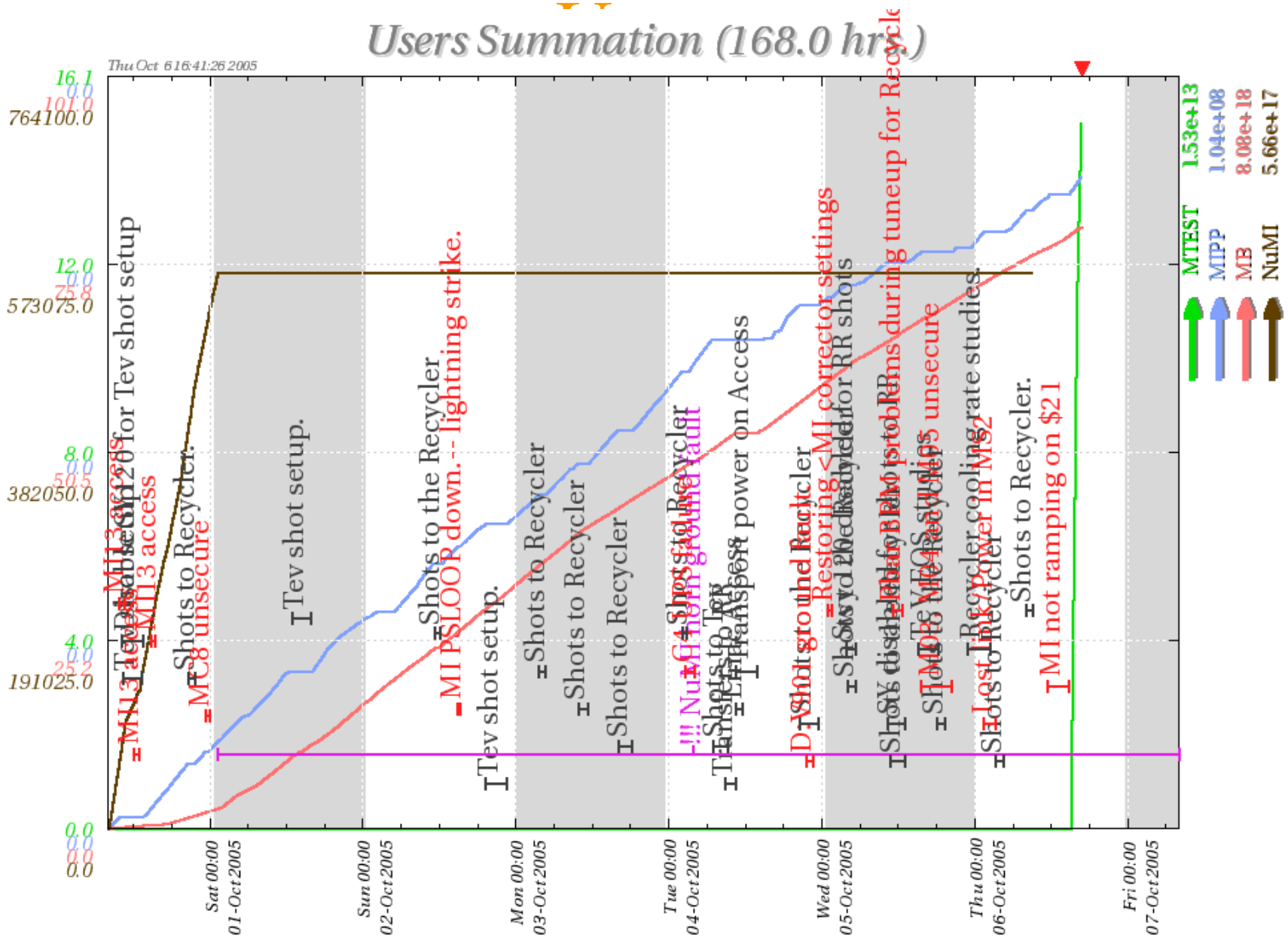
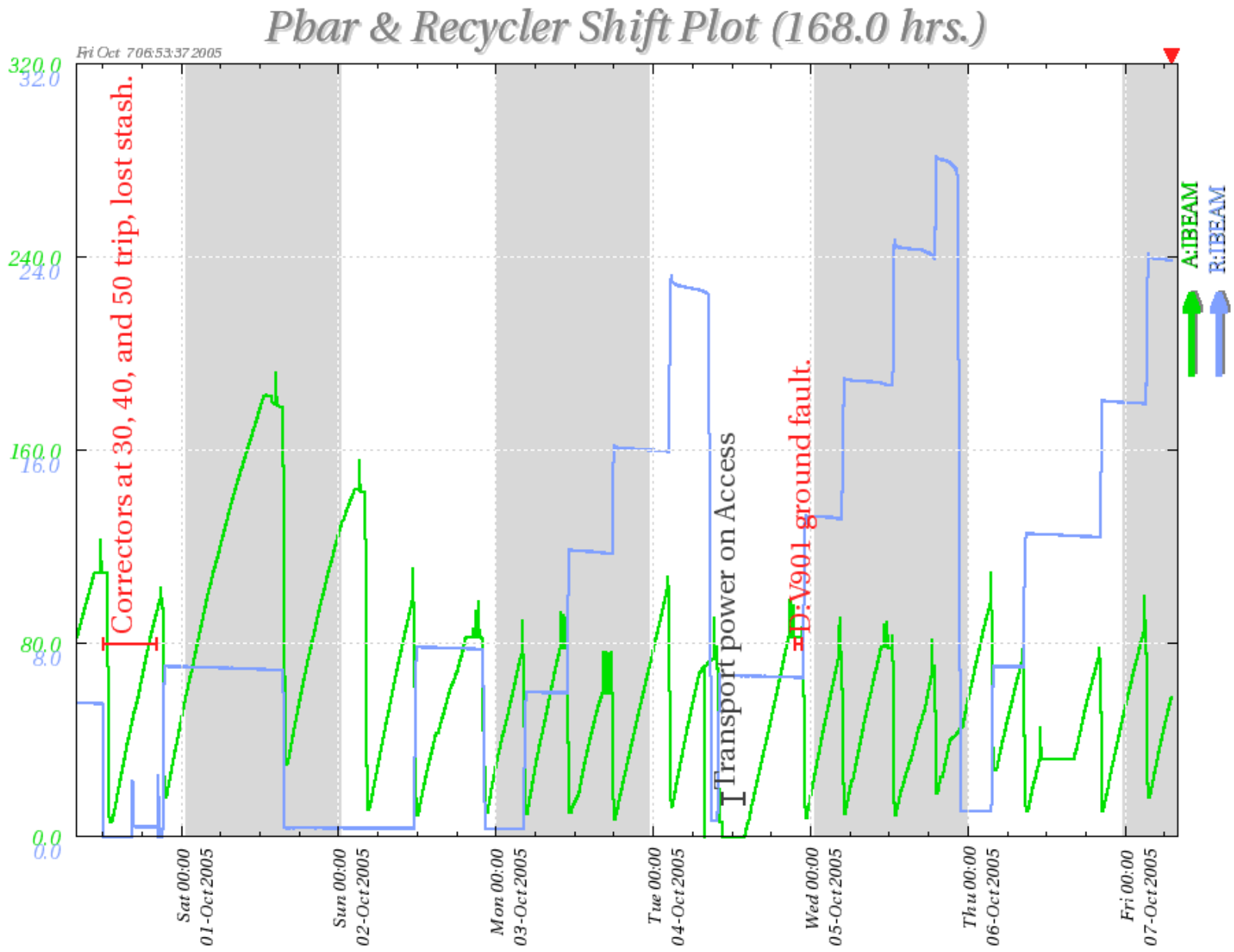
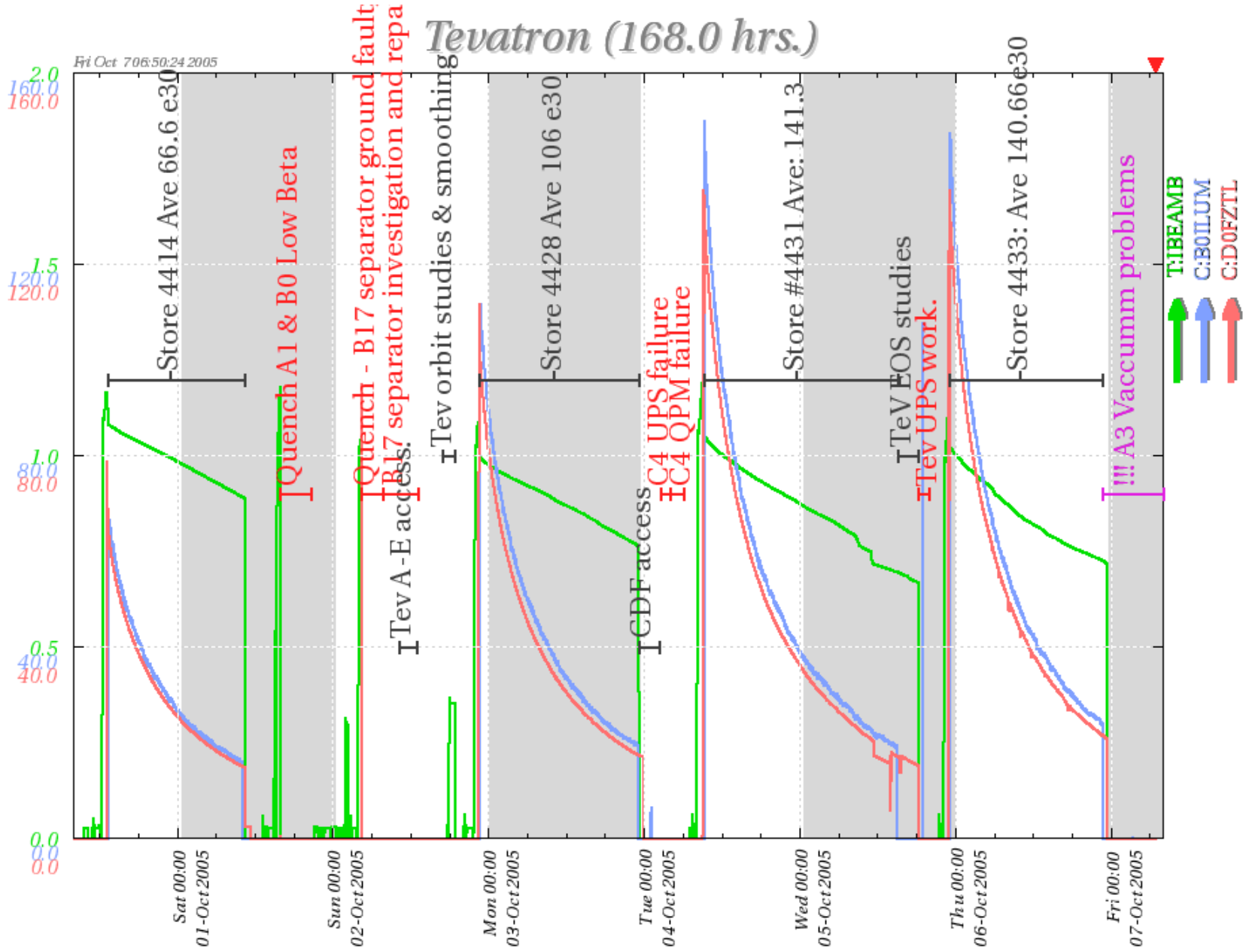
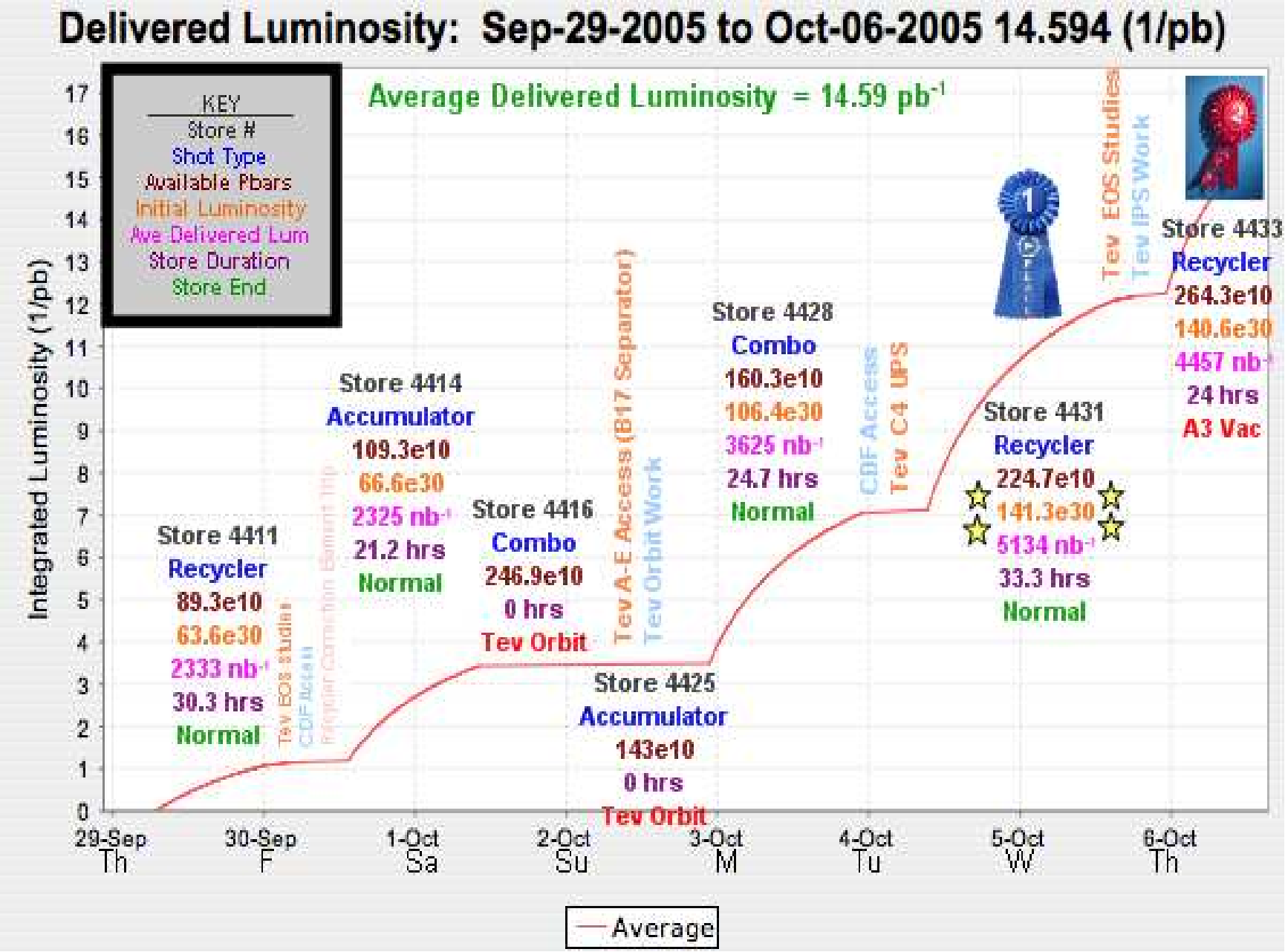
Accelerator Week in Review

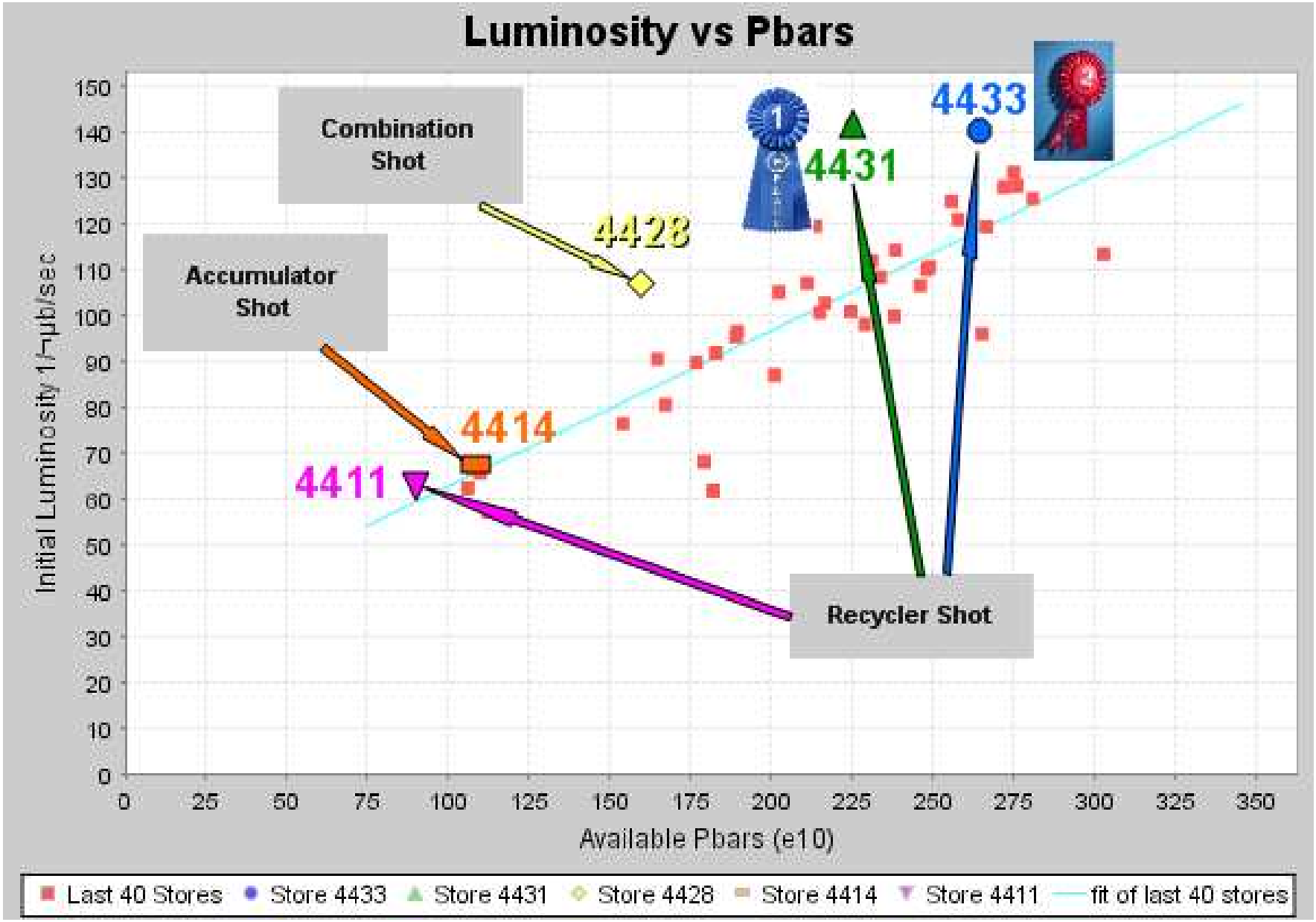
- Part I: Regular 9am Scheduling Meeting
  - Crew Chief Summary
  - 48 hour machine summaries and study requests
  - Operational Plan
- Part II: Weekly Machine Reports
  - Operational Summary – Brian Drendel
  - Shot Summary – Brian Drendel
  - Weekly Machine Reports – Machine Coordinators

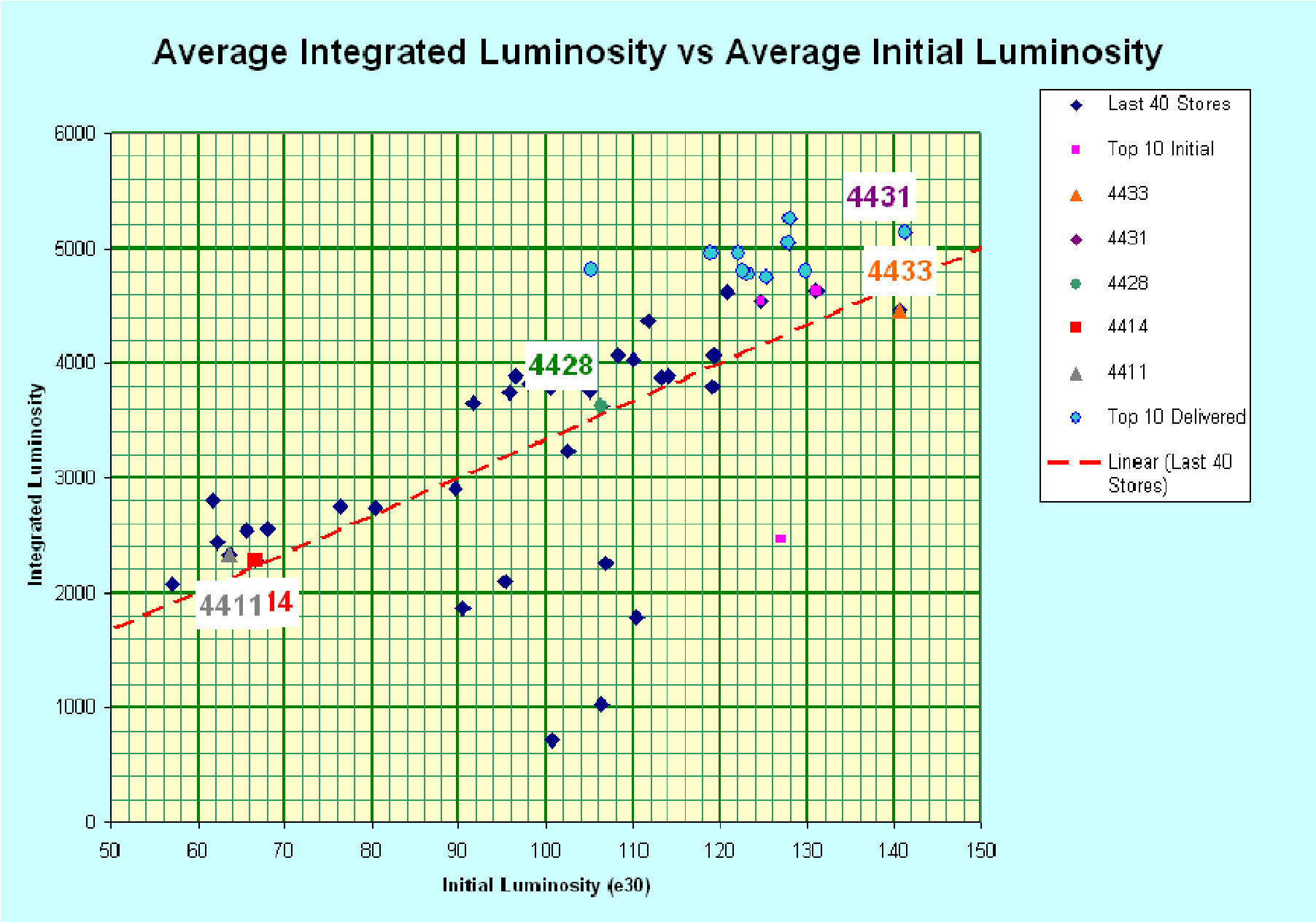

Users Summation (168.0 hrs.)
Thu Oct 6 16:41:26 2005
764100.0
573075.0
382050.0
191025.0
Sat 00:00 01-Oct 2005
Sun 00:00 02-Oct 2005
Mon 00:00 03-Oct 2005
Tue 00:00 04-Oct 2005
Wed 00:00 05-Oct 2005
Thu 00:00 06-Oct 2005
Fri 00:00 07-Oct 2005
MTEST 1.53e+13
MIPP 1.04e+08
MB 8.08e+18
NuMI 5.66e+17
Tev shot setup.
Shots to Recycler.
Shots to the Recycler
Shots to Recycler
Shots to Recycler
Shots to Recycler
Shots to Recycler.
MI PSLOOP down. -- lightning strike.
MI not ramping on $21

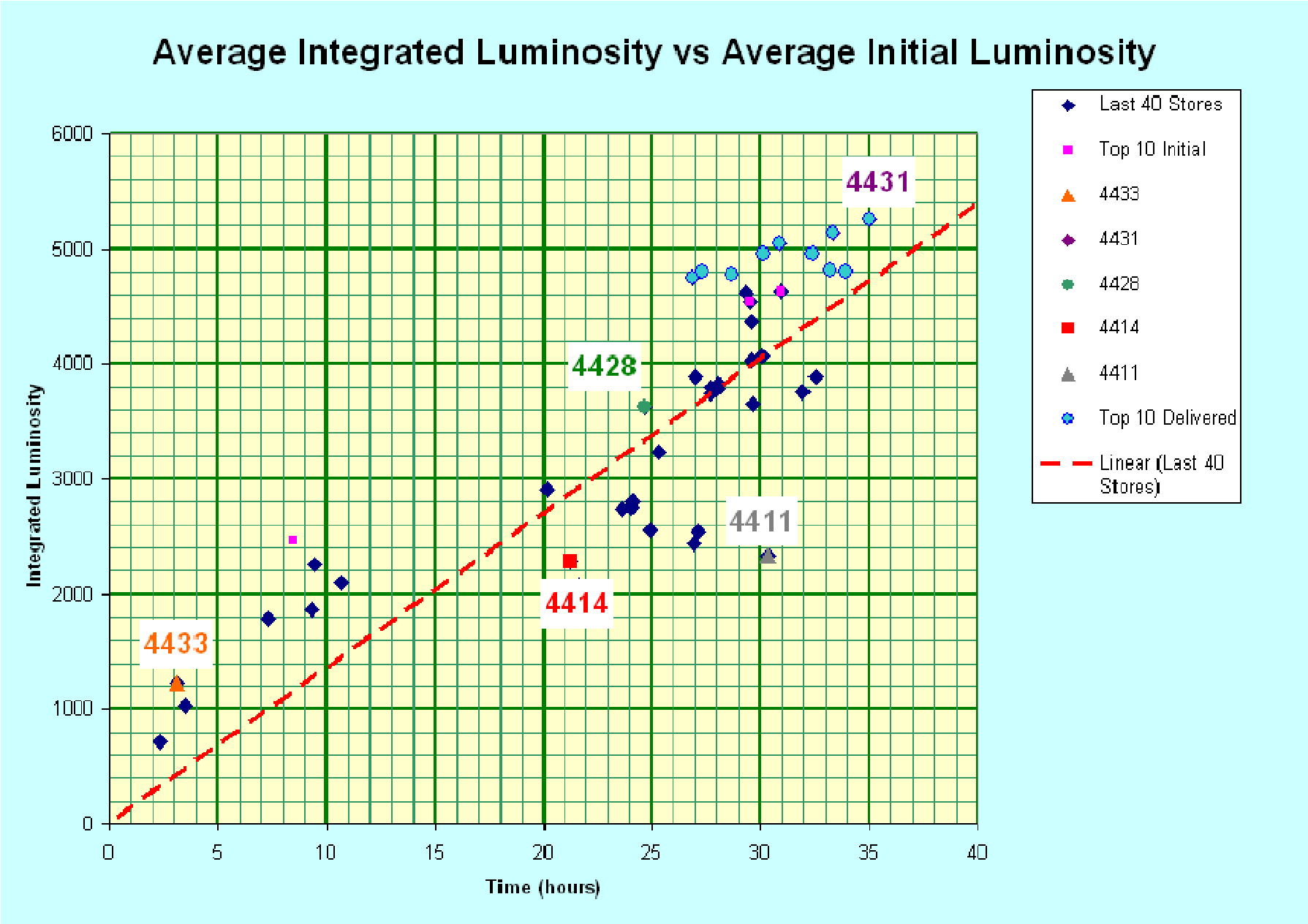

Pbar & Recycler Shift Plot (168.0 hrs.)
Fri Oct 7 06:53:37 2005
320.0
32.0
240.0
24.0
160.0
16.0
80.0
8.0
0.0
0.0
Correctors at 30, 40, and 50 trip, lost stash.
Transport power on Access
HD:V901 ground fault.
A:IBEAM
R:IBEAM
Sat 00:00 01-Oct 2005
Sun 00:00 02-Oct 2005
Mon 00:00 03-Oct 2005
Tue 00:00 04-Oct 2005
Wed 00:00 05-Oct 2005
Thu 00:00 06-Oct 2005
Fri 00:00 07-Oct 2005

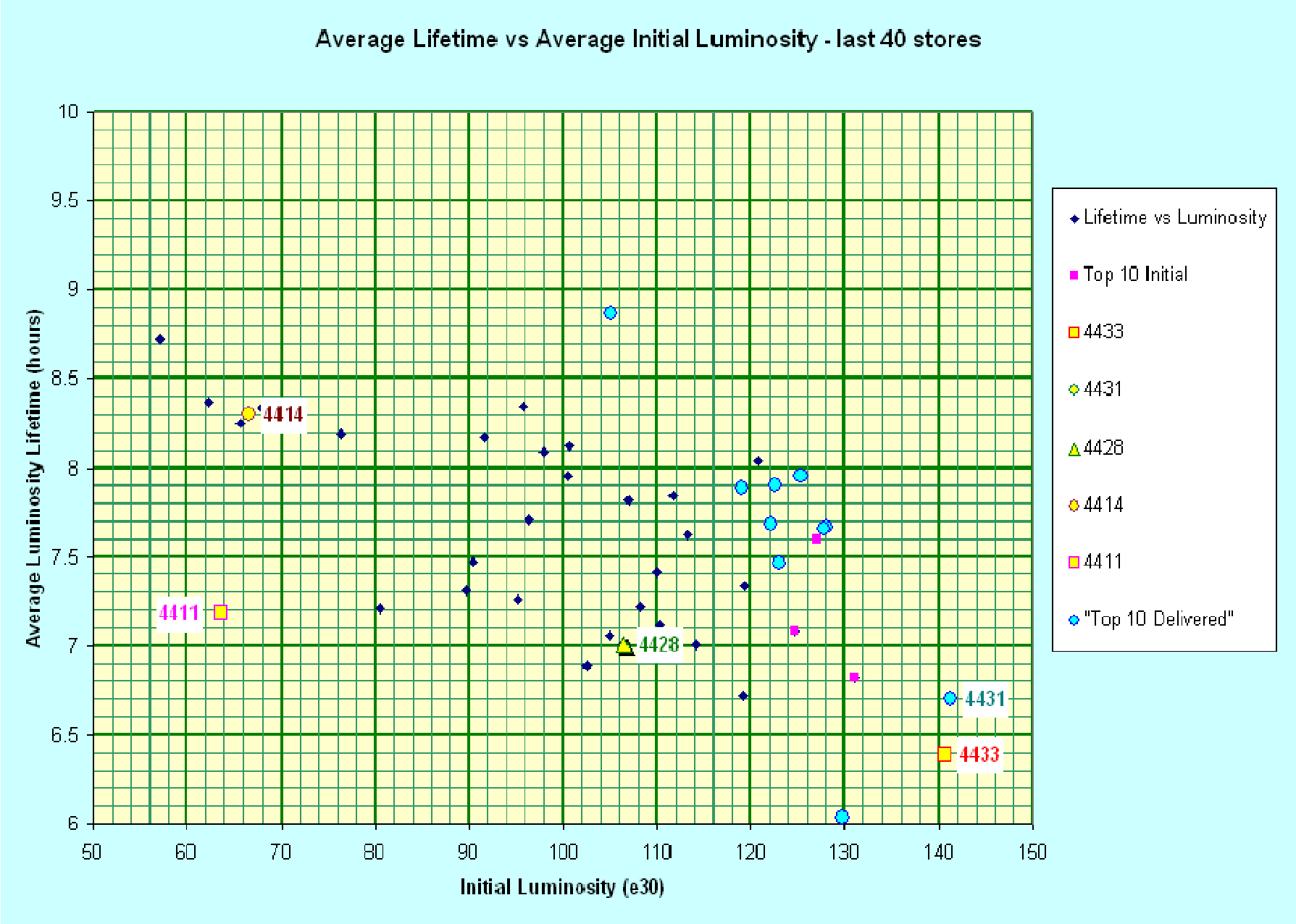

Tevatron (168.0 hrs.)
Fri Oct 7 06:50:24 2005
Store 4414 Ave 66.6 e30
Quench A1 & B0 Low Beta
Quench - B17 separator ground fault
B17 separator investigation and repa
Tev A-E access.
Tev orbit studies & smoothing
Store 4428 Ave 106 e30
CDF access
C4 UPS failure
C4 QPM failure
Store #4431 Ave: 141.3
TeV EOS studies
Tev UPS work.
Store 4433: Ave 140.66e30
!!! A3 Vaccumm problems
T:IBEAMB
C:B0ILUM
C:D0FZTL
2.0
160.0
160.0
1.5
120.0
120.0
1.0
80.0
80.0
0.5
40.0
40.0
0.0
0.0
0.0
Sat 00:00 01-Oct 2005
Sun 00:00 02-Oct 2005
Mon 00:00 03-Oct 2005
Tue 00:00 04-Oct 2005
Wed 00:00 05-Oct 2005
Thu 00:00 06-Oct 2005
Fri 00:00 07-Oct 2005

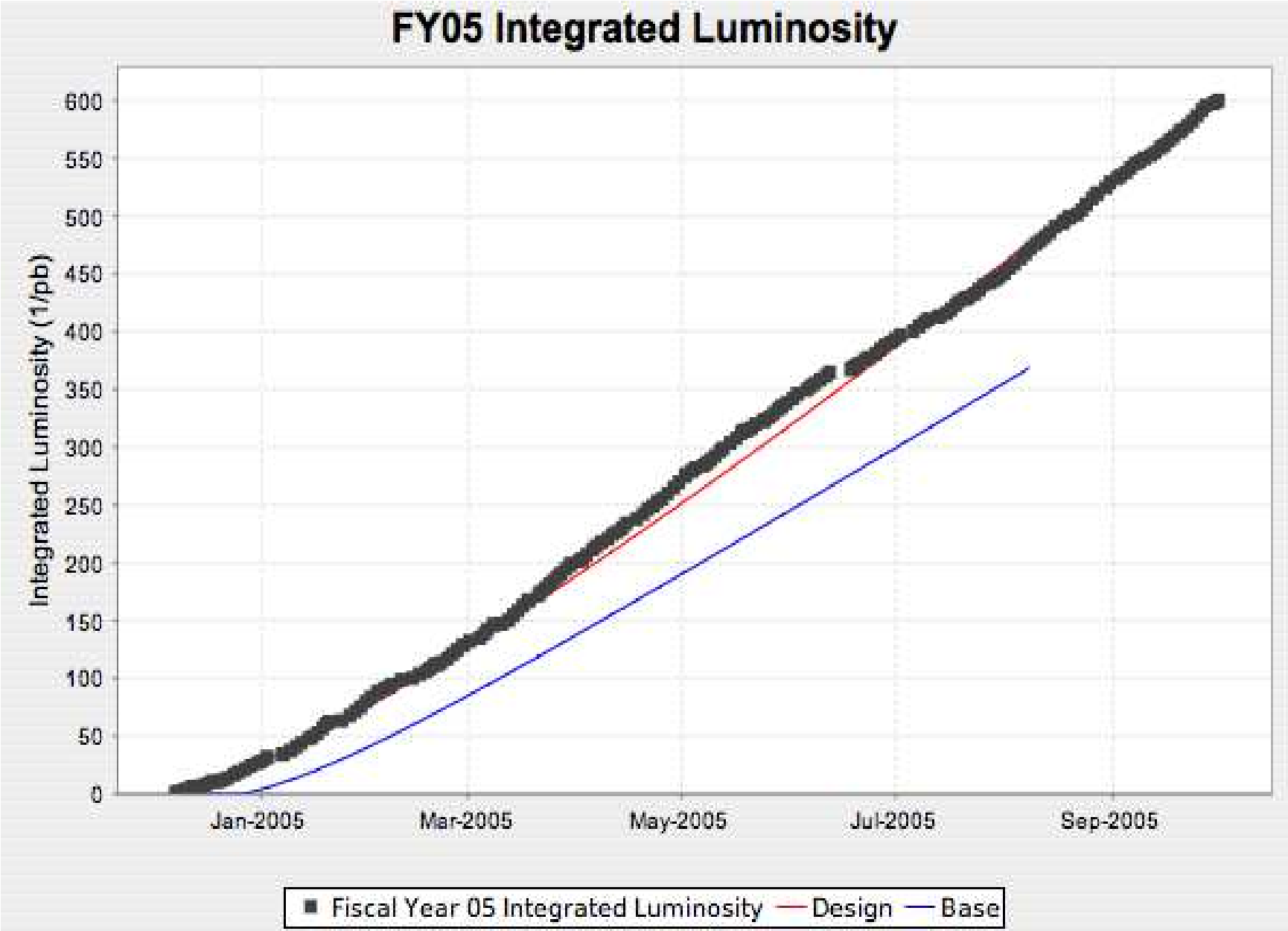

Delivered Luminosity: Sep-29-2005 to Oct-06-2005 14.594 (1/pb)
KEY
Store #
Shot Type
Available Pbars
Initial Luminosity
Ave Delivered Lum
Store Duration
Store End
Average Delivered Luminosity = 14.59 pb-1
Integrated Luminosity (1/pb)
Store 4411
Recycler
89.3e10
63.6e30
2333 nb-1
30.3 hrs
Normal
Tev BOS studies
CDF Access
Regular Correction Element Trip
Store 4414
Accumulator
109.3e10
66.6e30
2325 nb-1
21.2 hrs
Normal
Store 4416
Combo
246.9e10
0 hrs
Tev Orbit
Tev A-E Access (B17 Separator)
Tev Orbit Work
Store 4425
Accumulator
143e10
0 hrs
Tev Orbit
Store 4428
Combo
160.3e10
106.4e30
3625 nb-1
24.7 hrs
Normal
CDF Access
Tev C4 UPS
Store 4431
Recycler
224.7e10
141.3e30
5134 nb-1
33.3 hrs
Normal
Tev EOS Studies
Tev IPS Work
Store 4433
Recycler
264.3e10
140.6e30
4457 nb-1
24 hrs
A3 Vac
29-Sep Th
30-Sep F
1-Oct Sa
2-Oct Su
3-Oct M
4-Oct Tu
5-Oct W
6-Oct Th
Average

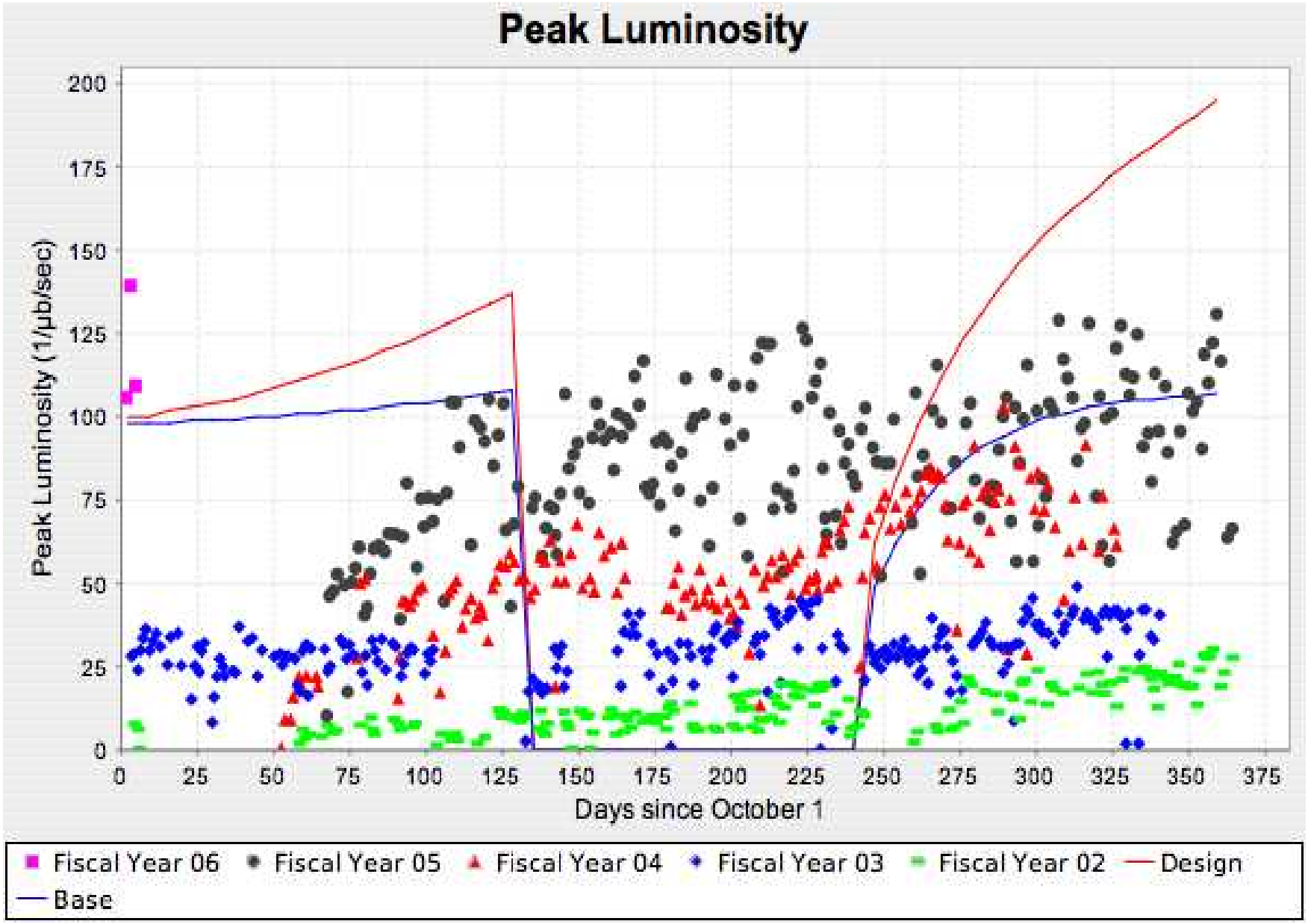

Luminosity vs Pbars
Combination Shot
Accumulator Shot
Recycler Shot
4428
4414
4411
4431
4433
Initial Luminosity 1/¬µb/sec
Available Pbars (e10)
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
Last 40 Stores
Store 4433
Store 4431
Store 4428
Store 4414
Store 4411
fit of last 40 stores

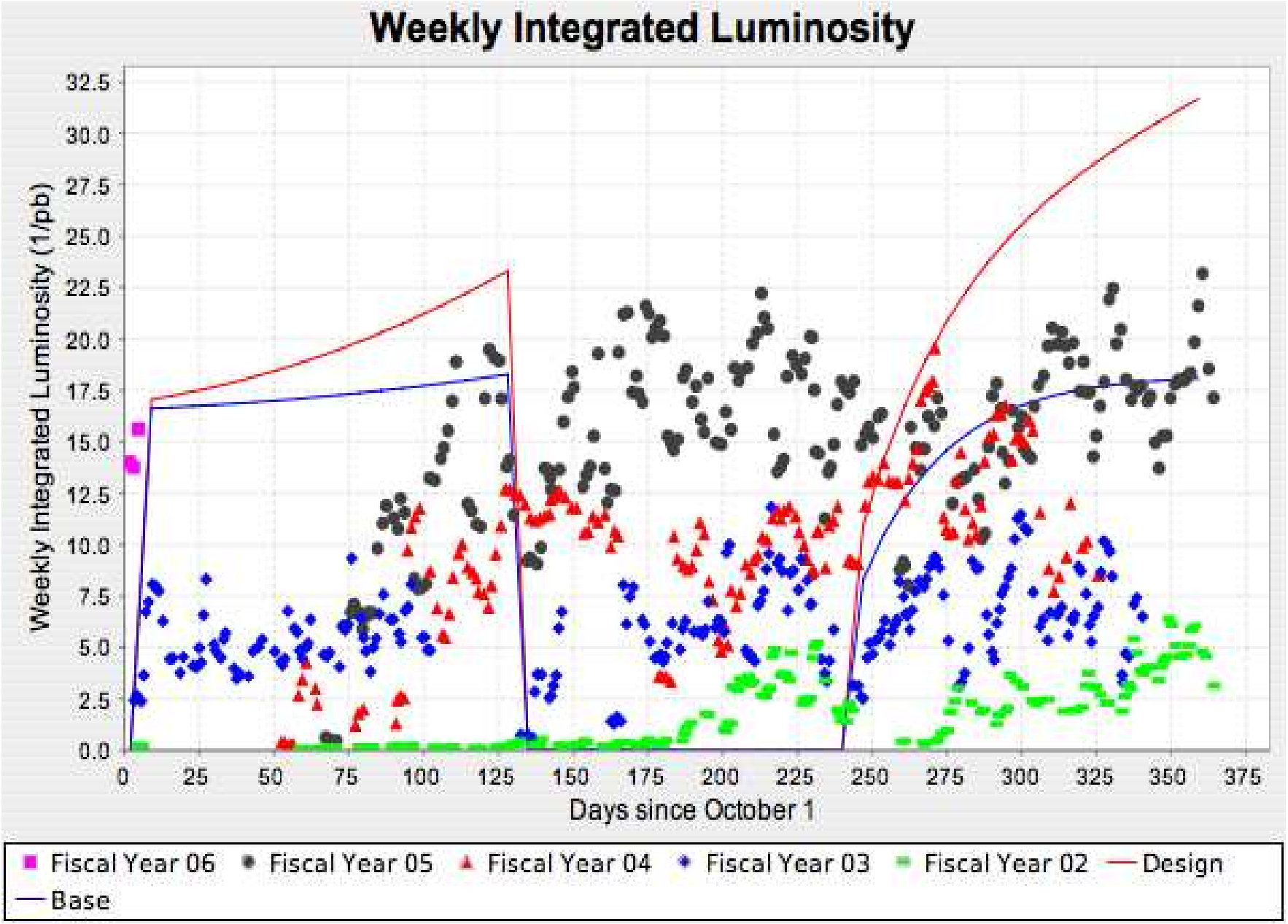

Average Integrated Luminosity vs Average Initial Luminosity
Integrated Luminosity
Initial Luminosity (e30)
0
1000
2000
3000
4000
5000
6000
50
60
70
80
90
100
110
120
130
140
150
4431
4433
4428
4411
14
Last 40 Stores
Top 10 Initial
4433
4431
4428
4414
4411
Top 10 Delivered
Linear (Last 40 Stores)

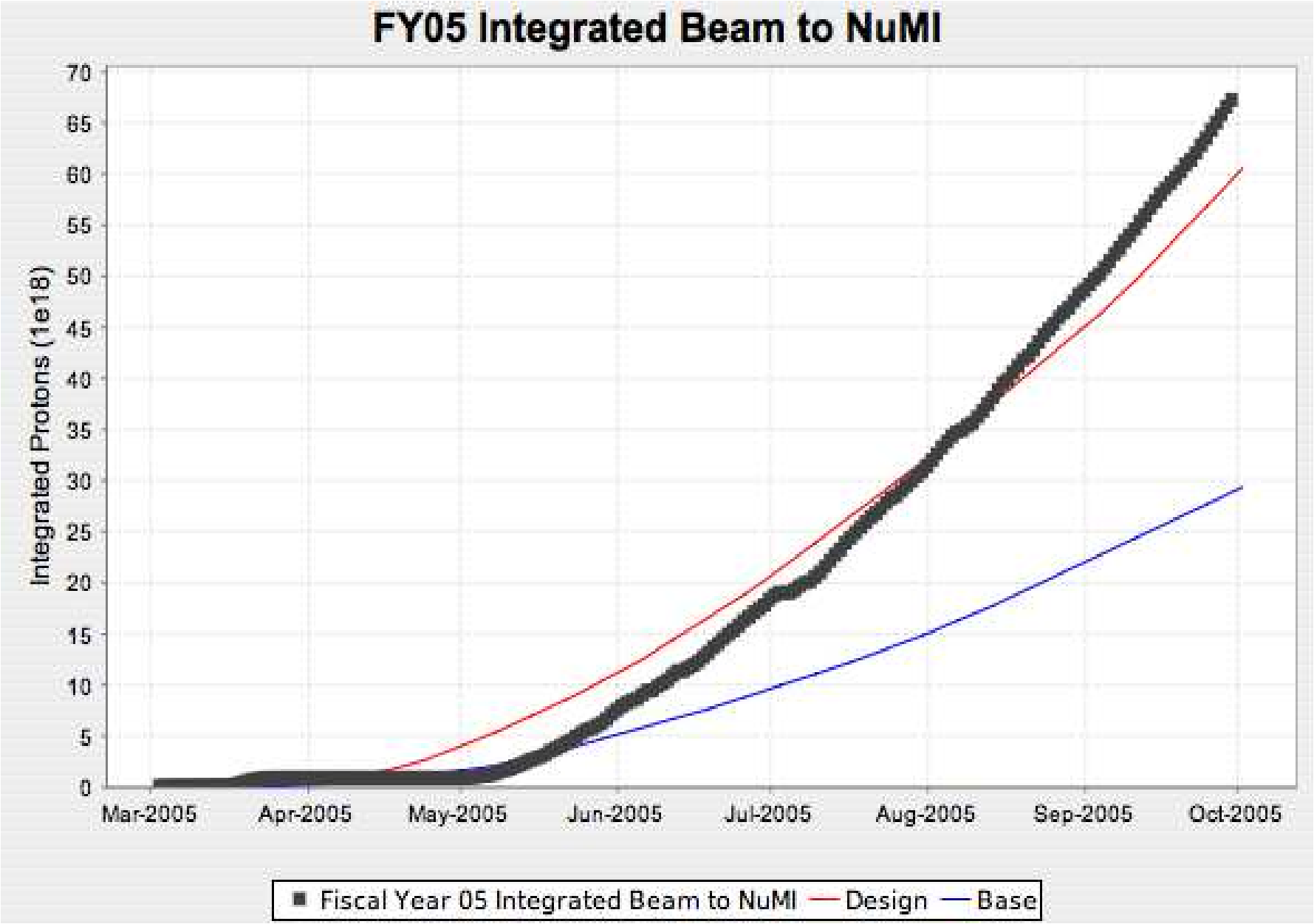

Average Integrated Luminosity vs Average Initial Luminosity
Integrated Luminosity
Time (hours)
0
1000
2000
3000
4000
5000
6000
0
5
10
15
20
25
30
35
40
4433
4414
4428
4411
4431
Last 40 Stores
Top 10 Initial
4433
4431
4428
4414
4411
Top 10 Delivered
Linear (Last 40 Stores)

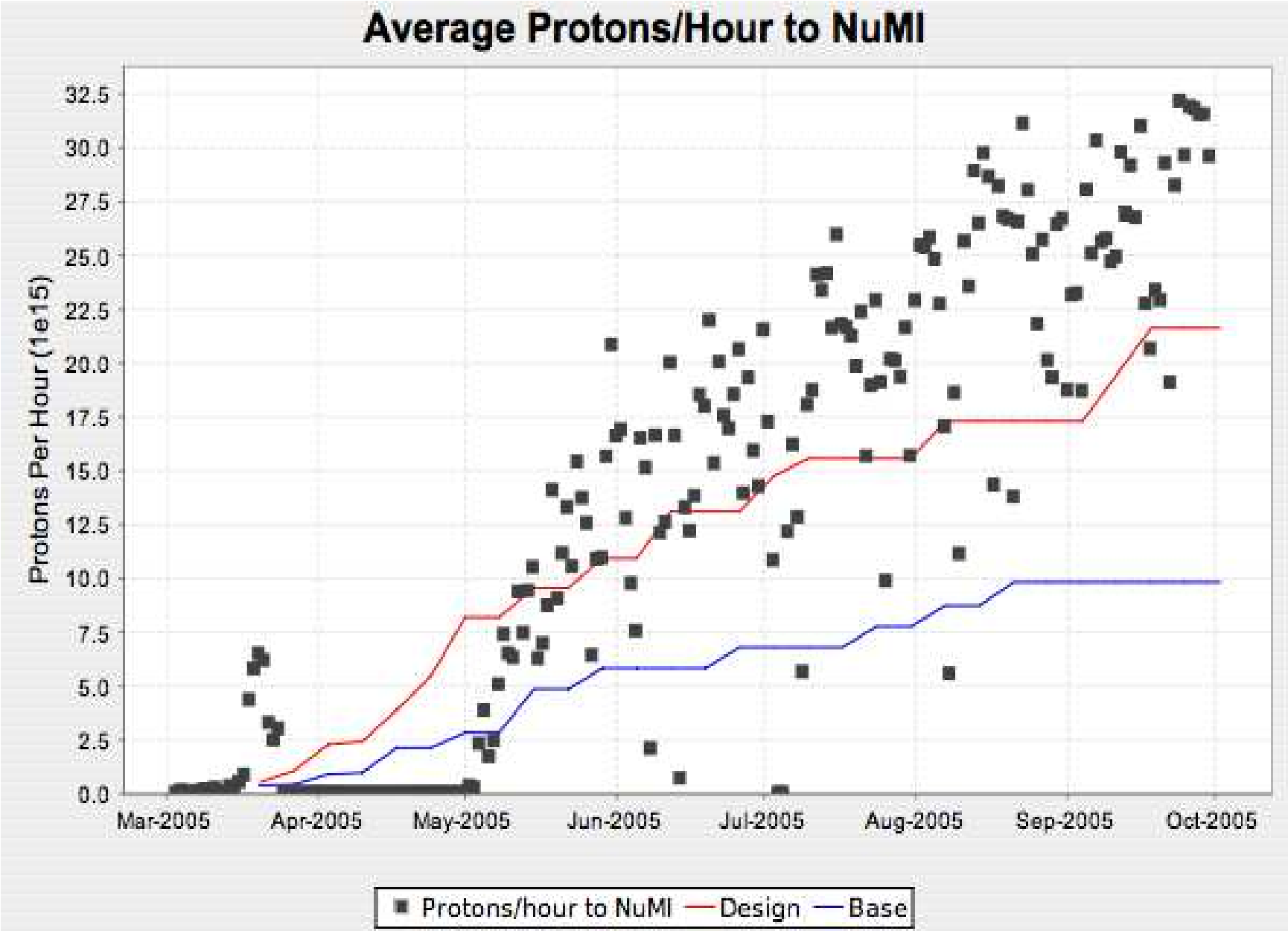

Average Lifetime vs Average Initial Luminosity - last 40 stores
Average Luminosity Lifetime (hours)
Initial Luminosity (e30)
10
9.5
9
8.5
8
7.5
7
6.5
6
50
60
70
80
90
100
110
120
130
140
150
4414
4411
4428
4431
4433
Lifetime vs Luminosity
Top 10 Initial
4433
4431
4428
4414
4411
"Top 10 Delivered"

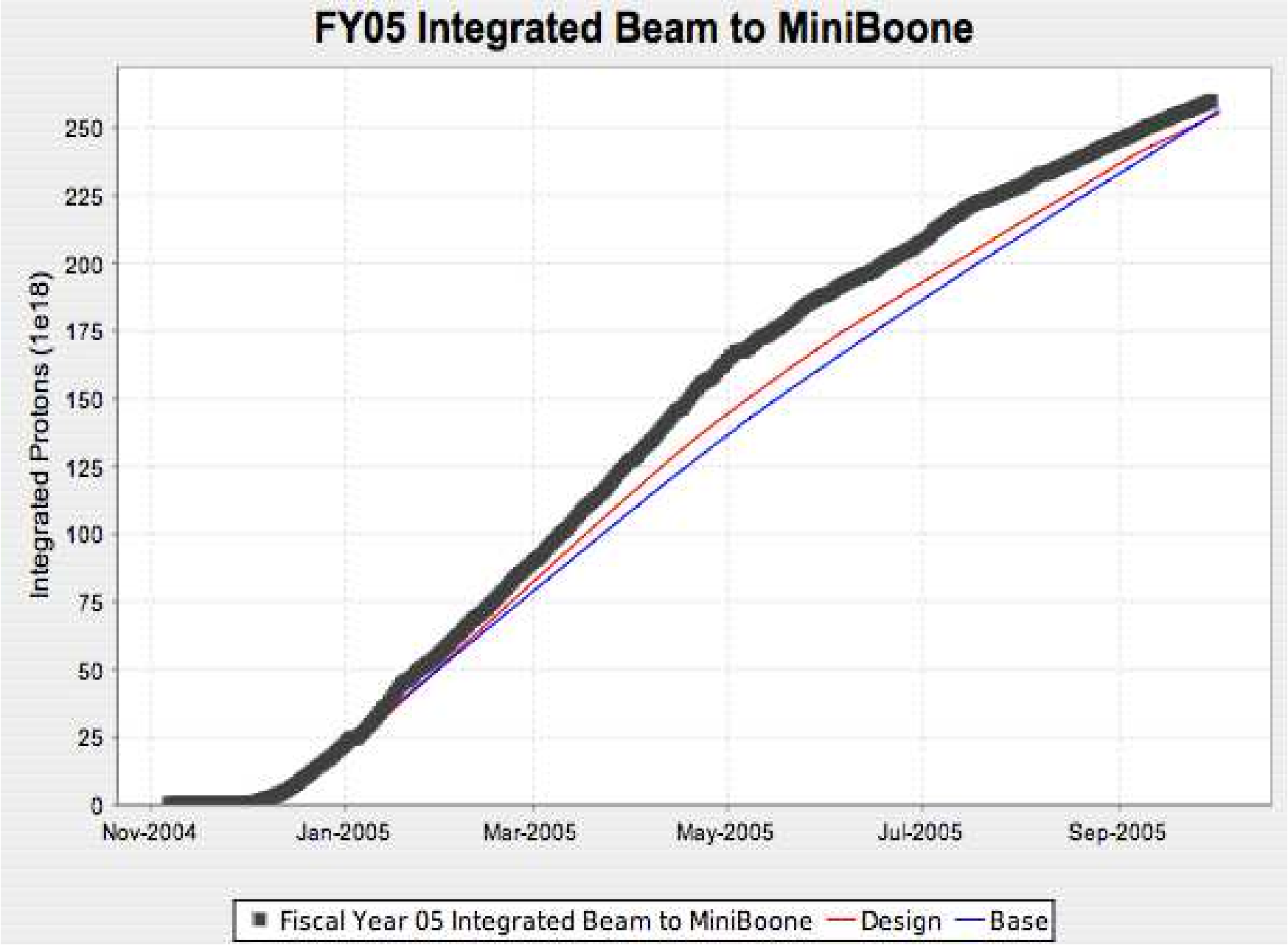

FY05 Integrated Luminosity
Integrated Luminosity (1/pb)
600
550
500
450
400
350
300
250
200
150
100
50
0
Jan-2005
Mar-2005
May-2005
Jul-2005
Sep-2005
Fiscal Year 05 Integrated Luminosity
Design
Base

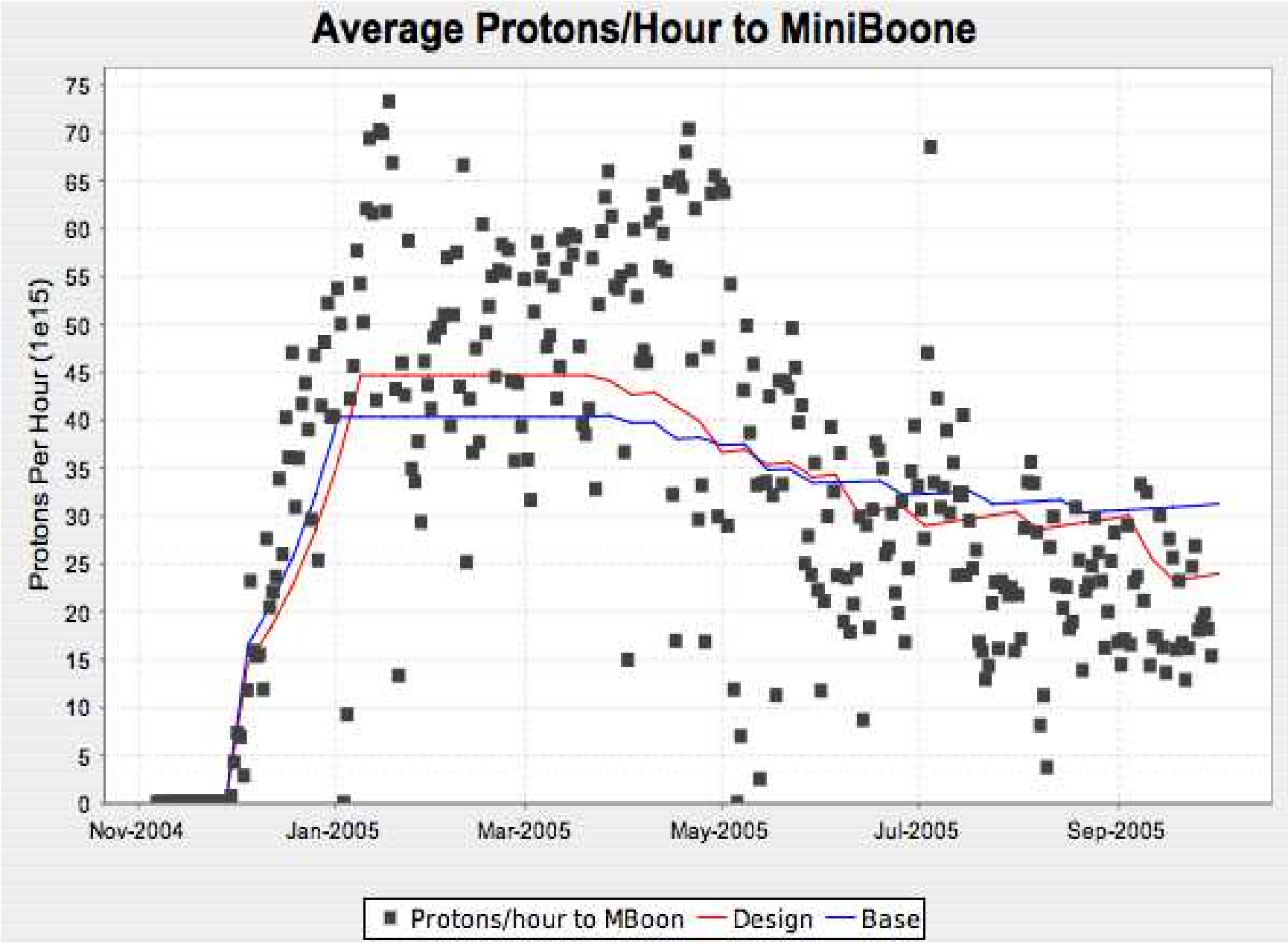

Peak Luminosity
Peak Luminosity (1/μb/sec)
200
175
150
125
100
75
50
25
0
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
Days since October 1
Fiscal Year 06
Fiscal Year 05
Fiscal Year 04
Fiscal Year 03
Fiscal Year 02
Design
Base


Weekly Integrated Luminosity
Weekly Integrated Luminosity (1/pb)
32.5
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
Days since October 1
Fiscal Year 06
Fiscal Year 05
Fiscal Year 04
Fiscal Year 03
Fiscal Year 02
Design
Base


FY05 Integrated Beam to NuMI
Integrated Protons (1e18)
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Mar-2005
Apr-2005
May-2005
Jun-2005
Jul-2005
Aug-2005
Sep-2005
Oct-2005
Fiscal Year 05 Integrated Beam to NuMI
Design
Base


Average Protons/Hour to NuMI
Protons Per Hour (1e15)
32.5
30.0
27.5
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Mar-2005
Apr-2005
May-2005
Jun-2005
Jul-2005
Aug-2005
Sep-2005
Oct-2005
Protons/hour to NuMI
Design
Base


FY05 Integrated Beam to MiniBoone
Integrated Protons (1e18)
250
225
200
175
150
125
100
75
50
25
0
Nov-2004
Jan-2005
Mar-2005
May-2005
Jul-2005
Sep-2005
Fiscal Year 05 Integrated Beam to MiniBoone
Design
Base


Average Protons/Hour to MiniBoone
Protons Per Hour (1e15)
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Nov-2004
Jan-2005
Mar-2005
May-2005
Jul-2005
Sep-2005
Protons/hour to MBoon
Design
Base