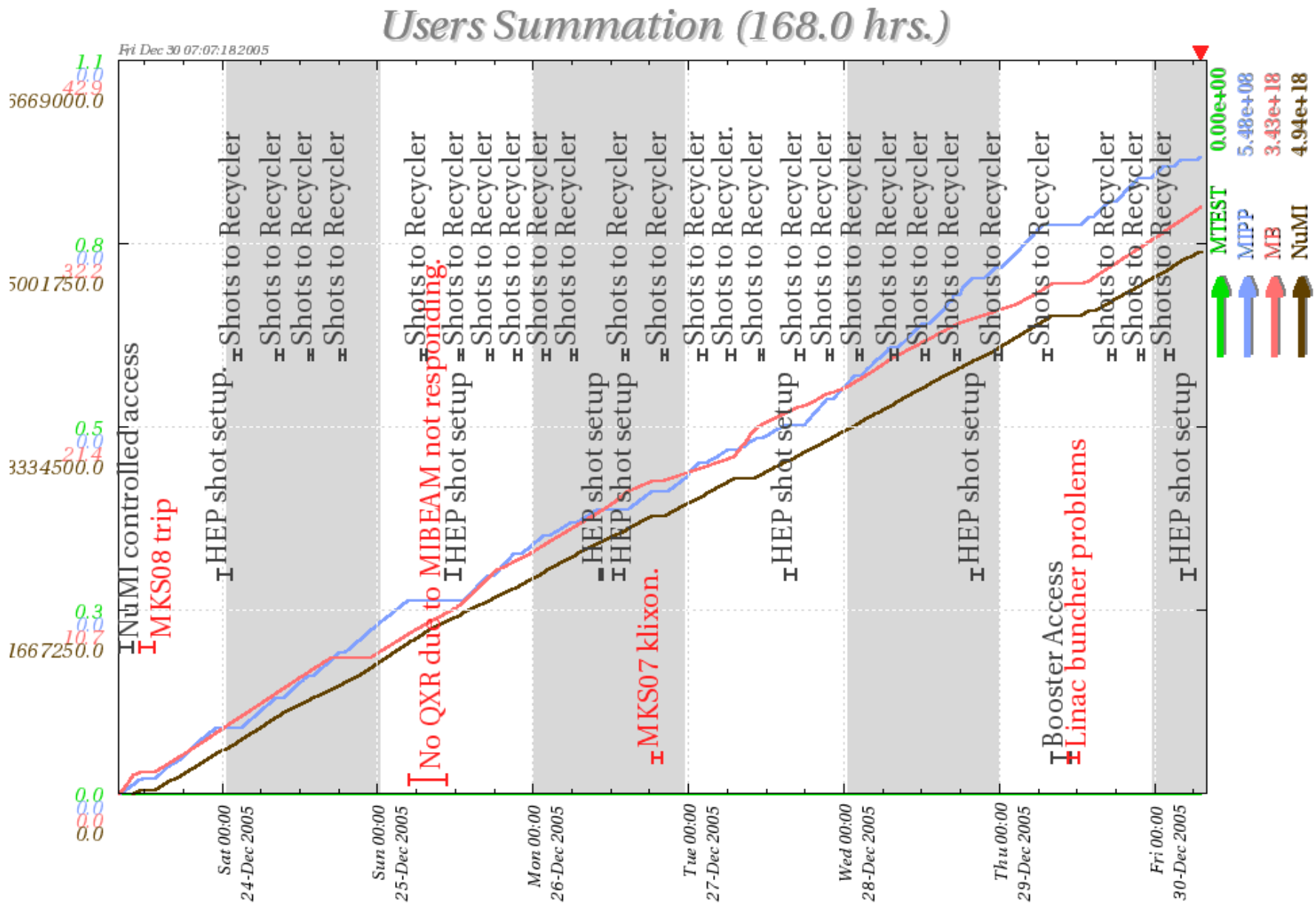
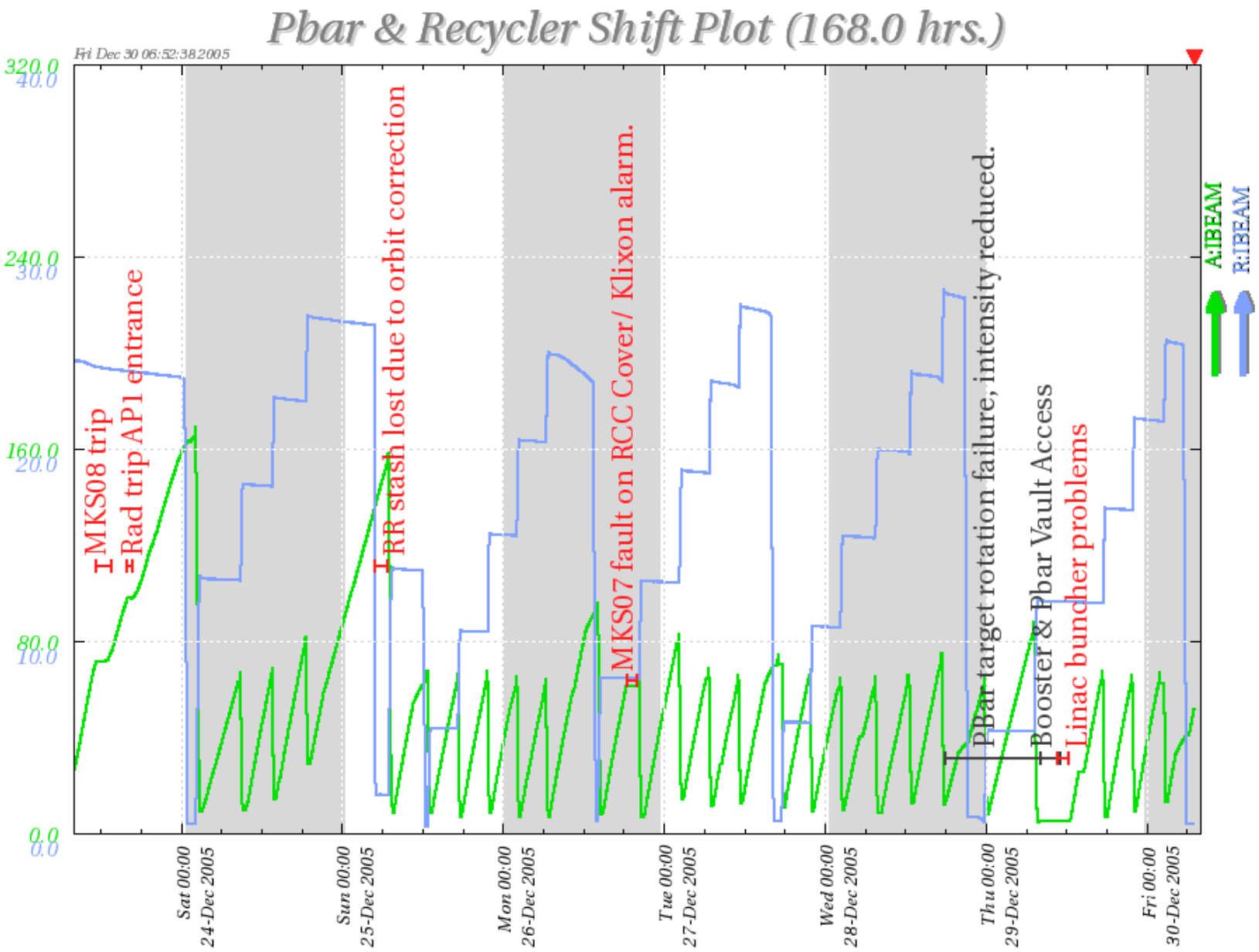
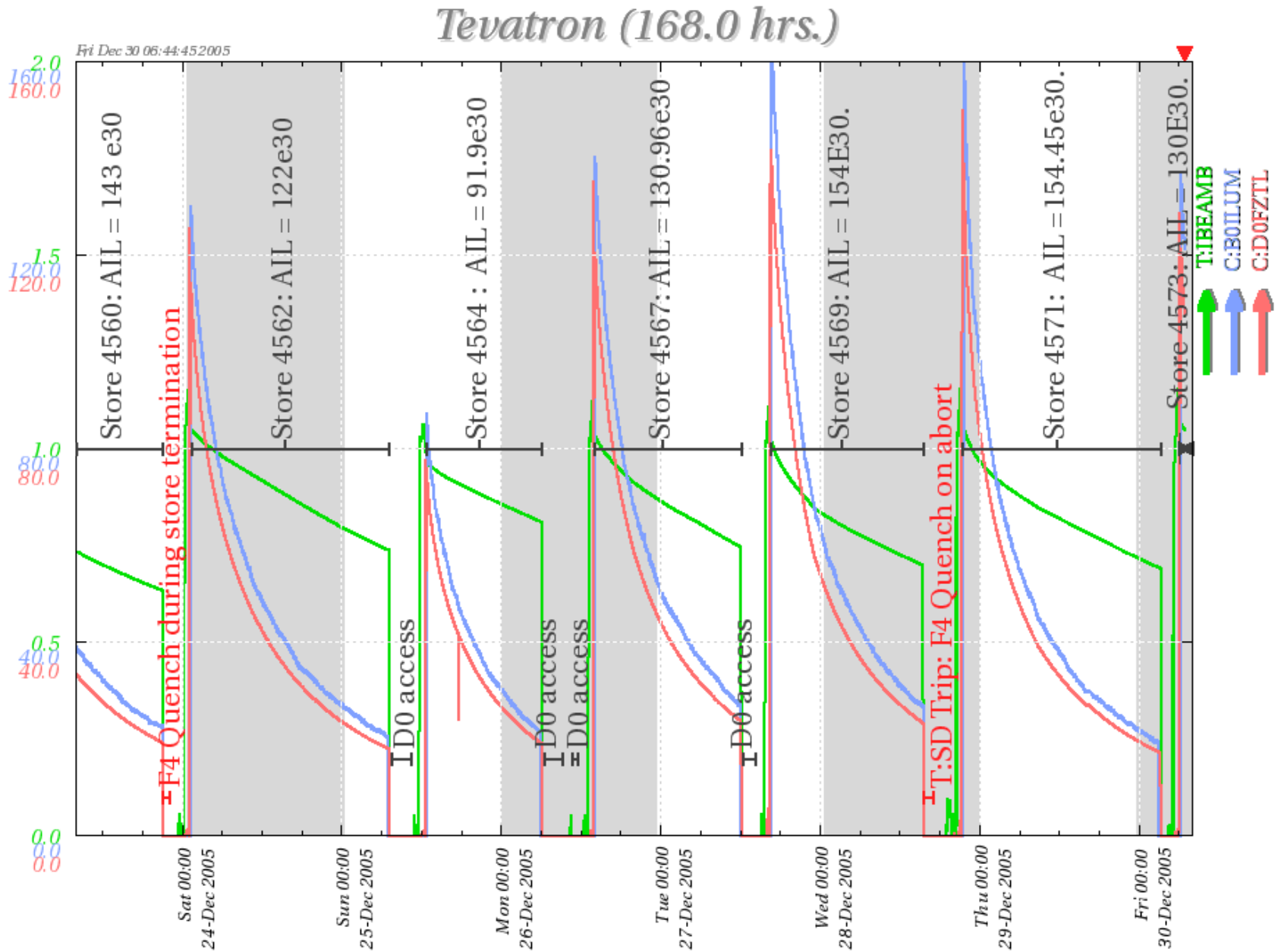
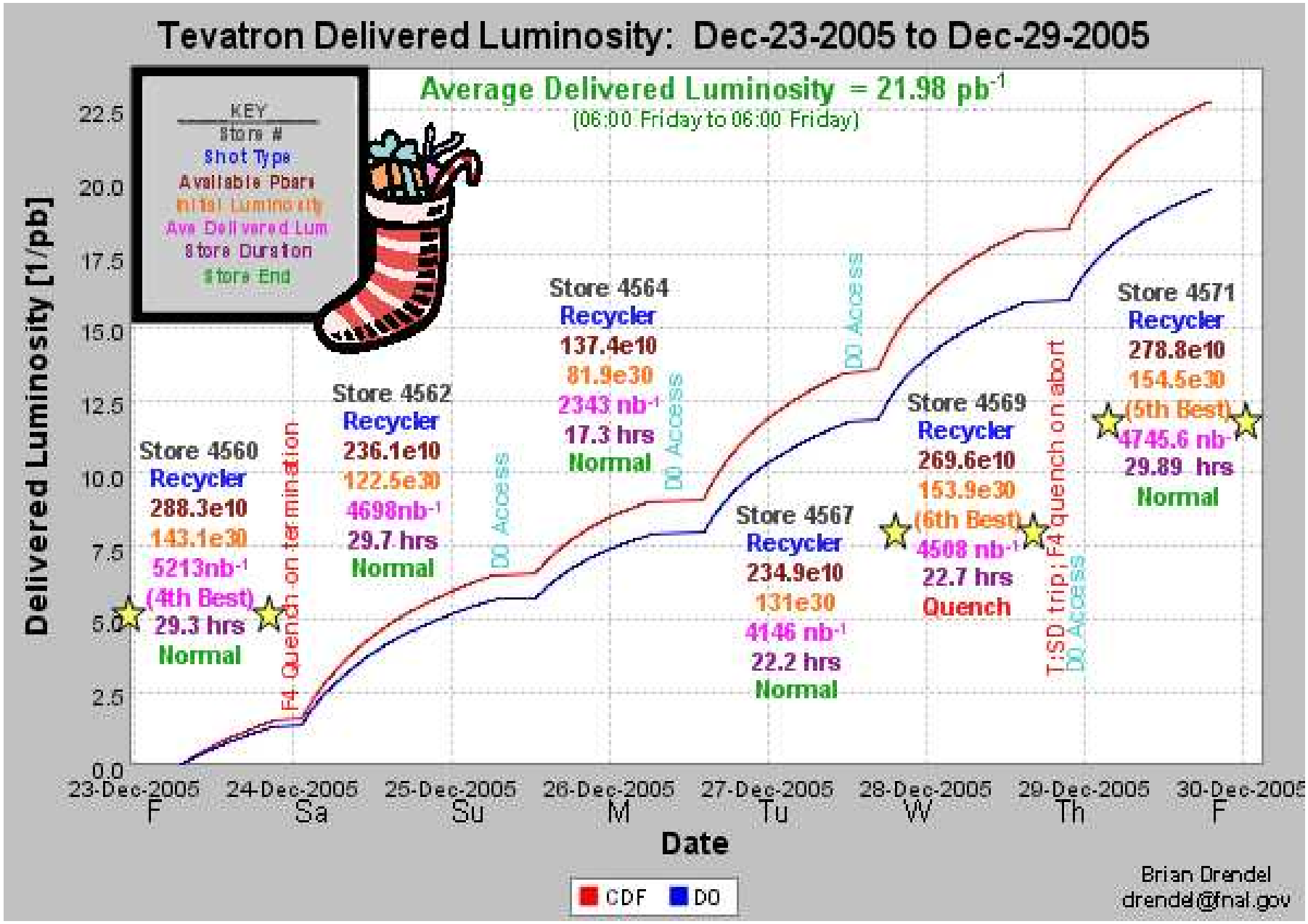
Accelerator Week in Review

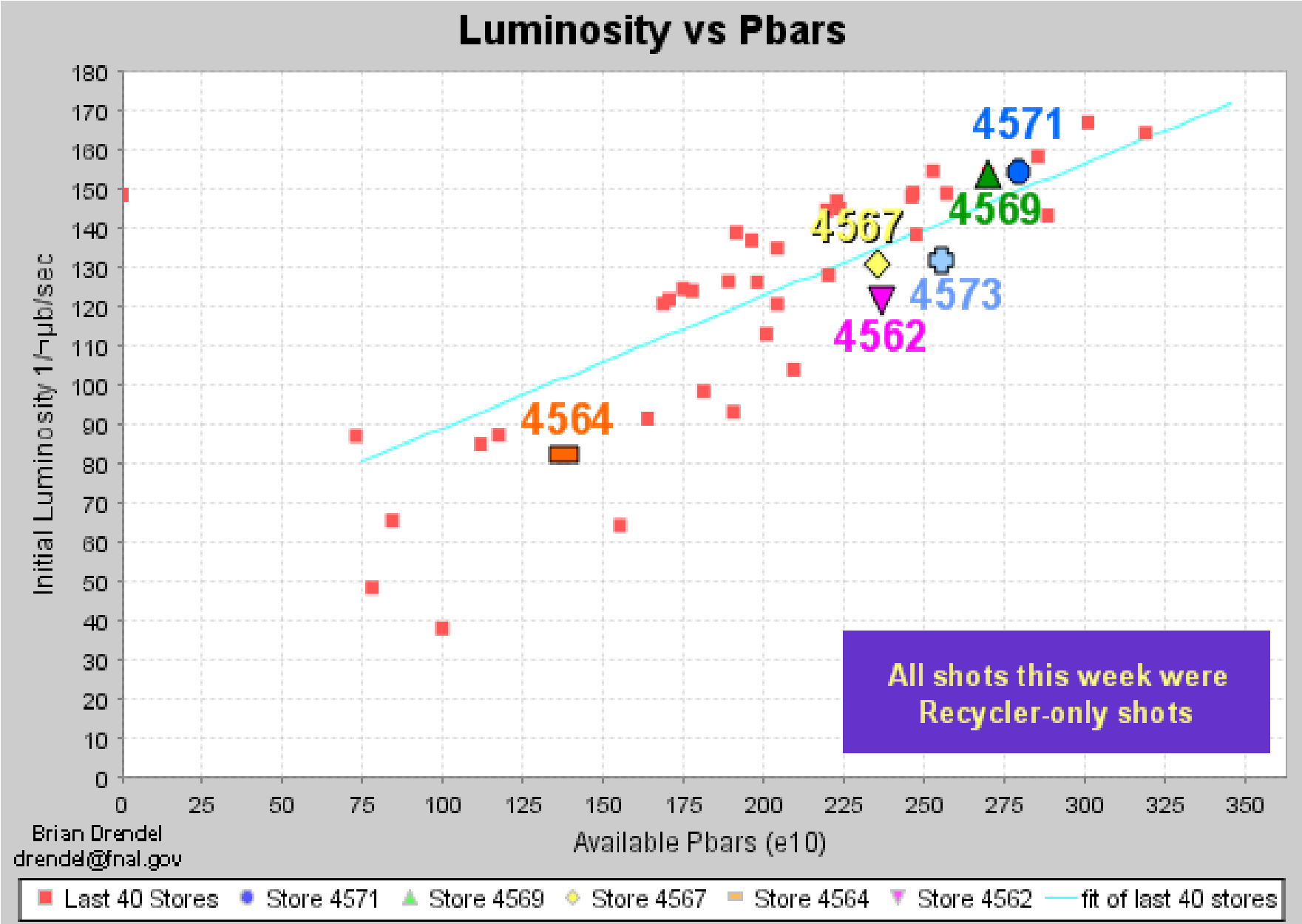
- Part I: Regular 9am Scheduling Meeting
  - Crew Chief Summary
  - 48 hour machine summaries and study requests – Machine Coordinators
  - Operational Plan – Jim Morgan
- Part II: Weekly Machine Reports
  - Weekly Operational Summary – Jim Morgan
    - User, Pbar and Tevatron weekly operational plots
    - Collider shot summary
    - NuMI beam summary
    - MiniBooNE beam summary
  - Weekly Machine Summaries – Machine Coordinators

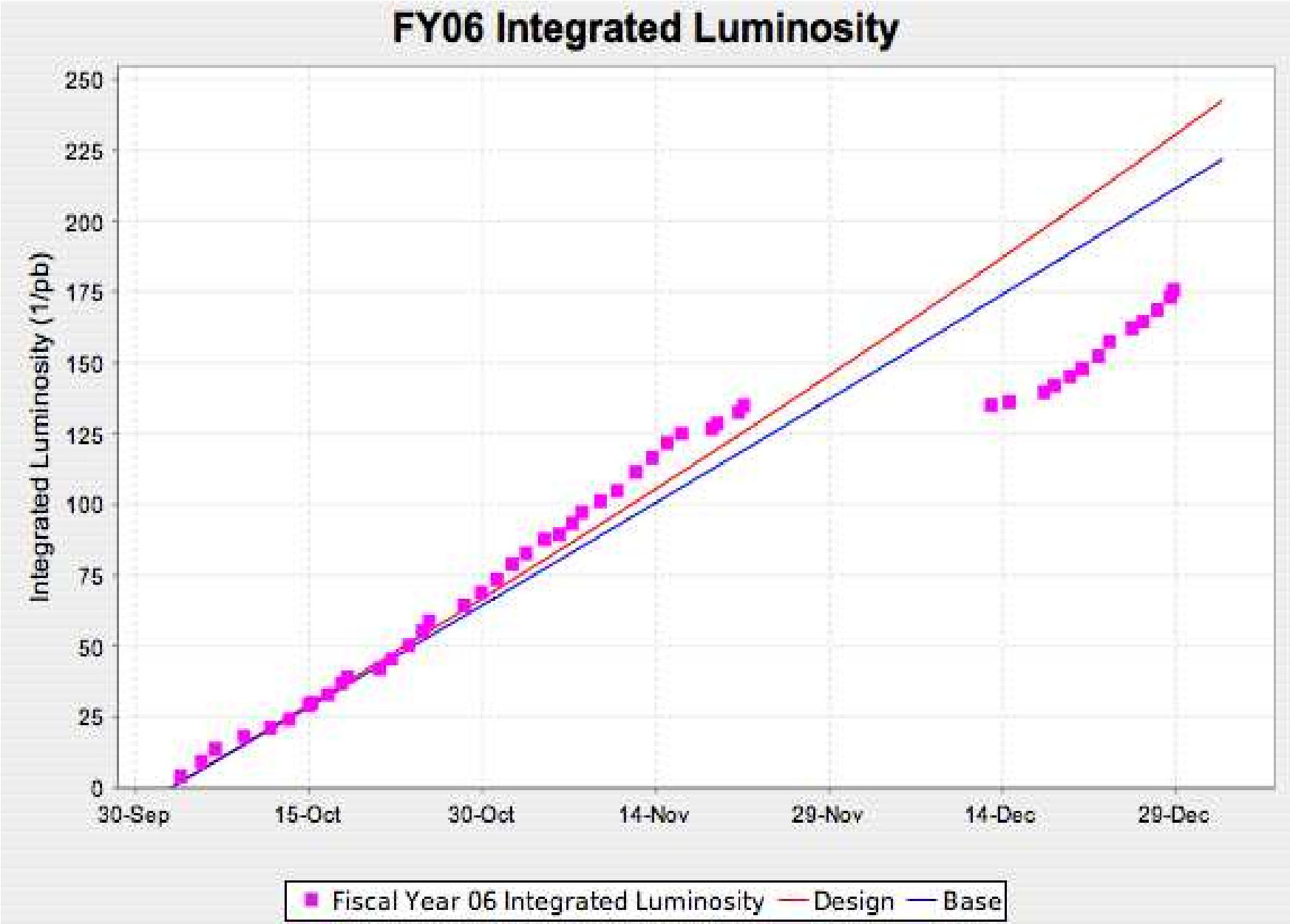

Users Summation (168.0 hrs.)
Fri Dec 30 07:07:18 2005
1.1
0.0
429
5669000.0
0.8
0.0
322
5001750.0
0.5
0.0
214
3334500.0
0.3
0.0
107
1667250.0
0.0
0.0
0.0
0.0
0.0
NuMI controlled access
MKS08 trip
HEP shot setup.
Shots to Recycler
No QXR due to MIBEAM not responding.
HEP shot setup
HEP shot setup
HEP shot setup
MKS07 klixon.
HEP shot setup
HEP shot setup
HEP shot setup
Booster Access
Linac buncher problems
HEP shot setup
Sat 00:00 24-Dec 2005
Sun 00:00 25-Dec 2005
Mon 00:00 26-Dec 2005
Tue 00:00 27-Dec 2005
Wed 00:00 28-Dec 2005
Thu 00:00 29-Dec 2005
Fri 00:00 30-Dec 2005
MTEST 0.00e+00
MIPP 5.48e+08
MB 3.43e+18
NuMI 4.94e+18

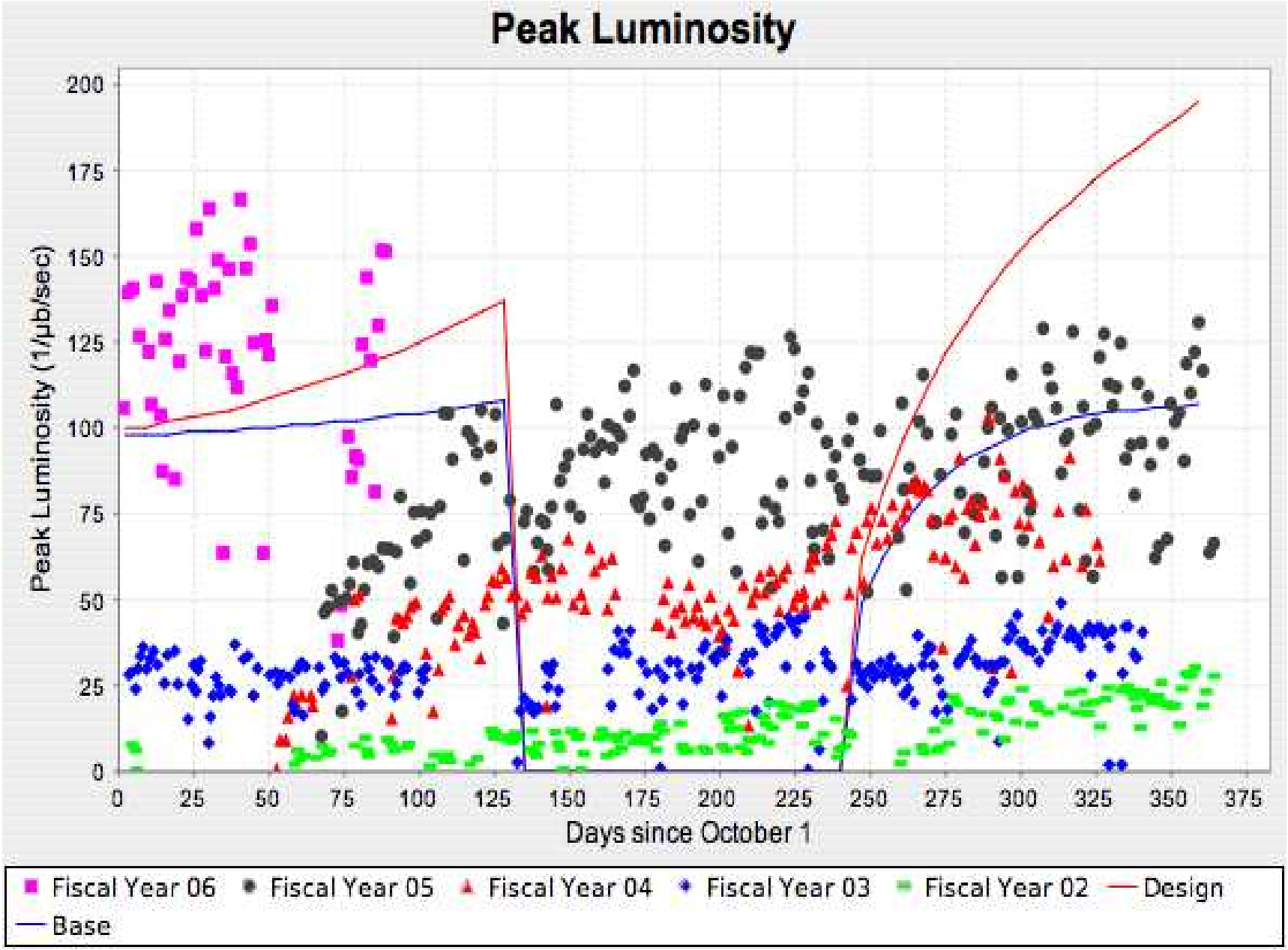

Pbar & Recycler Shift Plot (168.0 hrs.)
Fri Dec 30 06:52:38 2005
320.0
240.0
160.0
80.0
0.0
40.0
30.0
20.0
10.0
0.0
MKS08 trip
Rad trip AP1 entrance
RR stash lost due to orbit correction
MKS07 fault on RCC Cover / Klixon alarm.
PBar target rotation failure, intensity reduced.
Booster & Pbar Vault Access
Linac buncher problems
A:IBEAM
R:IBEAM
Sat 00:00 24-Dec 2005
Sun 00:00 25-Dec 2005
Mon 00:00 26-Dec 2005
Tue 00:00 27-Dec 2005
Wed 00:00 28-Dec 2005
Thu 00:00 29-Dec 2005
Fri 00:00 30-Dec 2005

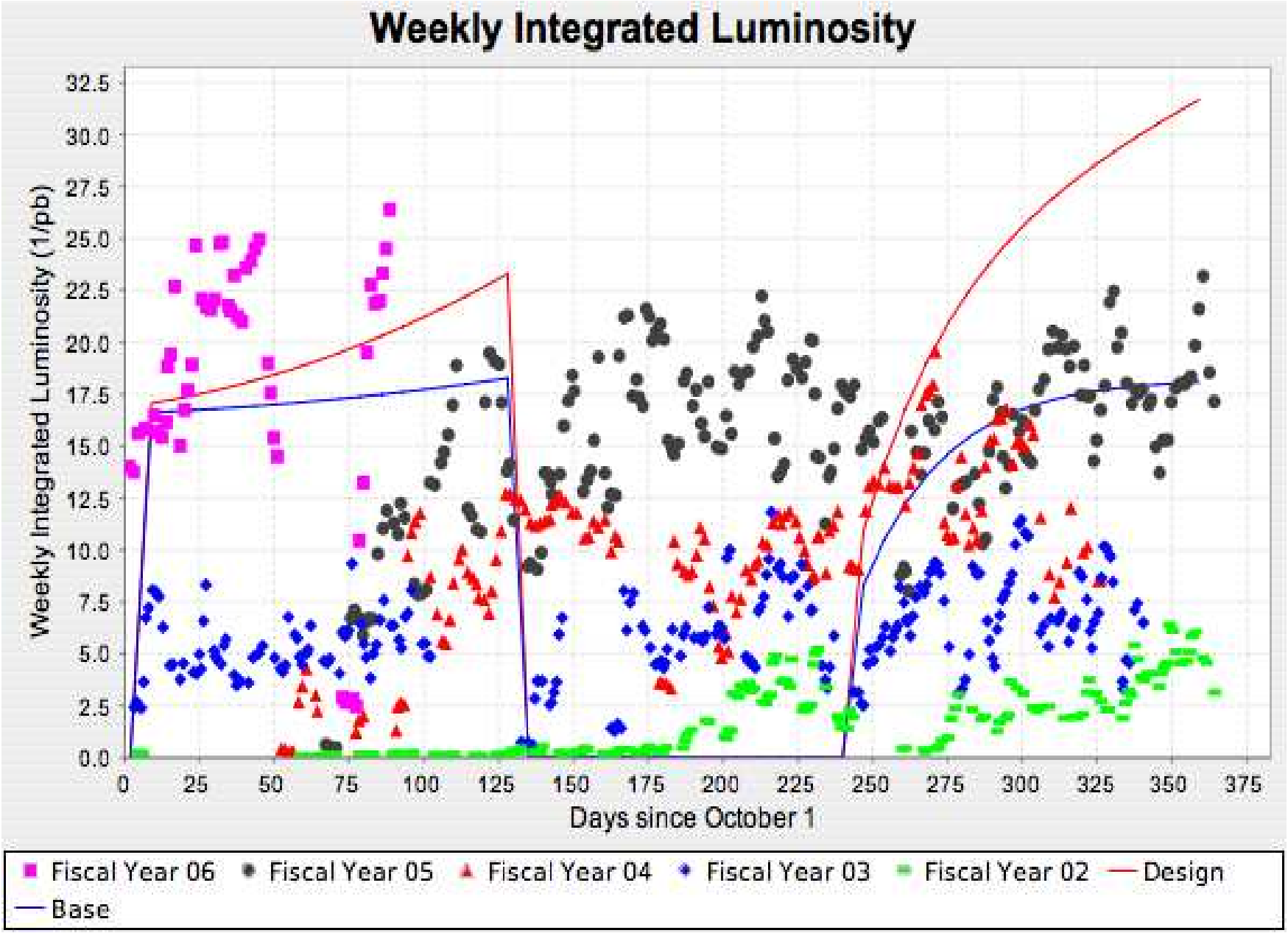

Tevatron (168.0 hrs.)
Fri Dec 30 06:44:45 2005
Store 4560: AIL = 143 e30
Store 4562: AIL = 122e30
Store 4564 : AIL = 91.9e30
Store 4567: AIL = 130.96e30
Store 4569: AIL = 154E30.
Store 4571: AIL = 154.45e30.
Store 4573: AIL = 130E30.
F4 Quench during store termination
D0 access
D0 access
D0 access
D0 access
T:SD Trip: F4 Quench on abort
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 24-Dec 2005
Sun 00:00 25-Dec 2005
Mon 00:00 26-Dec 2005
Tue 00:00 27-Dec 2005
Wed 00:00 28-Dec 2005
Thu 00:00 29-Dec 2005
Fri 00:00 30-Dec 2005

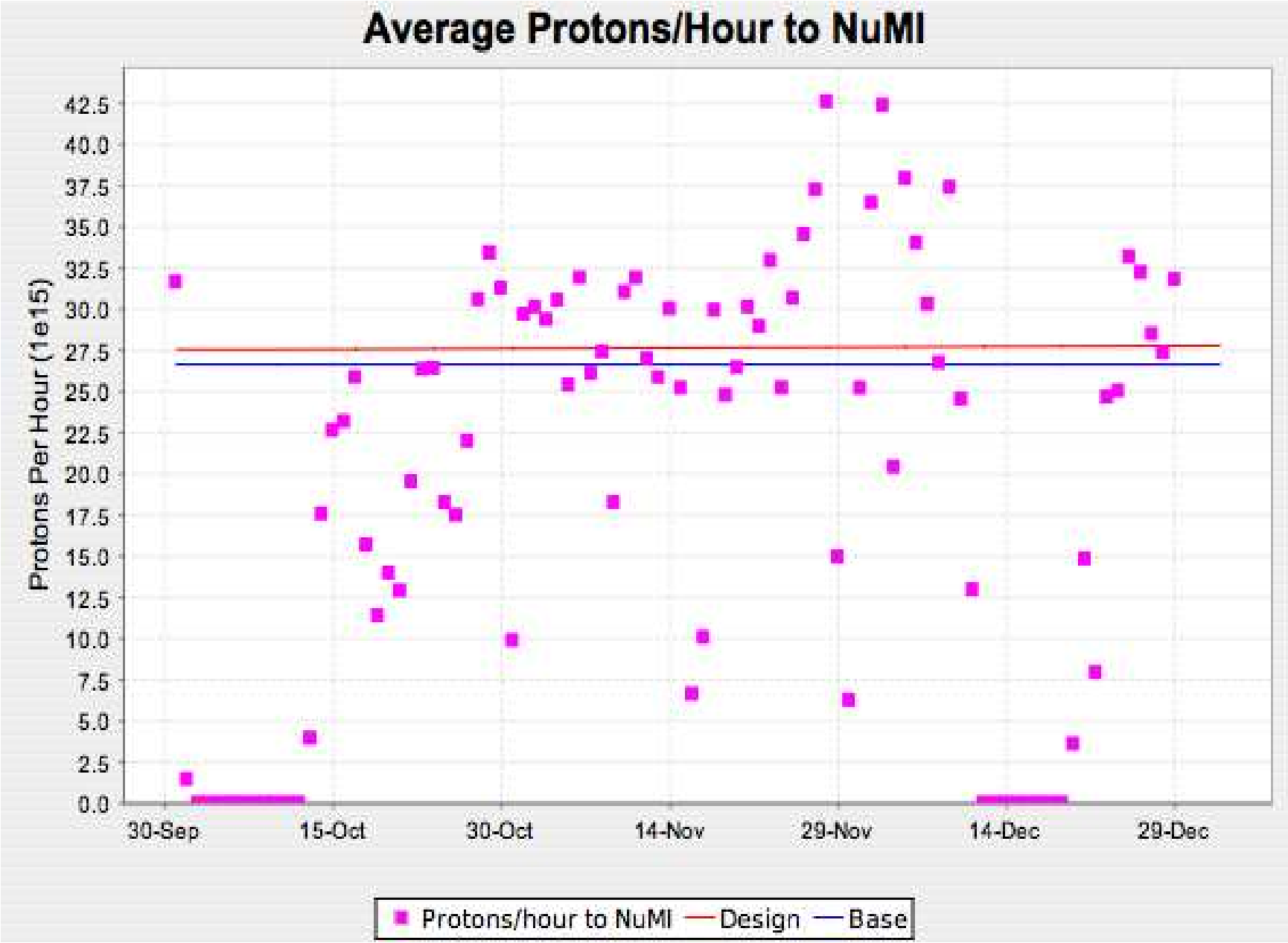

Tevatron Delivered Luminosity: Dec-23-2005 to Dec-29-2005
Average Delivered Luminosity = 21.98 pb-1
(06:00 Friday to 06:00 Friday)
KEY
Store #
Shot Type
Available Pbars
Initial Luminosity
Ave Delivered Lum
Store Duration
Store End
Delivered Luminosity [1/pb]
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Store 4560
Recycler
288.3e10
143.1e30
5213nb-1
(4th Best)
29.3 hrs
Normal
F4 Quench on termination
Store 4562
Recycler
236.1e10
122.5e30
4698nb-1
29.7 hrs
Normal
D0 Access
Store 4564
Recycler
137.4e10
81.9e30
2343 nb-1
17.3 hrs
Normal
D0 Access
Store 4567
Recycler
234.9e10
131e30
4146 nb-1
22.2 hrs
Normal
D0 Access
Store 4569
Recycler
269.6e10
153.9e30
(6th Best)
4508 nb-1
22.7 hrs
Quench
T:SD trip; F4 quench on abort
D0 Access
Store 4571
Recycler
278.8e10
154.5e30
(5th Best)
4745.6 nb-1
29.89 hrs
Normal
23-Dec-2005 F
24-Dec-2005 Sa
25-Dec-2005 Su
26-Dec-2005 M
27-Dec-2005 Tu
28-Dec-2005 W
29-Dec-2005 Th
30-Dec-2005 F
Date
CDF
D0
Brian Drendel
drendel@fnal.gov

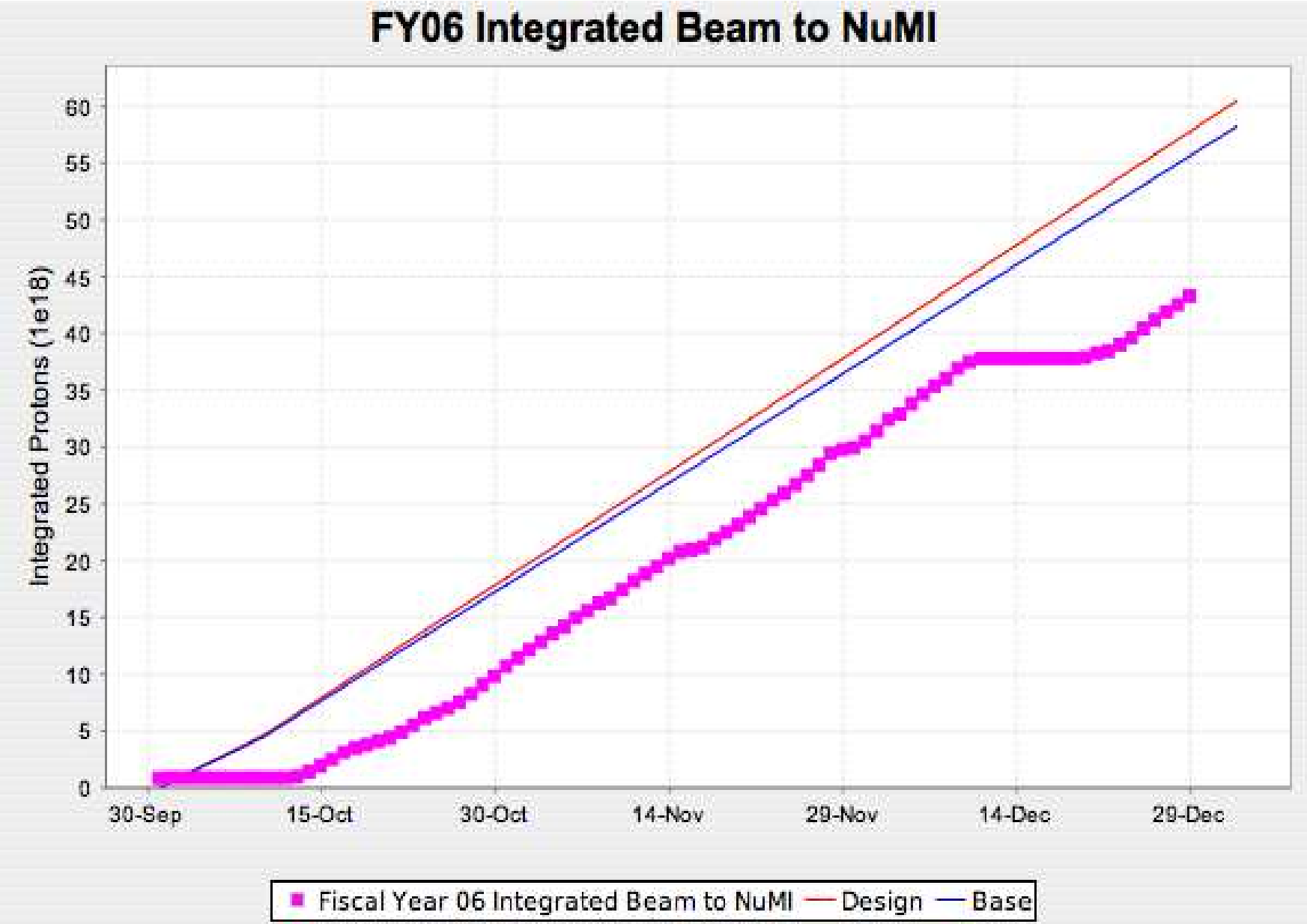

Luminosity vs Pbars
Initial Luminosity 1/¬μb/sec
Available Pbars (e10)
4571
4569
4567
4573
4562
4564
All shots this week were Recycler-only shots
Brian Drendel
drendel@fnal.gov
Last 40 Stores
Store 4571
Store 4569
Store 4567
Store 4564
Store 4562
fit of last 40 stores

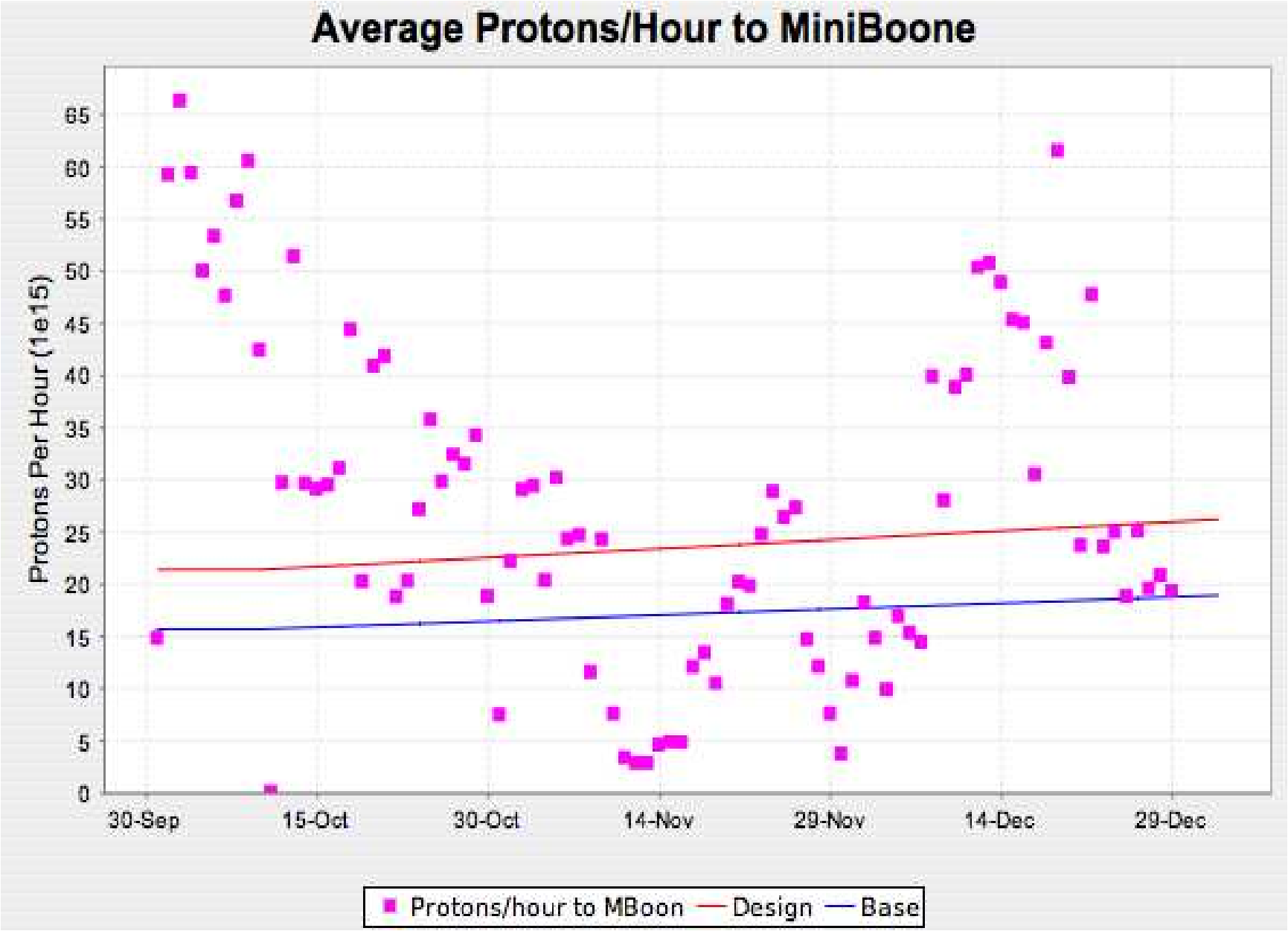

FY06 Integrated Luminosity
Integrated Luminosity (1/pb)
250
225
200
175
150
125
100
75
50
25
0
30-Sep
15-Oct
30-Oct
14-Nov
29-Nov
14-Dec
29-Dec
Fiscal Year 06 Integrated Luminosity
Design
Base

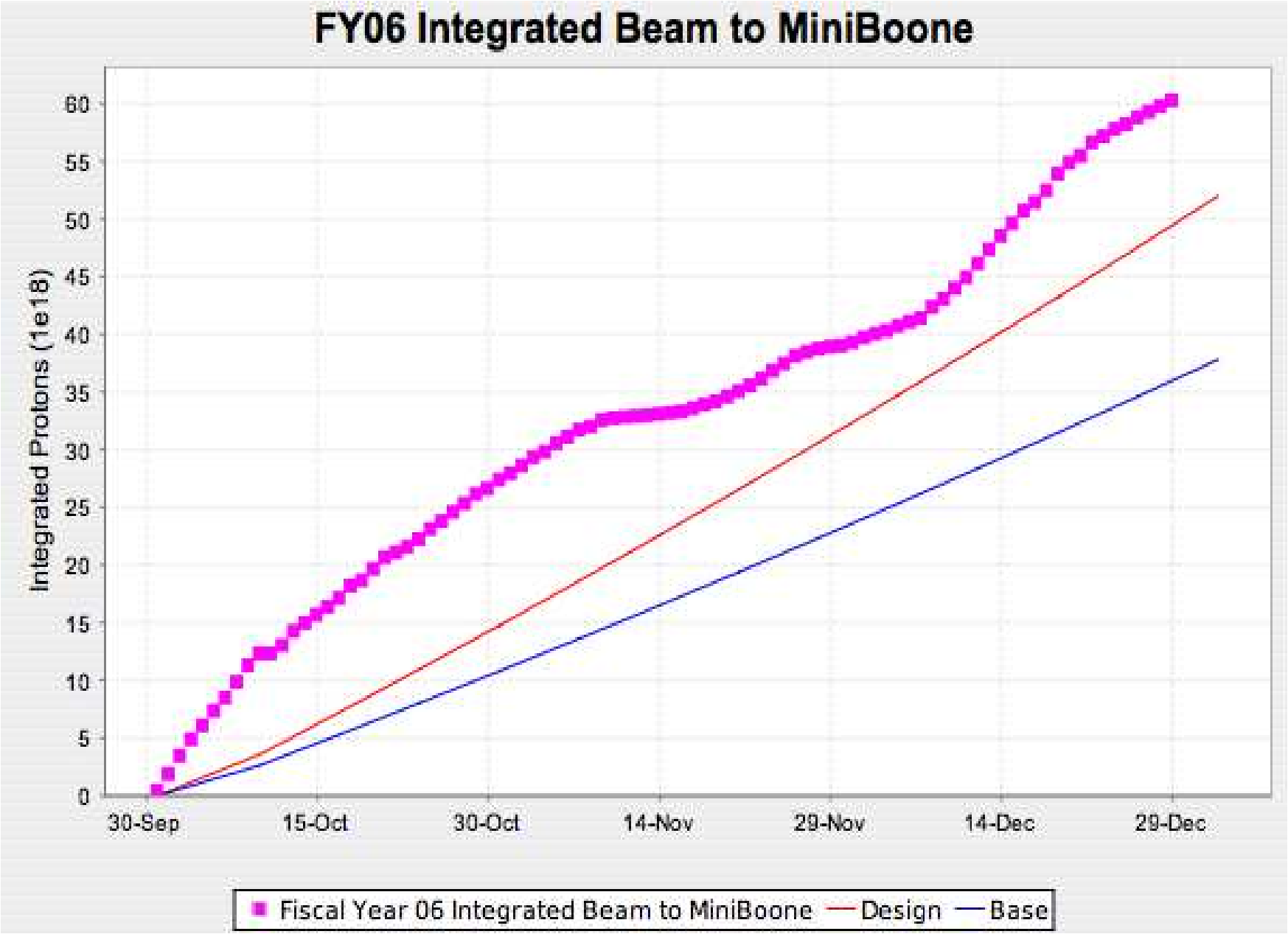

Peak Luminosity
Peak Luminosity (1/μb/sec)
200
175
150
125
100
75
50
25
0
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
Days since October 1
Fiscal Year 06
Fiscal Year 05
Fiscal Year 04
Fiscal Year 03
Fiscal Year 02
Design
Base


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


Average Protons/Hour to NuMI
Protons Per Hour (1e15)
42.5
40.0
37.5
35.0
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
30-Sep
15-Oct
30-Oct
14-Nov
29-Nov
14-Dec
29-Dec
Protons/hour to NuMI
Design
Base


FY06 Integrated Beam to NuMI
Integrated Protons (1e18)
60
55
50
45
40
35
30
25
20
15
10
5
0
30-Sep
15-Oct
30-Oct
14-Nov
29-Nov
14-Dec
29-Dec
Fiscal Year 06 Integrated Beam to NuMI
Design
Base


Average Protons/Hour to MiniBoone
Protons Per Hour (1e15)
65
60
55
50
45
40
35
30
25
20
15
10
5
0
30-Sep
15-Oct
30-Oct
14-Nov
29-Nov
14-Dec
29-Dec
Protons/hour to MBoon
Design
Base


FY06 Integrated Beam to MiniBoone
Integrated Protons (1e18)
0
5
10
15
20
25
30
35
40
45
50
55
60
30-Sep
15-Oct
30-Oct
14-Nov
29-Nov
14-Dec
29-Dec
Fiscal Year 06 Integrated Beam to MiniBoone
Design
Base