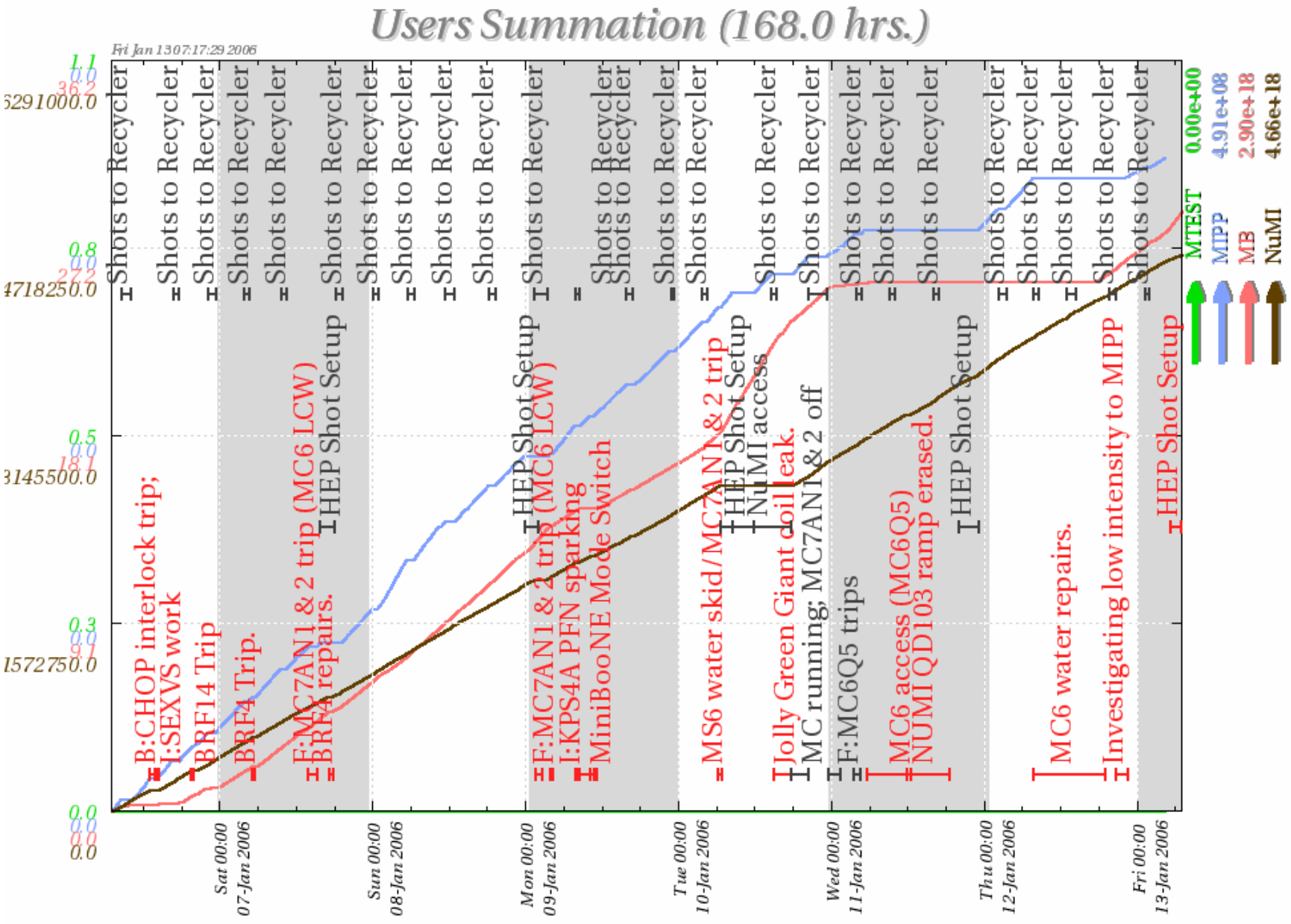
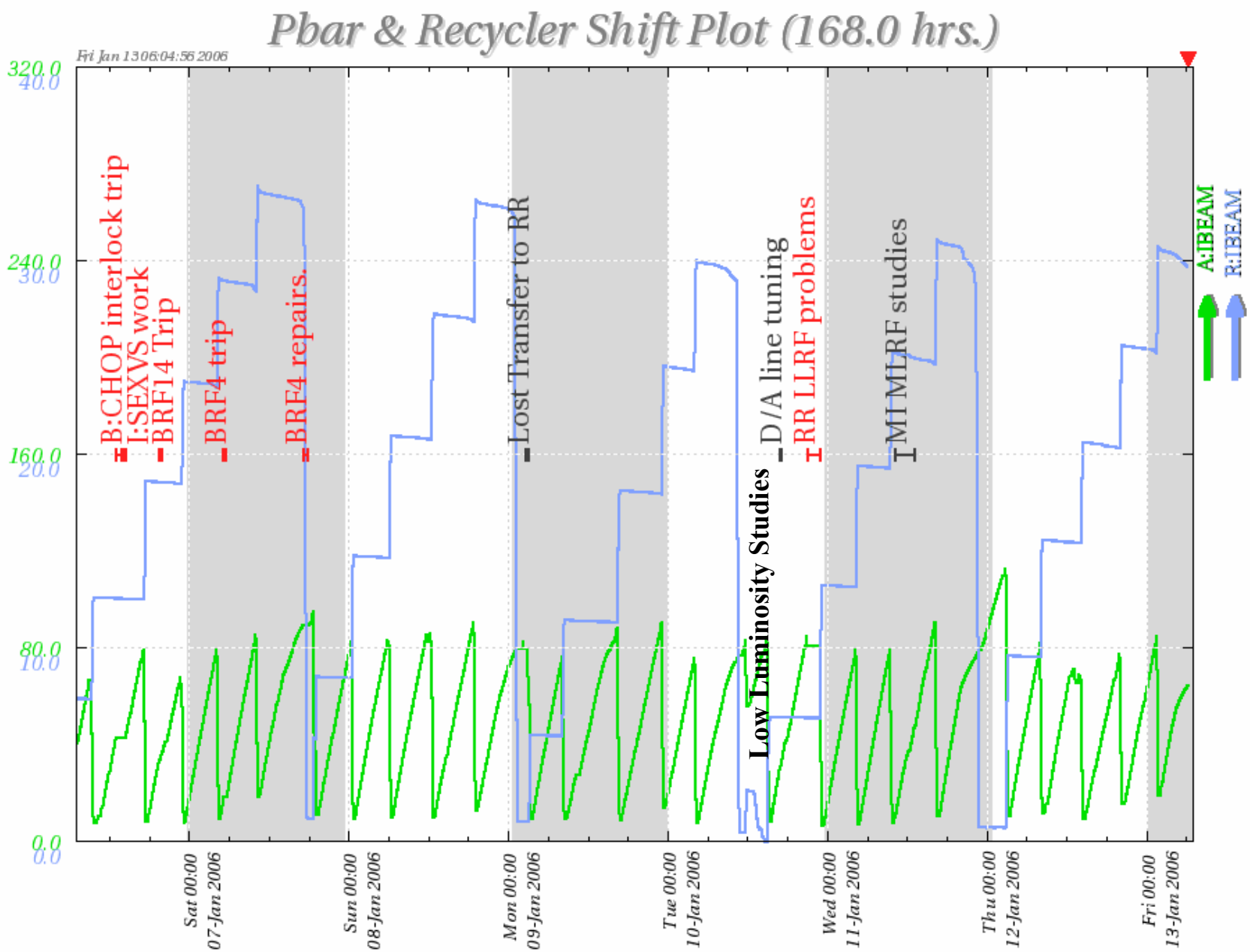
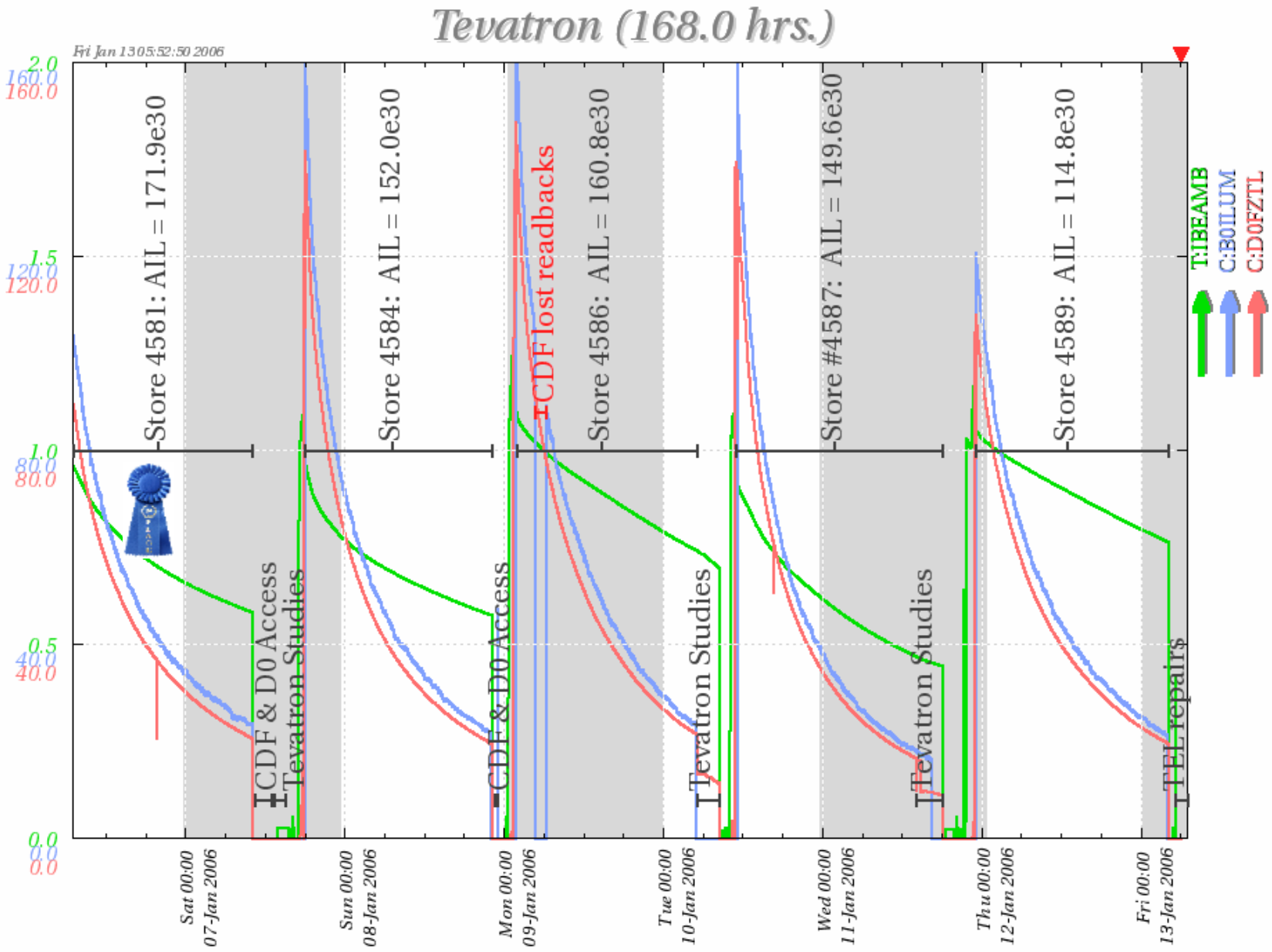
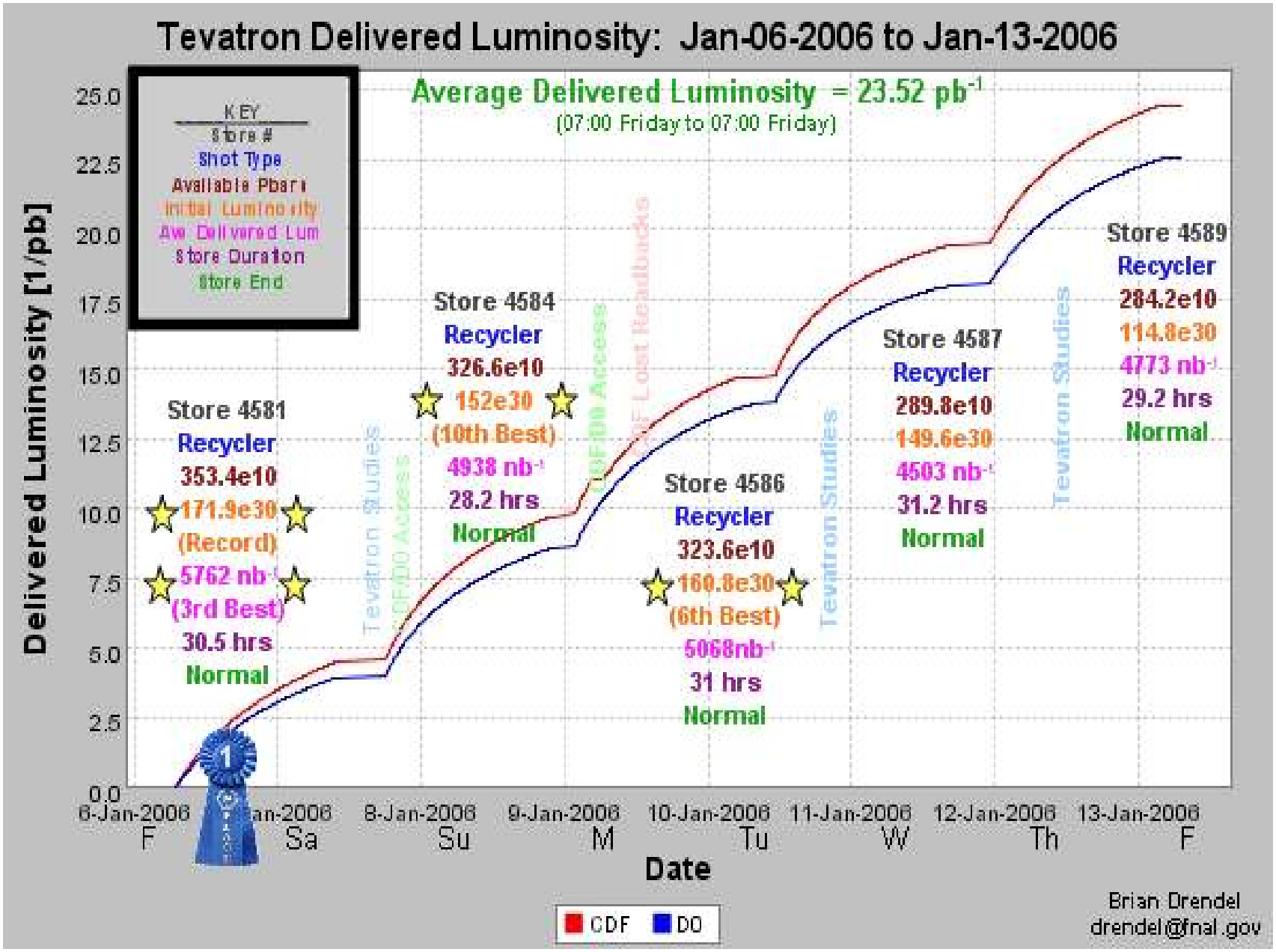
Accelerator Week in Review

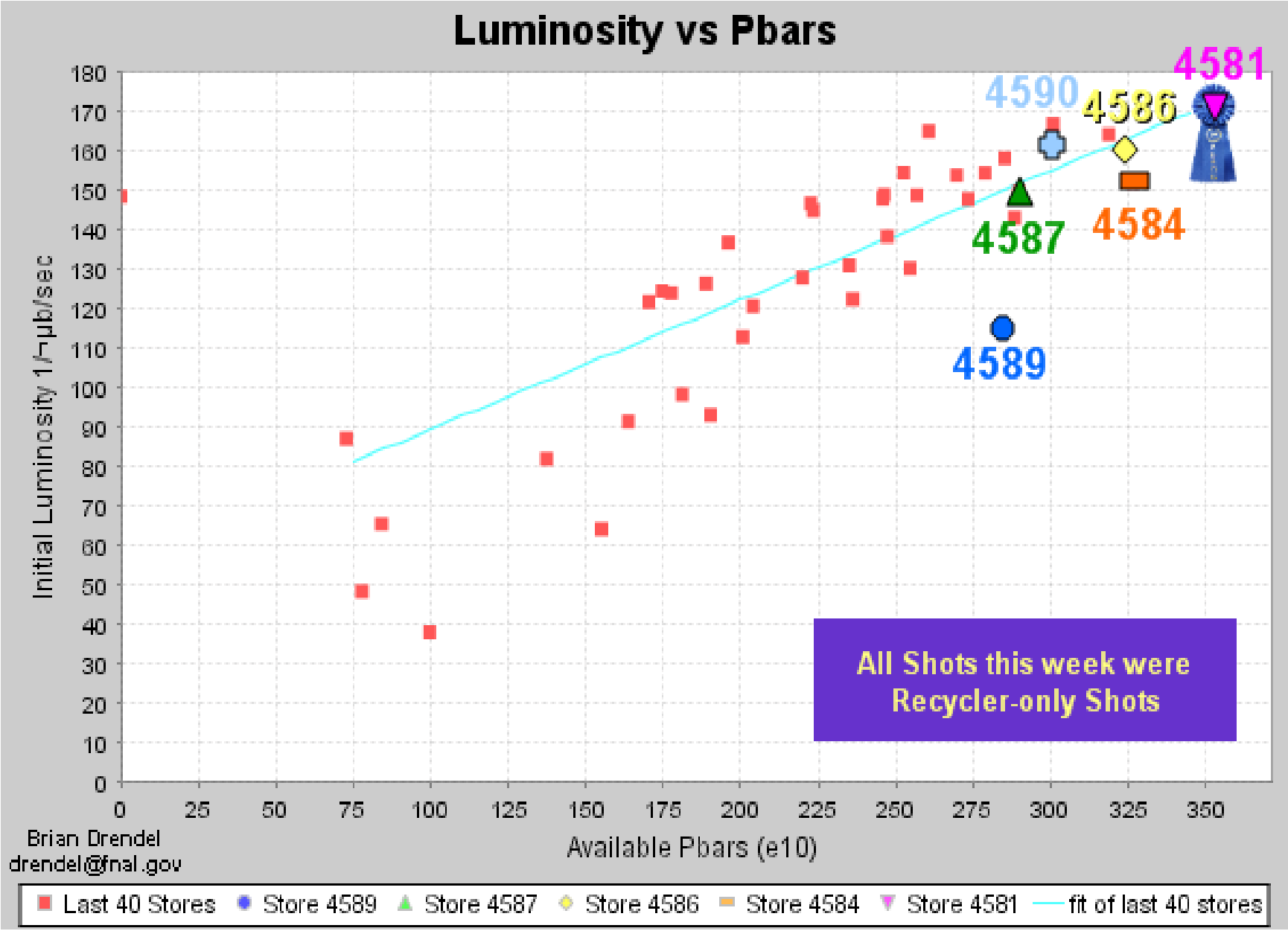
- Part I: Regular 9am Scheduling Meeting
  - Crew Chief Summary
  - 48 hour machine summaries and study requests – Machine Coordinators
  - Operational Plan – Salah Chaurize
- Part II: Weekly Machine Reports
  - Weekly Operational Summary – Brian Drendel
    - User, Pbar and Tevatron weekly operational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

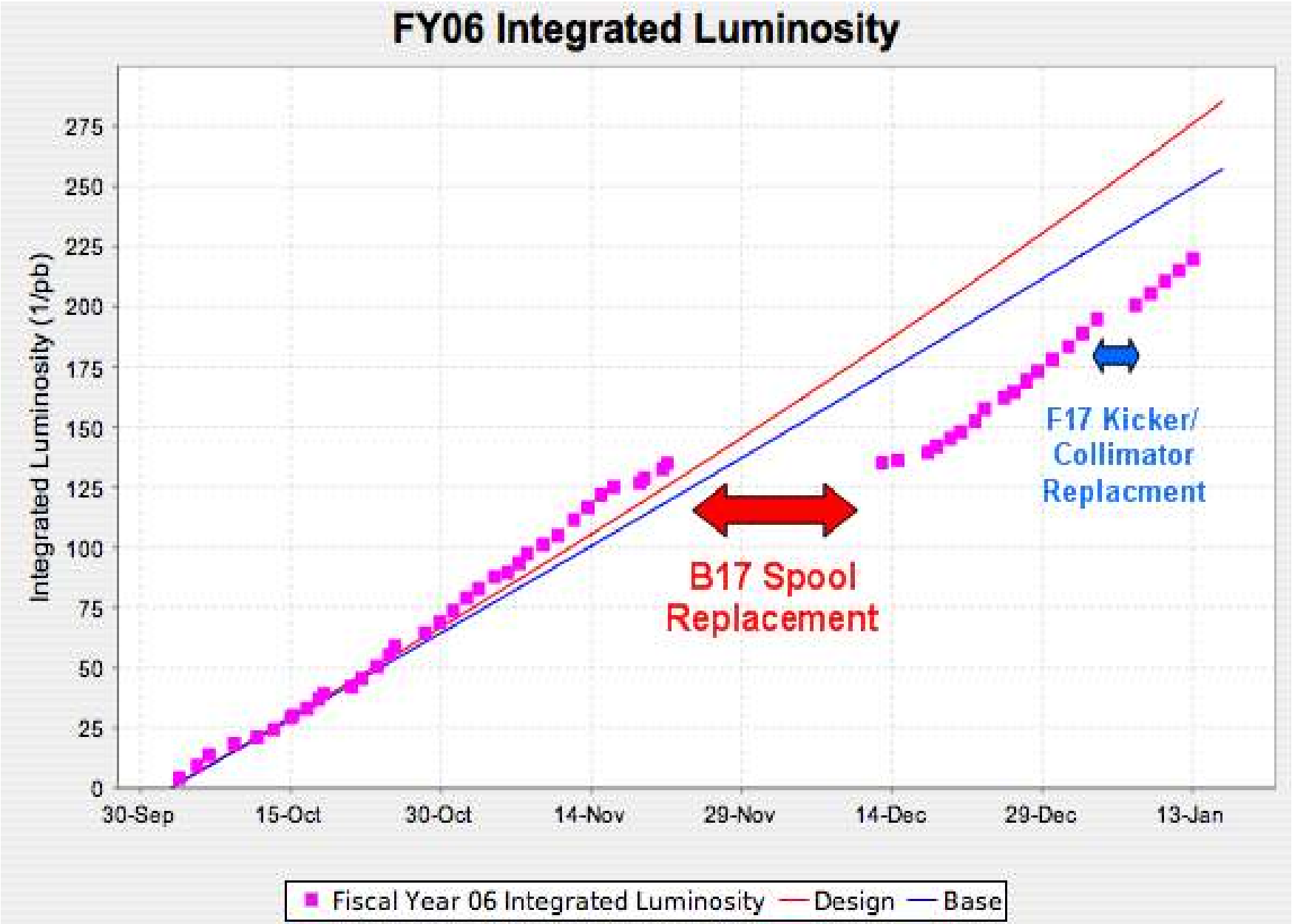

Users Summation (168.0 hrs.)
Fri Jan 13 07:17:29 2006
5291000.0
4718250.0
3145500.0
1572750.0
0.0
0.3
0.5
0.8
1.1
Shots to Recycler
B:CHOP interlock trip;
I:SEXVS work
BRF14 Trip
BRF4 Trip.
F:MC7AN1 & 2 trip (MC6 LCW)
BRF4 repairs.
HEP Shot Setup
HEP Shot Setup
F:MC7AN1 & 2 trip (MC6 LCW)
I:KPS4A PFN sparking
MiniBooNE Mode Switch
MS6 water skid/MC7AN1 & 2 trip
HEP Shot Setup
NuMI access
Jolly Green Giant oil leak.
MC running; MC7AN1 & 2 off
F:MC6Q5 trips
HEP Shot Setup
MC6 access (MC6Q5)
NUMI QD103 ramp erased.
MC6 water repairs.
Investigating low intensity to MIPP
HEP Shot Setup
Sat 00:00 07-Jan 2006
Sun 00:00 08-Jan 2006
Mon 00:00 09-Jan 2006
Tue 00:00 10-Jan 2006
Wed 00:00 11-Jan 2006
Thu 00:00 12-Jan 2006
Fri 00:00 13-Jan 2006
MTEST 0.00e+00
MIPP 4.91e+08
MB 2.90e+18
NuMI 4.66e+18

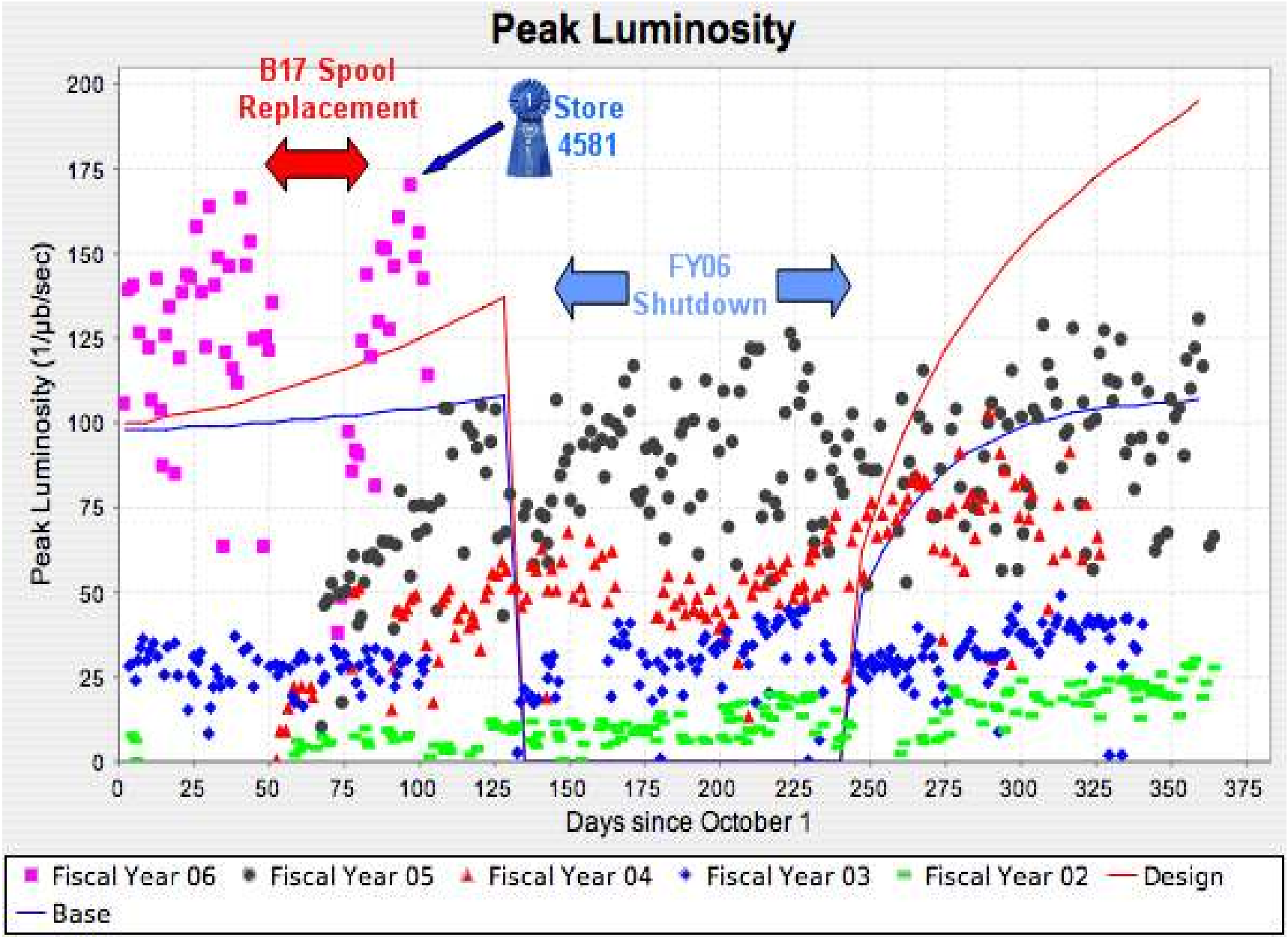

Pbar & Recycler Shift Plot (168.0 hrs.)
Fri Jan 13 06:04:56 2006
320.0
40.0
240.0
30.0
160.0
20.0
80.0
10.0
0.0
0.0
B:CHOP interlock trip
I:SEXVS work
BRF14 Trip
BRF4 trip
BRF4 repairs.
Lost Transfer to RR
Low Luminosity Studies
D/A line tuning
RR LLRF problems
MI MLRF studies
A:IBEAM
R:IBEAM
Sat 00:00 07-Jan 2006
Sun 00:00 08-Jan 2006
Mon 00:00 09-Jan 2006
Tue 00:00 10-Jan 2006
Wed 00:00 11-Jan 2006
Thu 00:00 12-Jan 2006
Fri 00:00 13-Jan 2006

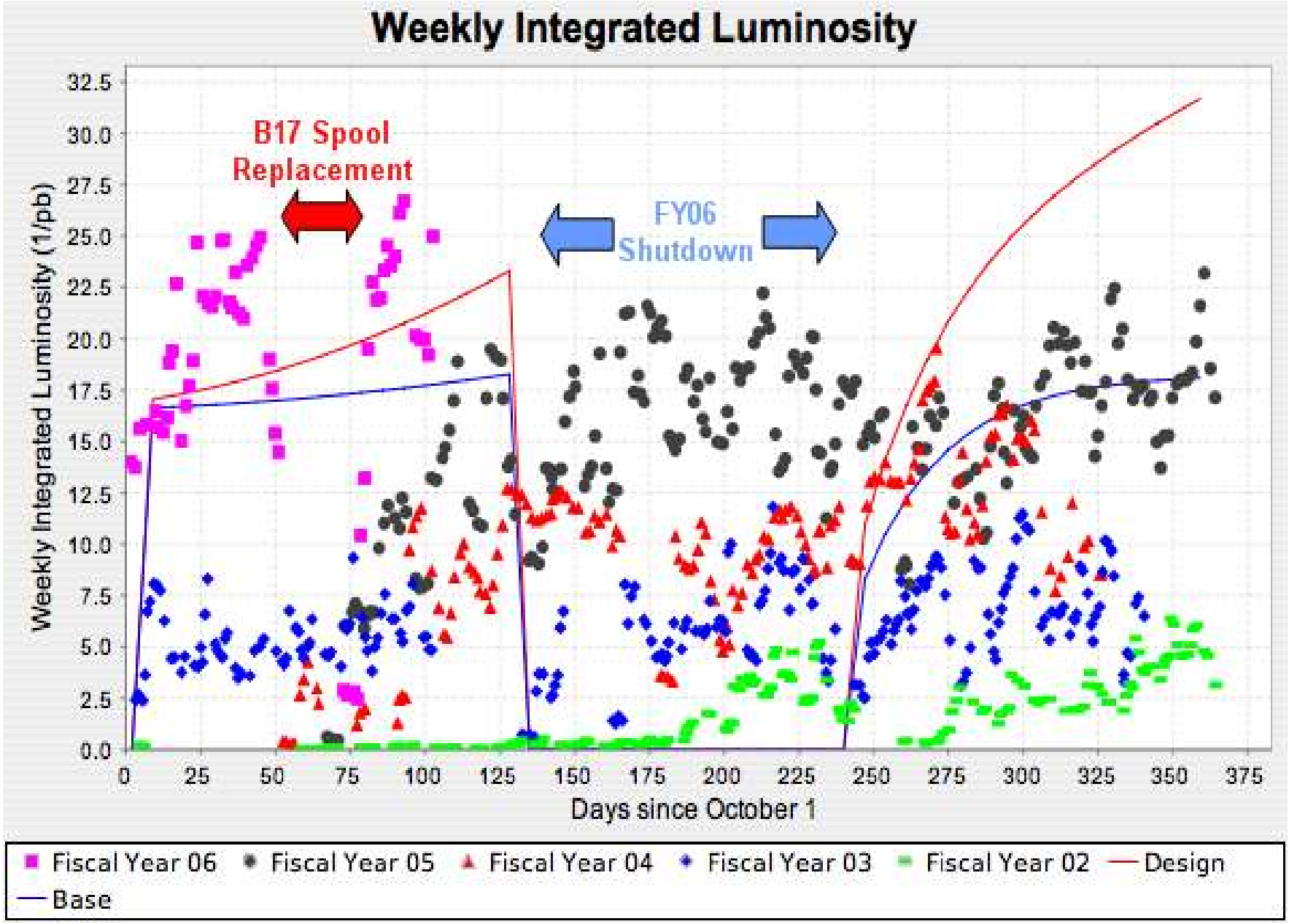

Tevatron (168.0 hrs.)
Fri Jan 13 05:52:50 2006
Store 4581: AIL = 171.9e30
Store 4584: AIL = 152.0e30
Store 4586: AIL = 160.8e30
Store #4587: AIL = 149.6e30
Store 4589: AIL = 114.8e30
CDF & D0 Access
Tevatron Studies
CDF & D0 Access
CDF lost readbacks
Tevatron Studies
Tevatron Studies
TEL repairs
T:IBEAMB
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 07-Jan 2006
Sun 00:00 08-Jan 2006
Mon 00:00 09-Jan 2006
Tue 00:00 10-Jan 2006
Wed 00:00 11-Jan 2006
Thu 00:00 12-Jan 2006
Fri 00:00 13-Jan 2006

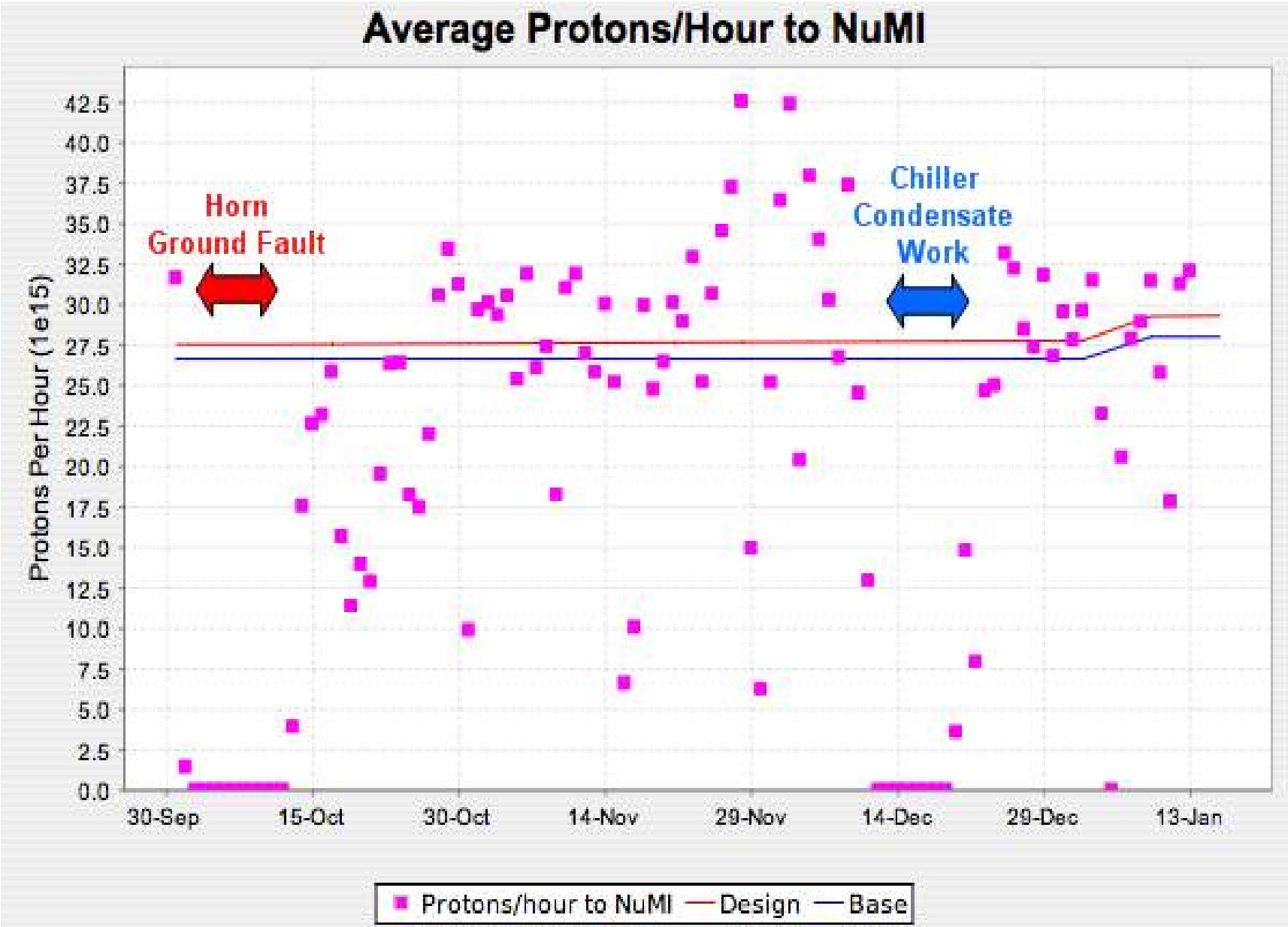

Tevatron Delivered Luminosity: Jan-06-2006 to Jan-13-2006
Average Delivered Luminosity = 23.52 pb-1
(07:00 Friday to 07:00 Friday)
KEY
Store #
Shot Type
Available Pbar
Initial Luminosity
Avg Delivered Lum
Store Duration
Store End
Store 4581
Recycler
353.4e10
171.9e30
(Record)
5762 nb-1
(3rd Best)
30.5 hrs
Normal
Store 4584
Recycler
326.6e10
152e30
(10th Best)
4938 nb-1
28.2 hrs
Normal
Store 4586
Recycler
323.6e10
160.8e30
(6th Best)
5068nb-1
31 hrs
Normal
Store 4587
Recycler
289.8e10
149.6e30
4503 nb-1
31.2 hrs
Normal
Store 4589
Recycler
284.2e10
114.8e30
4773 nb-1
29.2 hrs
Normal
Tevatron Studies
CDF/D0 Access
CDF Lost Roadblocks
Delivered Luminosity [1/pb]
25.0
22.5
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
6-Jan-2006 F
Sa
8-Jan-2006 Su
9-Jan-2006 M
10-Jan-2006 Tu
11-Jan-2006 W
12-Jan-2006 Th
13-Jan-2006 F
Date
CDF
D0
Brian Drendel
drendel@fnal.gov

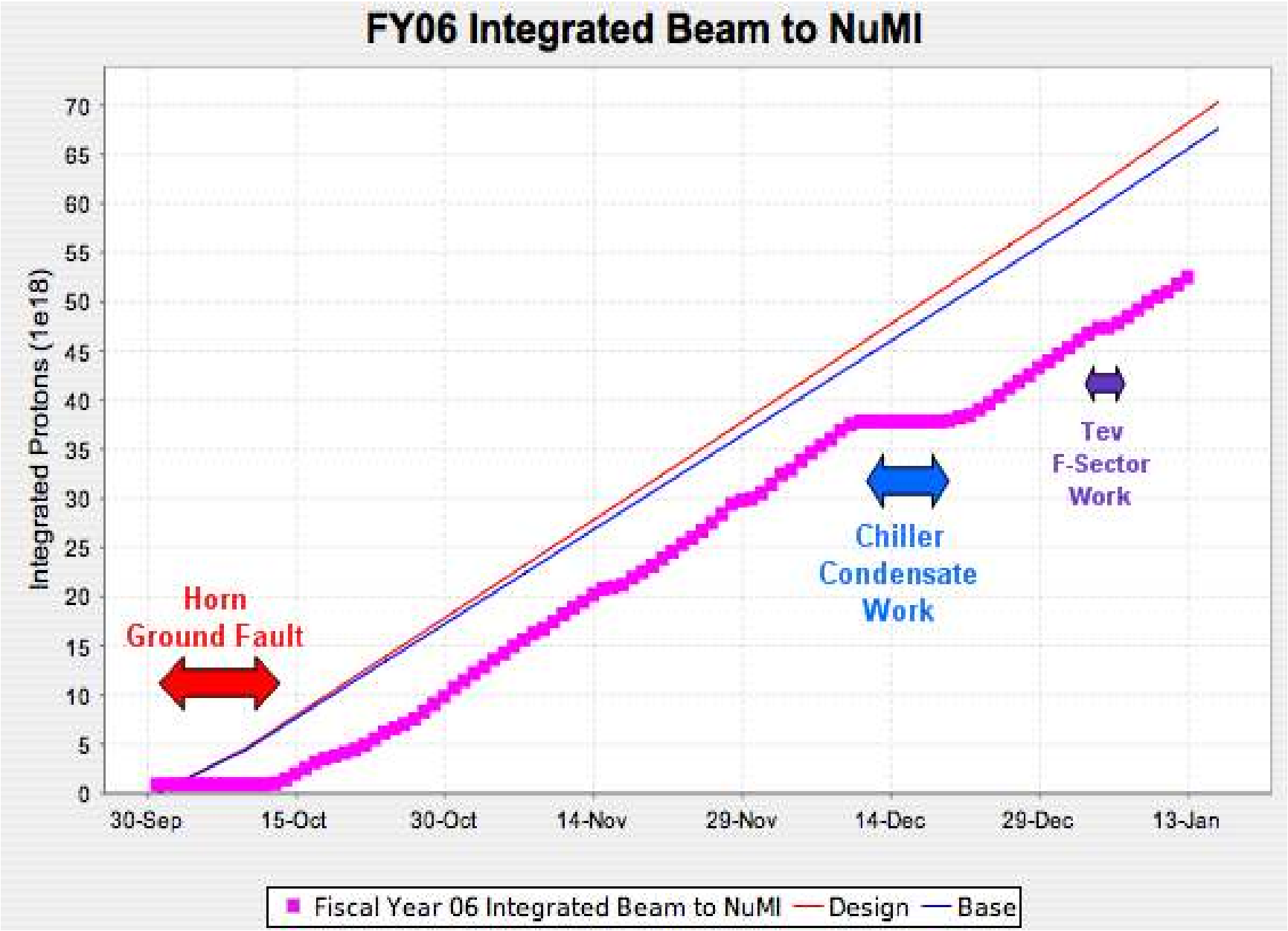

Luminosity vs Pbars
Initial Luminosity 1/¬µb/sec
Available Pbars (e10)
4581
4590
4586
4587
4584
4589
All Shots this week were Recycler-only Shots
Brian Drendel
drendel@fnal.gov
Last 40 Stores
Store 4589
Store 4587
Store 4586
Store 4584
Store 4581
fit of last 40 stores

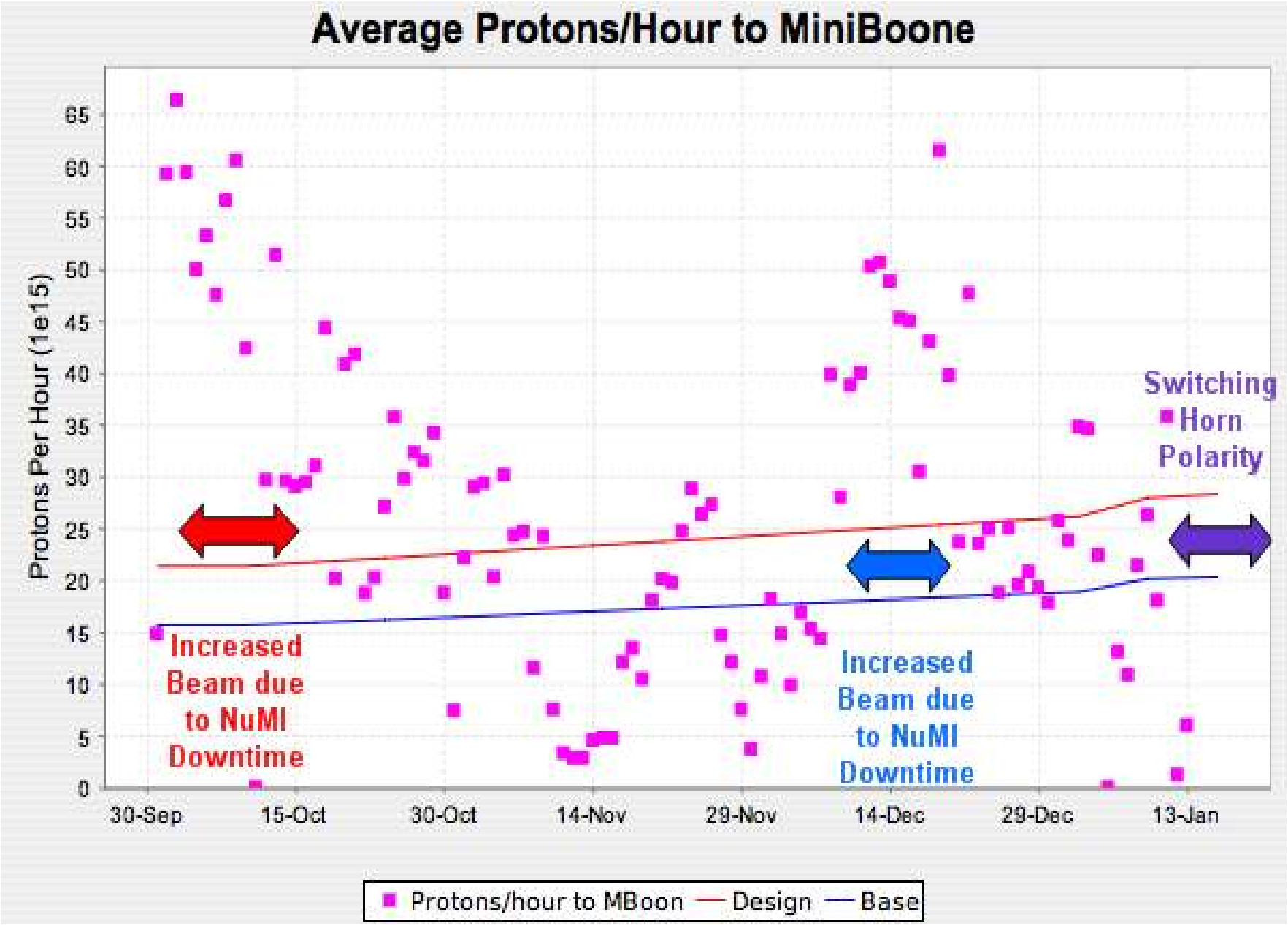

FY06 Integrated Luminosity
Integrated Luminosity (1/pb)
275
250
225
200
175
150
125
100
75
50
25
0
30-Sep
15-Oct
30-Oct
14-Nov
29-Nov
14-Dec
29-Dec
13-Jan
B17 Spool
Replacement
F17 Kicker/
Collimator
Replacment
Fiscal Year 06 Integrated Luminosity
Design
Base

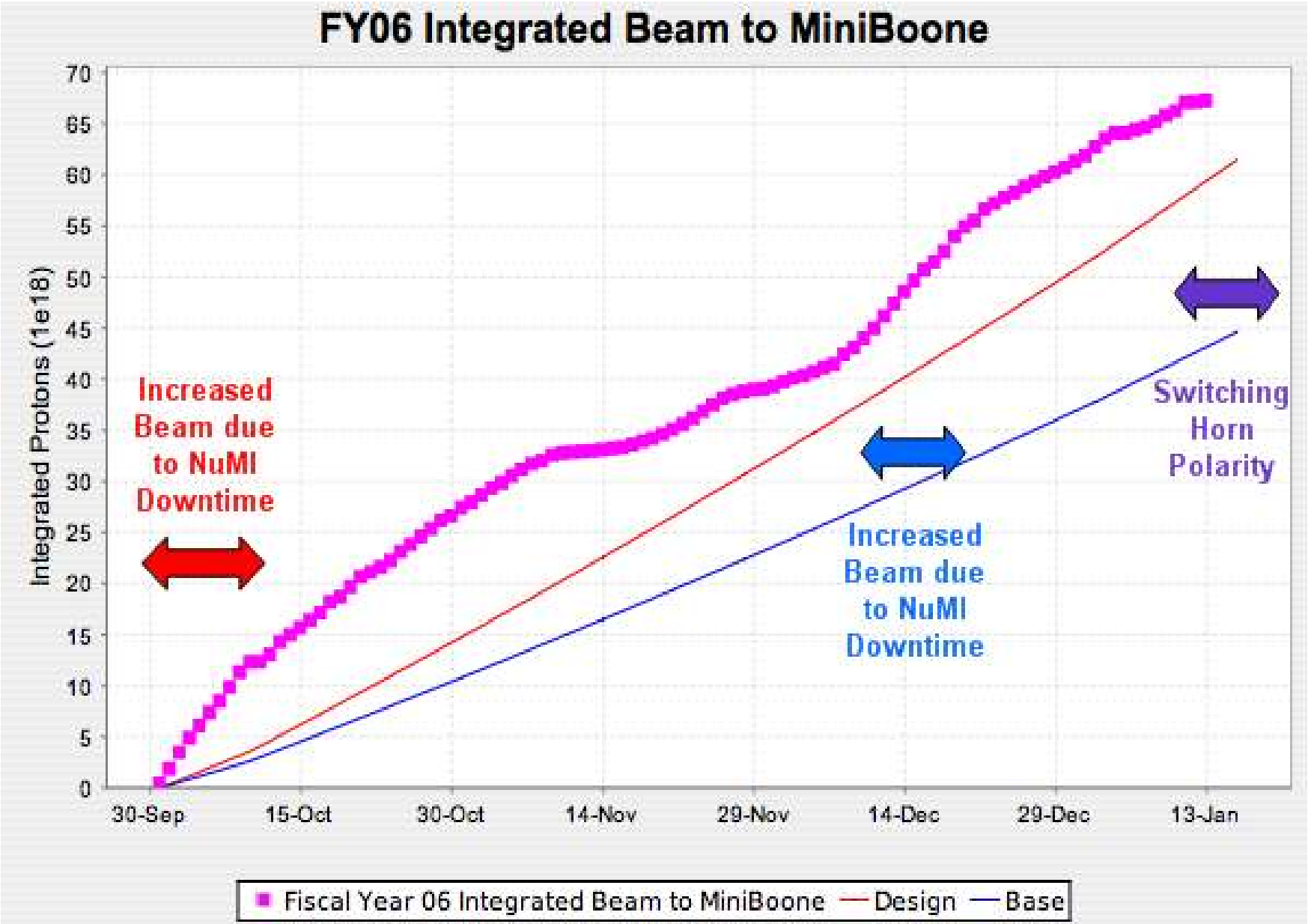

Peak Luminosity
B17 Spool
Replacement
Store
4581
FY06
Shutdown
Peak Luminosity (1/μb/sec)
Days since October 1
Fiscal Year 06
Fiscal Year 05
Fiscal Year 04
Fiscal Year 03
Fiscal Year 02
Design
Base


Weekly Integrated Luminosity
B17 Spool Replacement
FY06 Shutdown
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
13-Jan
Horn
Ground Fault
Chiller
Condensate
Work
Protons/hour to NuMI
Design
Base


FY06 Integrated Beam to NuMI
Integrated Protons (1e18)
70
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
13-Jan
Horn
Ground Fault
Chiller
Condensate
Work
Tev
F-Sector
Work
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
13-Jan
Increased Beam due to NuMI Downtime
Increased Beam due to NuMI Downtime
Switching Horn Polarity
Protons/hour to MBoon
Design
Base


FY06 Integrated Beam to MiniBoone
Integrated Protons (1e18)
70
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
13-Jan
Increased Beam due to NuMI Downtime
Increased Beam due to NuMI Downtime
Switching Horn Polarity
Fiscal Year 06 Integrated Beam to MiniBoone
Design
Base