2011-05-18 Wednesday Morning Notes

Wednesday, May 18, 2011
7:51 AM

Numbers

- Stacking
  - Pbars stacked: 450.32 E10
  - Time stacking: 23.18 Hr
  - Average stacking rate: 19.43 E10/Hr

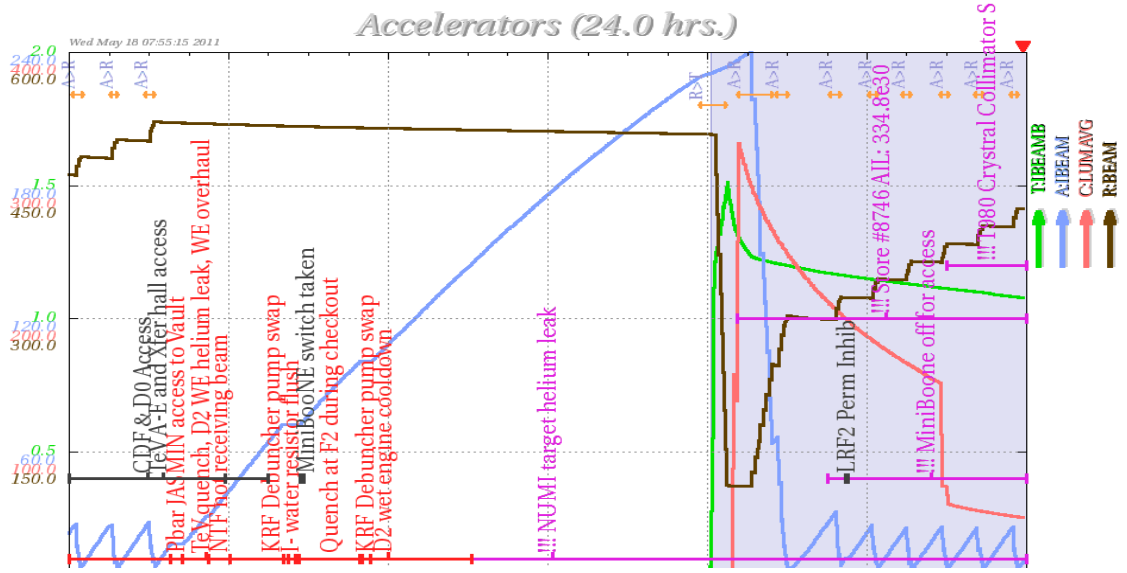
- Uptime
  - Number of pulses while in stacking mode: 31420
  - Number of pulses with beam: 30276
  - Fraction of up pulses was: 96.36%

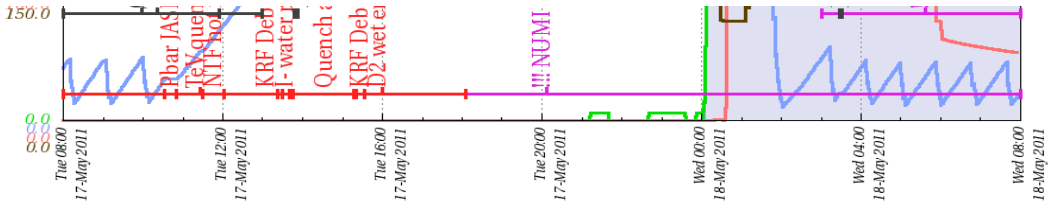
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 22.33 Hr
  - Possible average stacking rate: 20.16 E10/Hr
  - Could have stacked: 467.34 E10/Hr

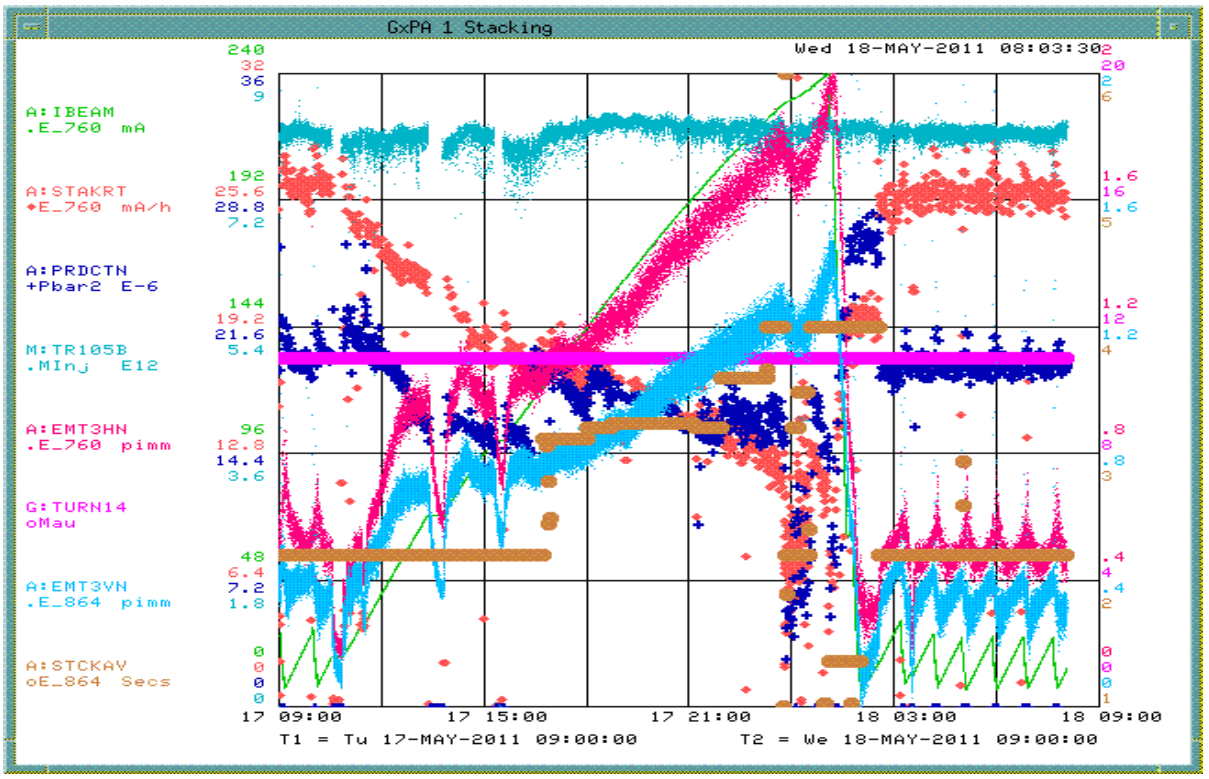
- Recycler Transfers
  - Pbars sent to the Recycler: 453.60 E10
  - Number of transfers : 40
  - Number of transfer sets: 11
  - Average Number of transfer per set: 3.64
  - Time taken to shoot including reverse proton tuneup: 00.14 Hr
  - Transfer efficiency: 88.61%

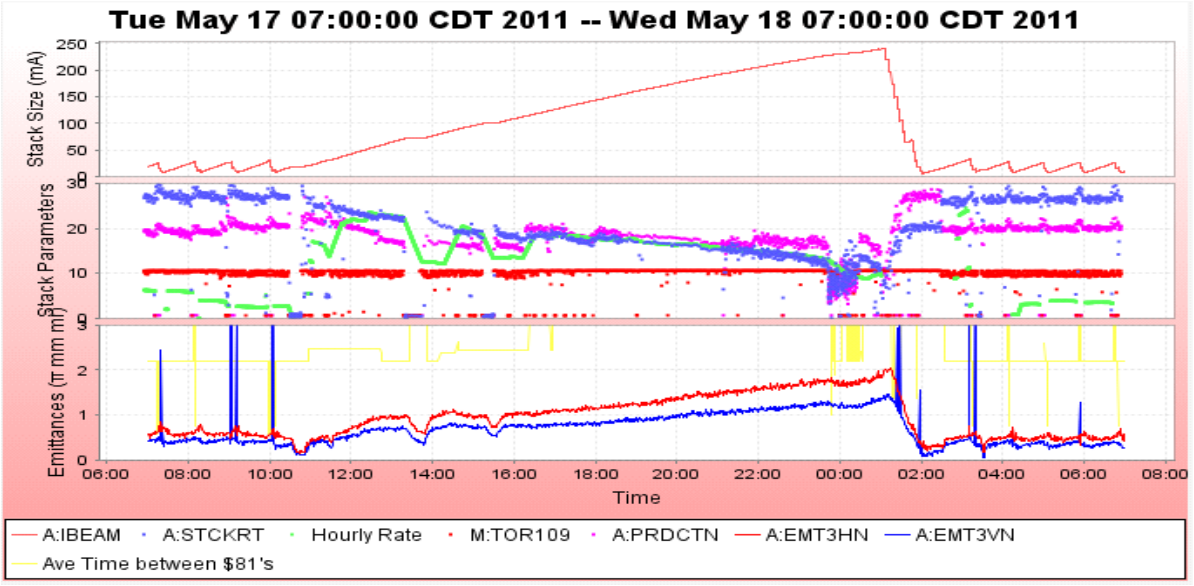
- Other Info
  - Average POT : 8.16 E12
  - Average production: 18.22 pbars/E6 protons

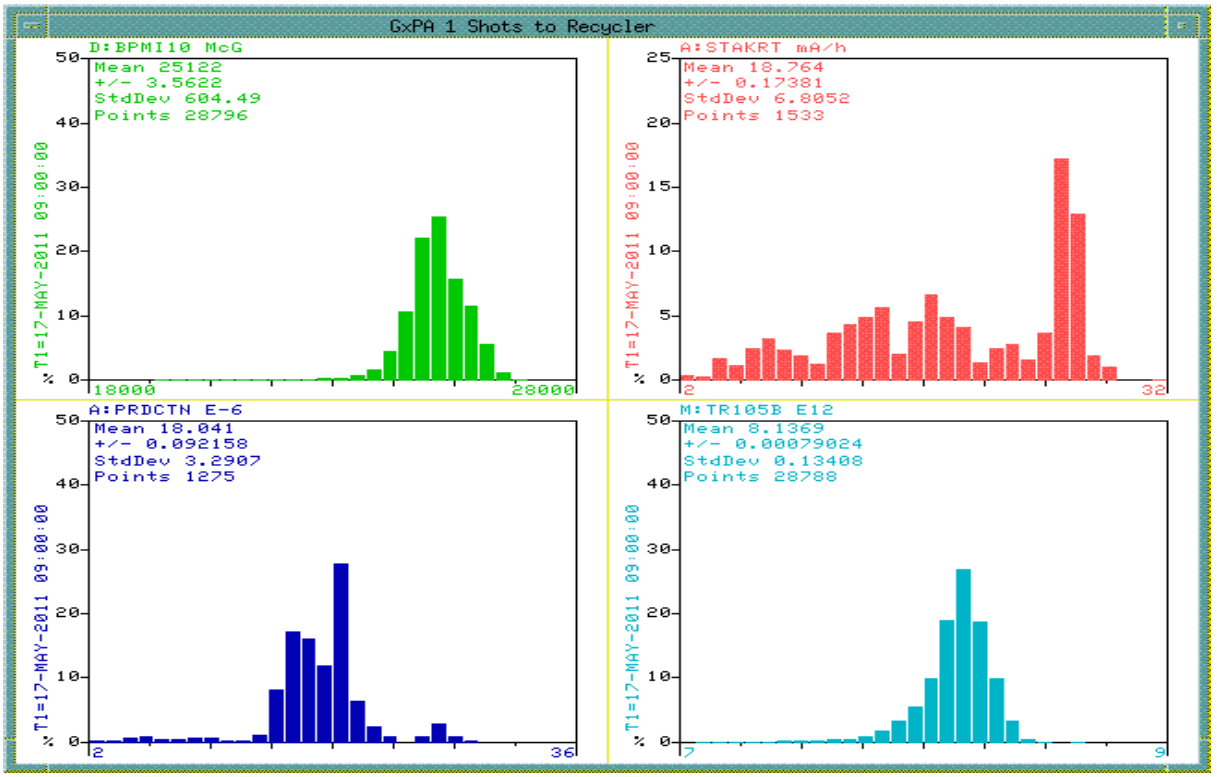
Plots

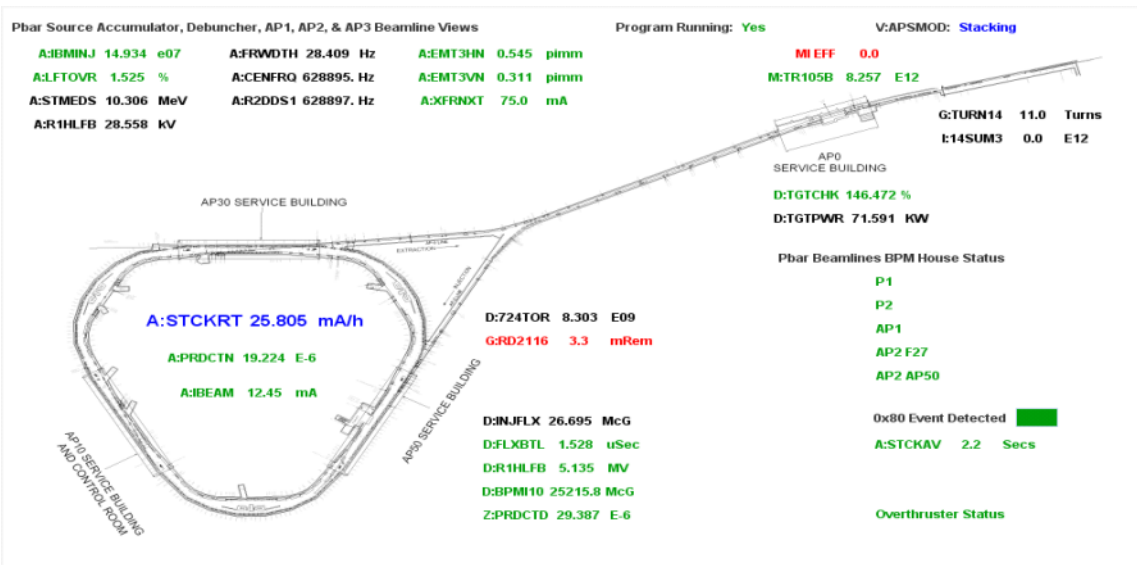



150.0
0.0
Tue 08:00 17-May 2011
Tue 12:00 17-May 2011
Tue 16:00 17-May 2011
Tue 20:00 17-May 2011
Wed 00:00 18-May 2011
Wed 04:00 18-May 2011
Wed 08:00 18-May 2011

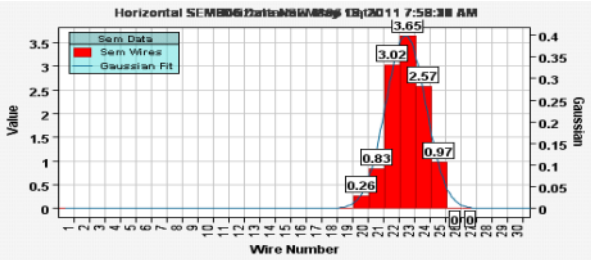

GxPA 1 Stacking
Wed 18-MAY-2011 08:03:30
A:IBEAM .E_760 mA
A:STAKRT +E_760 mA/h
A:PRDCTN +Pbar2 E-6
M:TR105B .MInj E12
A:EMT3HN .E_760 pimm
G:TURN14 oMau
A:EMT3VN .E_864 pimm
A:STCKAV oE_864 Secs
17 09:00
17 15:00
17 21:00
18 03:00
18 09:00
T1 = Tu 17-MAY-2011 09:00:00
T2 = We 18-MAY-2011 09:00:00

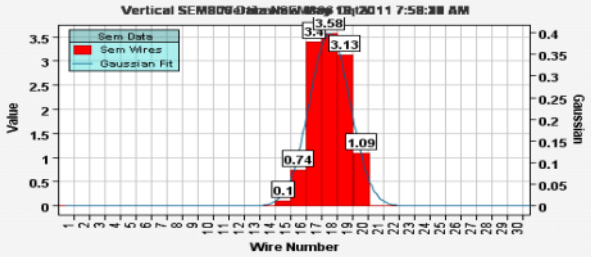

Tue May 17 07:00:00 CDT 2011 -- Wed May 18 07:00:00 CDT 2011
Stack Size (mA)
Stack Parameters
Emittances (π mm mr)
Time
A:IBEAM
A:STCKRT
Hourly Rate
M:TOR109
A:PRDCTN
A:EMT3HN
A:EMT3VN
Ave Time between $81's


GxPA 1 Shots to Recycler
D:BPMI10 McG
Mean 25122
+/- 3.5622
StdDev 604.49
Points 28796
A:STAKRT mA/h
Mean 18.764
+/- 0.17381
StdDev 6.8052
Points 1533
A:PRDCTN E-6
Mean 18.041
+/- 0.092158
StdDev 3.2907
Points 1275
M:TR105B E12
Mean 8.1369
+/- 0.00079024
StdDev 0.13408
Points 28788
T1=17-MAY-2011 09:00:00

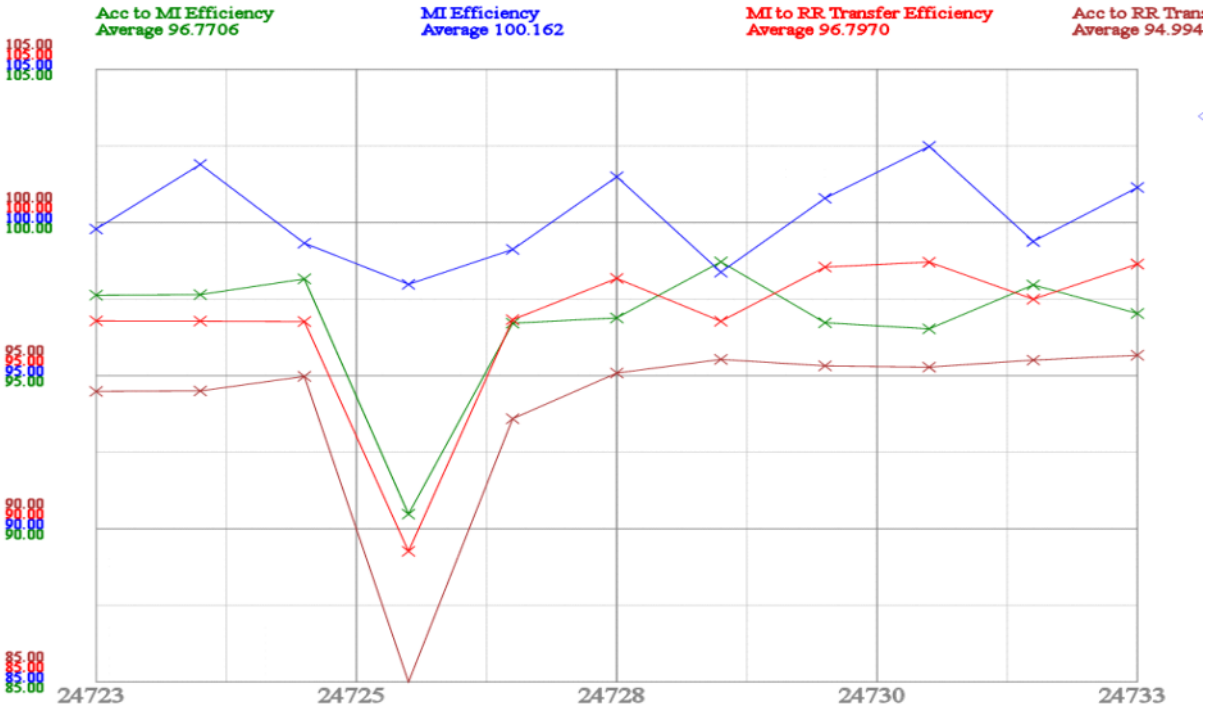

Pbar Source Accumulator, Debuncher, AP1, AP2, & AP3 Beamline Views
Program Running: Yes
V:APSMOD: Stacking
A:IBMINJ 14.934 e07
A:LFTOVR 1.525 %
A:STMEDS 10.306 MeV
A:R1HLFB 28.558 kV
A:FRWDTH 28.409 Hz
A:CENFRQ 628895. Hz
A:R2DDS1 628897. Hz
A:EMT3HN 0.545 pimm
A:EMT3VN 0.311 pimm
A:XFRNXT 75.0 mA
MI EFF 0.0
M:TR105B 8.257 E12
G:TURN14 11.0 Turns
I:14SUM3 0.0 E12
AP0 SERVICE BUILDING
D:TGTCHK 146.472 %
D:TGTPWR 71.591 KW
AP30 SERVICE BUILDING
Pbar Beamlines BPM House Status
P1
P2
AP1
AP2 F27
AP2 AP50
A:STCKRT 25.805 mA/h
A:PRDCTN 19.224 E-6
A:IBEAM 12.45 mA
D:724TOR 8.303 E09
G:RD2116 3.3 mRem
AP50 SERVICE BUILDING
AP10 SERVICE BUILDING AND CONTROL ROOM
D:INJFLX 26.695 McG
D:FLXBTL 1.528 uSec
D:R1HLFB 5.135 MV
D:BPMI10 25215.8 McG
Z:PRDCTD 29.387 E-6
0x80 Event Detected
A:STCKAV 2.2 Secs
Overthruster Status

Horizontal Area New	11.3	Intensity
Horizontal Area Calc	200.3	Intensity
Horizontal Sigma New	3.46	mm
Horizontal Sigma Calc	3.27	mm
Horizontal Mean	23.75	mm
Vertical Area New	12.04	Intensity
Vertical Area Calc	208.17	Intensity
Vertical Sigma New	3.32	mm
Vertical Sigma Calc	3.12	mm
Vertical Mean	9.03	mm





View Lumberjack Data | Pause | Old Hardware | Start Time | Make End Time Now | Stop Time



Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time		Column 21 Number_20_A:IBEAMB sampled on $91 (A:BEAM7), E10	Column 22 Number_21_A:IBEAMB sampled on $94 (A:BEAM9), E10	Unstacked (mA)	Column 23 Number_22_R:BEAMS (R:BEAME0[0]) pre xfer E10	Column 24 Number_23_R:BEAM (R:BEAME0[1]) post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Transfers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance
	Totals =>				455.30			406.12	89.20%	94.74%	94.04%	89.09%	40	11	6.1035	4.2707	1.9573
	Daily Average =>				455.30			406.12					40	11			
24733	Wednesday, May 18, 2011	7:39	26.65	7.14	22.20	403.70	424.54	21.25	95.74%	97.81%	98.48%	96.32%	3	1	4.841	3.433	2.007
24732	Wednesday, May 18, 2011	6:46	26.75	7.00	22.44	383.94	404.98	21.42	95.46%	98.04%	98.66%	96.72%	3	1	4.81	3.458	2.006
24731	Wednesday, May 18, 2011	5:53	26.87	6.75	22.63	363.97	385.16	21.54	95.21%	96.65%	99.03%	95.71%	3	1	5.06	3.365	1.999
24730	Wednesday, May 18, 2011	4:59	26.39	6.60	22.28	344.11	365.03	21.29	95.53%	96.75%	97.22%	94.05%	3	1	5.06	3.36	2.005
24729	Wednesday, May 18, 2011	4:08	27.81	7.41	23.02	323.42	345.06	22.00	95.56%	98.54%	97.24%	95.82%	3	1	5.055	3.531	2.019
24728	Wednesday, May 18, 2011	3:12	33.23	8.98	26.91	299.54	324.63	25.58	95.04%	97.32%	97.74%	95.13%	3	1	5.188	3.851	2.005
24727	Wednesday, May 18, 2011	1:47	67.36	5.85	65.33	246.93	304.19	60.79	93.05%	97.05%	95.94%	93.11%	5	1	4.787	3.363	1.934
24726	Wednesday, May 18, 2011	1:06	239.63	63.85	180.24	112.26	249.58	145.58	80.77%	90.46%	88.67%	80.20%	8	1	15.855	10.968	1.39
24725	Tuesday, May 17, 2011	10:00	28.97	7.72	23.85	500.35	522.37	22.70	95.18%	98.47%	97.47%	95.98%	3	1	4.936	3.244	2.051
24724	Tuesday, May 17, 2011	9:04	27.98	7.34	23.37	480.80	502.35	22.20	94.98%	97.92%	99.02%	96.96%	3	1	5.701	4.179	2.063
24723	Tuesday, May 17, 2011	8:10	28.23	7.90	23.03	461.97	483.09	21.77	94.53%	97.85%	97.72%	95.62%	3	1	5.846	4.226	2.051

Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time		Column 21 Number_20_A:IBEAMB sampled on $91 (A:BEAM7), E10	Column 22 Number_21_A:IBEAMB sampled on $94 (A:BEAM9), E10	Unstacked (mA)	Column 23 Number_22_R:BEAMS (R:BEAME0[0]) pre xfer E10	Column 24 Number_23_R:BEAM (R:BEAME0[1]) post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Transfers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance
	Totals =>				209.73			199.75	95.24%	97.71%	98.06%	95.80%	27	9	5.1663	3.6274	2.0229
	Daily Average =>				209.73			199.75					27	9			
24733	Wednesday, May 18, 2011	7:39	26.65	7.14	22.20	403.70	424.54	21.25	95.74%	97.81%	98.48%	96.32%	3	1	4.841	3.433	2.007
24732	Wednesday, May 18, 2011	6:46	26.75	7.00	22.44	383.94	404.98	21.42	95.46%	98.04%	98.66%	96.72%	3	1	4.81	3.458	2.006
24731	Wednesday, May 18, 2011	5:53	26.87	6.75	22.63	363.97	385.16	21.54	95.21%	96.65%	99.03%	95.71%	3	1	5.06	3.365	1.999
24730	Wednesday, May 18, 2011	4:59	26.39	6.60	22.28	344.11	365.03	21.29	95.53%	96.75%	97.22%	94.05%	3	1	5.06	3.36	2.005
24729	Wednesday, May 18, 2011	4:08	27.81	7.41	23.02	323.42	345.06	22.00	95.56%	98.54%	97.24%	95.82%	3	1	5.055	3.531	2.019
24728	Wednesday, May 18, 2011	3:12	33.23	8.98	26.91	299.54	324.63	25.58	95.04%	97.32%	97.74%	95.13%	3	1	5.188	3.851	2.005
24725	Tuesday, May 17, 2011	10:00	28.97	7.72	23.85	500.35	522.37	22.70	95.18%	98.47%	97.47%	95.98%	3	1	4.936	3.244	2.051
24724	Tuesday, May 17, 2011	9:04	27.98	7.34	23.37	480.80	502.35	22.20	94.98%	97.92%	99.02%	96.96%	3	1	5.701	4.179	2.063
24723	Tuesday, May 17, 2011	8:10	28.23	7.90	23.03	461.97	483.09	21.77	94.53%	97.85%	97.72%	95.62%	3	1	5.846	4.226	2.051