2011-04-21 Thursday Morning Notes

Thursday, April 21, 2011
7:07 AM

Stacking and Transfers

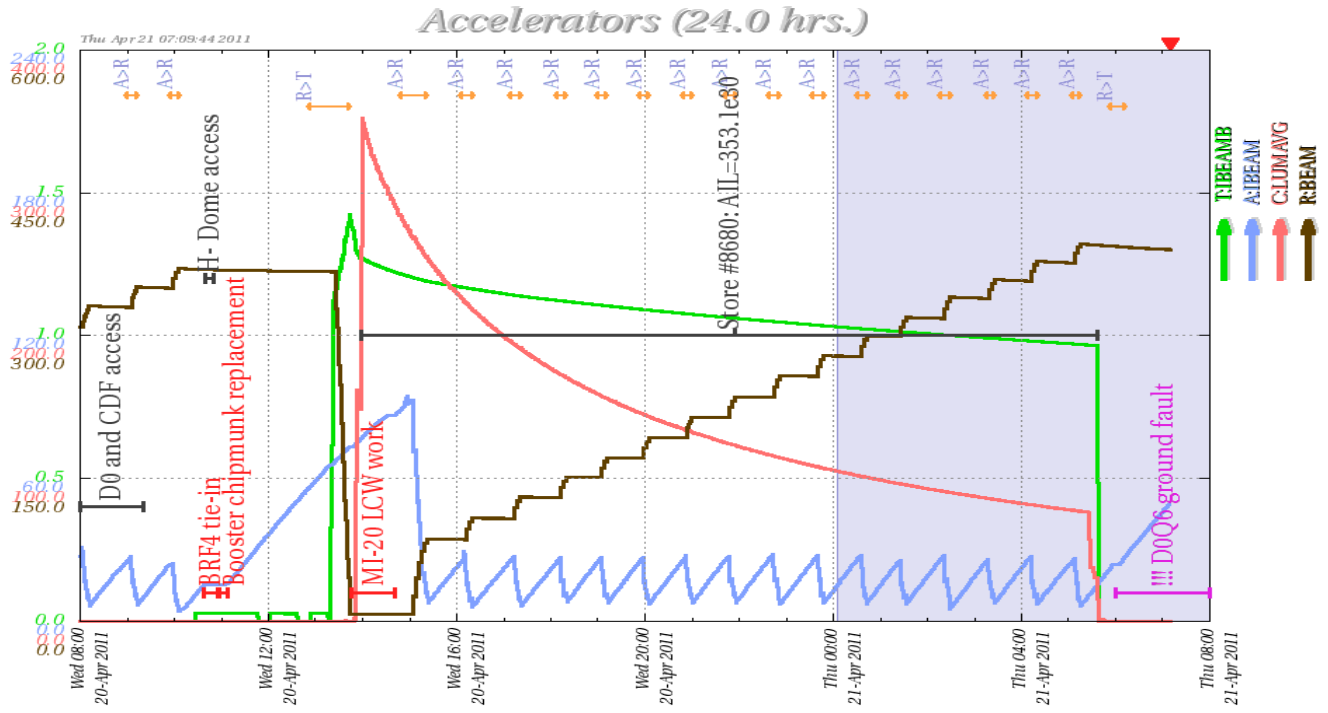
- Stcked 24.4 mA/hr with a production of 19.8 pbars/Mp with 8.19 Tp on target.
    - Overnight without SY120, stacked 26.1 mA/hr with a production of 19.6 pbars/Mp with 8.17 Tp on target
- Unstacked 510E10 in 60 transfers over 19 sets with an average overall efficiency of 93.7%
    - Remove Transfer 24187 (4/20/11 15:04, 93mA) still only 94.6%

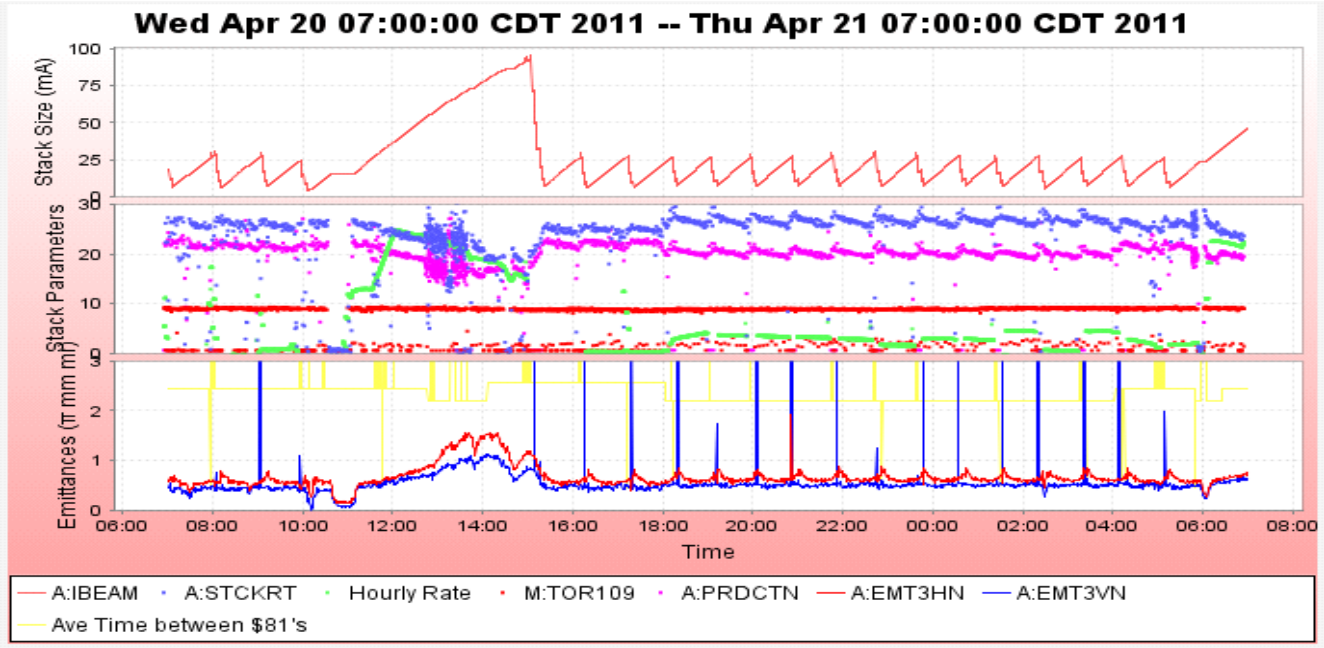
Operational Notes

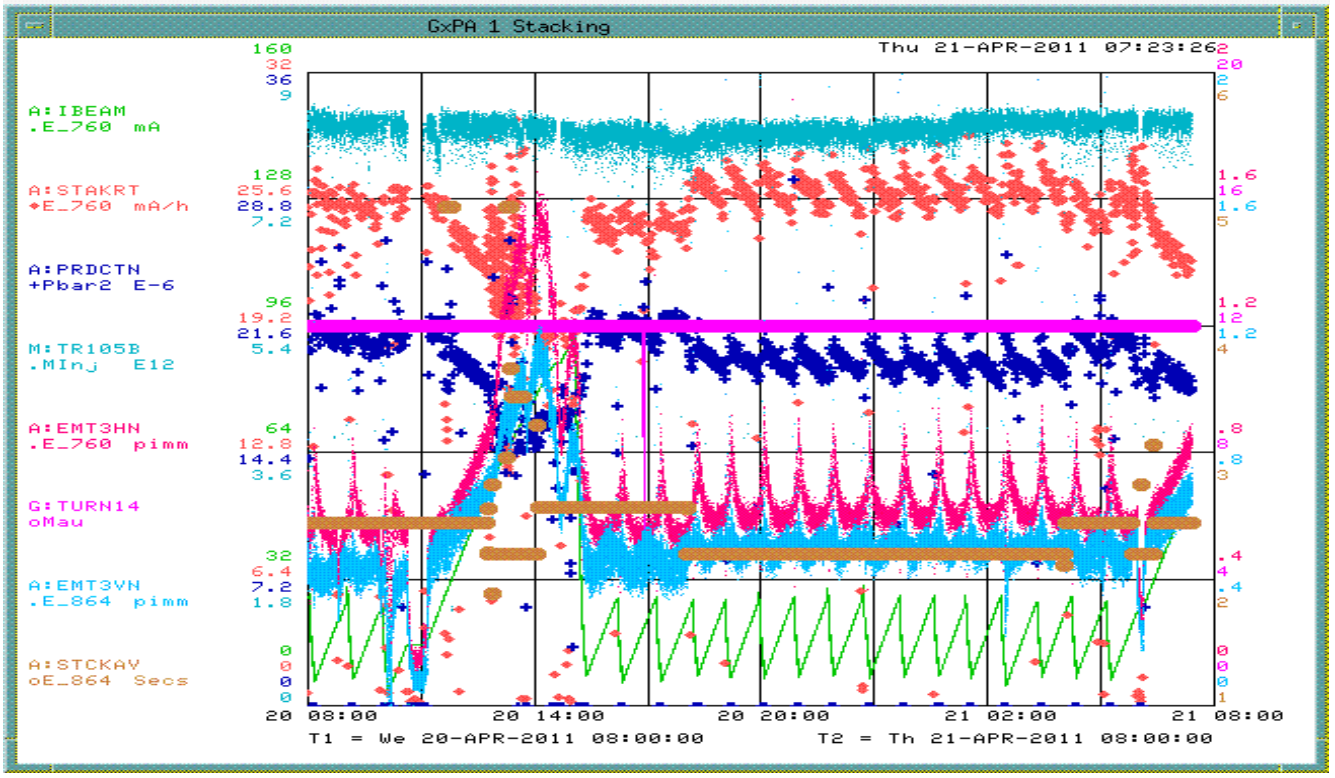
- Pbar 95 LCW leak is getting worse. Made up 90 gallons yesterday

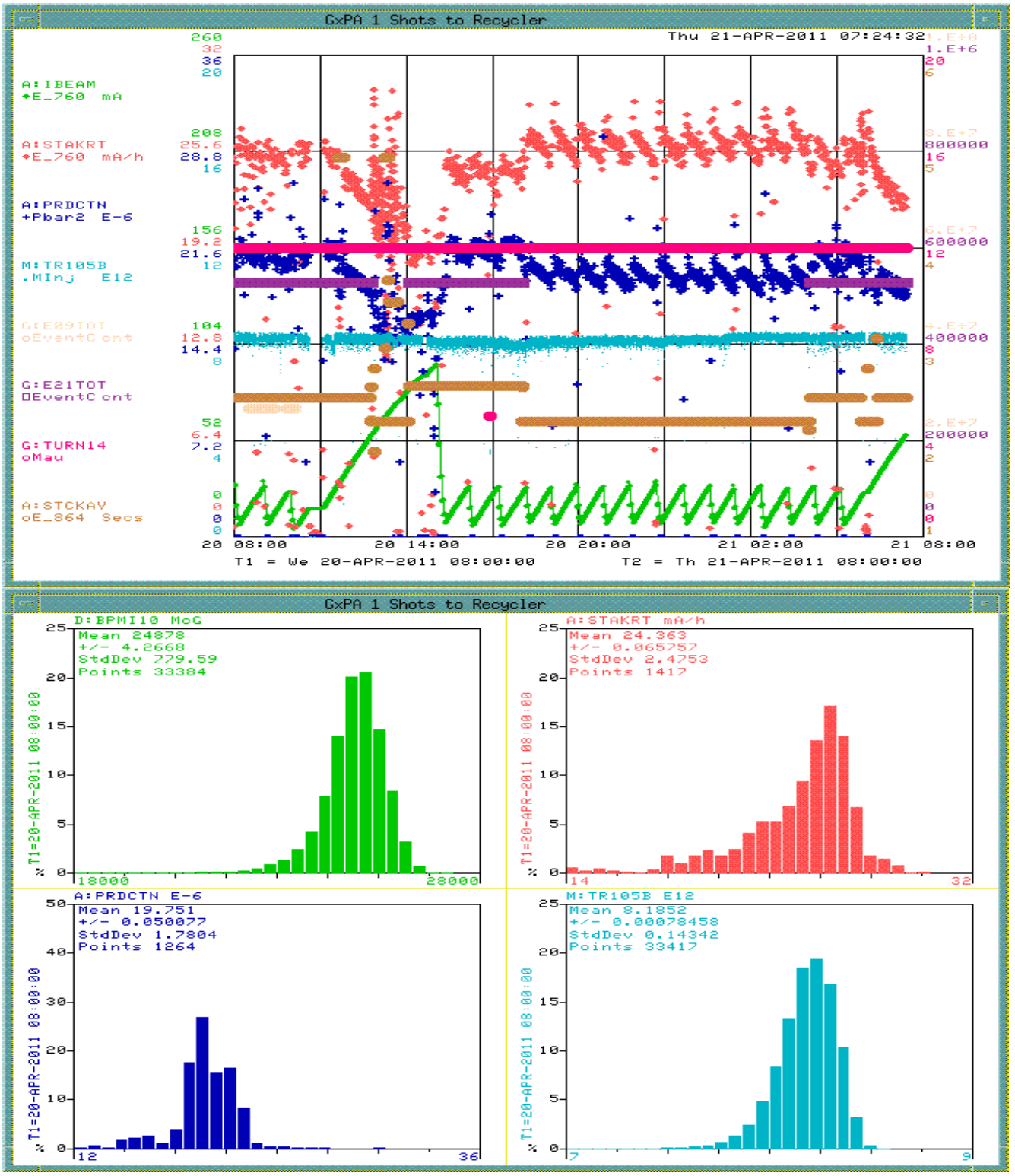
Numbers

Plots

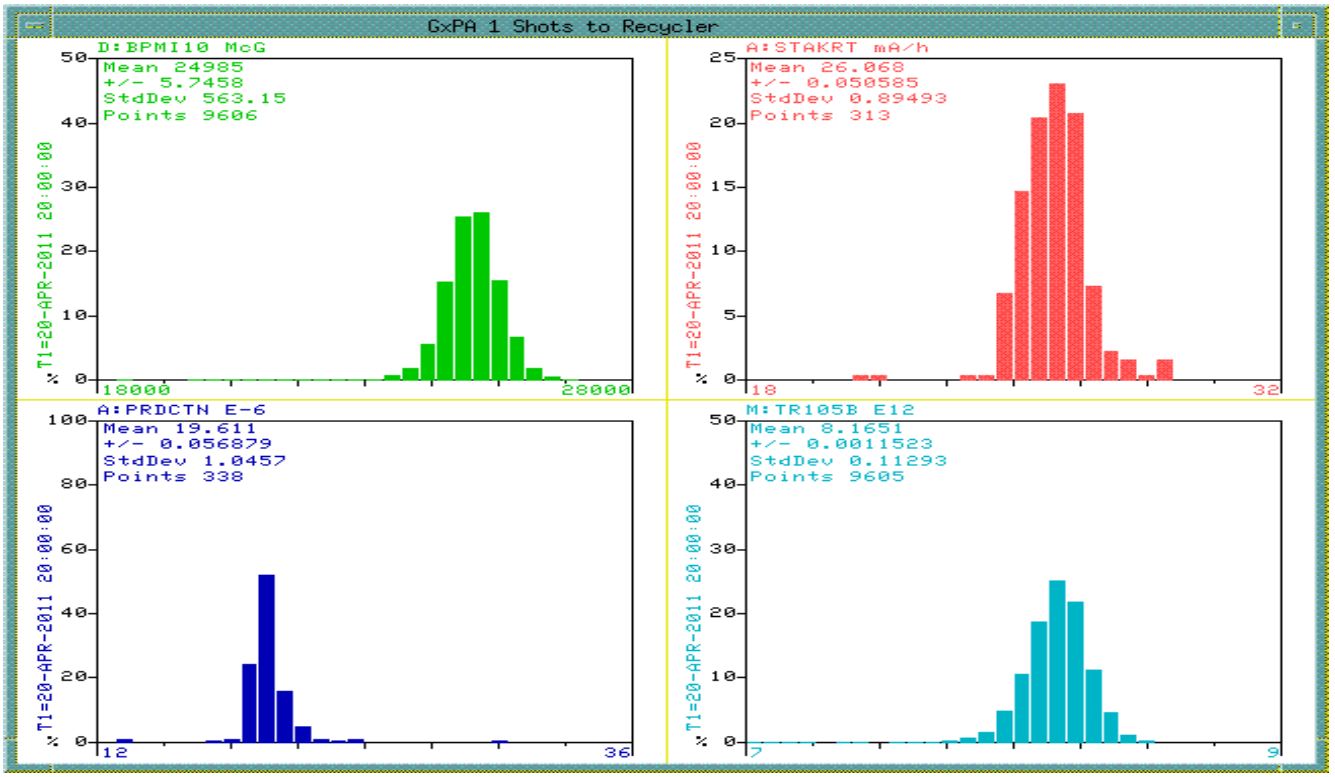



Wed Apr 20 07:00:00 CDT 2011 -- Thu Apr 21 07:00:00 CDT 2011
Stack Size (mA)
Stack Parameters
Emittances (π mm mr)
Time
A:IBEAM
A:STCKRT
Hourly Rate
M:TOR109
A:PRDCTN
A:EMT3HN
A:EMT3VN
Ave Time between $81's

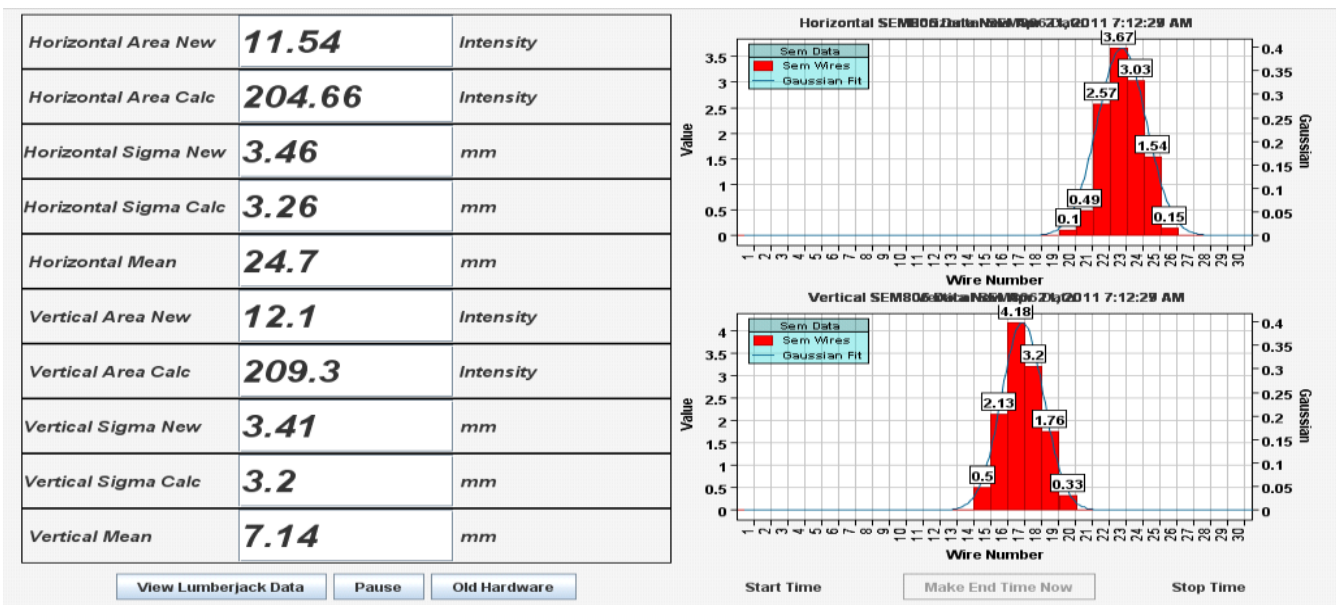

GxPA 1 Stacking
Thu 21-APR-2011 07:23:26
A:IBEAM
.E_760 mA
A:STAKRT
+E_760 mA/h
A:PRDCTN
+Pbar2 E-6
M:TR105B
.MInj E12
A:EMT3HN
.E_760 pimm
G:TURN14
oMau
A:EMT3VN
.E_864 pimm
A:STCKAV
oE_864 Secs
20 08:00
20 14:00
20 20:00
21 02:00
21 08:00
T1 = We 20-APR-2011 08:00:00
T2 = Th 21-APR-2011 08:00:00

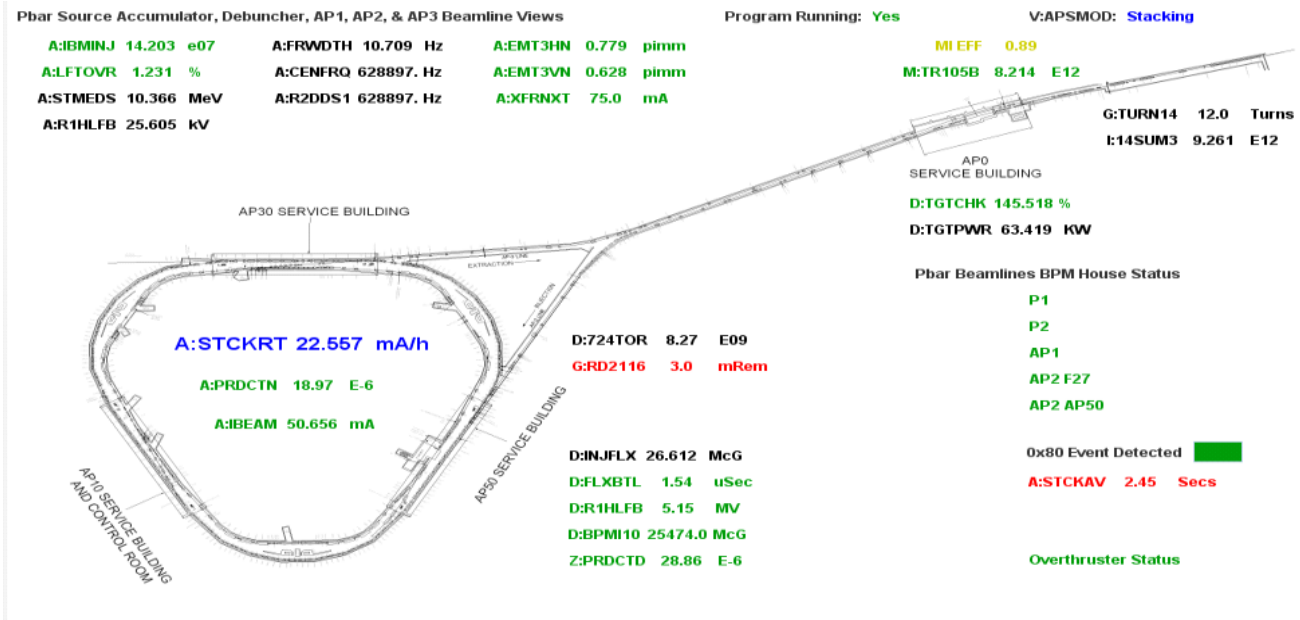

GxPA 1 Shots to Recycler
Thu 21-APR-2011 07:24:32
A:IBEAM
+E_760 mA
A:STAKRT
+E_760 mA/h
A:PRDCTN
+Pbar2 E-6
M:TR105B
.MInj E12
G:E09TOT
oEventC ont
G:E21TOT
OEventC ont
G:TURN14
oMau
A:STCKAV
oE_864 Secs
20 08:00
20 14:00
20 20:00
21 02:00
21 08:00
T1 = We 20-APR-2011 08:00:00
T2 = Th 21-APR-2011 08:00:00
GxPA 1 Shots to Recycler
D:BPMI10 McG
Mean 24878
+/- 4.2668
StdDev 779.59
Points 33384
A:STAKRT mA/h
Mean 24.363
+/- 0.065757
StdDev 2.4753
Points 1417
A:PRDCTN E-6
Mean 19.751
+/- 0.050077
StdDev 1.7804
Points 1264
M:TR105B E12
Mean 8.1852
+/- 0.00078458
StdDev 0.14342
Points 33417
% T1=20-APR-2011 08:00:00

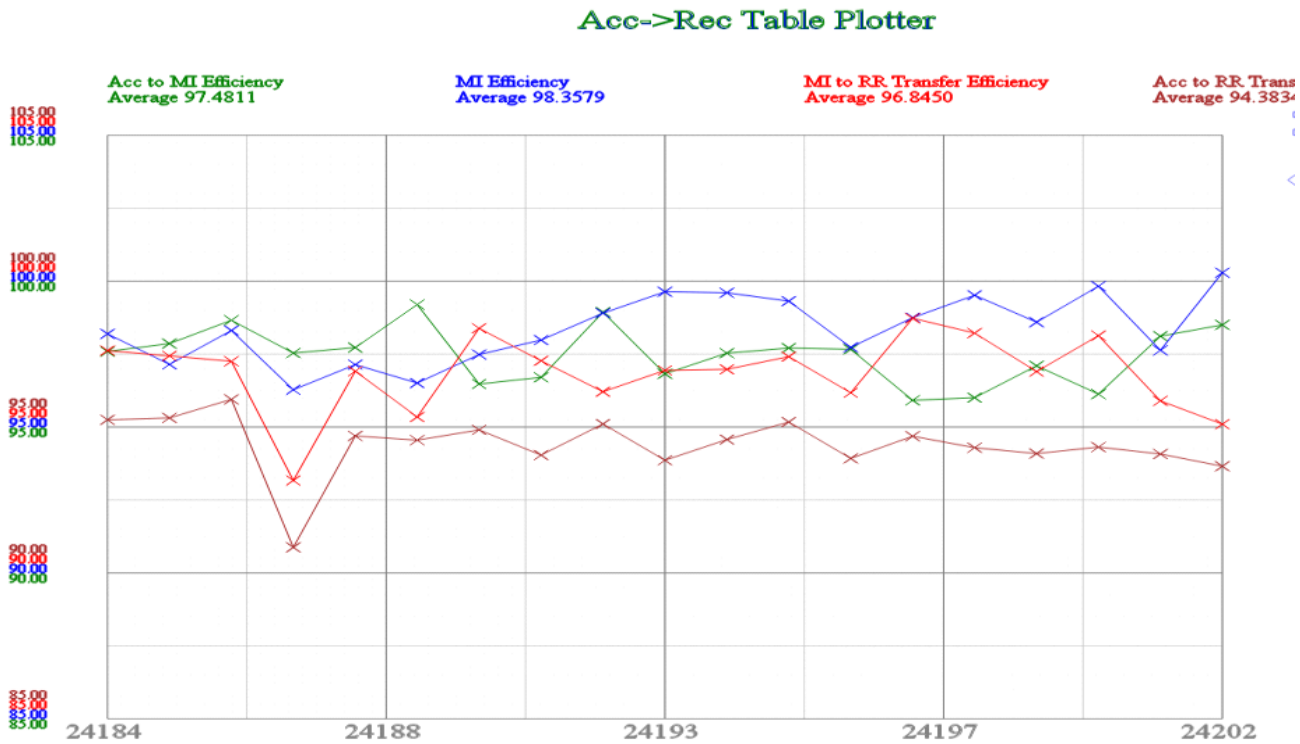
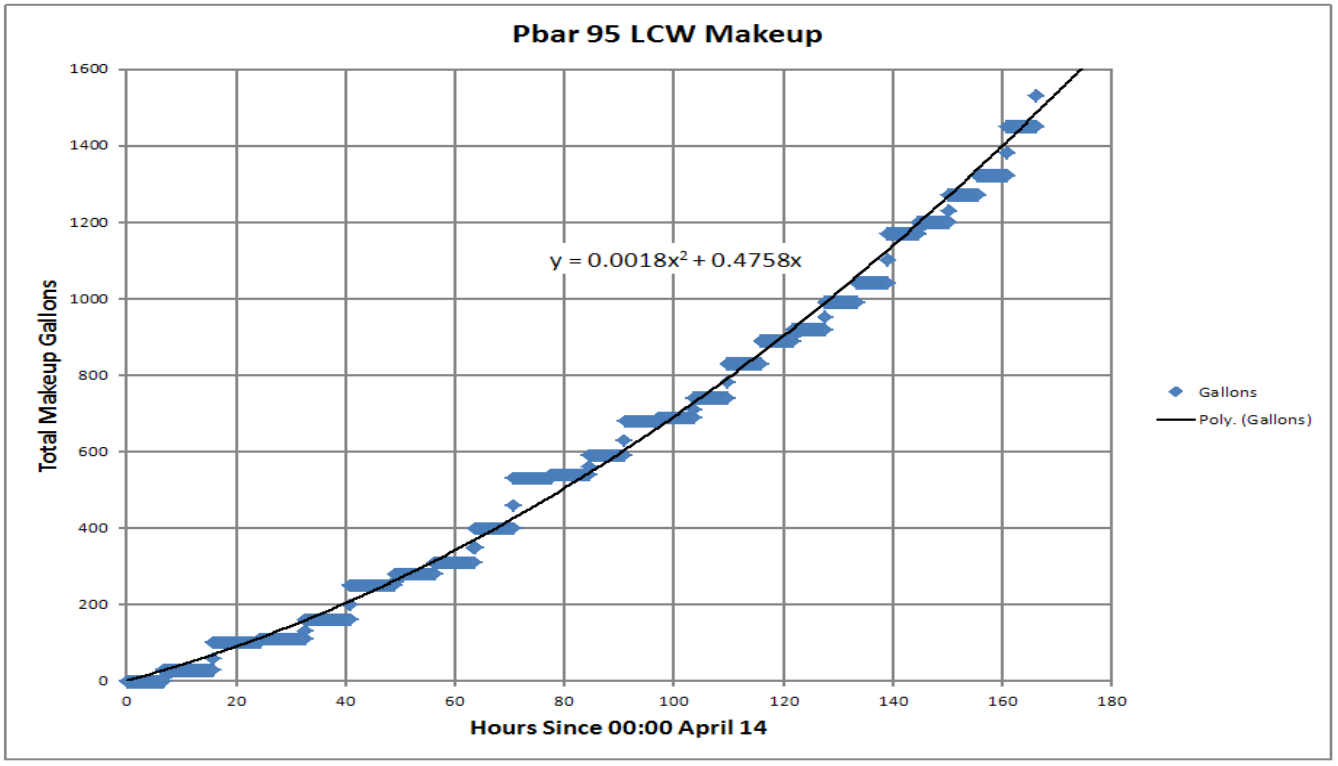
24 horus



Eve/owls without SY120 and normal sized stacks.




Pbar Source Accumulator, Debuncher, AP1, AP2, & AP3 Beamline Views
Program Running: Yes
V:APSMOD: Stacking
A:IBMINJ 14.203 e07
A:LFTOVR 1.231 %
A:STMEDS 10.366 MeV
A:R1HLFB 25.605 kV
A:FRWDTH 10.709 Hz
A:CENFRQ 628897. Hz
A:R2DDS1 628897. Hz
A:EMT3HN 0.779 pimm
A:EMT3VN 0.628 pimm
A:XFRNXT 75.0 mA
MI EFF 0.89
M:TR105B 8.214 E12
G:TURN14 12.0 Turns
I:14SUM3 9.261 E12
AP0 SERVICE BUILDING
D:TGTCHK 145.518 %
D:TGTPWR 63.419 KW
AP30 SERVICE BUILDING
Pbar Beamlines BPM House Status
P1
P2
AP1
AP2 F27
AP2 AP50
A:STCKRT 22.557 mA/h
A:PRDCTN 18.97 E-6
A:IBEAM 50.656 mA
D:724TOR 8.27 E09
G:RD2116 3.0 mRem
AP50 SERVICE BUILDING
AP10 SERVICE BUILDING AND CONTROL ROOM
D:INJFLX 26.612 McG
D:FLXBTL 1.54 uSec
D:R1HLFB 5.15 MV
D:BPMI10 25474.0 McG
Z:PRDCTD 28.86 E-6
0x80 Event Detected
A:STCKAV 2.45 Secs
Overthruster Status


Acc->Rec Table Plotter
Acc to MI Efficiency
Average 97.4811
MI Efficiency
Average 98.3579
MI to RR Transfer Efficiency
Average 96.8450
Acc to RR Trans
Average 94.383
105.00
100.00
95.00
90.00
85.00
24184
24188
24193
24197
24202

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:BE	Unstacked (mA)	Column 23 Number_22_R:BEAMS (R:BEAME0[0]) pre xfer	Column 24 Number_23_R:BEAM (R:BEAME0[1]) post xfer,	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 =>				509.83			477.67	93.69%	97.57%	95.42%	93.10%	60	19	5.9741	4.6804	1.9694
	Daily Average =>				509.83			477.67					60	19			
24202	Thursday, April 21, 2011	5:08	26.63	6.62	22.64	376.20	396.68	21.21	93.69%	98.23%	98.01%	96.28%	3	1	6.017	4.536	2.004
24201	Thursday, April 21, 2011	4:12	27.77	7.09	23.32	357.29	378.61	21.97	94.19%	98.35%	95.49%	93.91%	3	1	5.983	4.908	2.005
24200	Thursday, April 21, 2011	3:17	26.50	7.31	22.04	339.11	359.34	20.80	94.36%	96.64%	95.89%	92.67%	3	1	6.311	4.97	2.025
24199	Thursday, April 21, 2011	2:21	28.21	5.21	24.90	318.03	340.84	23.36	93.84%	97.06%	95.28%	92.48%	3	1	5.408	3.897	1.963
24198	Thursday, April 21, 2011	1:25	26.05	6.91	21.87	299.26	319.44	20.61	94.25%	96.16%	94.91%	91.26%	3	1	6.114	4.846	2.003
24197	Thursday, April 21, 2011	0:35	28.15	7.56	23.43	278.34	300.18	22.15	94.54%	96.20%	94.82%	91.22%	3	1	6.334	4.978	1.96
24196	Wednesday, April 20, 2011	23:40	27.99	7.46	23.39	257.32	279.03	22.01	94.11%	97.91%	95.78%	93.79%	3	1	6.288	4.903	1.99
24195	Wednesday, April 20, 2011	22:44	28.61	6.94	24.24	235.20	257.96	23.06	95.10%	97.92%	96.40%	94.39%	3	1	5.842	4.753	1.97
24194	Wednesday, April 20, 2011	21:47	28.15	7.47	23.50	213.88	235.85	22.24	94.61%	97.79%	97.65%	95.49%	3	1	5.888	4.953	1.996
24193	Wednesday, April 20, 2011	20:52	27.69	7.43	23.12	192.87	214.39	21.76	94.11%	97.05%	96.54%	93.69%	3	1	6.061	4.689	1.991
24192	Wednesday, April 20, 2011	19:57	27.09	6.99	22.85	171.78	193.30	21.74	95.14%	98.34%	96.90%	95.29%	3	1	5.982	4.846	2.013
24191	Wednesday, April 20, 2011	19:04	27.14	7.21	22.79	150.89	172.11	21.44	94.07%	97.03%	95.02%	92.19%	3	1	6.158	4.734	1.997
24190	Wednesday, April 20, 2011	18:12	27.10	7.79	22.24	130.33	151.25	21.09	94.83%	96.75%	93.56%	90.52%	3	1	6.065	4.701	2.019
24189	Wednesday, April 20, 2011	17:13	27.65	6.21	24.05	108.07	130.65	22.75	94.60%	98.84%	95.52%	94.41%	3	1	5.366	4.608	1.96
24188	Wednesday, April 20, 2011	16:11	27.43	5.82	24.20	85.82	108.51	22.95	94.81%	97.72%	95.19%	93.02%	3	1	5.654	4.413	1.947
24187	Wednesday, April 20, 2011	15:04	93.34	7.58	91.16	7.53	86.70	81.60	89.51%	97.44%	93.24%	90.86%	6	1	8.573	6.118	1.766
24186	Wednesday, April 20, 2011	9:58	24.81	4.55	22.21	349.95	370.84	21.31	95.92%	98.63%	97.43%	96.09%	3	1	4.809	3.63	1.912
24185	Wednesday, April 20, 2011	9:05	27.62	6.92	23.30	329.73	351.48	22.20	95.28%	98.45%	95.60%	94.13%	3	1	5.54	4.354	1.955
24184	Wednesday, April 20, 2011	8:04	28.55	6.35	24.58	308.79	331.69	23.44	95.37%	97.64%	96.11%	93.84%	3	1	5.115	4.091	1.943