2011-08-26 Friday Morning Notes

Friday, August 26, 2011
7:51 AM

Operational Notes

Pelletron tank access, again!

Numbers

- Stacking
  - Pbars stacked: 354.74 E10
  - Time stacking: 18.20 Hr
  - Average stacking rate: 19.49 E10/Hr

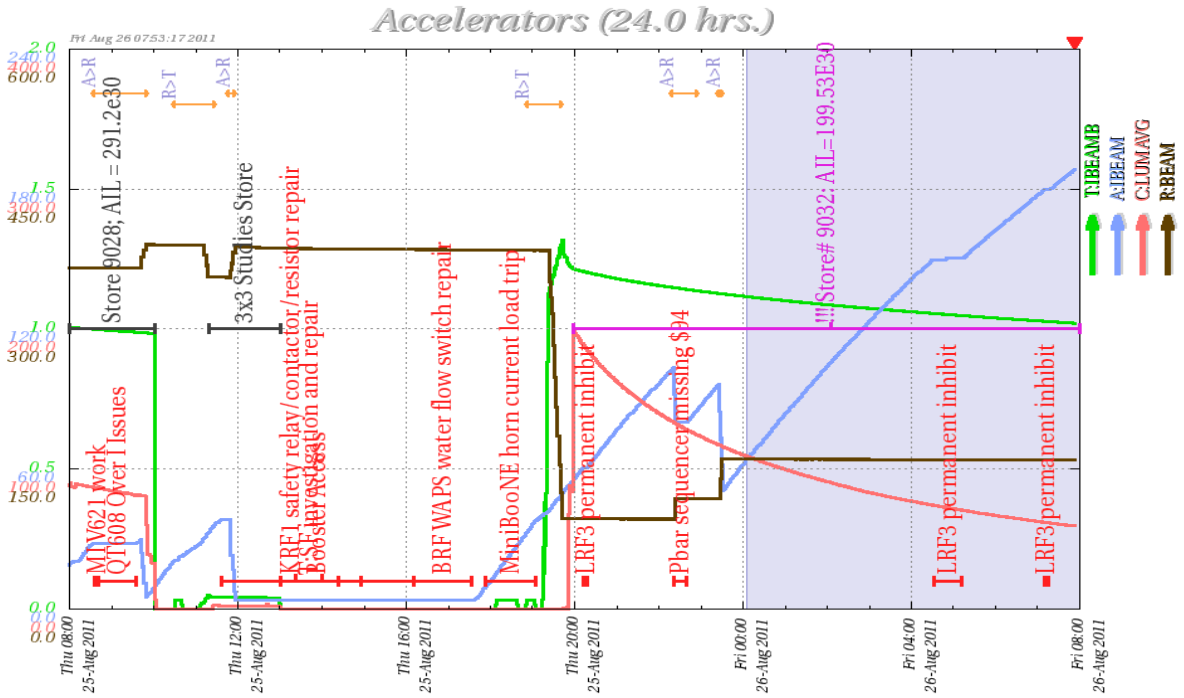
- Uptime
  - Number of pulses while in stacking mode: 27036
  - Number of pulses with beam: 22208
  - Fraction of up pulses was: 82.14%

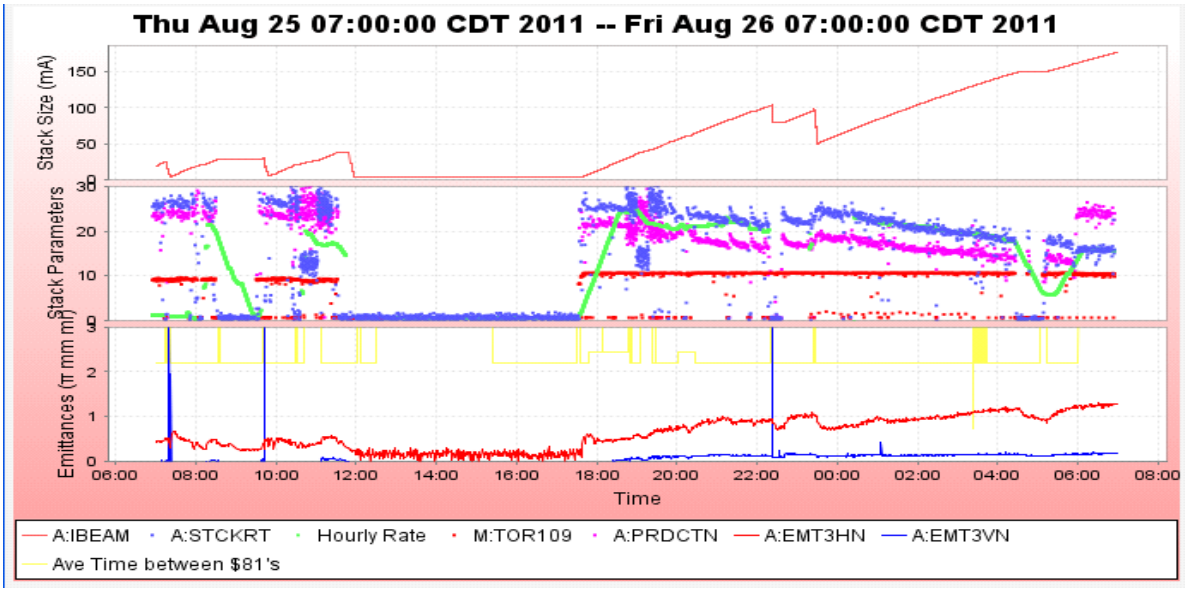
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 14.95 Hr
  - Possible average stacking rate: 23.72 E10/Hr
  - Could have stacked: 431.86 E10/Hr

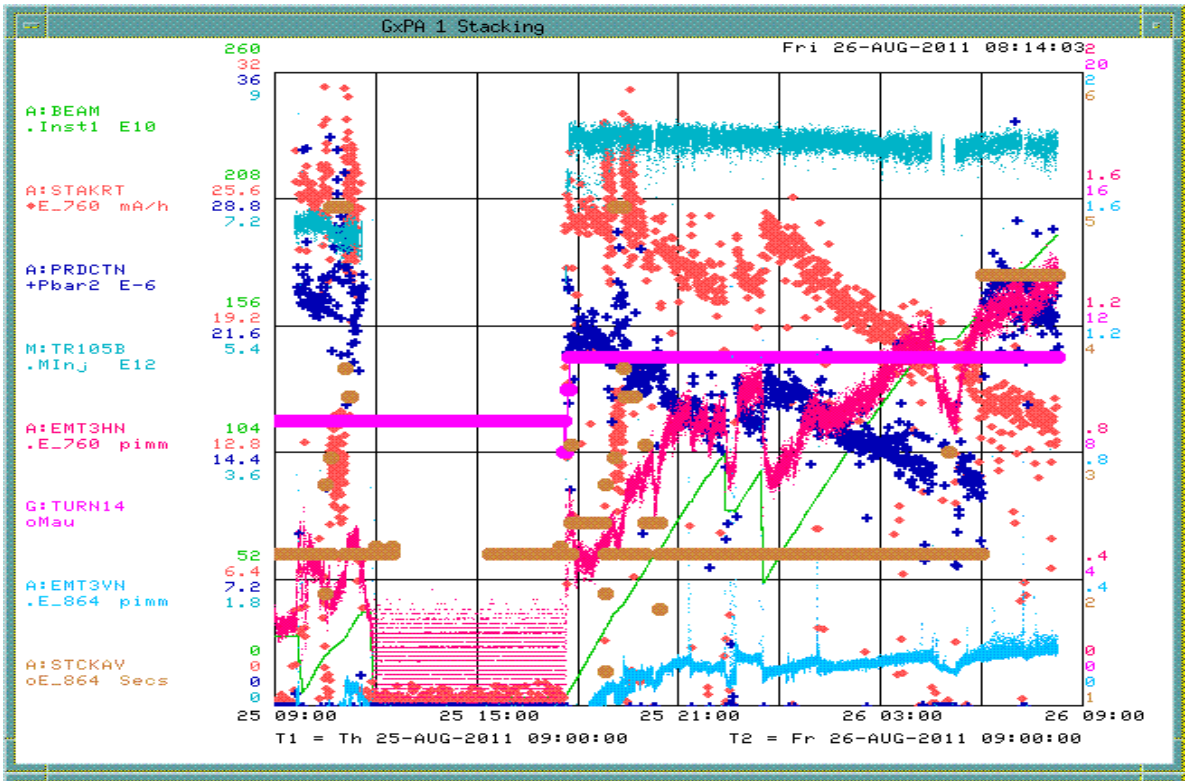
- Recycler Transfers
  - Pbars sent to the Recycler: 132.62 E10
  - Number of transfers : 9
  - Number of transfer sets: 4
  - Average Number of transfer per set: 2.25
  - Time taken to shoot including reverse proton tuneup: 00.03 Hr
  - Transfer efficiency: 93.84%

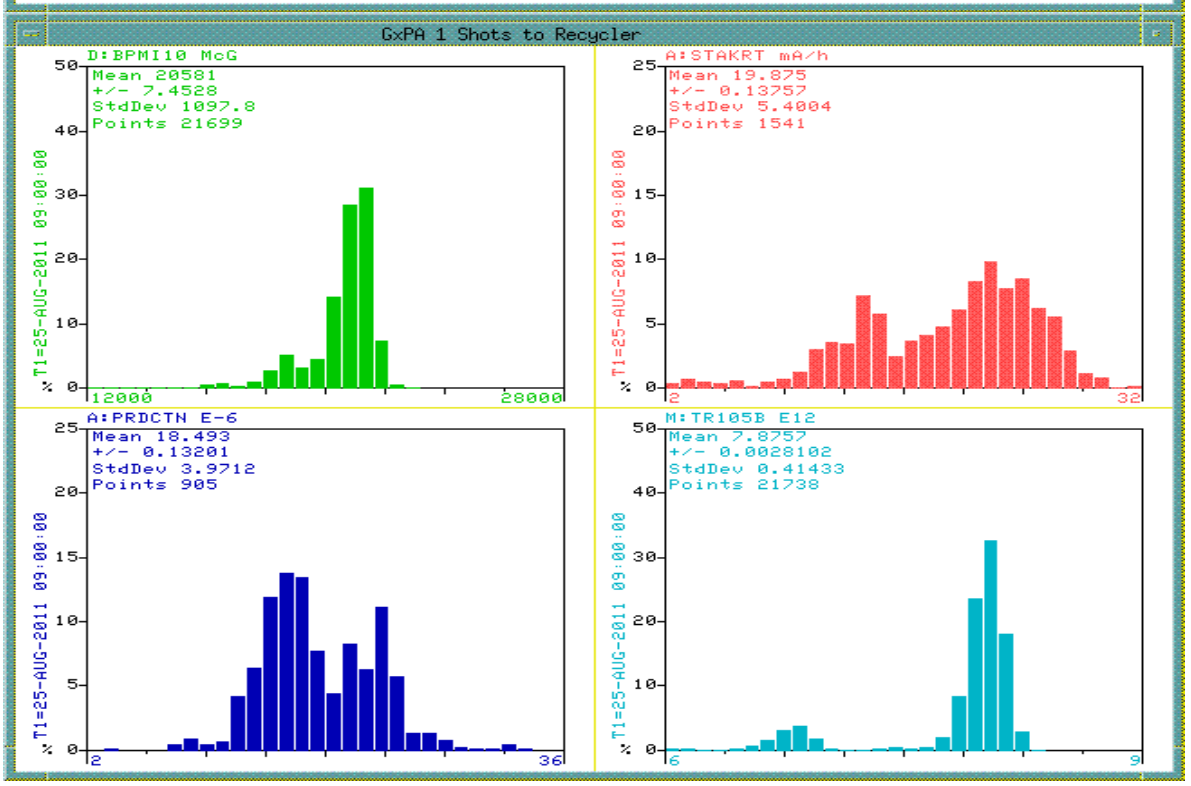
- Other Info
  - Average POT : 7.84 E12
  - Average production: 20.37 pbars/E6 protons

Plots

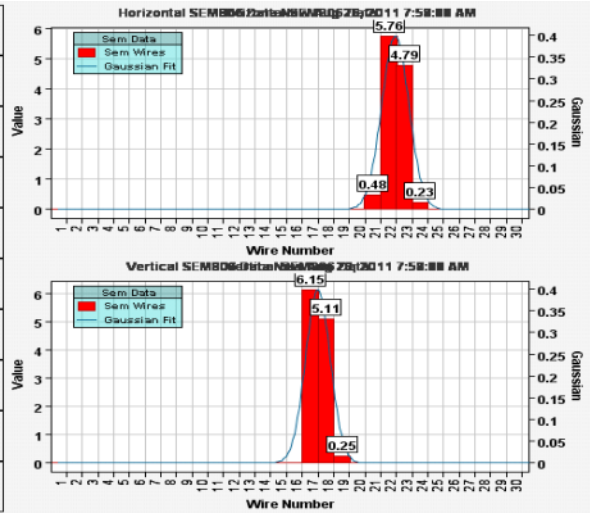

Accelerators (24.0 hrs.)
Fri Aug 26 07:53:17 2011
Store 9028; AIL = 291.2e30
3x3 Studies Store
MiniBooNE horn current load trip
LRF3 permanent inhibit
Pbar sequencer missing $94
!!!Store# 9032; AIL=199.53E30
LRF3 permanent inhibit
LRF3 permanent inhibit
T:IBEAMB
A:IBEAM
C:LUMAVG
R:BEAM
Thu 08:00 25-Aug 2011
Thu 12:00 25-Aug 2011
Thu 16:00 25-Aug 2011
Thu 20:00 25-Aug 2011
Fri 00:00 26-Aug 2011
Fri 04:00 26-Aug 2011
Fri 08:00 26-Aug 2011


Thu Aug 25 07:00:00 CDT 2011 -- Fri Aug 26 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

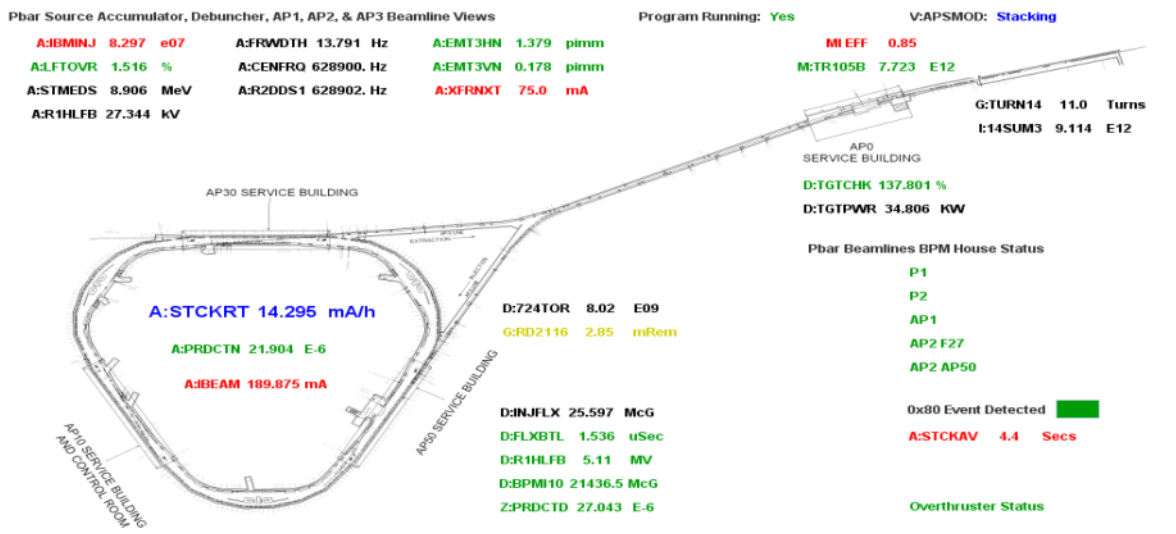

GxPA 1 Stacking
Fri 26-AUG-2011 08:14:03
A:BEAM
.Inst1 E10
A:STAKRT
*E_760 mA/h
A:PRDCTN
+Pbar2 E-6
M:TR105B
.MInj E12
A:EMT3HN
.E_760 pimm
G:TURN14
oMau
A:EMT3VN
.E_864 pimm
A:STCKAV
oE_864 Secs
25 09:00
25 15:00
25 21:00
26 03:00
26 09:00
T1 = Th 25-AUG-2011 09:00:00
T2 = Fr 26-AUG-2011 09:00:00

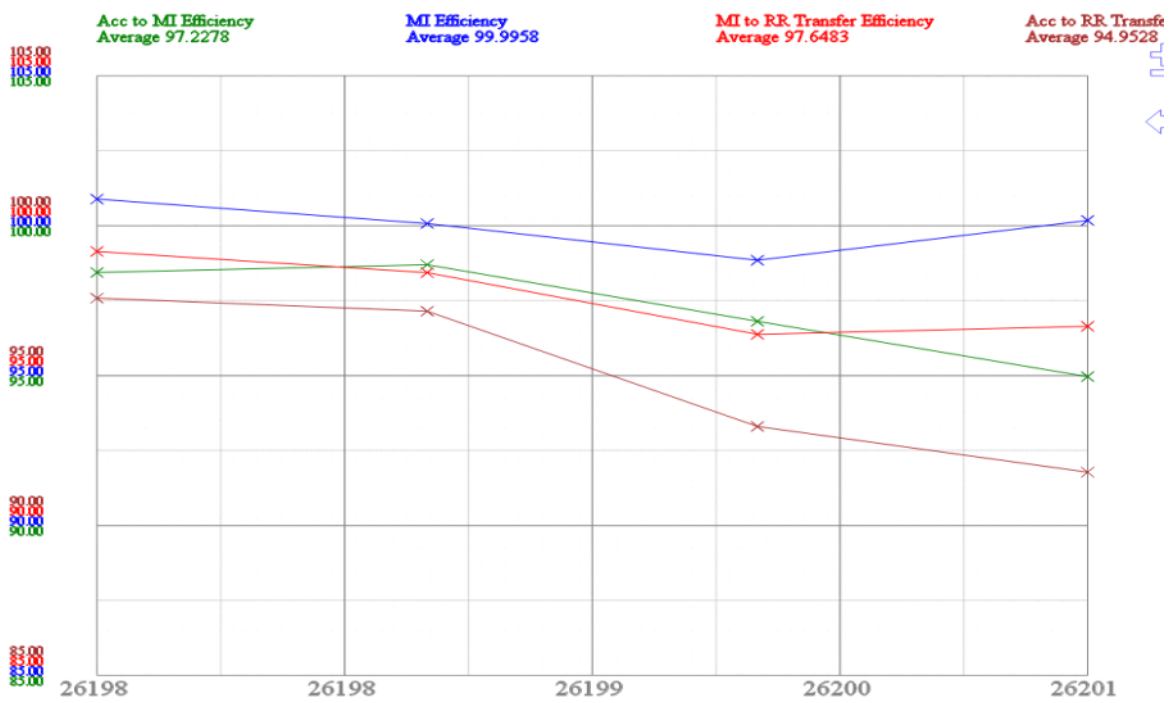

GxPA 1 Shots to Recycler
D:BPMI10 McG
Mean 20581
+/- 7.4528
StdDev 1097.8
Points 21699
A:STAKRT mA/h
Mean 19.875
+/- 0.13757
StdDev 5.4004
Points 1541
A:PRDCTN E-6
Mean 18.493
+/- 0.13201
StdDev 3.9712
Points 905
M:TR105B E12
Mean 7.8757
+/- 0.0028102
StdDev 0.41433
Points 21738
T1=25-AUG-2011 09:00:00

Horizontal Area New	11.26	Intensity
Horizontal Area Calc	199.64	Intensity
Horizontal Sigma New	1.83	mm
Horizontal Sigma Calc	1.72	mm
Horizontal Mean	22.27	mm
Vertical Area New	11.51	Intensity
Vertical Area Calc	199.15	Intensity
Vertical Sigma New	1.62	mm
Vertical Sigma Calc	1.53	mm
Vertical Mean	7.46	mm



Big stack, interleaved TLG





Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time		Column 21 Number_20_A:I BEAMB sampled on $91 (A:BEAM7), E10	Column 22 Number_21_A:I BEAMB 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 =>				132.81			125.71	94.65%	96.87%	96.81%	93.78%	9	4	5.991	1.163	1.7428
	Daily Average =>				132.81			125.71					9	4			
26201	Thursday, August 25, 2011	23:26	96.64	50.05	47.70	118.10	161.48	43.77	91.77%	94.96%	95.13%	90.33%	2	1	9.012	1.269	1.568
26200	Thursday, August 25, 2011	22:22	103.79	80.02	23.77	96.46	118.64	22.17	93.30%	96.81%	95.70%	92.64%	1	1	8.728	1.057	1.525
26199	Thursday, August 25, 2011	11:49	38.57	3.72	34.83	355.34	388.68	33.90	97.32%	98.59%	98.59%	97.20%	3	1	2.361	-1.197	1.909
26198	Thursday, August 25, 2011	9:42	30.04	5.17	26.52	365.11	390.70	25.87	97.54%	98.10%	98.47%	96.60%	3	1	3.863	-0.556	1.969