2011-09-22 Thursday Morning Notes

Thursday, September 22, 2011
7:47 AM

Numbers

- Stacking
  - Pbars stacked: 585.71 E10
  - Time stacking: 23.77 Hr
  - Average stacking rate: 24.65 E10/Hr

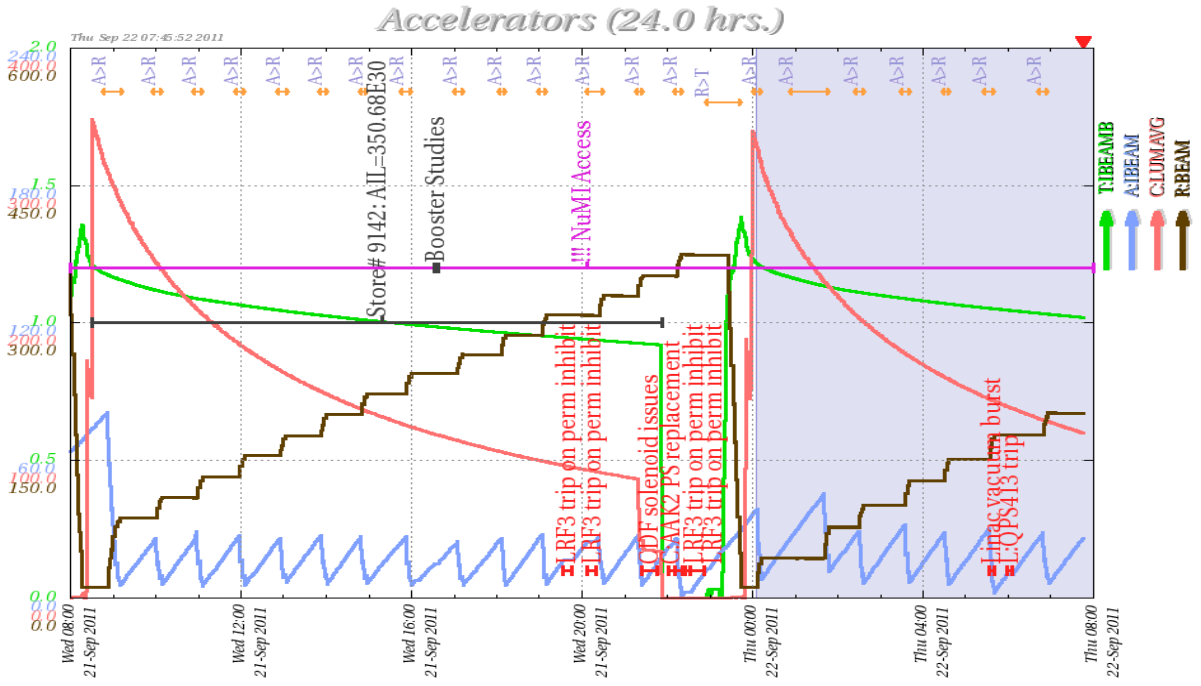
- Uptime
  - Number of pulses while in stacking mode: 33017
  - Number of pulses with beam: 30373
  - Fraction of up pulses was: 91.99%

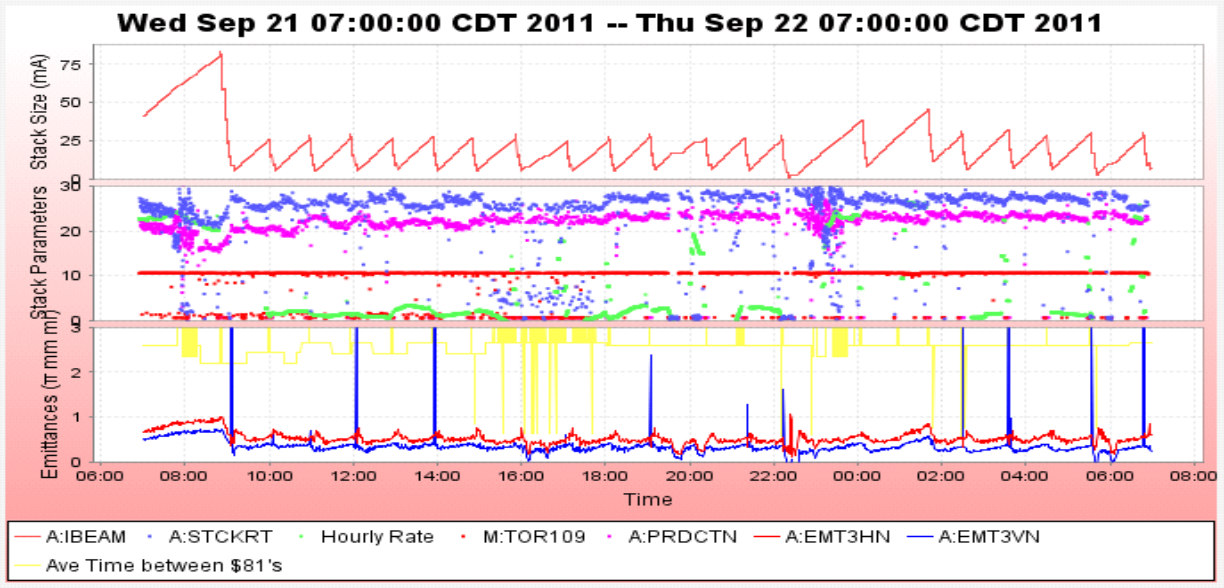
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 21.86 Hr
  - Possible average stacking rate: 26.79 E10/Hr
  - Could have stacked: 636.69 E10/Hr

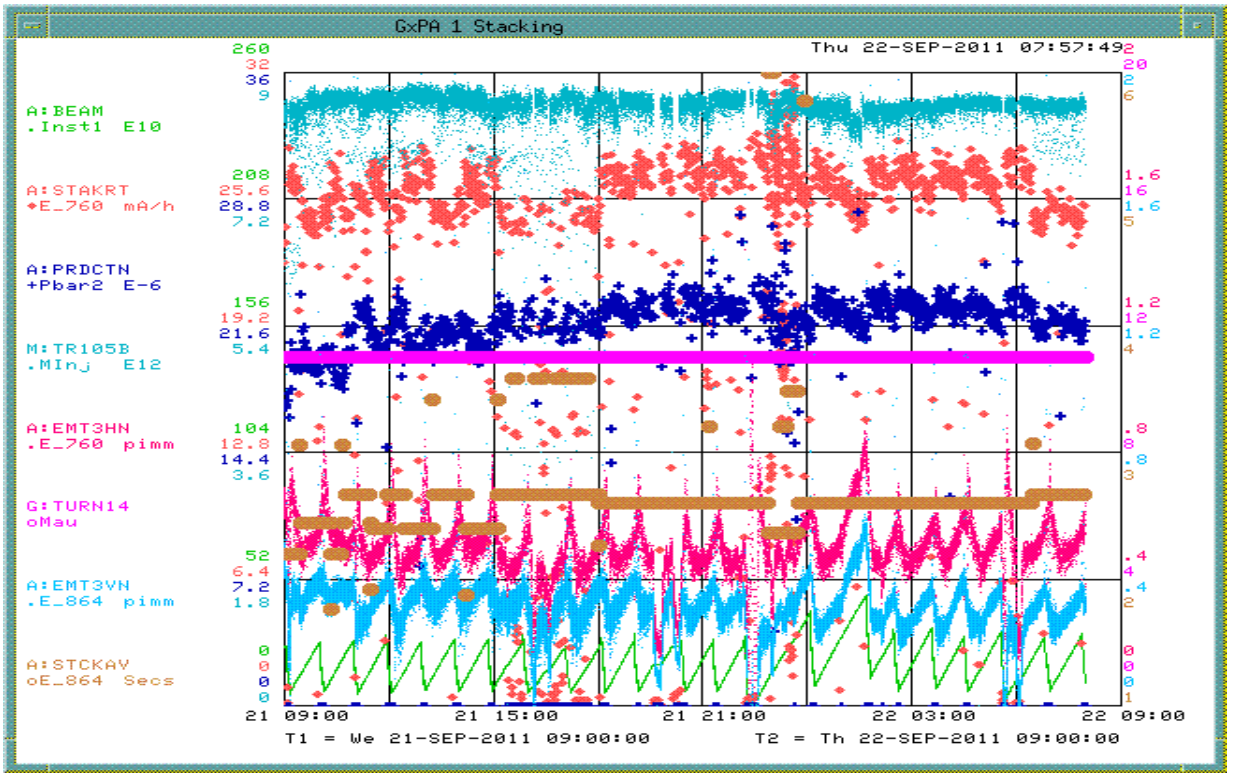
- Recycler Transfers
  - Pbars sent to the Recycler: 601.54 E10
  - Number of transfers : 67
  - Number of transfer sets: 22
  - Average Number of transfer per set: 3.05
  - Time taken to shoot including reverse proton tuneup: 00.23 Hr
  - Transfer efficiency: 95.91%

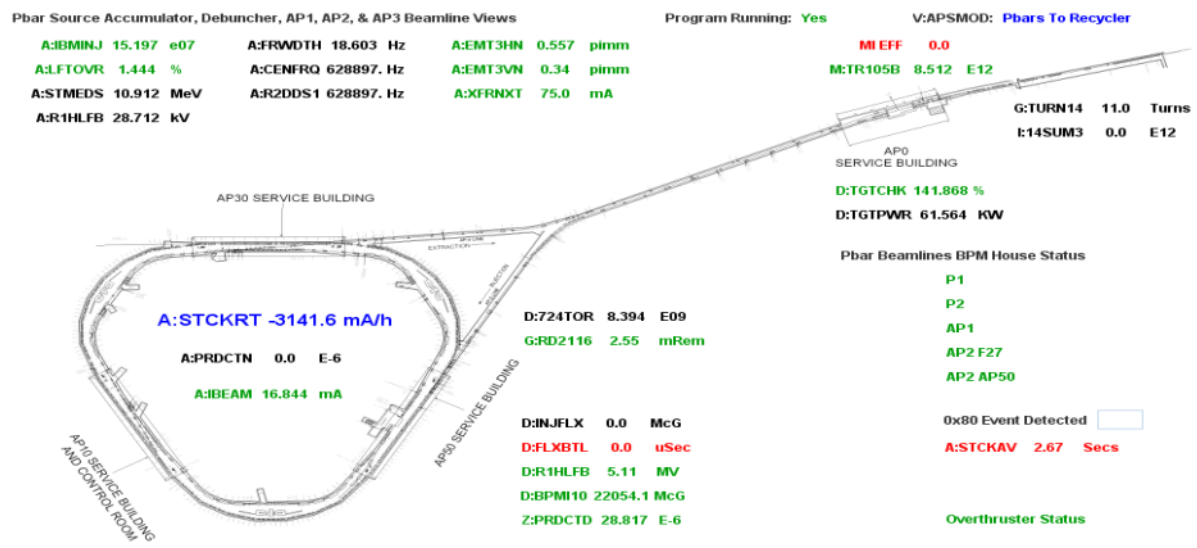
- Other Info
  - Average POT : 8.50 E12
  - Average production: 22.69 pbars/E6 protons

Plots

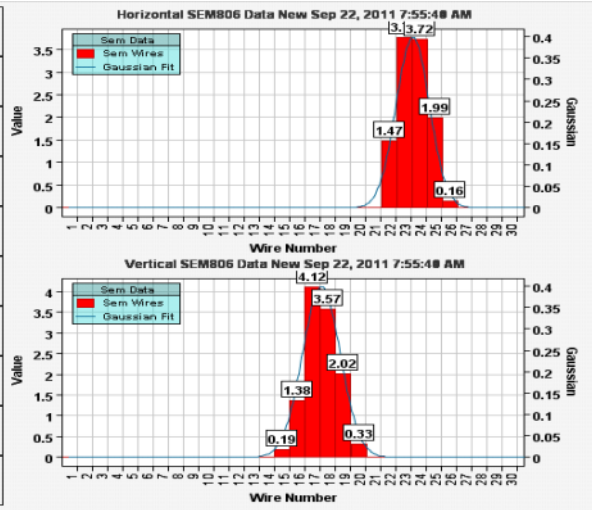

Accelerators (24.0 hrs.)
Thu Sep 22 07:45:52 2011
Store# 9142: AIL=350.68E30
Booster Studies
!!! NuMI Access
LRF3 trip on perm inhibit
LRF3 trip on perm inhibit
TOFF solenoid issues
CAAK2 PS replacement
LRF3 trip on perm inhibit
LRF3 trip on perm inhibit
Linac vacuum burst
LQ05413 trip
TIBEAMB
AIBEAM
CLUMAVG
RBEAM
Wed 08:00 21-Sep 2011
Wed 12:00 21-Sep 2011
Wed 16:00 21-Sep 2011
Wed 20:00 21-Sep 2011
Thu 00:00 22-Sep 2011
Thu 04:00 22-Sep 2011
Thu 08:00 22-Sep 2011

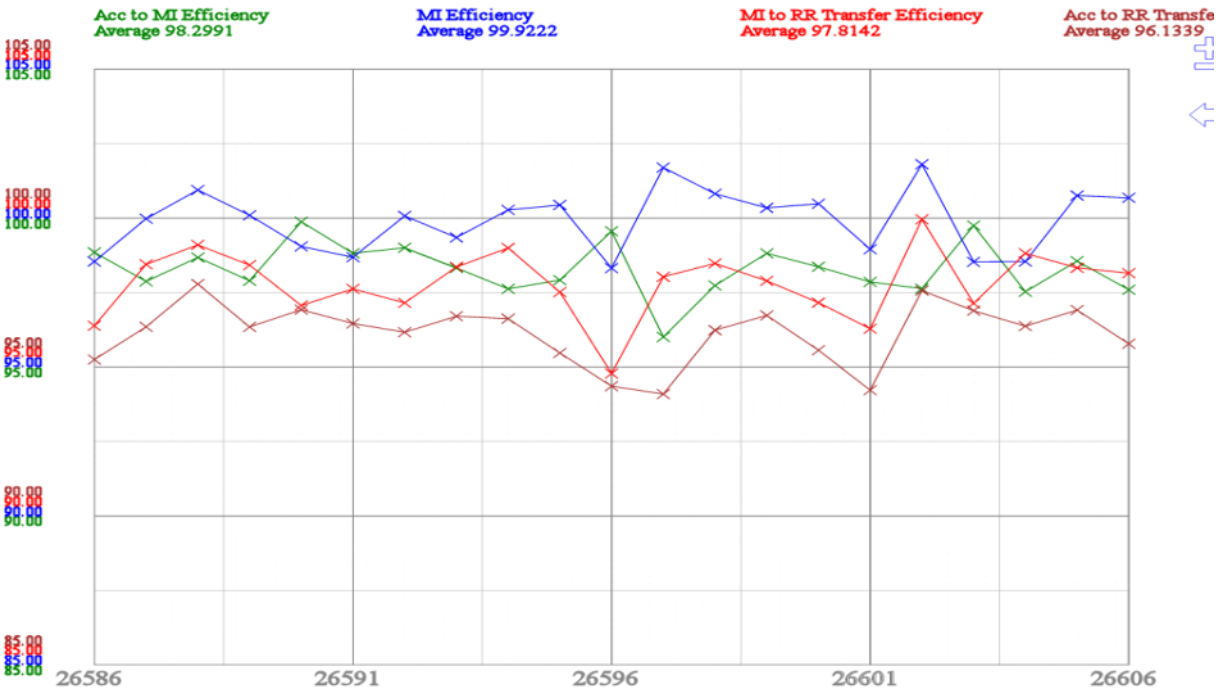

Wed Sep 21 07:00:00 CDT 2011 -- Thu Sep 22 07:00:00 CDT 2011
Stack Size (mA)
Stack Parameters
Emittances (π mm mr)
Time
A:IBEAM
A:STCKRT
Hourly Rate
M:TOR109
A:PRDCTN
A:EMT3HN
A:EMT3VN
Ave Time between $81's





Horizontal Area New	11.11	Intensity
Horizontal Area Calc	197.03	Intensity
Horizontal Sigma New	2.92	mm
Horizontal Sigma Calc	2.76	mm
Horizontal Mean	25.81	mm
Vertical Area New	11.61	Intensity
Vertical Area Calc	200.74	Intensity
Vertical Sigma New	3.14	mm
Vertical Sigma Calc	2.95	mm
Vertical Mean	7.77	mm





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 =>				589.74			566.27	96.02%	98.46%	98.29%	96.78%	66	21	5.0072	3.2	1.979
	Daily Average =>				589.74			566.27					66	21			
26606	Thursday, September 22, 2011	6:49	28.66	6.00	25.24	177.92	201.96	24.24	96.05%	98.13%	98.38%	96.54%	3	1	5.054	3.064	2.018
26605	Thursday, September 22, 2011	5:33	30.51	2.47	28.03	151.35	178.28	27.11	96.73%	98.64%	99.28%	97.94%	3	1	3.417	1.818	1.924
26604	Thursday, September 22, 2011	4:30	28.76	6.07	25.02	127.71	151.60	24.14	96.49%	97.77%	96.77%	94.61%	3	1	5.226	3.109	1.98
26603	Thursday, September 22, 2011	3:35	32.41	6.89	27.85	101.27	127.98	26.93	96.70%	99.44%	98.37%	97.82%	3	1	5.084	2.888	1.961
26602	Thursday, September 22, 2011	2:29	29.37	6.25	25.44	77.20	101.55	24.70	97.09%	98.06%	99.36%	97.43%	3	1	4.961	2.936	1.971
26601	Thursday, September 22, 2011	1:41	45.73	11.43	36.64	43.21	77.41	34.45	94.03%	97.86%	96.95%	94.87%	3	1	6.349	4.354	1.945
26600	Thursday, September 22, 2011	0:06	39.11	8.21	33.21	11.99	43.43	31.71	95.49%	98.52%	98.80%	97.34%	3	1	5.351	3.37	1.959
26599	Wednesday, September 21, 2011	22:13	25.95	1.40	24.56	351.28	374.84	23.79	96.86%	99.04%	99.18%	98.23%	3	1	2.917	0.988	1.875
26598	Wednesday, September 21, 2011	21:19	27.30	5.84	23.77	329.45	352.08	22.93	96.47%	98.31%	98.75%	97.09%	3	1	5.168	3.221	2.004
26597	Wednesday, September 21, 2011	20:24	26.98	6.14	23.28	308.33	330.19	22.06	94.75%	96.89%	97.84%	94.79%	3	1	4.48	3.024	2.01
26596	Wednesday, September 21, 2011	19:03	27.85	5.97	24.24	286.42	309.22	23.04	95.04%	99.57%	98.06%	97.64%	3	1	5.004	3.49	1.969
26595	Wednesday, September 21, 2011	18:06	26.39	5.67	23.07	265.06	286.92	22.06	95.64%	98.47%	98.21%	96.71%	3	1	4.928	3.39	1.988
26594	Wednesday, September 21, 2011	17:05	24.83	5.74	21.69	245.17	265.87	20.99	96.74%	97.40%	98.28%	95.72%	3	1	5.266	3.545	2.024
26593	Wednesday, September 21, 2011	15:52	27.07	5.68	23.95	222.59	245.55	23.18	96.76%	98.63%	97.84%	96.50%	3	1	4.974	3.259	1.992
26592	Wednesday, September 21, 2011	14:50	27.40	5.74	23.99	200.17	223.09	23.15	96.47%	98.64%	98.99%	97.64%	3	1	5.152	3.225	1.997
26591	Wednesday, September 21, 2011	13:53	27.63	5.96	24.24	177.21	200.50	23.41	96.58%	99.13%	98.49%	97.64%	3	1	4.709	3.476	2.002
26590	Wednesday, September 21, 2011	12:56	26.67	6.32	22.98	155.35	177.40	22.29	97.01%	99.39%	99.18%	98.58%	3	1	5.116	3.553	2.019
26589	Wednesday, September 21, 2011	11:58	27.51	5.61	24.39	132.08	155.51	23.56	96.58%	98.36%	98.18%	96.56%	3	1	5.378	3.485	1.977
26588	Wednesday, September 21, 2011	10:58	26.87	5.15	23.86	109.29	132.37	23.26	97.49%	98.81%	99.48%	98.30%	3	1	4.854	3.055	2.005
26587	Wednesday, September 21, 2011	10:01	26.50	5.73	23.36	87.09	109.56	22.48	96.21%	97.99%	97.72%	95.75%	3	1	5.341	3.515	2.008
26586	Wednesday, September 21, 2011	8:53	81.39	5.10	80.95	11.78	87.49	76.82	94.90%	98.49%	97.73%	96.25%	6	1	6.423	4.436	1.931