

2011-03-02 Wednesday Morning Notes

Wednesday, March 02, 2011
5:00 AM

On-call

- Wednesday/Thursday: Stan Johnson
- Friday: Al Sondgeroth
- Saturday: Tony Leveling
- Sunday: DVM

Stacking and Transfers

- Stacked 25.9mA/hr with an average production of 20.92 pbars/Mp and 8.30 Tp on target.
- Unstacked 502E10 in 58 transfers over 19 sets with an average overall efficiency of 95.9%
 - If we ignore the transfers from stacks over 40mA we get 96.25%.

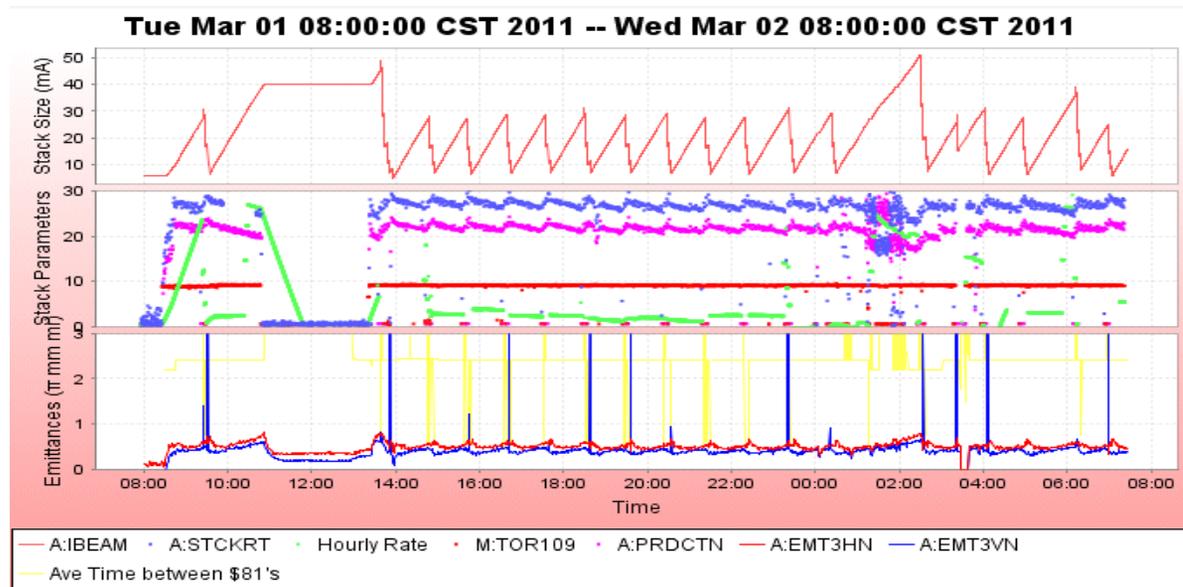
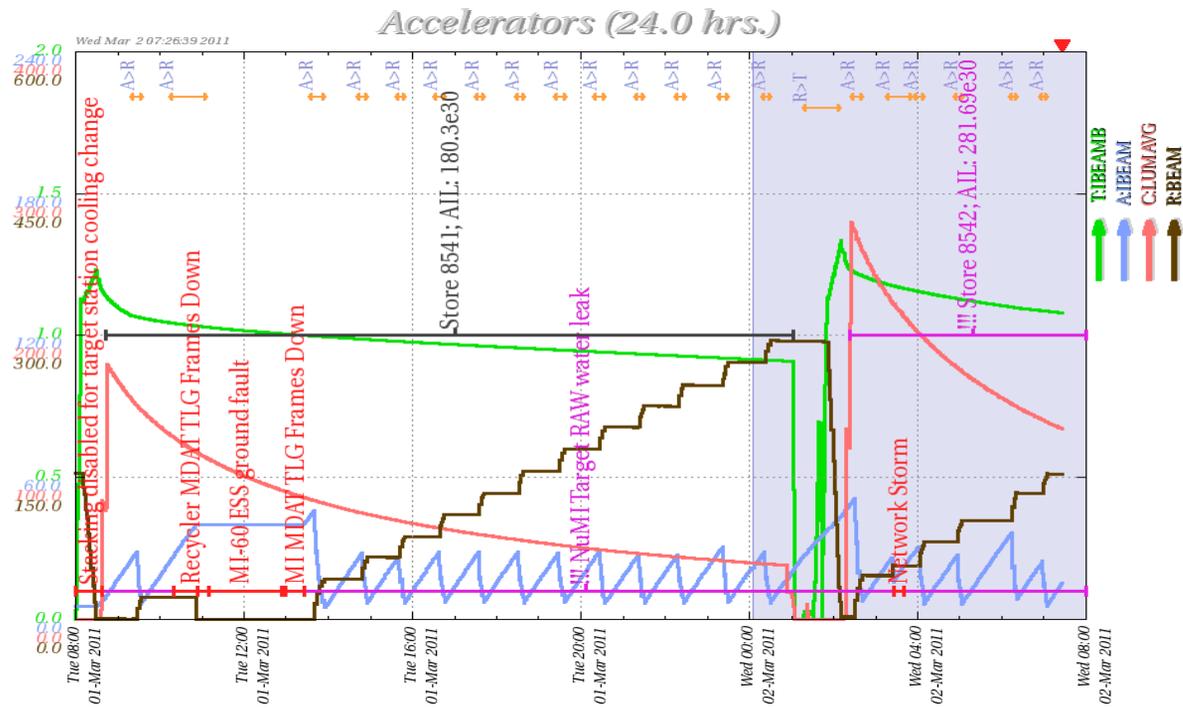
Interesting happenings

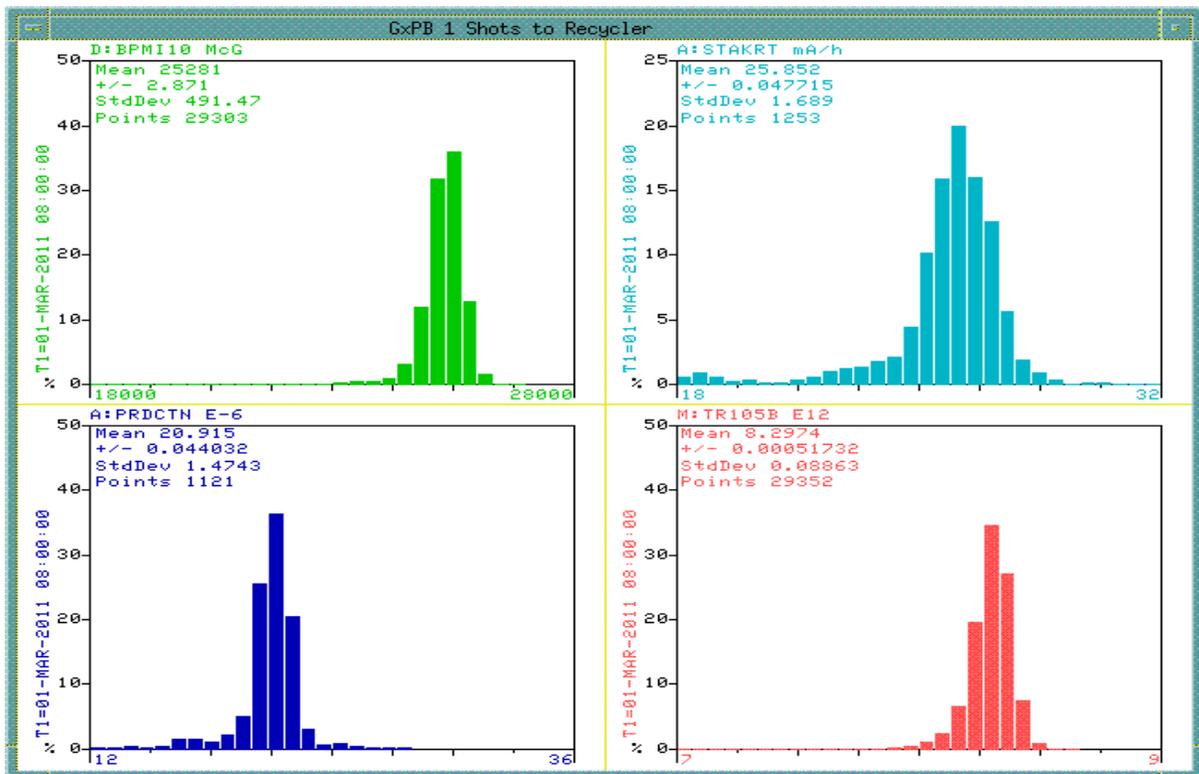
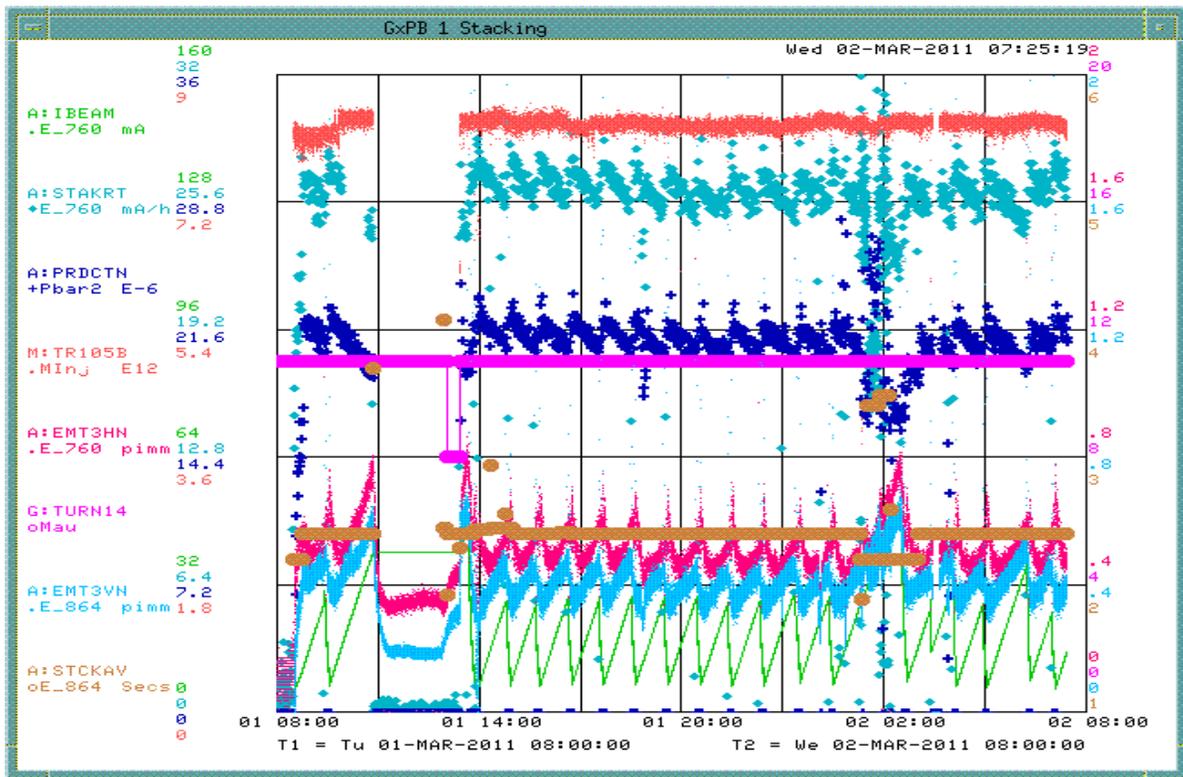
- Network Storm
 - D/A VSA and Oscillator power cycled, D/A VSA config sent, Stacking VSA killed and restarted.
 - MWAP10 yellow reset button locally, then turned on SEM806 sequence from P58

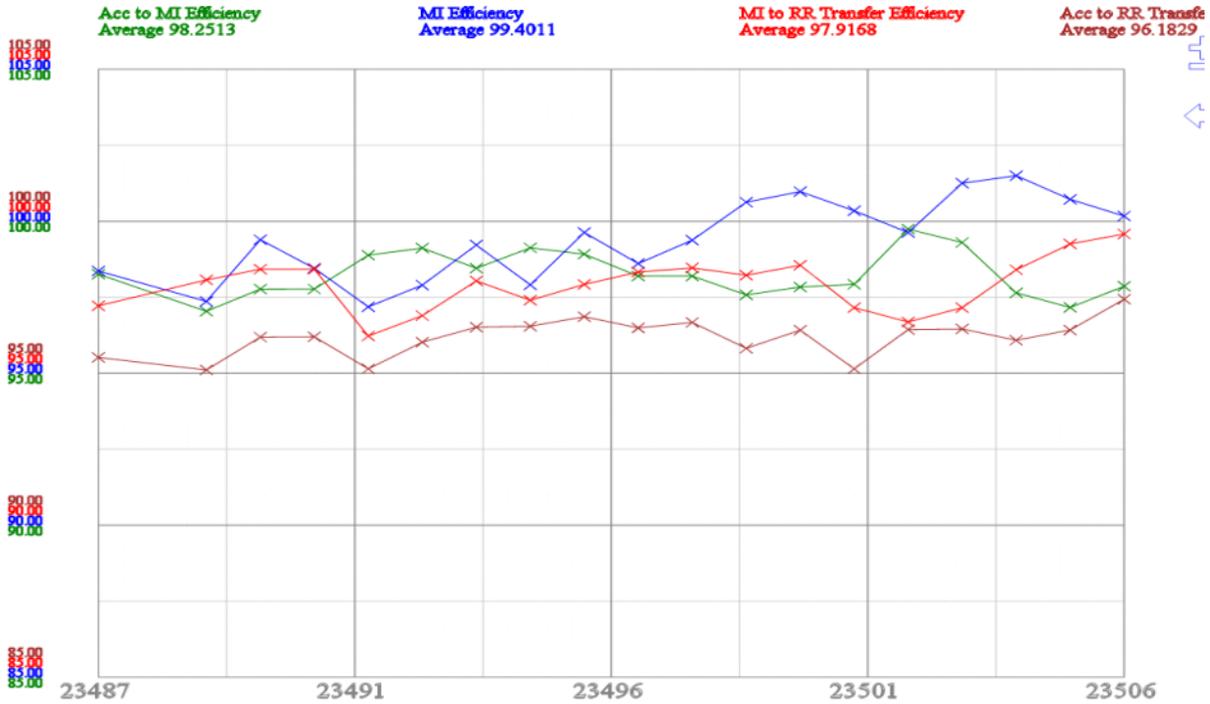
Numbers

- Stacking
 - Pbars stacked: 515.87 E10
 - Time stacking: 21.03 Hr
 - Average stacking rate: 24.53 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 30854
 - Number of pulses with beam: 29354
 - Fraction of up pulses was: 95.14%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 20.01 Hr
 - Possible average stacking rate: 25.78 E10/Hr
 - Could have stacked: 542.23 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 500.31 E10
 - Number of transfers : 58
 - Number of transfer sets: 19
 - Average Number of transfer per set: 3.05
 - Time taken to shoot including reverse proton tuneup: 00.20 Hr
 - Transfer efficiency: 95.75%
- Other Info
 - Average POT : 8.29 E12
 - Average production: 21.19 pbars/E6 protons

Plots







Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number_20_A1 BEAMB sampled on #91 (A-BEA M7), E10	Column 22 Number_21_A1 BEAMB sampled on #94 (A-BEA M9), E10	Unstacked (mA)	Column 23 Number_22_R: BEAMS (R:BEA ME0[0]) pre sfer E10	Column 24 Number_23_R: BEAM (R:BEA ME0[1]) post sfer, 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 =>				502.21			481.83	95.94%	98.18%	97.43%	95.67%	58	19	5.0433	3.854	1.9283	
Daily Average =>				502.21			481.83					58	19				
23506	Wednesday, March 02, 2011	6:58	24.92	5.63	21.41	133.57	154.05	20.78	97.02%	98.19%	97.62%	95.85%	3	1	4.933	3.659	1.902
23505	Wednesday, March 02, 2011	6:14	36.91	8.02	30.99	104.33	133.84	29.86	96.34%	97.50%	97.77%	95.32%	3	1	5.202	3.973	1.887
23504	Wednesday, March 02, 2011	4:57	27.33	6.09	23.41	82.24	104.56	22.54	96.26%	97.94%	98.69%	96.66%	3	1	4.892	3.588	1.946
23503	Wednesday, March 02, 2011	4:03	30.96	6.40	26.66	56.90	82.43	25.75	96.60%	98.75%	99.94%	98.70%	3	1	4.746	3.917	1.921
23502	Wednesday, March 02, 2011	3:23	26.21	15.07	11.14	46.30	57.04	10.74	96.44%	99.74%	99.37%	99.11%	1	1	4.577	4.098	1.882
23501	Wednesday, March 02, 2011	2:30	51.07	7.56	47.11	2.62	46.59	44.58	94.62%	97.73%	97.78%	95.56%	4	1	5.889	4.474	1.88
23500	Wednesday, March 02, 2011	0:22	28.97	6.75	24.91	271.38	295.05	24.03	96.43%	98.04%	98.92%	96.98%	3	1	4.735	3.71	1.948
23499	Tuesday, March 01, 2011	23:23	30.96	7.05	26.56	247.23	272.27	25.45	95.83%	98.02%	97.47%	95.53%	3	1	4.759	3.729	1.915
23498	Tuesday, March 01, 2011	22:19	27.82	6.45	24.04	225.18	247.99	23.24	96.69%	98.38%	97.55%	95.97%	3	1	4.705	3.539	1.933
23497	Tuesday, March 01, 2011	21:23	27.71	6.47	23.95	203.13	225.87	23.09	96.41%	97.36%	95.90%	93.37%	3	1	4.692	3.803	1.945
23496	Tuesday, March 01, 2011	20:27	28.95	6.67	24.96	179.80	203.60	24.11	96.58%	98.85%	98.63%	97.50%	3	1	4.695	3.587	1.949
23495	Tuesday, March 01, 2011	19:29	28.59	6.78	24.48	156.84	180.24	23.64	96.53%	99.15%	96.59%	95.77%	3	1	4.785	3.705	1.945
23494	Tuesday, March 01, 2011	18:31	28.94	6.66	24.95	133.46	157.17	24.02	96.27%	98.51%	98.04%	96.59%	3	1	5.174	3.935	1.922
23493	Tuesday, March 01, 2011	17:34	28.50	6.80	24.39	110.56	133.71	23.41	95.99%	98.64%	97.09%	95.77%	3	1	4.982	3.94	1.941
23492	Tuesday, March 01, 2011	16:38	28.67	6.81	24.61	87.56	110.88	23.44	95.28%	98.87%	96.78%	95.69%	3	1	5.309	3.895	1.941
23491	Tuesday, March 01, 2011	15:41	27.05	6.46	23.35	65.59	87.77	22.45	96.13%	97.58%	95.61%	93.30%	3	1	5.271	3.895	1.95
23490	Tuesday, March 01, 2011	14:48	27.97	6.51	24.15	42.66	65.72	23.22	96.13%	98.19%	97.23%	95.47%	3	1	5.254	3.832	1.95
23489	Tuesday, March 01, 2011	13:40	46.08	5.04	46.65	0.08	42.90	44.10	94.53%	97.72%	95.73%	93.55%	5	1	5.816	4.051	1.939
23487	Tuesday, March 01, 2011	9:28	28.71	6.38	24.48	0.48	23.74	23.39	95.56%	98.08%	96.42%	94.57%	3	1	5.407	3.896	1.942

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-BEAM0[0]) pre xfer E10	Column 24 Number_23_R: BEAM (R-BEAM0[1]) post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI2 * 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 =>				408.45		393.15	96.25%	98.29%	97.59%	95.92%	58	17	4.9481	3.8059	1.9305		
Daily Average =>				408.45		393.15					58	17					
23506	Wednesday, March 02, 2011	6:58	24.92	5.63	21.41	133.57	154.05	20.78	97.02%	98.19%	97.62%	95.85%	3	1	4.933	3.659	1.902
23505	Wednesday, March 02, 2011	6:14	36.91	8.02	30.99	104.33	133.84	29.86	96.34%	97.50%	97.77%	95.32%	3	1	5.202	3.973	1.887
23504	Wednesday, March 02, 2011	4:57	27.33	6.09	23.41	82.24	104.56	22.54	96.26%	97.94%	98.69%	96.66%	3	1	4.892	3.588	1.946
23503	Wednesday, March 02, 2011	4:03	30.96	6.40	26.66	56.90	82.43	25.75	96.60%	98.75%	99.94%	98.70%	3	1	4.746	3.917	1.921
23502	Wednesday, March 02, 2011	3:23	26.21	15.07	11.14	46.30	57.04	10.74	96.44%	99.74%	99.37%	99.11%	1	1	4.577	4.098	1.882
													4				
23500	Wednesday, March 02, 2011	0:22	28.97	6.75	24.91	271.38	295.05	24.03	96.43%	98.04%	98.92%	96.98%	3	1	4.735	3.71	1.948
23499	Tuesday, March 01, 2011	23:23	30.96	7.05	26.56	247.23	272.27	25.45	95.83%	98.02%	97.47%	95.53%	3	1	4.759	3.729	1.915
23498	Tuesday, March 01, 2011	22:19	27.82	6.45	24.04	225.18	247.99	23.24	96.69%	98.38%	97.55%	95.97%	3	1	4.705	3.539	1.933
23497	Tuesday, March 01, 2011	21:23	27.71	6.47	23.95	203.13	225.87	23.09	96.41%	97.36%	95.90%	93.37%	3	1	4.692	3.803	1.945
23496	Tuesday, March 01, 2011	20:27	28.95	6.67	24.96	179.80	203.60	24.11	96.58%	98.85%	98.63%	97.50%	3	1	4.695	3.587	1.949
23495	Tuesday, March 01, 2011	19:29	28.59	6.78	24.48	156.84	180.24	23.64	96.53%	99.15%	96.59%	95.77%	3	1	4.785	3.705	1.945
23494	Tuesday, March 01, 2011	18:31	28.94	6.66	24.95	133.46	157.17	24.02	96.27%	98.51%	98.04%	96.59%	3	1	5.174	3.935	1.922
23493	Tuesday, March 01, 2011	17:34	28.50	6.80	24.39	110.56	133.71	23.41	95.99%	98.64%	97.09%	95.77%	3	1	4.982	3.94	1.941
23492	Tuesday, March 01, 2011	16:38	28.67	6.81	24.61	87.56	110.88	23.44	95.28%	98.87%	96.78%	95.69%	3	1	5.309	3.895	1.941
23491	Tuesday, March 01, 2011	15:41	27.05	6.46	23.35	65.59	87.77	22.45	96.13%	97.58%	95.61%	93.30%	3	1	5.271	3.895	1.95
23490	Tuesday, March 01, 2011	14:48	27.97	6.51	24.15	42.66	65.72	23.22	96.13%	98.19%	97.23%	95.47%	3	1	5.254	3.832	1.95
													5				
23487	Tuesday, March 01, 2011	9:28	28.71	6.38	24.48	0.48	23.74	23.39	95.56%	98.08%	96.42%	94.57%	3	1	5.407	3.896	1.942