2011-06-13 Monday Morning Notes

Monday, June 13, 2011
8:02 AM

Numbers

- Stacking
  - Pbars stacked: 1714.15 E10
  - Time stacking: 70.93 Hr
  - Average stacking rate: 24.17 E10/Hr

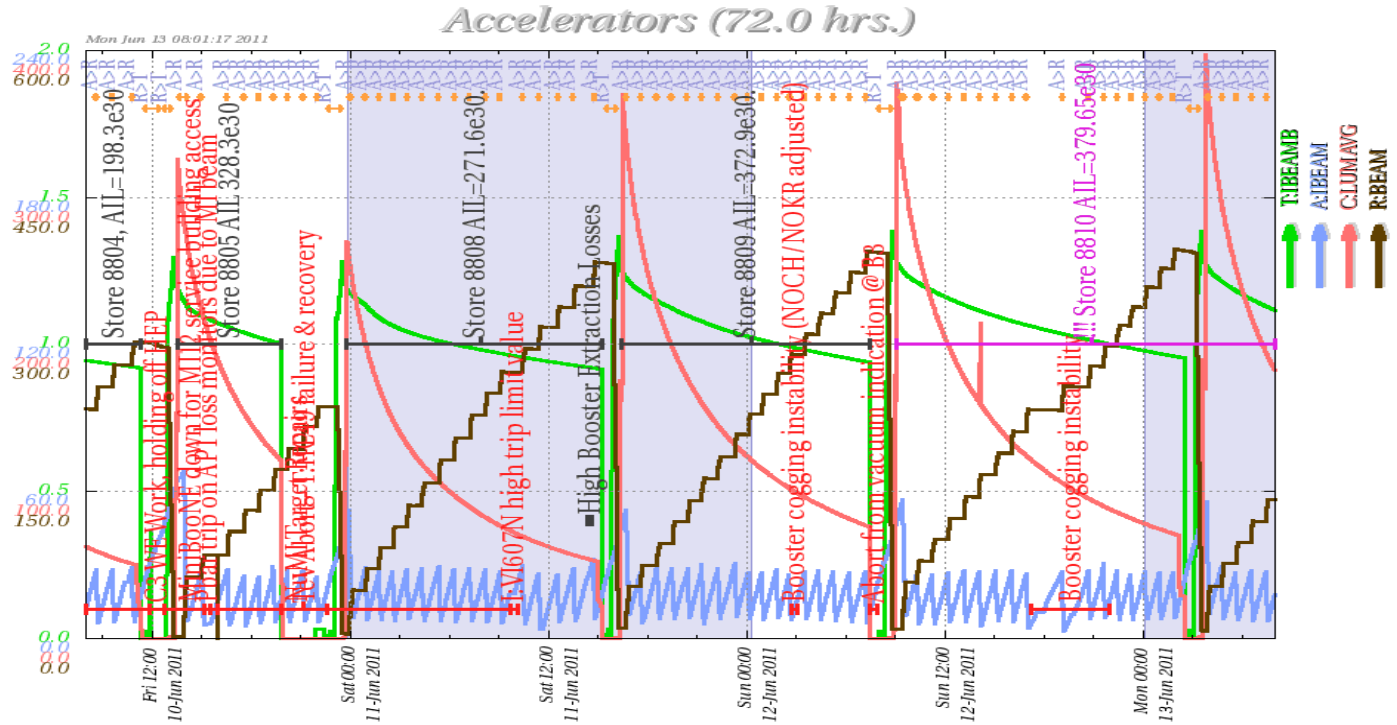
- Uptime
  - Number of pulses while in stacking mode: 101371
  - Number of pulses with beam: 96928
  - Fraction of up pulses was: 95.62%

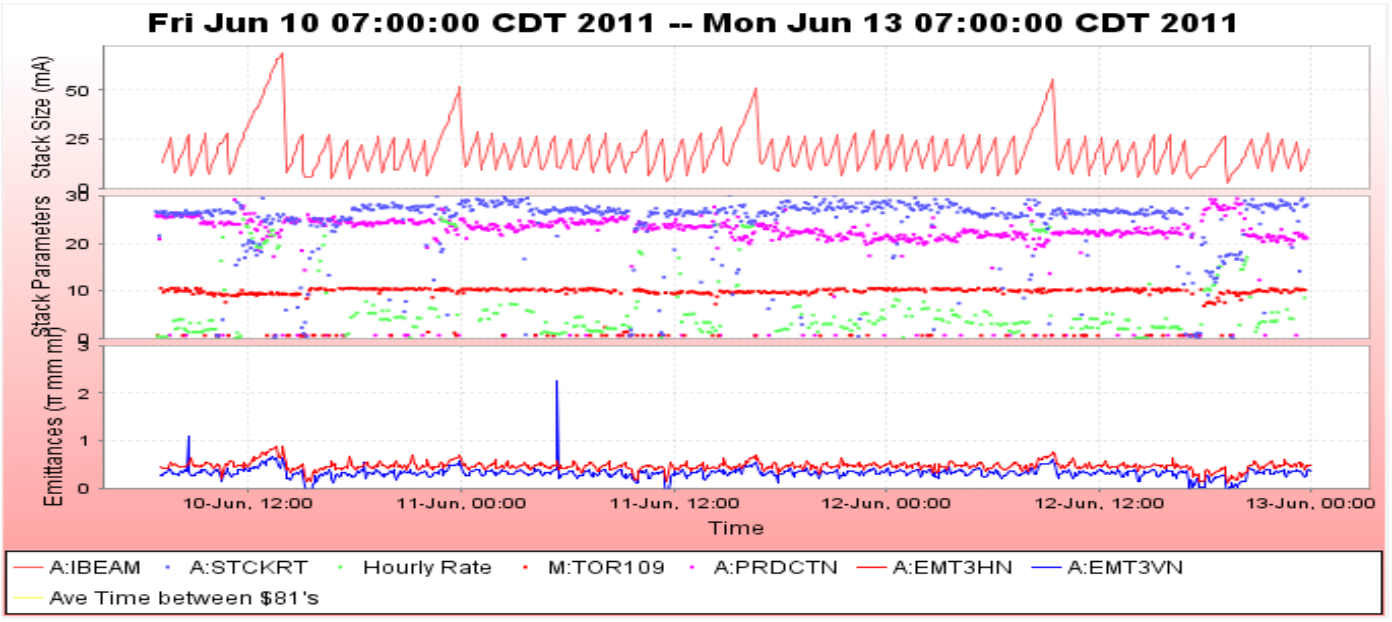
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 67.82 Hr
  - Possible average stacking rate: 25.28 E10/Hr
  - Could have stacked: 1792.73 E10/Hr

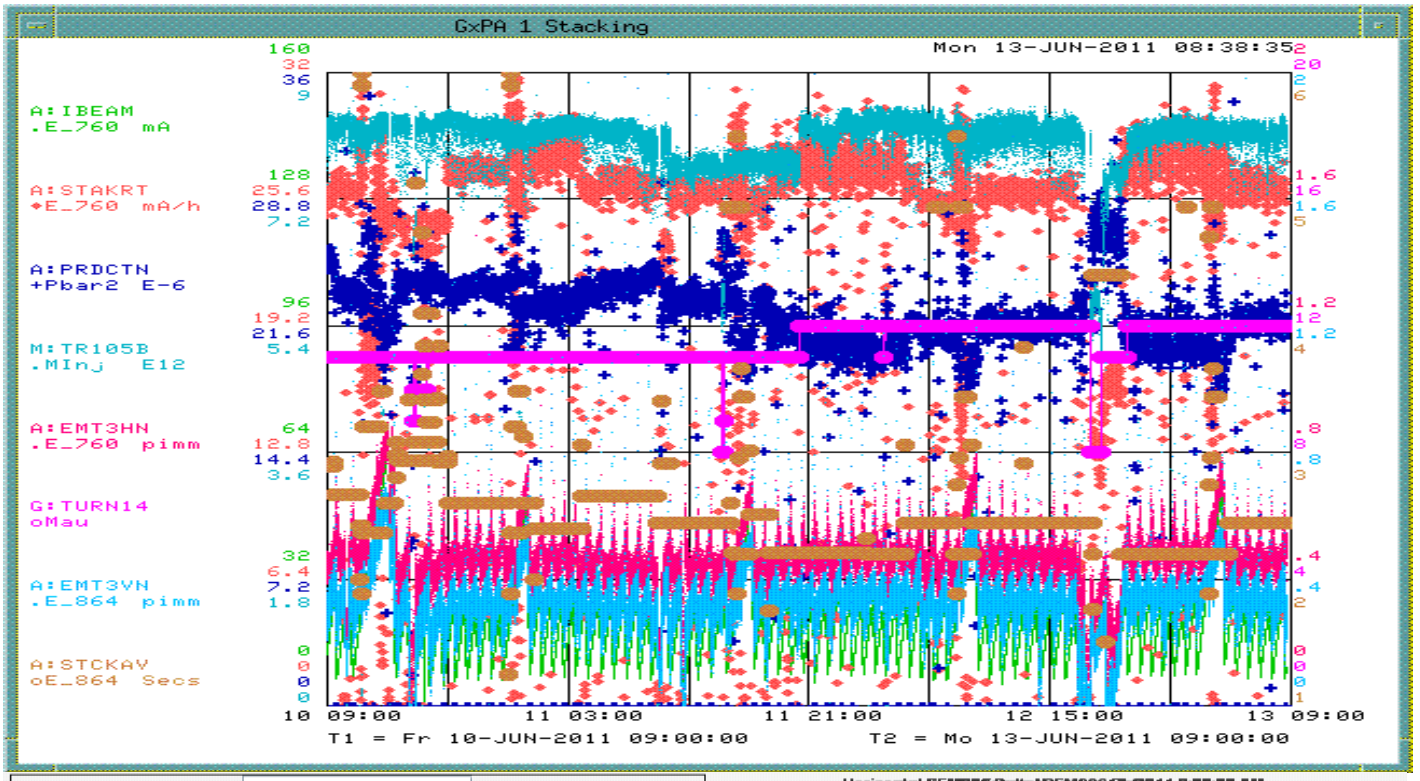
- Recycler Transfers
  - Pbars sent to the Recycler: 1682.53 E10
  - Number of transfers : 203
  - Number of transfer sets: 67
  - Average Number of transfer per set: 3.03
  - Time taken to shoot including reverse proton tuneup: 00.71 Hr
  - Transfer efficiency: 94.65%

- Other Info
  - Average POT : 8.06 E12
  - Average production: 21.95 pbars/E6 protons

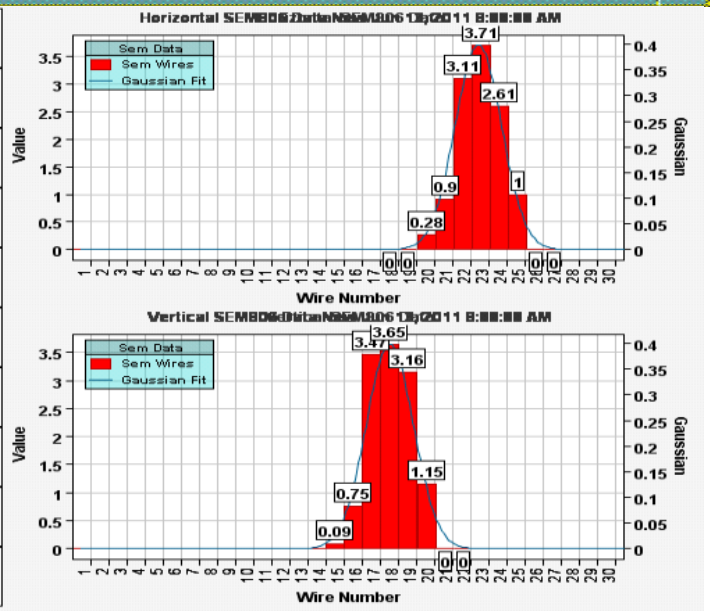
Plots

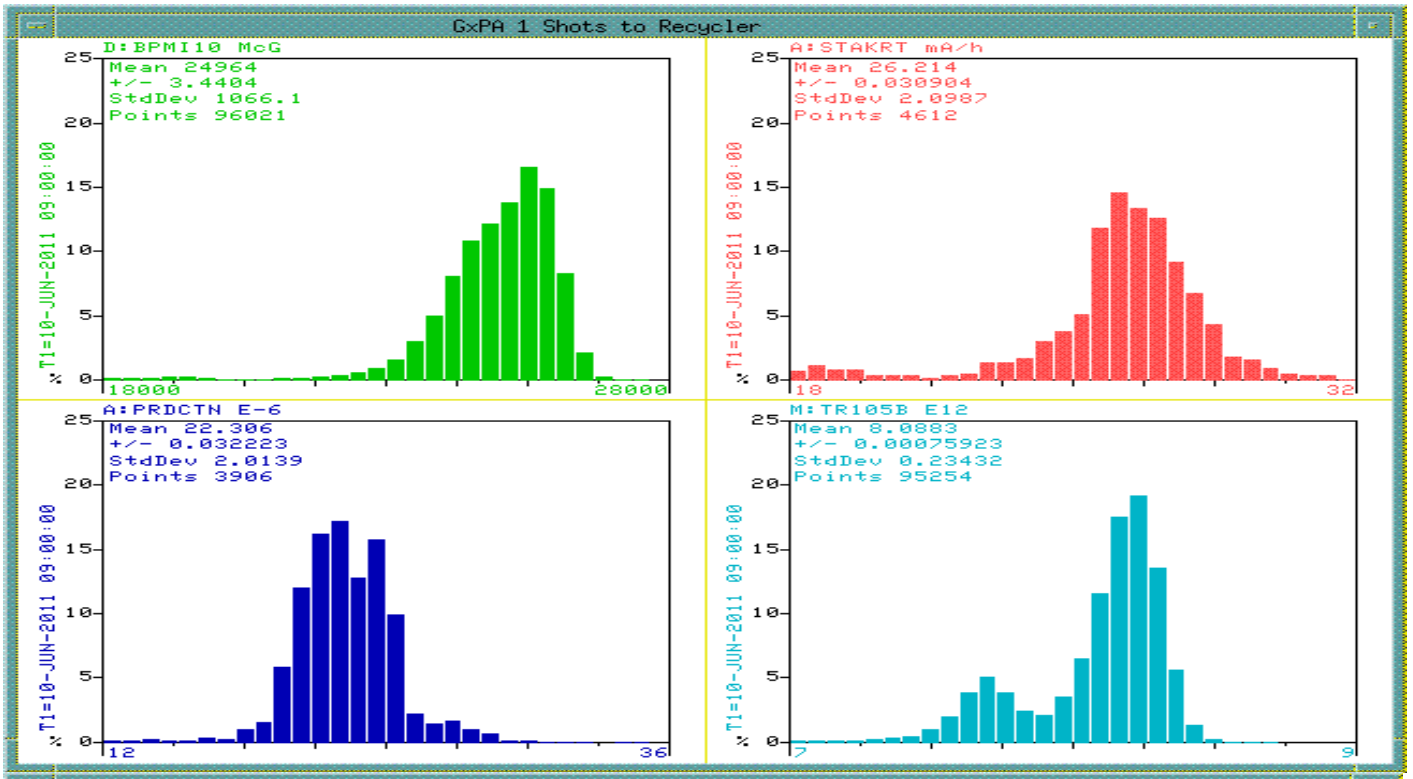

Accelerators (72.0 hrs.)
Mon Jun 13 08:01:17 2011
Store 8804, AIL=198.3e30
Store 8805 AIL 328.3e30
Store 8808 AIL=271.6e30
Store 8809 AIL=372.9e30
Store 8810 AIL=379.65e30
High Booster Extraction Losses
Booster cogging instability (NOCH/NOKR adjusted)
Booster cogging instability
T:IBEAMB
A:IBEAM
C:LUMAVG
R:BEAM
Fri 12:00 10-Jun 2011
Sat 00:00 11-Jun 2011
Sat 12:00 11-Jun 2011
Sun 00:00 12-Jun 2011
Sun 12:00 12-Jun 2011
Mon 00:00 13-Jun 2011

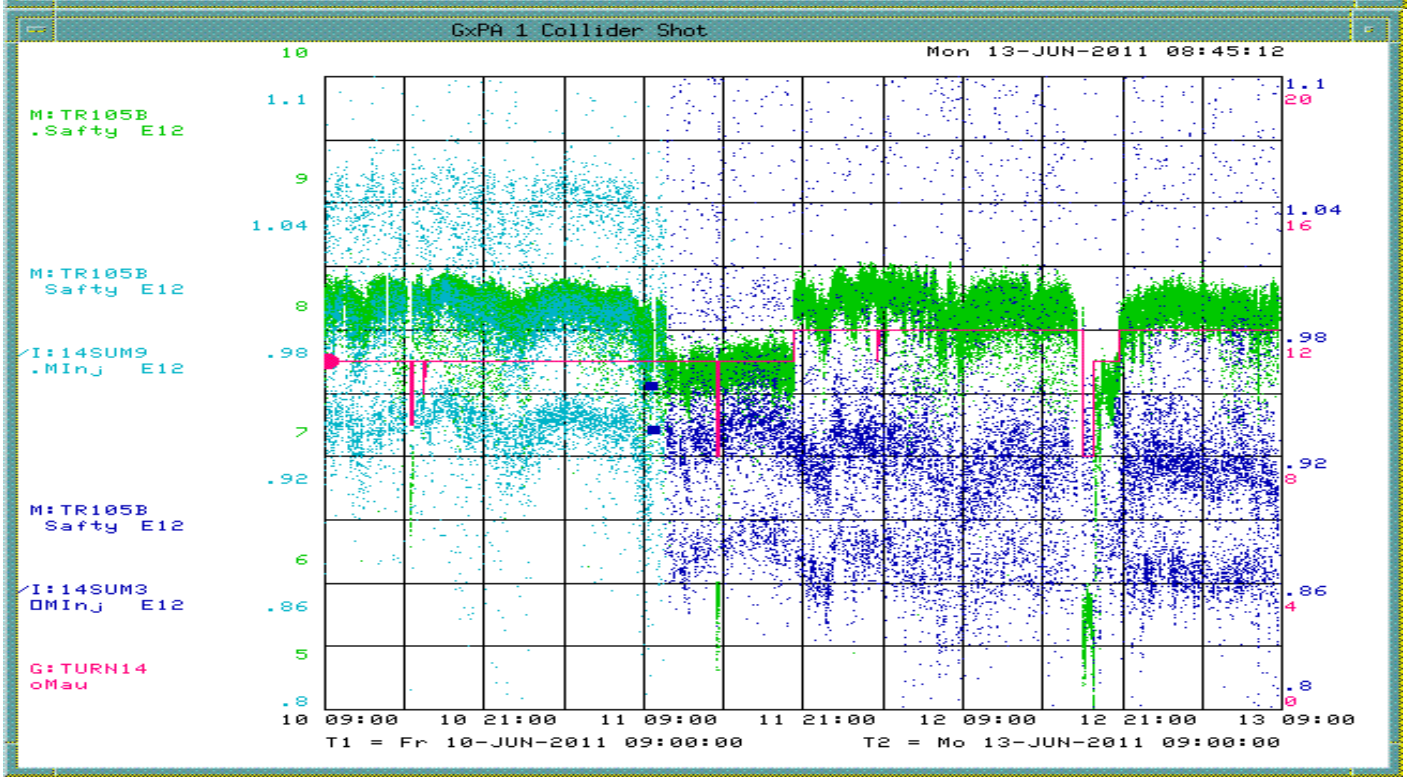

Fri Jun 10 07:00:00 CDT 2011 -- Mon Jun 13 07:00:00 CDT 2011
Stack Size (mA)
Stack Parameters
Emittances (π mm mr)
10-Jun, 12:00
11-Jun, 00:00
11-Jun, 12:00
12-Jun, 00:00
12-Jun, 12:00
13-Jun, 00:00
Time
A:IBEAM
A:STCKRT
Hourly Rate
M:TOR109
A:PRDCTN
A:EMT3HN
A:EMT3VN
Ave Time between $81's



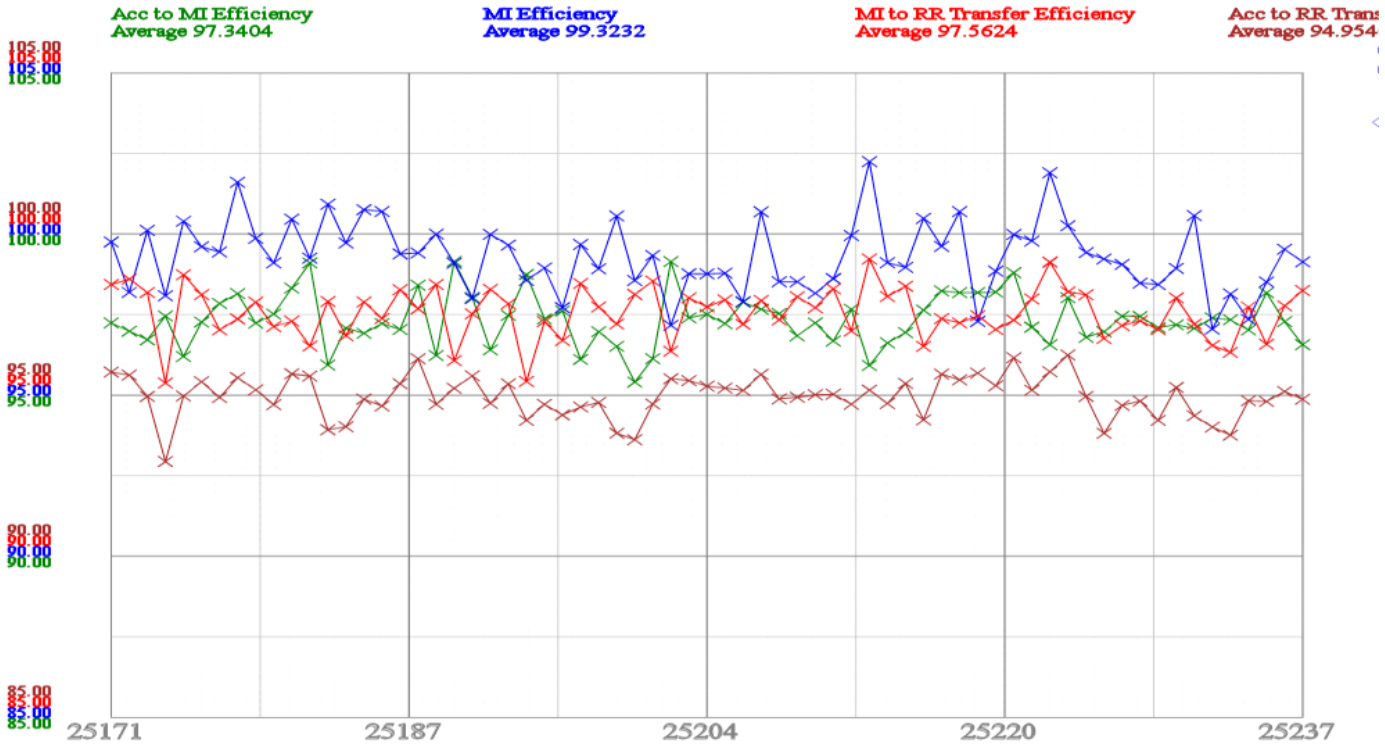
Horizontal Area New	11.6	Intensity
Horizontal Area Calc	205.74	Intensity
Horizontal Sigma New	3.49	mm
Horizontal Sigma Calc	3.29	mm
Horizontal Mean	23.71	mm
Vertical Area New	12.26	Intensity
Vertical Area Calc	212.12	Intensity
Vertical Sigma New	3.32	mm
Vertical Sigma Calc	3.12	mm
Vertical Mean	9.05	mm







NuMI came back online, so back to the $23s



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 =>				1723.94			1633.44	94.75%	97.28%	96.61%	93.99%	207	67	4.6343	3.174	2.0164
	Daily Average =>				574.65			544.48					69	22			
25237	Monday, June 13, 2011	7:27	27.54	7.09	23.17	119.68	141.58	22.01	95.01%	96.60%	95.96%	92.70%	3	1	4.36	3.072	2.036
25236	Monday, June 13, 2011	6:33	27.94	7.23	23.39	97.82	119.90	22.23	95.05%	97.31%	96.19%	93.60%	3	1	4.386	3.168	2.037
25235	Monday, June 13, 2011	5:38	27.37	7.10	22.96	76.28	97.95	21.78	94.84%	97.78%	96.72%	94.58%	3	1	4.522	3.165	2.049
25234	Monday, June 13, 2011	4:46	29.86	7.93	24.67	53.23	76.51	23.39	94.84%	96.93%	94.73%	91.82%	3	1	4.815	3.43	2.018
25233	Monday, June 13, 2011	3:52	55.86	10.54	49.20	8.01	53.52	45.93	93.36%	97.17%	96.00%	93.29%	4	1	5.884	4.135	1.973
25232	Monday, June 13, 2011	1:49	27.43	8.00	22.22	377.07	397.48	20.90	94.05%	97.52%	95.16%	92.80%	3	1	4.746	3.329	2.042
25231	Monday, June 13, 2011	0:59	27.25	7.95	22.09	357.94	378.42	20.87	94.46%	96.92%	97.32%	94.32%	3	1	4.605	3.096	2.055
25230	Monday, June 13, 2011	0:08	27.55	7.67	22.67	337.94	359.16	21.55	95.08%	97.57%	96.86%	94.51%	3	1	4.577	3.309	1.998
25229	Sunday, June 12, 2011	23:15	26.28	7.73	21.29	319.13	338.88	20.03	94.09%	96.85%	95.74%	92.72%	3	1	4.508	3.445	2.06
25228	Sunday, June 12, 2011	22:27	28.06	7.65	23.17	298.29	319.94	21.93	94.66%	97.32%	95.86%	93.30%	3	1	4.564	3.363	2.022
25227	Sunday, June 12, 2011	21:36	28.43	8.19	22.96	277.59	299.00	21.67	94.40%	97.19%	96.11%	93.41%	3	1	4.627	3.441	2.02
25226	Sunday, June 12, 2011	20:42	28.15	7.98	22.86	256.87	278.11	21.42	93.68%	97.27%	95.77%	93.16%	3	1	4.776	3.172	2.037
25225	Sunday, June 12, 2011	19:06	27.60	2.98	26.16	232.89	257.65	24.94	95.31%	97.57%	96.23%	93.89%	3	1	3.296	1.548	1.943
25224	Sunday, June 12, 2011	16:56	26.88	4.17	24.04	211.09	233.94	23.12	96.15%	98.19%	98.38%	96.60%	3	1	3.758	2.164	1.991
25223	Sunday, June 12, 2011	16:02	28.13	6.94	23.85	189.02	211.60	22.83	95.74%	96.50%	98.37%	94.93%	3	1	4.586	3.227	2.025
25222	Sunday, June 12, 2011	15:06	28.10	7.12	23.66	167.17	189.50	22.51	95.12%	97.11%	97.17%	94.36%	3	1	4.553	3.143	2.018
25221	Sunday, June 12, 2011	14:04	27.66	5.12	24.28	144.41	167.60	23.33	96.08%	98.61%	98.41%	97.04%	3	1	4.069	2.733	2.009
25220	Sunday, June 12, 2011	13:09	27.71	6.93	23.47	122.44	144.69	22.41	95.49%	98.25%	97.23%	95.53%	3	1	4.43	3.087	2.039
25219	Sunday, June 12, 2011	12:12	26.97	6.84	22.81	101.07	122.74	21.82	95.66%	98.42%	95.96%	94.44%	3	1	4.621	3.292	2.024
25218	Sunday, June 12, 2011	11:14	26.47	5.64	23.34	79.17	101.32	22.28	95.44%	98.23%	98.56%	96.81%	3	1	4.545	3.003	1.991
25217	Sunday, June 12, 2011	10:20	27.23	6.09	23.48	57.07	79.38	22.45	95.59%	98.26%	98.19%	96.48%	3	1	4.447	3.124	2.01
25216	Sunday, June 12, 2011	9:28	56.70	9.18	51.16	9.91	57.38	47.95	93.73%	97.49%	97.47%	95.02%	4	1	5.843	3.939	1.97
25215	Sunday, June 12, 2011	7:11	27.63	6.50	23.74	372.93	395.21	22.64	95.35%	97.16%	96.13%	93.40%	3	1	4.78	3.124	2.024
25214	Sunday, June 12, 2011	6:12	27.22	6.58	23.33	352.33	374.14	22.12	94.82%	96.39%	95.70%	92.24%	3	1	4.757	3.219	2.024
25213	Sunday, June 12, 2011	5:15	28.02	7.30	23.41	331.33	353.29	22.28	95.16%	96.31%	97.81%	94.21%	3	1	4.924	3.293	2.042
25212	Sunday, June 12, 2011	4:21	27.98	7.46	23.24	310.31	332.10	22.03	94.78%	97.71%	97.37%	95.13%	3	1	4.955	3.454	2.029
25211	Sunday, June 12, 2011	3:30	27.50	7.91	22.37	289.85	310.99	21.29	95.18%	96.47%	95.27%	91.91%	3	1	4.937	3.528	2.068
25210	Sunday, June 12, 2011	2:34	26.42	7.74	21.44	270.30	290.45	20.38	95.05%	97.15%	95.56%	92.84%	3	1	4.71	2.986	2.044
25209	Sunday, June 12, 2011	1:48	28.46	8.41	22.83	249.23	270.76	21.65	94.83%	97.12%	95.66%	92.91%	3	1	4.816	3.333	2.037
25208	Sunday, June 12, 2011	0:55	27.47	7.90	22.20	228.75	249.66	21.08	94.95%	97.16%	96.00%	93.28%	3	1	4.721	3.358	2.045
25207	Sunday, June 12, 2011	0:05	27.22	7.83	21.96	208.26	229.09	20.97	95.52%	97.76%	98.25%	96.05%	3	1	4.823	3.34	2.066
25206	Saturday, June 11, 2011	23:17	30.96	9.02	24.55	185.40	208.60	23.35	95.10%	97.89%	96.44%	94.41%	3	1	4.84	3.484	2.045

25205	Saturday, June 11, 2011	22:16	29.01	8.06	23.58	163.37	185.71	22.46	95.25%	97.45%	96.47%	94.01%	3	1	4.523	3.261	2.059
25204	Saturday, June 11, 2011	21:17	28.43	6.01	24.19	140.66	163.61	23.08	95.39%	97.23%	96.37%	93.70%	3	1	4.33	2.896	1.998
25203	Saturday, June 11, 2011	20:26	28.60	8.48	22.74	119.27	140.82	21.67	95.29%	97.69%	95.93%	93.71%	3	1	4.399	3.245	2.047
25202	Saturday, June 11, 2011	19:30	29.11	7.85	23.86	96.75	119.44	22.82	95.64%	98.60%	96.50%	95.15%	3	1	4.79	3.122	2.056
25201	Saturday, June 11, 2011	18:35	28.91	7.88	23.59	74.77	96.98	22.34	94.70%	96.22%	95.51%	91.89%	3	1	4.631	3.319	2.022
25200	Saturday, June 11, 2011	17:34	27.00	6.47	23.11	53.51	74.99	21.57	93.33%	95.19%	93.48%	88.99%	3	1	4.38	3.149	1.969
25199	Saturday, June 11, 2011	16:43	52.63	9.51	46.87	10.27	53.71	43.77	93.38%	96.38%	96.66%	93.16%	4	1	5.517	3.869	1.977
25198	Saturday, June 11, 2011	14:43	32.77	8.28	27.12	358.90	384.21	25.66	94.63%	96.88%	95.66%	92.67%	3	1	4.585	3.193	1.979
25197	Saturday, June 11, 2011	13:31	28.67	7.16	24.17	337.67	360.20	22.86	94.59%	96.17%	95.95%	92.28%	3	1	4.515	3.243	2.015
25196	Saturday, June 11, 2011	12:32	26.67	6.63	22.72	317.27	338.52	21.49	94.58%	97.55%	95.71%	93.37%	3	1	4.315	2.775	2
25195	Saturday, June 11, 2011	11:24	26.77	3.78	24.36	295.36	318.14	23.00	94.42%	97.45%	96.12%	93.67%	3	1	3.553	2.013	1.97
25194	Saturday, June 11, 2011	10:26	30.04	5.75	26.48	271.57	296.09	24.85	93.83%	98.27%	97.05%	95.37%	3	1	4.388	2.944	1.971
25193	Saturday, June 11, 2011	9:04	27.39	6.54	23.51	250.12	272.33	22.41	95.32%	97.41%	96.85%	94.34%	3	1	4.532	2.823	2.012
25192	Saturday, June 11, 2011	8:10	28.61	6.87	24.44	227.75	250.64	23.13	94.67%	96.47%	96.59%	93.18%	3	1	4.686	2.936	2.014
25191	Saturday, June 11, 2011	7:14	29.38	7.10	25.00	204.51	228.18	23.91	95.62%	97.96%	96.21%	94.24%	3	1	4.574	3.133	2.01
25190	Saturday, June 11, 2011	6:16	28.20	6.90	24.02	182.25	204.93	22.85	95.12%	98.57%	97.34%	95.95%	3	1	4.572	3.041	2.028
25189	Saturday, June 11, 2011	5:21	29.74	7.28	25.21	158.95	182.56	23.82	94.48%	96.18%	95.68%	92.03%	3	1	4.435	3.152	2.01
25188	Saturday, June 11, 2011	4:21	28.92	6.96	24.71	135.69	159.23	23.72	96.01%	98.32%	98.31%	96.66%	3	1	4.6	3.131	2.018
25187	Saturday, June 11, 2011	3:26	28.74	7.74	23.28	113.94	135.96	22.19	95.30%	97.23%	96.17%	93.51%	3	1	4.814	3.131	2.001
25186	Saturday, June 11, 2011	2:34	27.49	7.15	22.64	92.79	114.06	21.42	94.61%	97.59%	97.63%	95.28%	3	1	4.604	3.228	2.027
25185	Saturday, June 11, 2011	1:45	28.15	7.57	22.86	71.44	92.97	21.64	94.66%	96.64%	96.93%	93.67%	3	1	4.586	3.169	2.018
25184	Saturday, June 11, 2011	0:56	29.20	7.71	23.78	49.29	71.59	22.40	94.21%	97.16%	96.80%	94.05%	3	1	4.417	3.065	2.023
25183	Friday, June 10, 2011	23:58	52.53	8.04	48.34	4.84	49.64	45.19	93.48%	95.89%	96.38%	92.42%	4	1	5.175	3.722	1.956
25182	Friday, June 10, 2011	21:58	25.93	6.55	22.16	216.08	237.03	21.14	95.39%	99.05%	97.78%	96.85%	3	1	4.613	3.037	2.006
25181	Friday, June 10, 2011	21:08	28.30	6.88	24.29	193.37	216.42	23.28	95.85%	98.53%	98.83%	97.38%	3	1	4.385	3.169	2.037
25180	Friday, June 10, 2011	20:11	26.11	6.39	22.58	172.56	193.76	21.40	94.80%	97.75%	96.62%	94.45%	3	1	4.712	3.033	2.023
25179	Friday, June 10, 2011	19:21	27.18	6.88	23.13	150.96	172.82	22.03	95.24%	97.49%	97.09%	94.65%	3	1	4.514	3.176	2.038
25178	Friday, June 10, 2011	18:27	25.21	6.27	21.74	130.54	151.18	20.78	95.57%	97.75%	99.15%	96.92%	3	1	4.386	2.982	2.028
25177	Friday, June 10, 2011	17:33	25.75	5.32	22.94	109.14	130.78	21.77	94.90%	97.60%	96.94%	94.61%	3	1	4.503	3.162	2.002
25176	Friday, June 10, 2011	16:33	28.18	5.22	25.16	85.42	109.33	24.03	95.48%	97.78%	97.46%	95.30%	3	1	4.725	2.875	1.969
25175	Friday, June 10, 2011	15:01	28.03	5.69	24.79	62.30	85.66	23.54	94.93%	96.57%	96.84%	93.52%	3	1	4.671	3.092	2.009
25174	Friday, June 10, 2011	13:55	69.39	7.31	66.52	2.28	62.89	61.37	92.27%	96.70%	95.50%	92.35%	5	1	6.023	4.222	1.934
25173	Friday, June 10, 2011	10:47	29.53	7.03	25.15	279.00	302.59	23.90	95.03%	96.95%	96.71%	93.76%	3	1	4.803	3.293	2.027
25172	Friday, June 10, 2011	9:36	28.47	6.81	24.33	256.66	279.69	23.26	95.61%	96.67%	95.77%	92.59%	3	1	4.889	3.195	2.026
25171	Friday, June 10, 2011	8:37	28.25	6.22	24.63	233.89	257.27	23.60	95.80%	97.52%	97.30%	94.89%	3	1	4.569	3.357	2.031