

2011-01-13 Thursday Morning Notes

Thursday, January 13, 2011
7:08 AM

Stacking and Transfers

- Stacked 24.4mA/hr with a production of 19.8 pbars/Mp with 8.08 Tp on target.
- Unstacked 485E10 in 58 transfers over 19 sets with an overall efficiency of 95.6%.

Interesting Happenings

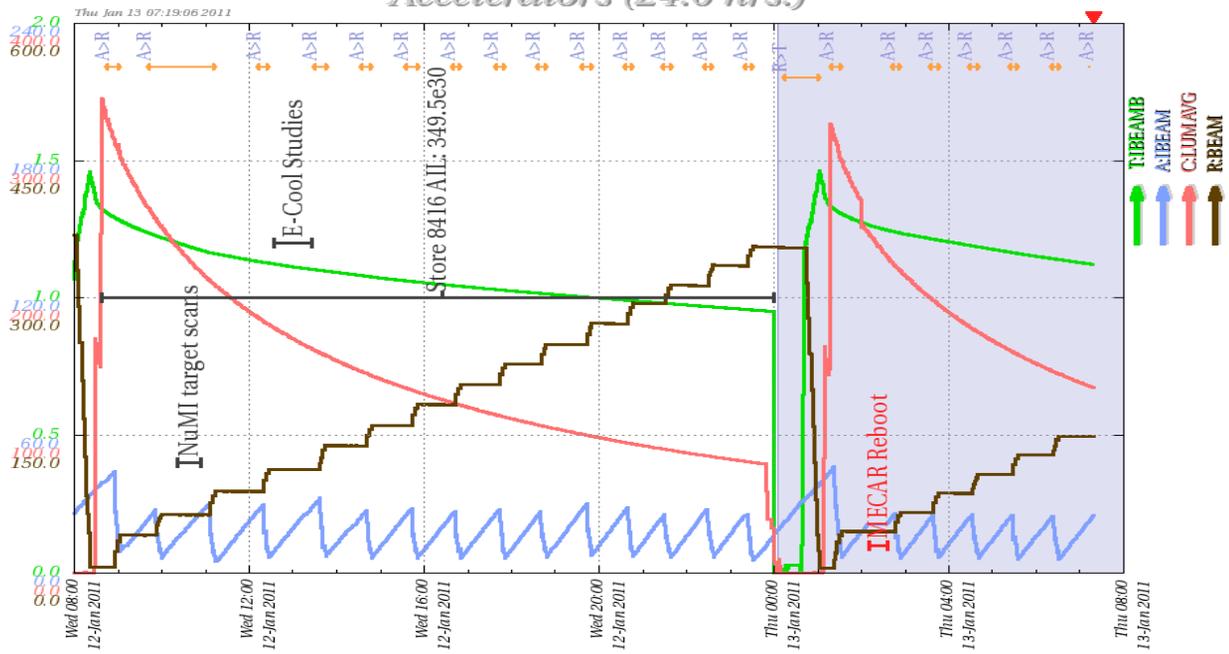
- Yesterday, DVM moved the Debuncher vertical tune up, way from the 3/4. This resulted in more circulating beam in the Debuncher that was washed out by poorer Debuncher cooling performance. The net effect is stack rates that are roughly the same. Put the Debuncher tunes back to their default of 0.772 and 0.780.

Numbers

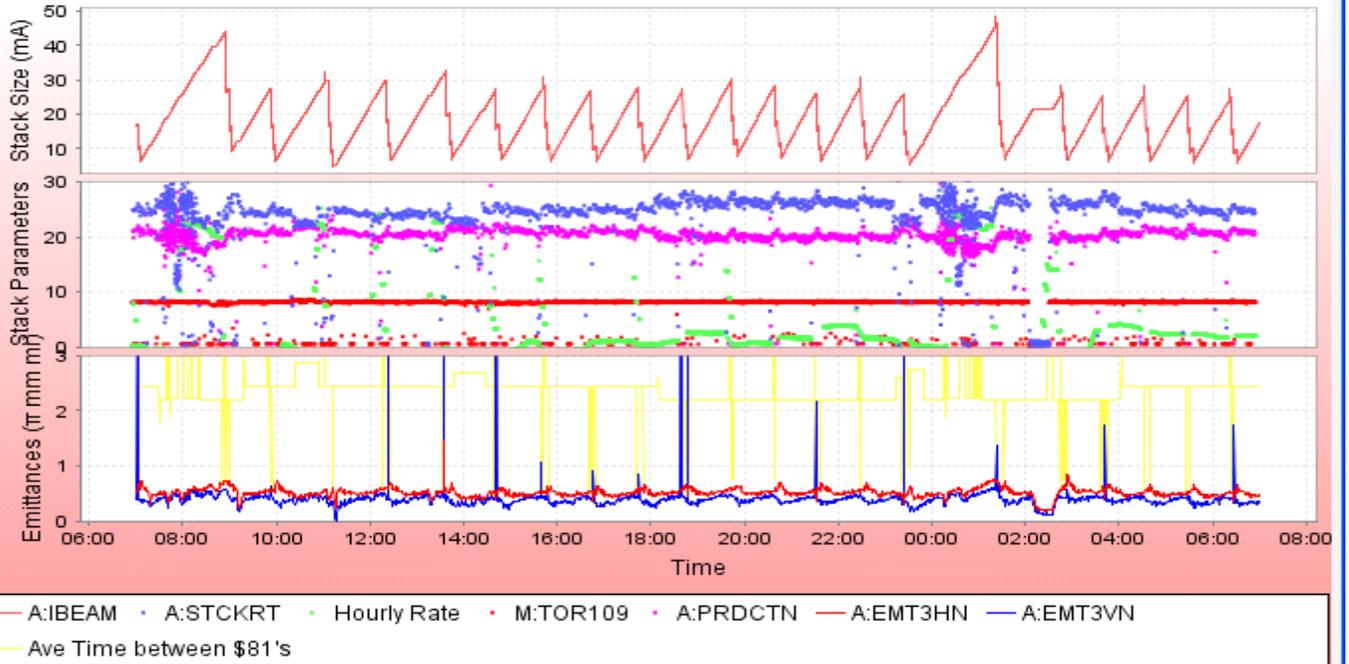
- Stacking
 - Pbars stacked: 517.12 E10
 - Time stacking: 23.79 Hr
 - Average stacking rate: 21.74 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 35420
 - Number of pulses with beam: 34131
 - Fraction of up pulses was: 96.36%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 22.92 Hr
 - Possible average stacking rate: 22.56 E10/Hr
 - Could have stacked: 536.65 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 497.29 E10
 - Number of transfers : 61
 - Number of transfer sets: 21
 - Average Number of transfer per set: 2.90
 - Time taken to shoot including reverse proton tuneup: 00.21 Hr
 - Transfer efficiency: 95.46%
- Other Info
 - Average POT : 8.08 E12
 - Average production: 18.75 pbars/E6 protons

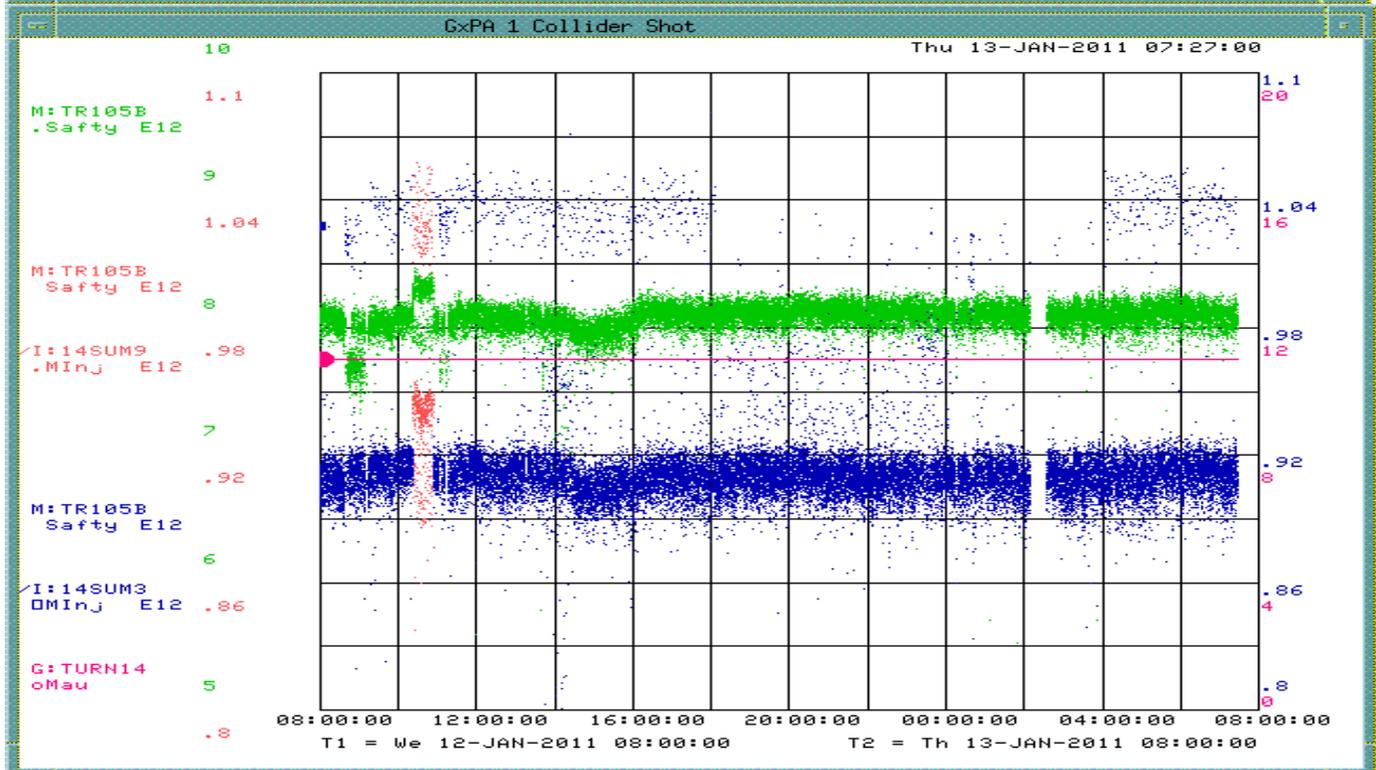
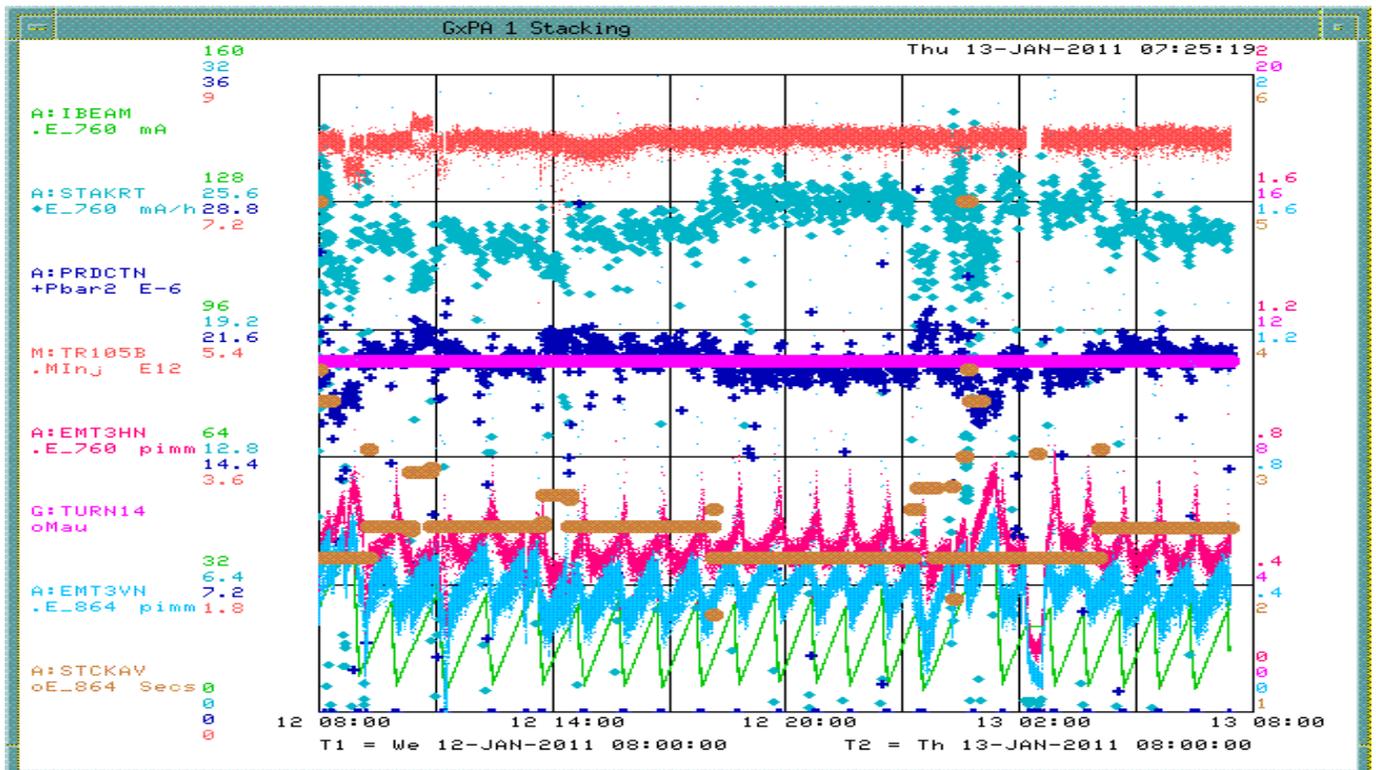
Plots

Accelerators (24.0 hrs.)

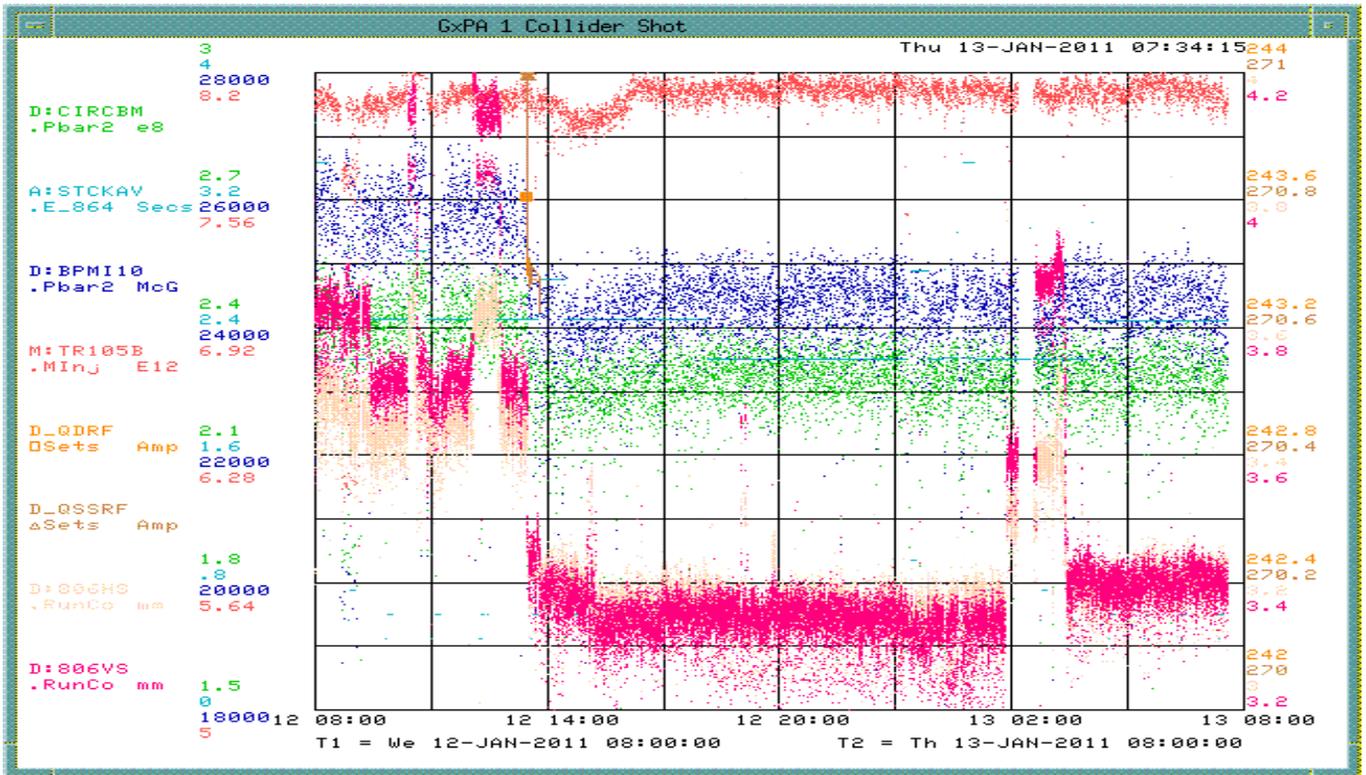


Wed Jan 12 07:00:00 CST 2011 -- Thu Jan 13 07:00:00 CST 2011

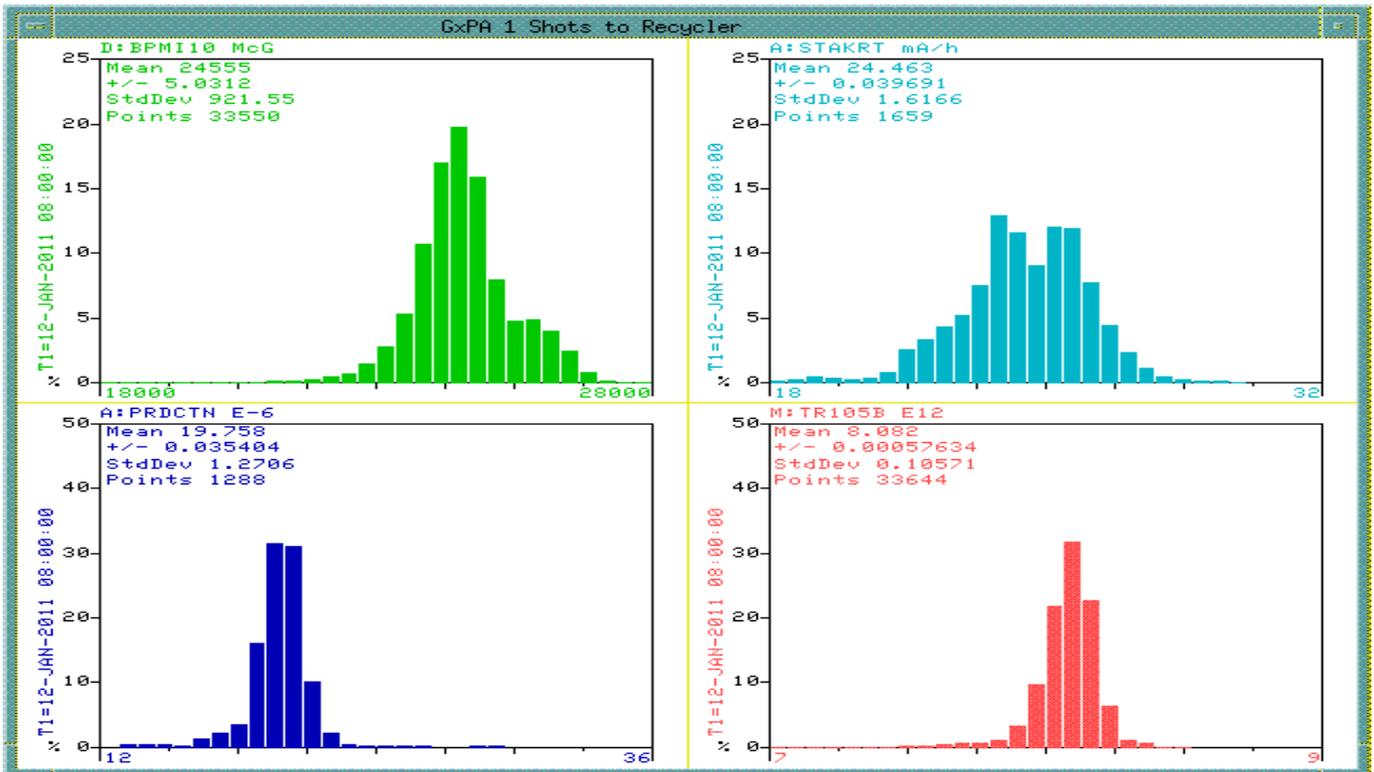


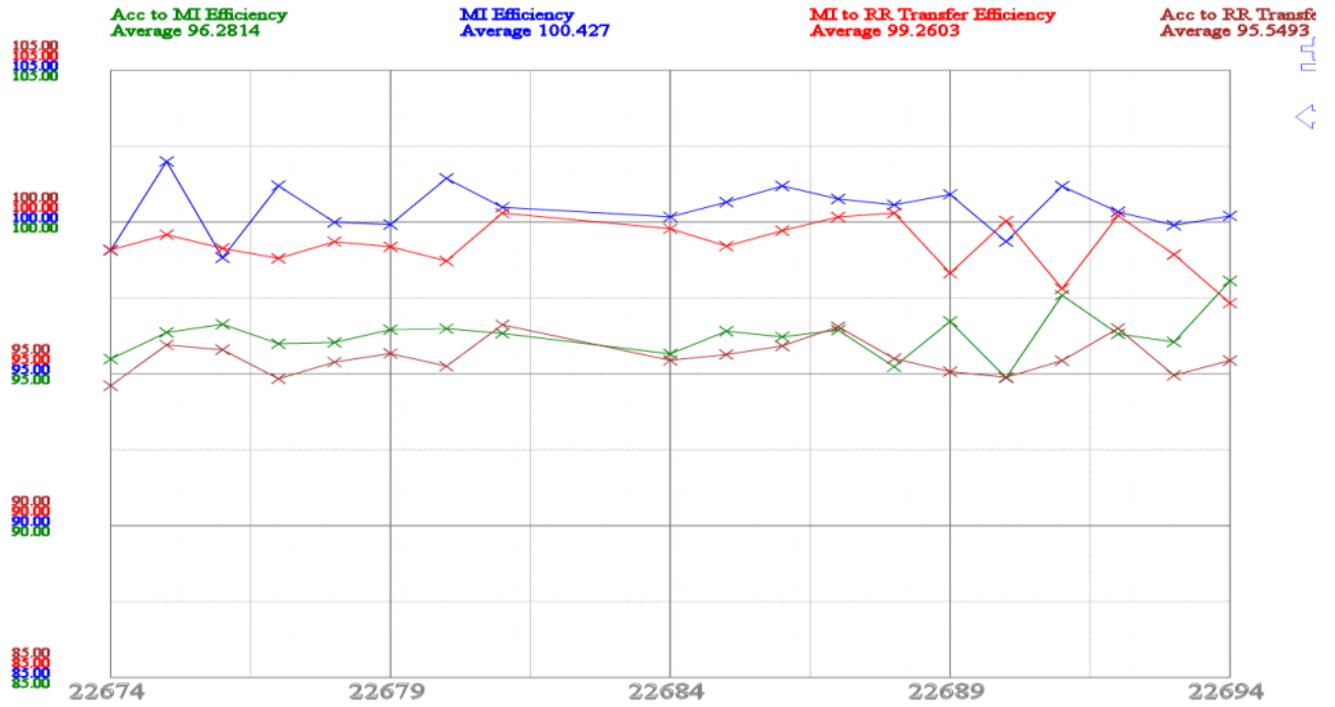


We did run some \$29 stacking only beam for a short time. Beam on target was higher.



Attempt to run Debuncher vertical tune higher was a wash. Restored tunes to default.





B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Column 1 Number_0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time		Column 21 Number_20_A:1 BEAMB sampled on \$91 (A:BEAM7), E10	Column 22 Number_21_A:1 BEAMB sampled on \$94 (A:BEAM9), E10	Unstacked (mA)	Column 23 Number_22_R: BEAMS (R:BEAME0[0]) pre fer E10	Column 24 Number_23_R: BEAM (R:BEAME0[1]) post fer, 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 =>					485.14			463.58	95.56%	96.41%	96.67%	93.21%	58	19	5.1916	3.8197	1.9207		
Daily Average =>					485.14			463.58					58	19					
22694	Thursday, January 13, 2011	6:23	25.07	5.72	21.84	128.58	149.33	20.96	95.99%	98.20%	98.60%	96.82%	3	1	4.789	3.509	1.953		
22693	Thursday, January 13, 2011	5:27	25.53	5.89	22.13	107.87	128.80	21.04	95.09%	96.48%	96.13%	92.74%	3	1	5.047	3.791	1.912		
22692	Thursday, January 13, 2011	4:32	25.77	6.19	22.15	86.91	108.01	21.31	96.21%	96.73%	97.40%	94.22%	3	1	5.084	3.712	1.981		
22691	Thursday, January 13, 2011	3:38	25.47	6.35	21.74	66.26	87.03	20.83	95.81%	97.41%	98.37%	95.82%	3	1	5.266	3.985	1.951		
22690	Thursday, January 13, 2011	2:46	26.21	6.45	22.28	45.26	66.38	21.15	94.93%	95.35%	94.87%	90.46%	3	1	5.61	3.848	1.924		
22689	Thursday, January 13, 2011	1:22	46.36	6.86	43.19	5.13	45.53	40.82	94.52%	96.57%	97.26%	93.92%	4	1	6.123	4.338	1.887		
22688	Wednesday, January 12, 2011	23:24	25.86	5.22	22.90	335.02	356.70	21.91	95.67%	95.20%	95.83%	91.23%	3	1	4.441	3.429	1.913		
22687	Wednesday, January 12, 2011	22:29	28.37	6.58	24.22	313.50	336.35	23.39	96.59%	96.60%	97.08%	93.78%	3	1	5.197	3.809	1.925		
22686	Wednesday, January 12, 2011	21:31	25.98	6.38	22.16	293.71	314.74	21.30	96.13%	96.62%	97.50%	94.20%	3	1	5.076	3.708	1.956		
22685	Wednesday, January 12, 2011	20:39	28.50	6.94	24.19	271.95	294.71	23.10	95.50%	96.25%	96.32%	92.70%	3	1	5.236	3.82	1.92		
22684	Wednesday, January 12, 2011	19:43	30.16	7.50	25.26	248.98	272.82	24.18	95.69%	95.90%	95.95%	92.01%	3	1	5.358	4.08	1.92		
22681	Wednesday, January 12, 2011	16:42	27.13	6.18	23.47	183.54	206.09	22.74	96.88%	96.72%	96.78%	93.60%	3	1	5.063	3.76	1.958		
22680	Wednesday, January 12, 2011	15:43	28.32	6.27	24.54	160.81	184.03	23.44	95.49%	96.43%	97.64%	94.15%	3	1	5.01	3.801	1.926		
22679	Wednesday, January 12, 2011	14:41	27.22	6.43	23.34	138.80	161.22	22.38	95.91%	96.63%	96.48%	93.22%	3	1	5.012	3.629	1.946		
22678	Wednesday, January 12, 2011	13:37	32.60	6.82	27.93	112.78	139.19	26.65	95.41%	96.58%	96.84%	93.53%	3	1	4.927	3.82	1.901		
22677	Wednesday, January 12, 2011	12:19	29.89	6.68	25.59	89.01	113.31	24.36	95.19%	96.44%	97.19%	93.73%	3	1	5.675	4.168	1.938		
22676	Wednesday, January 12, 2011	11:06	29.96	4.94	26.95	63.49	89.22	25.81	95.79%	96.72%	95.61%	92.47%	3	1	4.406	2.942	1.849		
22675	Wednesday, January 12, 2011	9:52	27.58	6.35	23.69	41.14	63.55	22.71	95.88%	96.32%	97.38%	93.80%	3	1	5.263	3.728	1.924		
22674	Wednesday, January 12, 2011	8:55	44.29	9.05	37.57	6.44	41.46	35.49	94.45%	95.35%	94.62%	90.22%	3	1	6.058	4.698	1.809		