2011-09-20 Monday Morning Notes

Monday, September 19, 2011
8:21 AM

Numbers

- Stacking
  - Pbars stacked: 2472.25 E10
  - Time stacking: 138.67 Hr
  - Average stacking rate: 17.83 E10/Hr

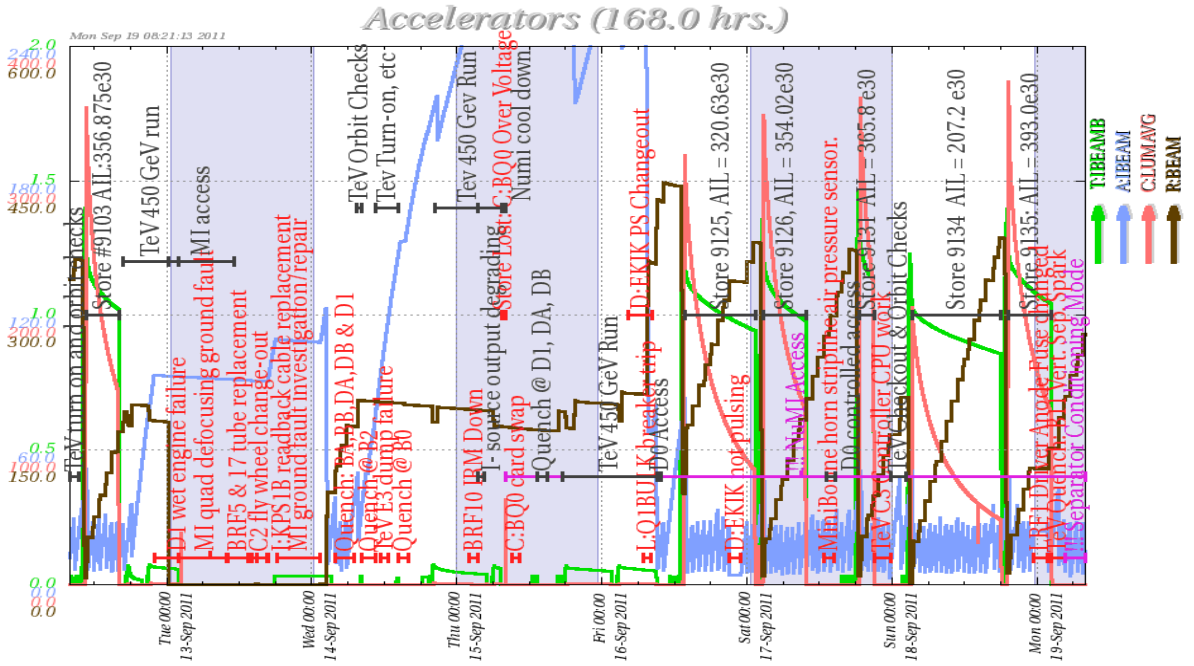
- Uptime
  - Number of pulses while in stacking mode: 170808
  - Number of pulses with beam: 157737
  - Fraction of up pulses was: 92.35%

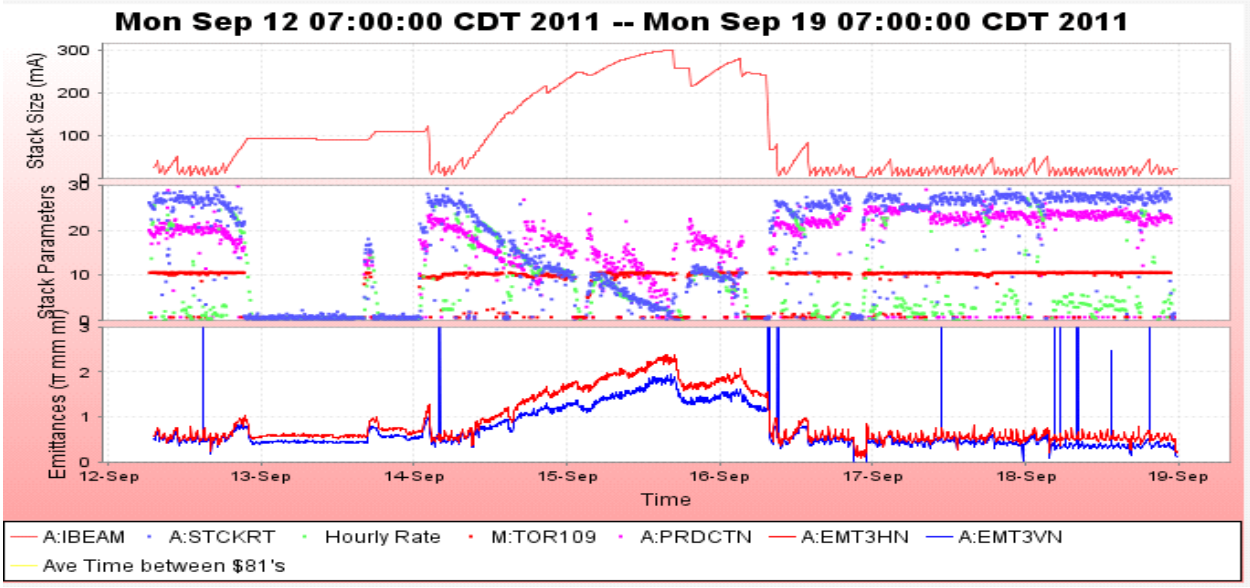
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 128.06 Hr
  - Possible average stacking rate: 19.31 E10/Hr
  - Could have stacked: 2677.11 E10/Hr

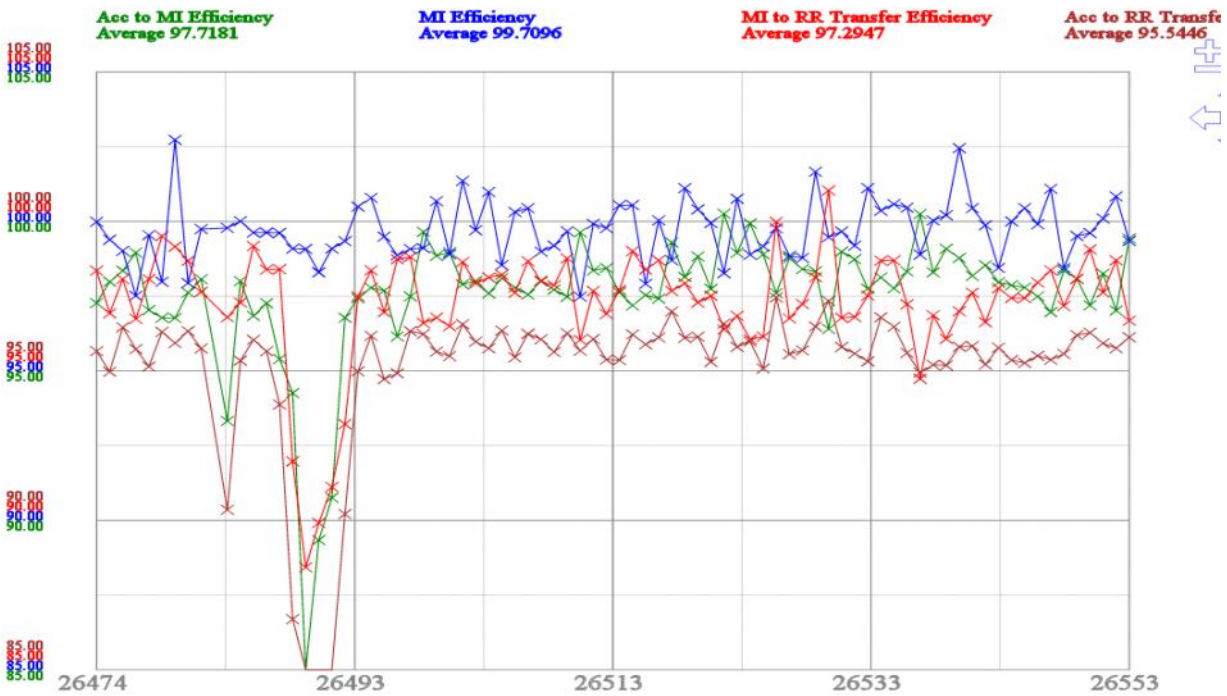
- Recycler Transfers
  - Pbars sent to the Recycler: 2457.80 E10
  - Number of transfers : 248
  - Number of transfer sets: 80
  - Average Number of transfer per set: 3.10
  - Time taken to shoot including reverse proton tuneup: 00.87 Hr
  - Transfer efficiency: 93.47%

- Other Info
  - Average POT : 8.15 E12
  - Average production: 19.23 pbars/E6 protons

Plots


Accelerators (168.0 hrs.)
Mon Sep 19 08:21:13 2011
Store #9103 AIL:356.875e30
TeV 450 GeV run
MI access
TeV Orbit Checks
Tev Turn-on, etc
Tev 450 Gev Run
Numi cool down
TeV 450 GeV Run
Store 9125, AIL = 320.63e30
Store 9126, AIL = 354.02e30
Store 9134 AIL = 207.2 e30
Store 9135: AIL = 393.0e30
T:IBEAMB
A:IBEAM
C:LUMAVG
R:BEAM
Tue 00:00 13-Sep 2011
Wed 00:00 14-Sep 2011
Thu 00:00 15-Sep 2011
Fri 00:00 16-Sep 2011
Sat 00:00 17-Sep 2011
Sun 00:00 18-Sep 2011
Mon 00:00 19-Sep 2011


Mon Sep 12 07:00:00 CDT 2011 -- Mon Sep 19 07:00:00 CDT 2011
Stack Size (mA)
Stack Parameters
Emittances (π mm mr)
12-Sep
13-Sep
14-Sep
15-Sep
16-Sep
17-Sep
18-Sep
19-Sep
Time
A:IBEAM
A:STCKRT
Hourly Rate
M:TOR109
A:PRDCTN
A:EMT3HN
A:EMT3VN
Ave Time between $81's



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 =>				2491.33			2338.65	93.87%	96.89%	96.60%	93.60%	251	79	6.21441	4.8344	1.9256
	Daily Average =>				355.90			334.09					36	11			
26553	Monday, September 19, 2011	7:31	27.42	5.04	24.25	256.09	278.97	23.26	95.92%	99.53%	98.61%	98.15%	3	1	4.956	3.366	1.962
26552	Monday, September 19, 2011	6:36	28.30	6.05	24.58	233.06	256.43	23.64	96.16%	97.40%	97.94%	95.39%	3	1	5.272	3.807	1.997
26551	Monday, September 19, 2011	5:23	27.82	4.19	24.94	209.68	233.48	23.92	95.89%	98.30%	98.52%	96.85%	3	1	4.908	3.139	1.958
26550	Monday, September 19, 2011	4:28	28.90	6.05	25.16	186.03	210.01	24.21	96.21%	97.36%	97.54%	94.96%	3	1	6.059	3.855	1.981
26549	Monday, September 19, 2011	3:34	42.83	8.87	36.23	151.70	186.29	34.83	96.14%	98.18%	98.03%	96.25%	3	1	5.621	3.931	1.942
26548	Monday, September 19, 2011	1:50	27.72	5.99	24.00	129.31	152.14	22.93	95.57%	98.14%	97.09%	95.28%	3	1	5.72	3.769	1.966
26547	Sunday, September 18, 2011	22:38	28.29	6.11	24.53	106.57	129.79	23.41	95.46%	96.96%	97.70%	94.73%	3	1	5.598	3.58	1.971
26546	Sunday, September 18, 2011	21:41	27.87	5.76	24.41	83.60	106.71	23.34	95.63%	97.86%	97.12%	95.04%	3	1	4.796	3.364	1.986
26545	Sunday, September 18, 2011	20:48	35.91	7.94	30.31	55.00	83.64	28.88	95.29%	98.21%	98.61%	96.84%	3	1	5.833	3.962	1.955
26544	Sunday, September 18, 2011	19:30	48.04	6.91	45.65	12.45	55.29	43.34	94.94%	97.73%	97.56%	95.35%	4	1	5.732	4.143	1.965
26543	Sunday, September 18, 2011	17:37	26.68	5.97	23.49	364.89	387.13	22.53	95.91%	98.14%	97.30%	95.49%	3	1	5.181	3.469	1.981
26542	Sunday, September 18, 2011	16:47	33.51	7.34	28.60	338.94	365.90	27.32	95.51%	98.70%	98.72%	97.43%	3	1	5.468	3.687	1.978
26541	Sunday, September 18, 2011	15:25	27.26	5.78	24.22	317.09	339.93	23.29	96.16%	98.48%	98.19%	96.70%	3	1	5.336	3.297	1.967
26540	Sunday, September 18, 2011	14:30	27.54	5.99	24.33	294.67	317.72	23.33	95.87%	98.57%	100.31%	98.88%	3	1	5.044	3.472	1.968
26539	Sunday, September 18, 2011	13:33	26.10	5.85	23.39	273.18	295.31	22.31	95.38%	98.80%	98.83%	97.65%	3	1	5.085	3.436	1.956
26538	Sunday, September 18, 2011	12:39	26.55	5.77	23.57	251.28	273.58	22.48	95.40%	98.09%	98.23%	96.36%	3	1	5.442	3.476	1.999
26537	Sunday, September 18, 2011	11:46	27.51	6.11	24.21	228.57	251.55	23.09	95.37%	99.93%	99.10%	99.04%	3	1	5.354	3.483	1.971
26536	Sunday, September 18, 2011	10:51	29.98	6.45	25.96	204.24	228.97	24.91	95.94%	98.74%	98.89%	97.65%	3	1	5.502	3.562	2.005
26535	Sunday, September 18, 2011	9:49	26.49	5.61	23.27	182.16	204.46	22.50	96.69%	98.11%	98.60%	96.73%	3	1	5.326	3.474	1.979
26534	Sunday, September 18, 2011	8:56	26.50	5.66	23.30	160.08	182.42	22.49	96.51%	98.58%	98.81%	97.40%	3	1	5.37	3.451	2.009
26533	Sunday, September 18, 2011	8:04	27.72	6.00	24.12	137.31	160.27	23.04	95.52%	97.95%	98.62%	96.60%	3	1	5.436	3.774	1.999
26532	Sunday, September 18, 2011	7:08	26.39	5.73	23.02	115.44	137.44	22.04	95.76%	98.86%	98.74%	97.62%	3	1	5.361	3.665	1.992
26531	Sunday, September 18, 2011	6:16	27.16	5.96	23.55	92.92	115.55	22.57	95.86%	98.94%	98.99%	97.93%	3	1	5.227	3.529	1.969
26530	Sunday, September 18, 2011	5:22	26.05	5.54	22.89	71.29	93.24	22.19	96.93%	97.14%	96.72%	93.95%	3	1	4.927	3.354	1.974
26529	Sunday, September 18, 2011	4:29	27.60	5.99	23.94	48.30	71.30	23.10	96.48%	98.41%	99.67%	98.09%	3	1	5.176	3.811	1.995
26528	Sunday, September 18, 2011	3:25	52.59	7.46	48.44	2.66	48.50	46.20	95.38%	98.32%	97.30%	95.67%	4	1	6.234	4.854	1.936
26527	Sunday, September 18, 2011	1:21	47.95	6.98	44.36	167.16	209.10	42.31	95.37%	98.39%	97.69%	96.13%	4	1	6.057	5.003	1.968
26526	Saturday, September 17, 2011	23:29	26.04	3.15	24.27	144.00	167.50	23.63	97.37%	98.66%	97.87%	96.56%	3	1	3.967	2.866	1.925
26525	Saturday, September 17, 2011	22:32	26.89	5.89	23.33	121.90	144.14	22.26	95.43%	99.34%	98.79%	98.13%	3	1	5.364	4.109	1.986
26524	Saturday, September 17, 2011	21:39	27.49	6.10	23.74	99.36	122.04	22.79	96.01%	99.67%	98.87%	98.54%	3	1	5.288	3.999	2.016
26523	Saturday, September 17, 2011	20:44	26.84	5.88	23.32	77.18	99.45	22.41	96.10%	98.59%	99.43%	98.02%	3	1	5.281	4.207	1.96
26522	Saturday, September 17, 2011	19:51	28.16	5.99	24.46	53.93	77.31	23.61	96.52%	99.55%	98.99%	98.54%	3	1	5.204	4.091	1.959
26521	Saturday, September 17, 2011	18:54	51.07	6.89	47.46	9.31	54.11	45.16	95.15%	97.90%	97.99%	95.94%	4	1	6.088	4.667	1.932
26520	Saturday, September 17, 2011	16:53	33.22	6.91	28.41	347.16	374.09	27.34	96.24%	98.75%	98.90%	97.67%	3	1	5.559	4.304	1.96
26519	Saturday, September 17, 2011	15:44	27.73	6.17	23.71	325.79	348.30	22.78	96.06%	98.29%	99.22%	97.52%	3	1	5.247	4.136	1.983

26518	Saturday, September 17, 2011	14:51	33.69	7.18	28.62	299.24	326.60	27.67	96.70%	99.28%	98.49%	97.78%	3	1	5.473	4.067	1.978
26517	Saturday, September 17, 2011	13:41	28.40	6.00	24.51	276.80	300.08	23.55	96.07%	98.09%	97.74%	95.88%	3	1	5.628	4.364	1.98
26516	Saturday, September 17, 2011	12:40	29.11	6.05	25.09	253.59	277.44	24.03	95.77%	98.49%	97.16%	95.69%	3	1	5.473	4.451	1.992
26515	Saturday, September 17, 2011	11:41	26.42	5.59	23.00	232.17	254.05	22.13	96.23%	97.53%	97.73%	95.31%	3	1	5.289	4.651	1.985
26514	Saturday, September 17, 2011	10:49	31.24	6.33	26.85	207.09	232.54	25.64	95.50%	98.37%	98.90%	97.29%	3	1	5.606	4.563	1.948
26513	Saturday, September 17, 2011	9:46	28.87	6.22	24.80	183.80	207.39	23.72	95.65%	98.14%	97.64%	95.82%	3	1	5.718	4.567	1.986
26512	Saturday, September 17, 2011	8:39	27.35	5.41	24.47	160.87	184.29	23.51	96.06%	98.51%	98.55%	97.08%	3	1	4.938	4.494	1.975
26511	Saturday, September 17, 2011	7:38	25.90	5.15	23.28	139.01	161.05	22.30	95.76%	99.29%	96.81%	96.12%	3	1	5.017	4.247	1.939
26510	Saturday, September 17, 2011	6:39	25.42	4.95	22.97	117.17	139.13	22.10	96.20%	97.40%	97.92%	95.37%	3	1	5.031	4.251	1.961
26509	Saturday, September 17, 2011	5:41	26.12	4.79	23.46	95.01	117.39	22.50	95.95%	97.80%	97.64%	95.49%	3	1	4.714	3.984	2.009
26508	Saturday, September 17, 2011	4:44	26.33	5.60	23.10	73.15	95.27	22.22	96.20%	97.94%	97.50%	95.49%	3	1	5.336	4.122	1.969
26507	Saturday, September 17, 2011	3:51	26.87	5.65	23.57	50.73	73.19	22.71	96.36%	97.32%	97.70%	95.08%	3	1	5.21	4.382	1.966
26506	Saturday, September 17, 2011	2:53	46.48	5.44	43.86	9.37	50.99	41.81	95.31%	97.84%	97.57%	95.47%	4	1	5.378	4.4	1.918
26505	Saturday, September 17, 2011	0:57	26.86	5.60	23.61	359.52	381.98	22.76	96.40%	98.04%	97.09%	95.19%	3	1	5.553	4.541	1.959
26504	Friday, September 16, 2011	23:59	28.01	5.83	24.44	337.09	360.37	23.47	96.05%	97.99%	98.03%	96.07%	3	1	5.442	4.332	1.958
26503	Friday, September 16, 2011	20:59	26.61	4.62	23.75	316.64	339.12	22.76	95.85%	98.00%	98.11%	96.14%	3	1	4.901	3.961	1.922
26502	Friday, September 16, 2011	20:04	28.08	6.01	24.38	294.15	317.30	23.51	96.44%	98.12%	99.03%	97.16%	3	1	5.429	4.507	1.964
26501	Friday, September 16, 2011	19:10	33.64	6.93	28.83	267.48	294.77	27.52	95.45%	98.95%	98.05%	97.02%	3	1	5.592	4.648	1.96
26500	Friday, September 16, 2011	18:01	28.45	6.17	24.43	244.92	268.09	23.35	95.58%	98.46%	98.76%	97.24%	3	1	5.71	4.768	1.986
26499	Friday, September 16, 2011	16:59	28.55	6.27	24.84	221.74	245.24	23.87	96.10%	99.09%	98.63%	97.74%	3	1	5.782	4.83	1.995
26498	Friday, September 16, 2011	15:57	28.11	6.35	24.37	199.01	222.21	23.49	96.36%	97.38%	96.63%	94.10%	3	1	5.625	4.772	1.989
26497	Friday, September 16, 2011	14:56	26.25	5.86	22.95	177.69	199.44	21.85	95.19%	96.73%	95.77%	92.64%	3	1	5.65	4.645	2.004
26496	Friday, September 16, 2011	13:50	83.38	5.84	81.54	101.75	178.23	77.47	95.00%	97.58%	97.29%	94.94%	6	1	5.689	4.436	1.877
26495	Friday, September 16, 2011	10:07	27.64	6.16	23.97	426.67	448.99	23.02	96.07%	98.03%	98.47%	96.54%	3	1	5.243	4.239	1.99
26494	Friday, September 16, 2011	8:57	80.09	6.73	79.27	357.51	429.68	74.92	94.52%	97.39%	97.53%	94.98%	6	1	6.754	5.519	1.913
26493	Friday, September 16, 2011	7:23	241.39	68.23	172.71	212.31	361.81	155.89	90.26%	96.83%	96.20%	93.15%	8	1	12.181	9.582	1.505
26492	Friday, September 16, 2011	3:13	279.64	239.41	40.08	182.57	215.14	33.14	82.69%	90.76%	89.93%	81.62%	2	1	19.216	14.621	1.198
26491	Thursday, September 15, 2011	19:25	255.38	215.08	40.01	173.85	205.43	32.14	80.32%	89.34%	87.82%	78.46%	2	1	16.382	13.823	1.311
26490	Thursday, September 15, 2011	16:47	299.14	257.33	40.43	171.25	194.03	23.27	57.56%	65.07%	64.47%	41.95%	2	1	22.275	18.33	1.116
26489	Wednesday, September 14, 2011	20:47	218.13	198.13	20.00	181.06	198.39	17.33	86.69%	94.26%	93.40%	88.04%	1	1	14.859	11.686	1.423
26488	Wednesday, September 14, 2011	7:38	50.38	19.58	32.02	176.07	205.87	30.05	93.87%	95.42%	95.10%	90.75%	2	1	6.585	5.909	1.883
26487	Wednesday, September 14, 2011	5:40	28.48	7.07	24.06	154.69	177.56	23.01	95.64%	97.59%	97.25%	94.90%	3	1	5.359	4.405	2.007
26486	Wednesday, September 14, 2011	4:43	27.68	6.55	23.70	132.51	155.09	22.81	96.25%	96.99%	96.87%	93.95%	3	1	5.444	4.545	2.005
26485	Wednesday, September 14, 2011	3:53	39.02	9.36	32.20	102.59	132.94	30.65	95.18%	97.86%	97.76%	95.67%	3	1	6.129	5.192	1.978
26484	Wednesday, September 14, 2011	2:20	123.23	9.06	118.85	0.32	103.54	105.99	89.18%	92.56%	92.28%	85.41%	7	1	7.747	6.09	1.761
26482	Monday, September 12, 2011	18:09	35.94	12.88	24.32	177.49	200.61	23.27	95.70%	98.22%	97.78%	96.03%	2	1	5.982	5.256	1.942
26481	Monday, September 12, 2011	16:50	27.16	6.35	23.42	170.43	192.80	22.55	96.29%	97.62%	96.19%	93.90%	3	1	5.533	4.602	2.007
26480	Monday, September 12, 2011	15:51	28.16	6.54	24.21	147.73	170.80	23.24	95.96%	96.66%	98.31%	95.03%	3	1	5.225	4.697	1.994
26479	Monday, September 12, 2011	14:52	27.78	5.66	24.48	124.56	147.87	23.54	96.17%	96.86%	95.08%	92.09%	3	1	5.506	4.796	
26478	Monday, September 12, 2011	13:55	31.44	7.26	26.75	99.51	124.84	25.44	95.10%	96.84%	96.66%	93.60%	3	1	5.843	4.875	1.968
26477	Monday, September 12, 2011	12:48	29.23	6.61	25.25	75.55	99.62	24.23	95.96%	98.80%	96.91%	95.74%	3	1	5.251	4.639	1.995
26476	Monday, September 12, 2011	11:49	27.84	6.47	23.98	52.76	75.70	23.05	96.11%	98.14%	96.99%	95.18%	3	1	5.339	4.672	2.002
26475	Monday, September 12, 2011	10:48	51.80	7.02	48.52	7.60	52.91	45.86	94.52%	97.49%	97.03%	94.59%	4	1	5.959	5.203	1.945
26474	Monday, September 12, 2011	8:41	29.29	6.87	25.01	339.54	363.10	23.90	95.57%	97.37%	96.64%	94.09%	3	1	5.923	5.161	1.982