2011-08-22 Monday Morning Notes

Monday, August 22, 2011
7:57 AM

Operational Notes

Ecool down again over the weekend, resulting in big stacks.

Numbers

- Stacking
  - Pbars stacked: 1053.19 E10
  - Time stacking: 62.76 Hr
  - Average stacking rate: 16.78 E10/Hr

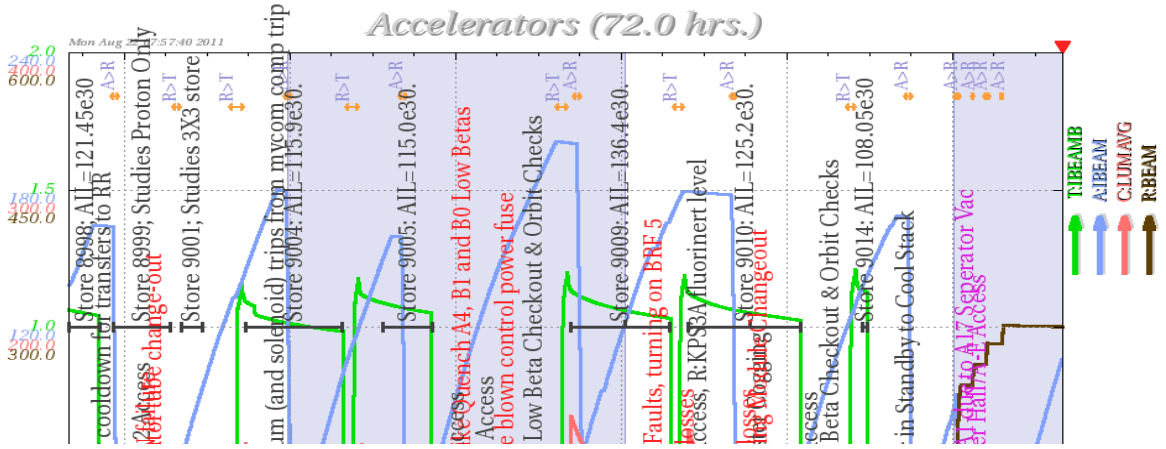
- Uptime
  - Number of pulses while in stacking mode: 87246
  - Number of pulses with beam: 80579
  - Fraction of up pulses was: 92.36%

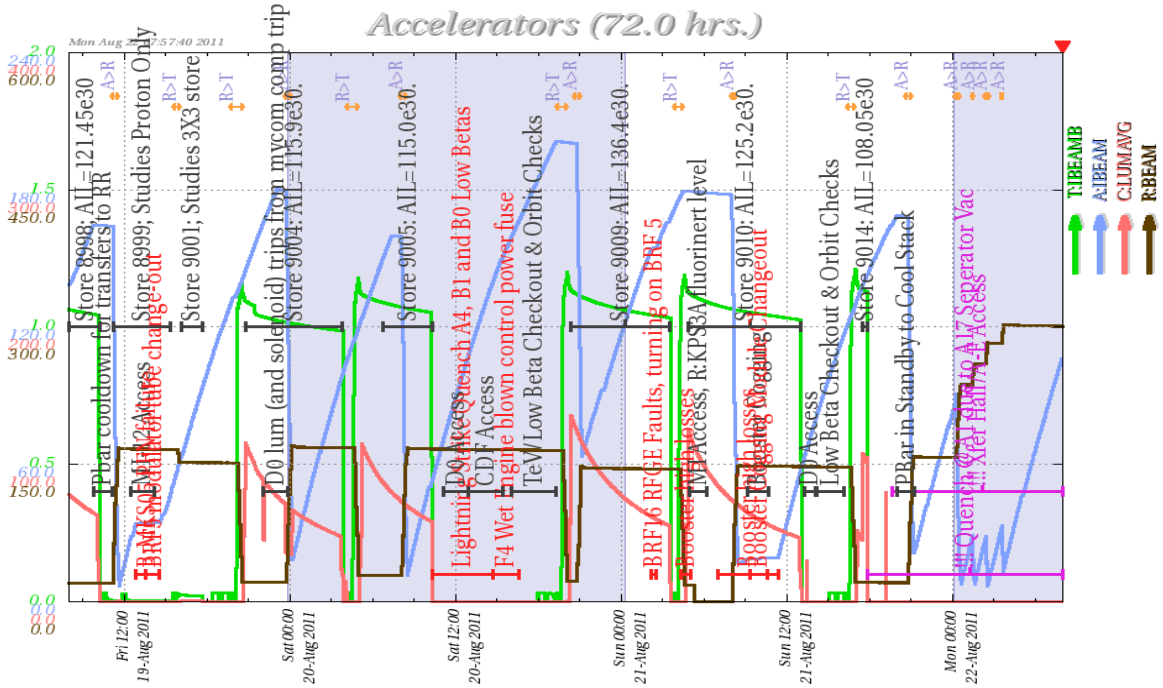
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 57.97 Hr
  - Possible average stacking rate: 18.17 E10/Hr
  - Could have stacked: 1140.33 E10/Hr

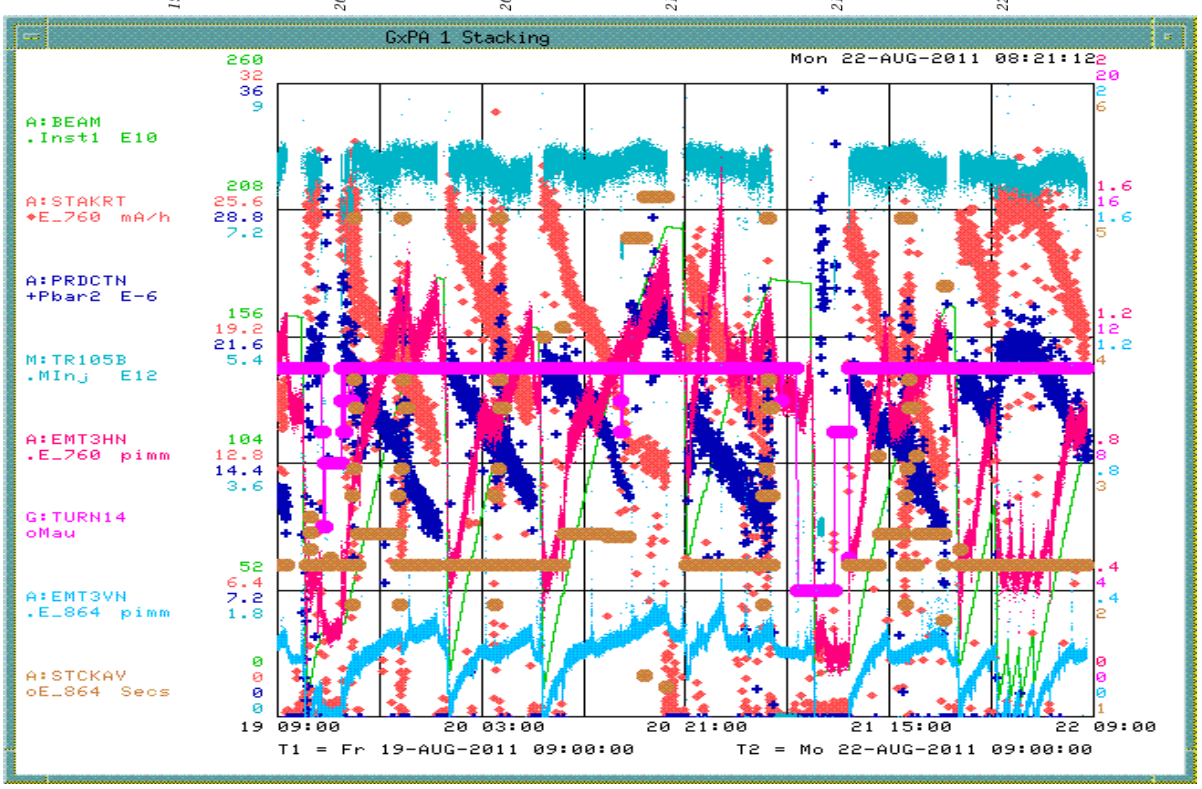
- Recycler Transfers
  - Pbars sent to the Recycler: 1069.39 E10
  - Number of transfers : 60
  - Number of transfer sets: 10
  - Average Number of transfer per set: 6.00
  - Time taken to shoot including reverse proton tuneup: 00.21 Hr
  - Transfer efficiency: 94.25%

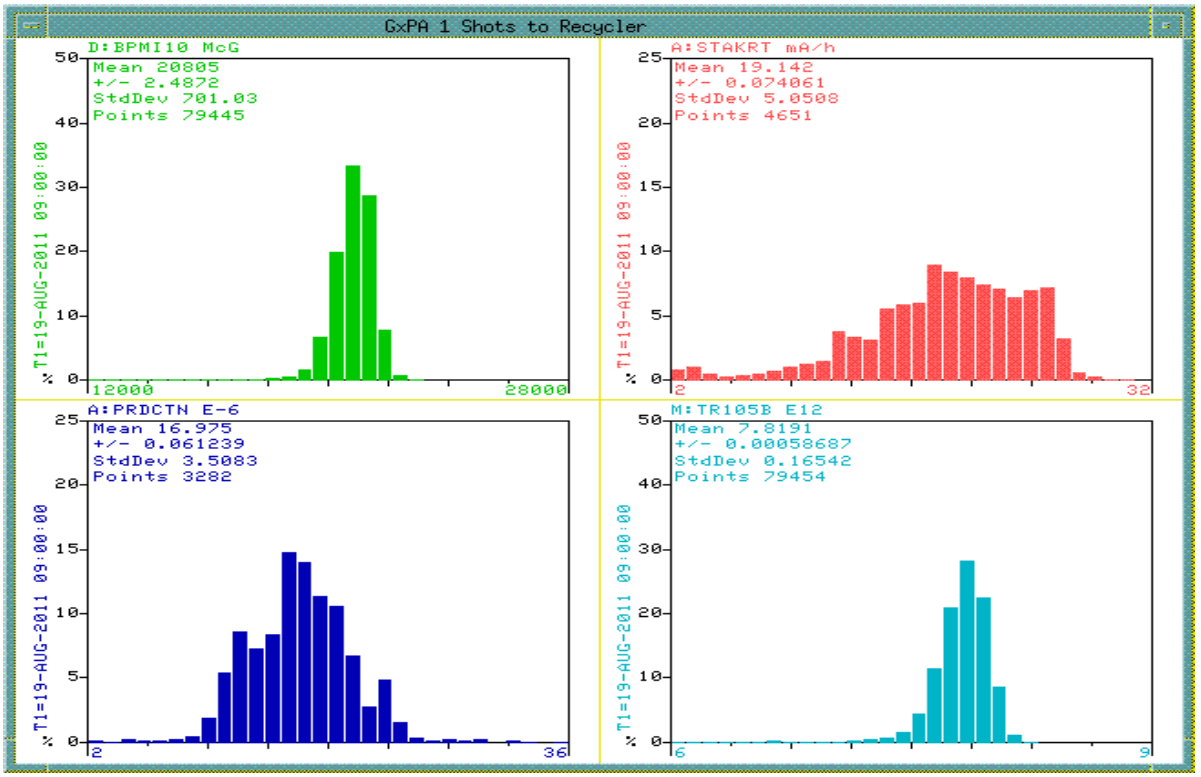
- Other Info
  - Average POT : 7.80 E12
  - Average production: 16.76 pbars/E6 protons

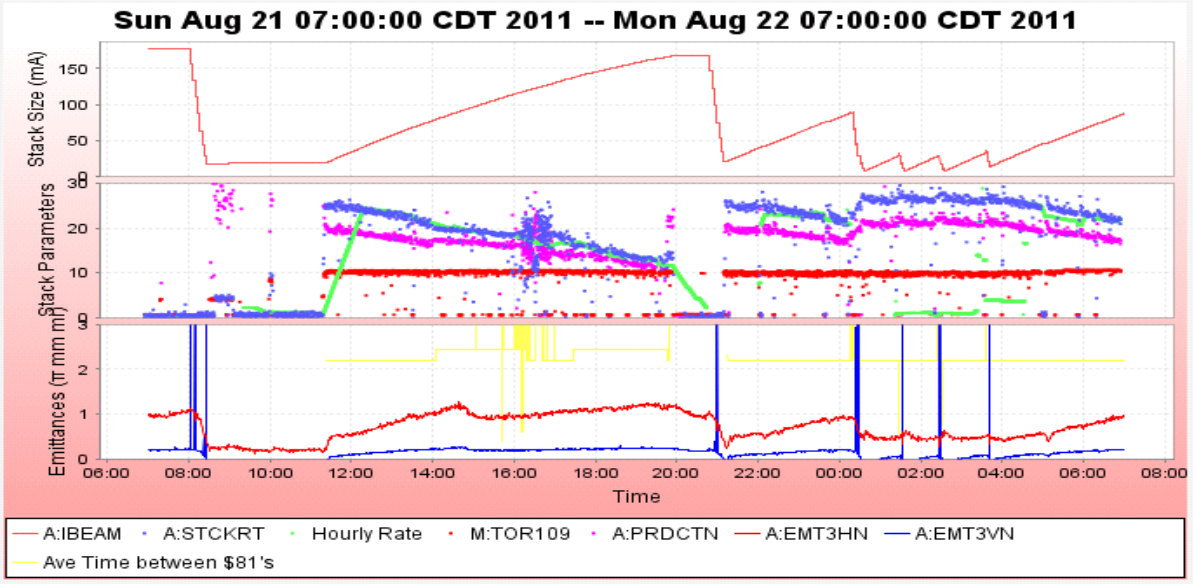
Plots



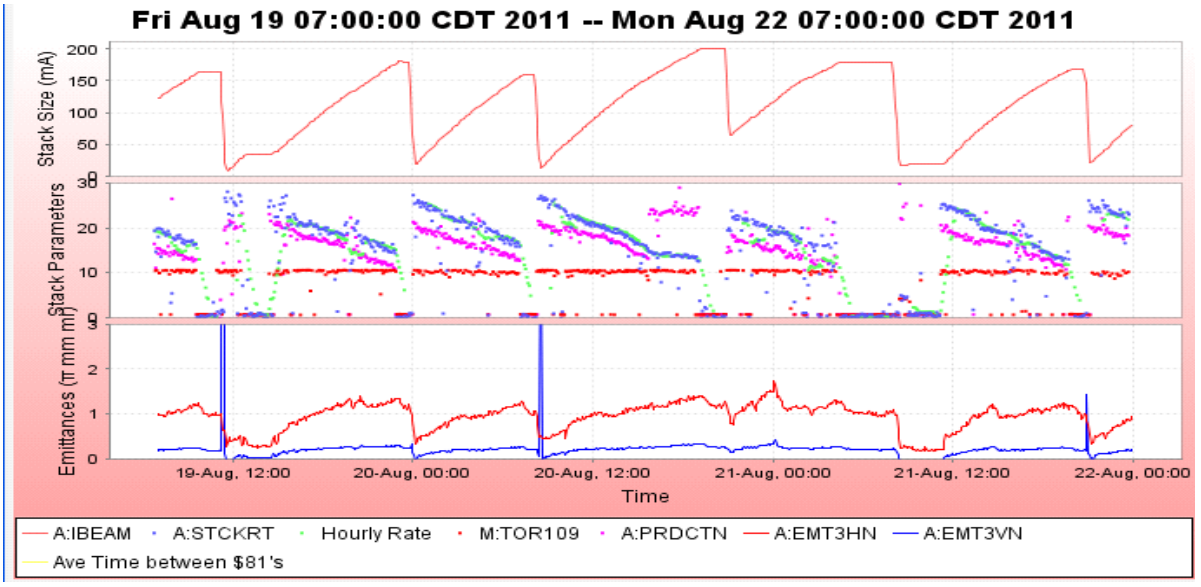

Accelerators (72.0 hrs.)
Store 8998; AIL=121.45e30
Store 8999; Studies Proton Only
Store 9001; Studies 3X3 store
Store 9004; AIL=115.9e30.
Store 9005; AIL=115.0e30.
Store 9009; AIL=136.4e30.
Store 9010; AIL=125.2e30.
Store 9014; AIL=108.05e30
Pbar cooldown for transfers to RR
D0 lum (and solenoid) trips from mycom comp trip
CDF Access
TeV/Low Beta Checkout & Orbit Checks
Low Beta Checkout & Orbit Checks
PBar in Standby to Cool Stack
T:IBEAMB
A:IBEAM
C:LUMAVG
R:BEAM
Fri 12:00 19-Aug 2011
Sat 00:00 20-Aug 2011
Sat 12:00 20-Aug 2011
Sun 00:00 21-Aug 2011
Sun 12:00 21-Aug 2011
Mon 00:00 22-Aug 2011


GxPA 1 Stacking
Mon 22-AUG-2011 08:21:12
A:BEAM .Inst1 E10
A:STAKRT +E_760 mA/h
A:PRDCTN +Pbar2 E-6
M:TR105B .MInj E12
A:EMT3HN .E_760 pimm
G:TURN14 oMau
A:EMT3VN .E_864 pimm
A:STCKAV oE_864 Secs
19 09:00
20 03:00
20 21:00
21 15:00
22 09:00
T1 = Fr 19-AUG-2011 09:00:00
T2 = Mo 22-AUG-2011 09:00:00


GxPA 1 Shots to Recycler
D:BPMI10 McG
Mean 20805
+/- 2.4872
StdDev 701.03
Points 79445
A:STAKRT mA/h
Mean 19.142
+/- 0.074061
StdDev 5.0508
Points 4651
A:PRDCTN E-6
Mean 16.975
+/- 0.061239
StdDev 3.5083
Points 3282
M:TR105B E12
Mean 7.8191
+/- 0.00058687
StdDev 0.16542
Points 79454
T1=19-AUG-2011 09:00:00

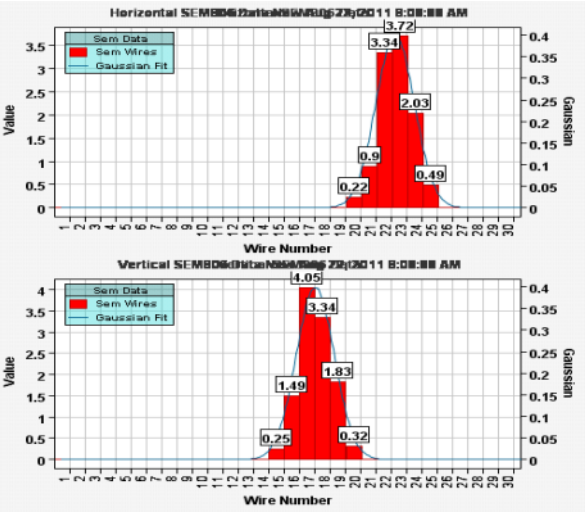

Sun Aug 21 07:00:00 CDT 2011 -- Mon Aug 22 07:00:00 CDT 2011
Stack Size (mA)
Stack Parameters
Emittances (π mm mr)
Time
A:IBEAM
A:STCKRT
Hourly Rate
M:TOR109
A:PRDCTN
A:EMT3HN
A:EMT3VN
Ave Time between $81's

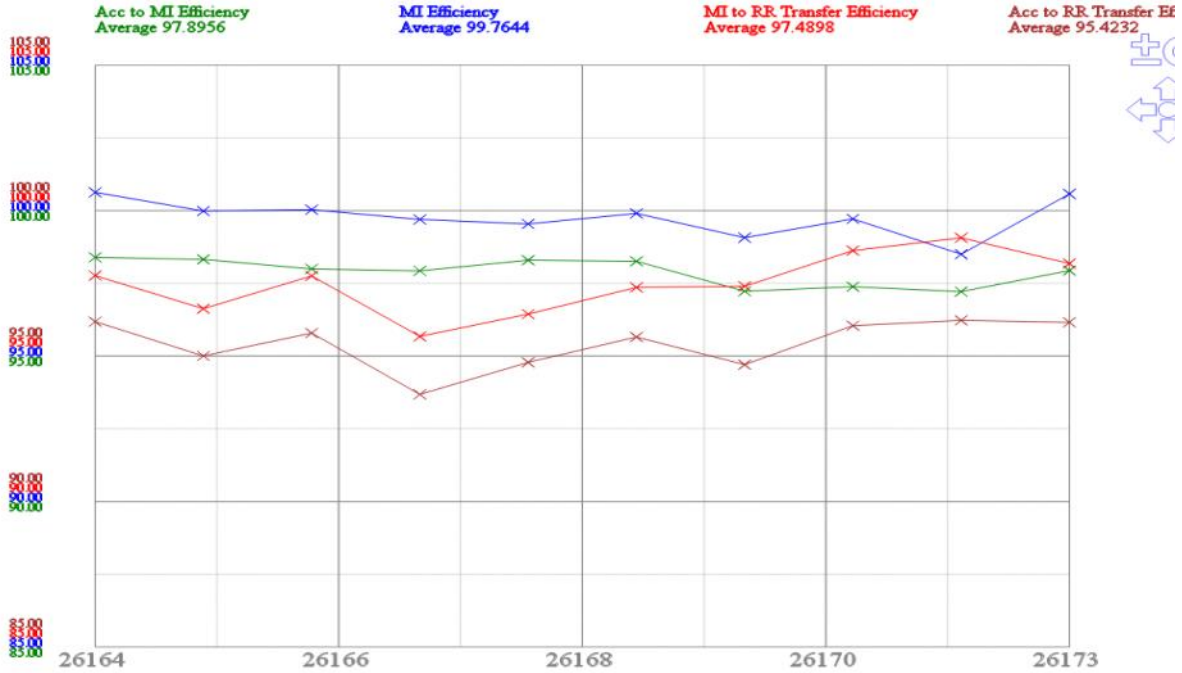
24 hours



Weekend

Horizontal Area New	10.7	Intensity
Horizontal Area Calc	189.8	Intensity
Horizontal Sigma New	3.2	mm
Horizontal Sigma Calc	3.02	mm
Horizontal Mean	23.22	mm
Vertical Area New	11.29	Intensity
Vertical Area Calc	195.26	Intensity
Vertical Sigma New	3.21	mm
Vertical Sigma Calc	3.02	mm
Vertical Mean	7.58	mm





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: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 =>				1069.74			1016.22	95.00%	98.06%	97.87%	95.97%	60	10	6.8997	1.0923	1.7415
	Daily Average =>				356.58			338.74					20	3			
26173	Monday, August 22, 2011	3:37	33.44	12.89	21.78	282.23	303.02	20.92	96.04%	97.85%	98.24%	96.12%	2	1	4.688	0.516	1.98
26172	Monday, August 22, 2011	2:27	28.70	6.81	24.52	259.63	282.93	23.57	96.13%	98.03%	97.08%	95.16%	3	1	4.876	0.008	2.015
26171	Monday, August 22, 2011	1:29	29.27	7.22	24.63	236.82	260.27	23.70	96.25%	97.44%	97.02%	94.54%	3	1	4.996	0.151	2.021
26170	Monday, August 22, 2011	0:20	89.06	7.01	87.40	157.54	237.90	82.10	93.94%	96.80%	96.21%	93.13%	6	1	6.24	0.627	1.908
26169	Sunday, August 21, 2011	20:48	168.24	21.39	146.69	20.81	158.85	140.12	95.52%	98.24%	98.17%	96.45%	7	1	7.47	1.217	1.56
26168	Sunday, August 21, 2011	8:02	177.91	17.03	160.75	0.19	149.12	152.13	94.64%	98.29%	97.84%	96.17%	8	1	8.172	2.857	1.586
26167	Saturday, August 20, 2011	20:47	200.16	63.33	136.75	21.99	147.81	128.07	93.65%	97.84%	97.55%	95.45%	6	1	10.477	2.071	1.325
26166	Saturday, August 20, 2011	8:07	159.48	11.32	148.96	28.43	167.84	142.31	95.53%	98.07%	98.01%	96.11%	8	1	7.236	1.108	1.712
26165	Friday, August 19, 2011	23:44	179.77	18.44	161.17	21.48	170.82	152.73	94.77%	98.19%	98.16%	96.39%	8	1	8.462	1.498	1.554
26164	Friday, August 19, 2011	11:10	164.15	7.05	157.10	20.05	167.88	150.57	95.84%	98.52%	98.59%	97.13%	9	1	6.38	0.87	1.754