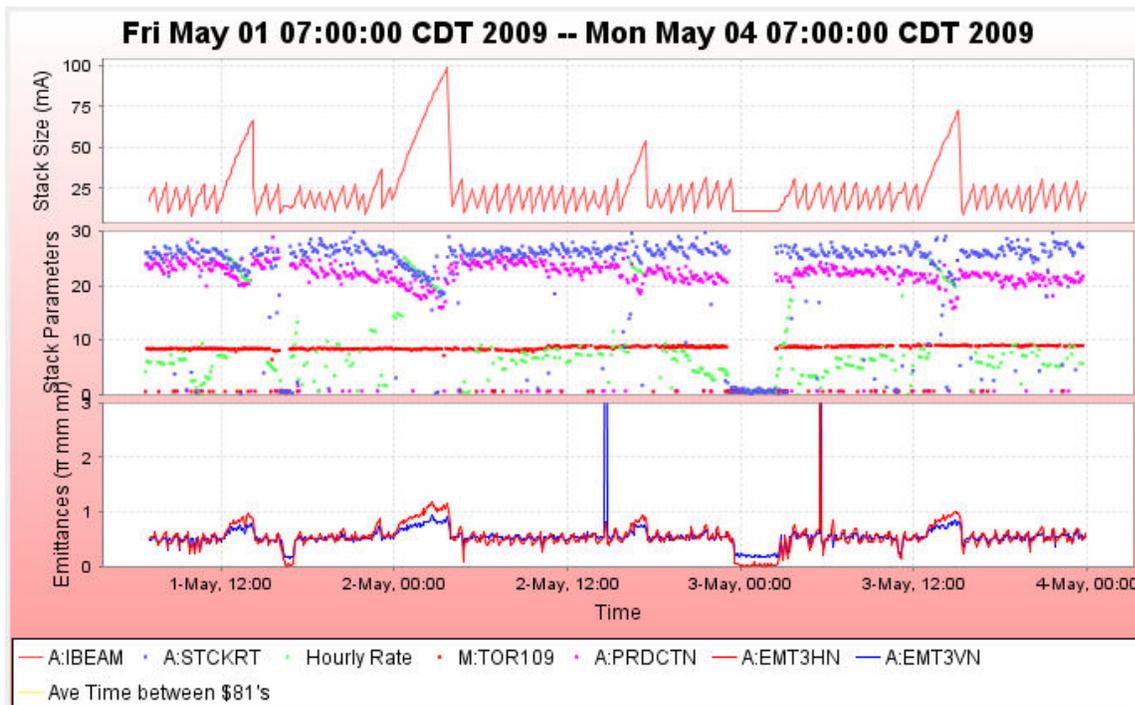


Stacking

- Stacked
 - <stacking rate> = 25.1 ma/hr
 - <production> = 21.6e-6/proton
 - <beam on target> = 7.71 at 11 turns, 8.25 at 12 turns
- Pbar Crate \$33 Slot #1 Camac 190 card (connected to MADC #16) had a No-Q and reset ok. This C190 has a history of problems
 - In April 23 the C190 card was replaced
 - On April 27 the MADC was replaced.
 - Controls experts informed us that they also have changed out the cabling between the MADC and C190.
- Ops did a good job of performing the normal tuning efforts over the weekend.



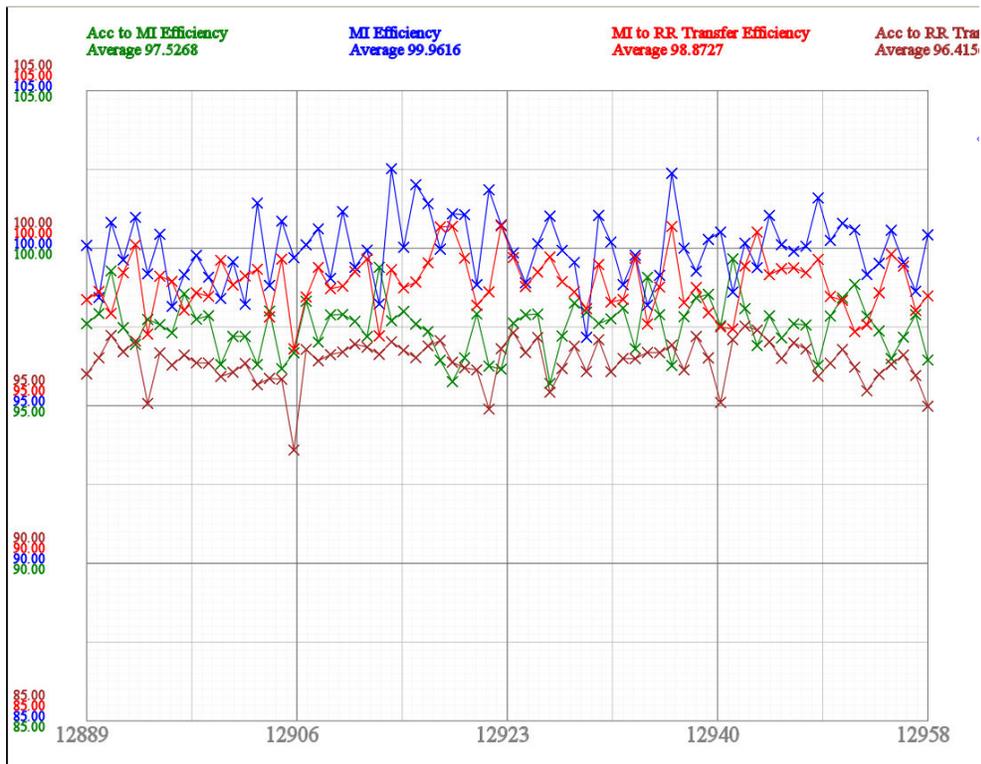
Transfers

- Unstacked 1623e10 in 155 transfers over 71 sets
 - Overall efficiency from Accumulator to Recycler was approximately 96%
 - Taking out the sets with more than 2 transfers, we 96.5%.

Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3_ Transfer Time	Column 21 Number _20_A:1 BEAMB sampled on \$91 (A:BEA M7). E10	Column 22 Number _21_A:1 BEAMB sampled on \$94 (A:BEA M9). E10	Unstacked (mA)	Column 23 Number _22_R: BEAMS (R:BEA ME0(0)) pre xfer E10	Column 24 Number _23_R: BEAM (R:BEA ME0(1)) post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Trans fers	Set s	Column 5 Number _4_Acc Horizontal Emittanc e	Column 6 Number _5_Acc Vertical Emittanc e	Column 8 Number _7_Acc Longitu dinal Emittanc e	
	Totals =>			1622.94			1557.55	95.97%	97.45%	97.37%	155	71	5.1764	4.79	1.8854	
12958	Monday, May 04, 2009	6:39	58.96	9.55	53.25	8.78	58.90	50.27	94.40%	96.56%	96.60%	4	1	6.691	5.846	1.92
12957	Monday, May 04, 2009	3:24	31.65	11.36	21.54	358.40	378.91	20.64	95.86%	97.89%	96.65%	2	1	5.976	5.058	1.882
12956	Monday, May 04, 2009	2:33	28.98	9.57	20.46	340.04	359.68	19.74	96.49%	97.34%	96.93%	2	1	4.872	4.505	1.84
12955	Monday, May 04, 2009	1:50	27.68	9.83	19.10	322.92	341.23	18.40	96.32%	96.51%	97.20%	2	1	5.26	5.052	1.89
12954	Monday, May 04, 2009	1:02	28.57	10.22	19.65	305.12	323.86	18.86	95.93%	97.33%	97.03%	2	1	5.695	5.1	1.887
12953	Monday, May 04, 2009	0:08	31.58	11.15	21.70	285.43	306.02	20.68	95.28%	97.76%	97.11%	2	1	6.02	5.334	1.887
12952	Monday, May 04, 2009	23:26	27.87	9.74	19.38	267.64	286.23	18.64	96.20%	98.66%	99.73%	2	1	5.033	4.869	1.873
12951	Sunday, May 03, 2009	22:31	31.59	11.07	21.81	247.17	268.17	21.09	96.71%	98.21%	99.04%	2	1	5.658	4.819	1.882
12950	Sunday, May 03, 2009	21:45	28.91	10.05	20.01	228.64	247.81	19.26	96.23%	97.83%	97.94%	2	1	5.355	4.959	1.896
12949	Sunday, May 03, 2009	20:57	29.74	10.33	20.68	209.26	229.03	19.82	95.82%	96.44%	98.00%	2	1	5.503	5.106	1.882
12948	Sunday, May 03, 2009	20:00	30.83	10.47	21.37	189.18	209.74	20.66	96.70%	97.44%	97.59%	2	1	5.33	4.806	1.88
12947	Sunday, May 03, 2009	19:17	26.00	9.06	18.22	171.94	189.52	17.65	96.91%	97.63%	97.07%	2	1	4.624	4.421	1.888
12946	Sunday, May 03, 2009	18:34	26.76	9.19	18.82	153.95	172.14	18.18	96.64%	96.90%	96.92%	2	1	5.06	4.833	1.878
12945	Sunday, May 03, 2009	17:46	28.30	9.95	19.59	135.26	154.18	18.99	96.90%	97.89%	98.64%	2	1	5.057	4.919	1.883
12944	Sunday, May 03, 2009	16:57	27.48	9.45	19.30	116.80	135.53	18.80	97.41%	97.02%	96.79%	2	1	4.766	4.324	1.885
12943	Sunday, May 03, 2009	16:10	27.49	9.47	19.26	98.29	116.99	18.77	97.47%	98.02%	98.40%	2	1	5.179	4.625	1.901
12942	Sunday, May 03, 2009	15:10	27.73	9.60	19.38	79.65	98.45	18.82	97.08%	99.44%	98.11%	2	1	4.837	4.513	1.887
12941	Sunday, May 03, 2009	12:12	73.95	8.11	70.48	13.66	79.82	66.52	94.38%	97.09%	97.28%	5	1	6.346	5.532	1.919
12940	Sunday, May 03, 2009	11:28	28.01	10.03	19.30	375.25	393.70	18.63	96.55%	98.50%	98.69%	2	1	4.901	4.648	1.909
12939	Sunday, May 03, 2009	10:20	29.31	10.71	19.83	357.49	376.53	19.28	97.23%	98.33%	97.47%	2	1	4.858	4.817	1.875
12938	Sunday, May 03, 2009	9:31	28.62	10.36	19.56	340.74	359.40	18.80	96.11%	97.85%	97.85%	2	1	5.318	4.734	1.876
12937	Sunday, May 03, 2009	8:48	26.69	9.49	18.49	324.30	342.00	17.90	96.81%	95.90%	97.43%	2	1	4.941	4.718	1.888
12936	Sunday, May 03, 2009	8:04	27.74	9.85	19.20	306.88	325.31	18.55	96.58%	97.73%	96.96%	2	1	4.879	4.886	1.888
12935	Sunday, May 03, 2009	7:12	30.31	10.90	20.71	287.87	307.77	20.01	96.61%	99.12%	97.31%	2	1	5.444	4.609	1.888
12934	Sunday, May 03, 2009	6:25	29.11	10.10	20.26	269.33	288.80	19.54	96.44%	96.97%	96.60%	2	1	5.472	5.112	1.876
12933	Sunday, May 03, 2009	5:32	29.79	10.51	20.53	250.38	270.07	19.79	96.36%	97.92%	97.08%	2	1	5.537	4.841	1.866
12932	Sunday, May 03, 2009	4:34	31.13	11.12	21.28	230.60	250.94	20.43	95.97%	97.82%	97.82%	2	1	5.464	5.101	1.864
12931	Sunday, May 03, 2009	3:47	29.16	10.43	20.00	211.85	231.15	19.40	97.01%	97.82%	98.74%	2	1	5.505	5.06	1.856
12930	Sunday, May 03, 2009	23:25	31.79	11.26	21.73	191.44	212.32	20.89	96.09%	98.08%	95.54%	2	1	5.812	5.113	1.902
12929	Saturday, May 02, 2009	22:28	31.68	11.14	21.84	171.50	192.56	21.17	96.93%	98.34%	97.79%	2	1	4.975	4.829	1.875

12928	Saturday, May 02, 2009	21:40	30.49	10.80	20.95	151.79	171.83	20.13	96.10%	97.22%	96.92%	2	1	5.732	4.927	1.891
12927	Saturday, May 02, 2009	20:41	33.27	11.91	22.64	130.62	152.10	21.56	95.23%	95.89%	96.76%	2	1	6.224	5.251	1.876
12926	Saturday, May 02, 2009	19:50	29.08	9.41	20.95	110.53	130.83	20.34	97.12%	97.98%	97.72%	2	1	4.777	4.725	1.864
12925	Saturday, May 02, 2009	19:06	26.87	9.78	18.40	92.92	110.70	17.78	96.63%	98.00%	96.97%	2	1	5.01	4.625	1.918
12924	Saturday, May 02, 2009	18:18	27.81	9.48	19.59	74.05	93.07	19.06	97.30%	97.88%	97.90%	2	1	4.954	4.596	1.86
12923	Saturday, May 02, 2009	17:26	27.18	9.31	19.12	55.70	74.18	18.51	96.81%	96.60%	97.41%	2	1	5.194	4.616	1.887
12922	Saturday, May 02, 2009	15:27	54.10	9.11	48.85	9.66	55.81	46.28	94.74%	96.87%	97.92%	4	1	6.319	5.581	1.926
12921	Saturday, May 02, 2009	14:41	27.08	9.25	19.14	351.32	369.56	18.39	96.08%	97.95%	96.95%	2	1	5.135	4.877	1.881
12920	Saturday, May 02, 2009	13:58	26.46	9.09	18.66	334.51	352.32	17.96	96.28%	96.83%	97.57%	2	1	4.628	4.753	1.86
12919	Saturday, May 02, 2009	13:13	27.01	9.86	18.48	317.69	335.35	17.79	96.28%	96.22%	97.18%	2	1	4.806	4.745	1.895
12918	Saturday, May 02, 2009	12:29	26.54	9.17	18.60	300.60	318.56	18.03	96.94%	96.74%	96.87%	2	1	4.623	4.388	1.869
12917	Saturday, May 02, 2009	11:44	26.64	9.44	18.50	283.55	301.37	17.92	96.87%	97.17%	98.32%	2	1	4.664	4.552	1.884
12916	Saturday, May 02, 2009	10:56	27.51	9.28	19.55	265.45	284.23	18.88	96.56%	97.95%	99.57%	2	1	4.698	4.697	1.844
12915	Saturday, May 02, 2009	10:11	26.68	9.27	18.71	248.11	266.14	18.09	96.69%	98.01%	97.50%	2	1	4.764	4.641	1.877
12914	Saturday, May 02, 2009	9:26	26.52	9.28	18.54	230.72	248.57	17.99	97.02%	97.57%	99.77%	2	1	4.594	4.684	1.899
12913	Saturday, May 02, 2009	8:42	26.10	9.41	17.98	213.87	231.17	17.38	96.64%	99.41%	97.58%	2	1	4.69	4.643	1.879
12912	Saturday, May 02, 2009	7:55	26.98	9.68	18.58	196.29	214.22	18.00	96.87%	97.37%	97.20%	2	1	4.694	4.607	1.921
12911	Saturday, May 02, 2009	7:09	26.92	9.36	18.84	178.35	196.54	18.26	96.93%	97.56%	96.81%	2	1	5.028	4.613	1.899
12910	Saturday, May 02, 2009	6:19	28.51	9.79	20.01	159.30	178.66	19.37	96.79%	98.19%	99.15%	2	1	4.528	4.716	1.875
12909	Saturday, May 02, 2009	5:33	27.66	9.55	19.38	140.92	159.59	18.71	96.54%	97.88%	96.88%	2	1	4.704	4.715	1.869
12908	Saturday, May 02, 2009	4:40	27.54	9.65	19.14	122.72	141.10	18.42	96.25%	97.07%	97.74%	2	1	4.99	4.73	1.869
12907	Saturday, May 02, 2009	3:42	30.38	8.23	22.62	101.17	122.93	21.85	96.62%	98.06%	98.18%	2	1	4.653	4.532	1.81
12906	Saturday, May 02, 2009	23:44	100.00	13.54	92.22	16.33	101.36	85.44	92.65%	96.16%	96.09%	6	1	7.485	6.146	1.956
12905	Friday, May 01, 2009	23:05	27.50	15.66	11.84	418.96	430.30	11.35	95.84%	96.17%	97.00%	1	1	5.464	4.719	1.9
12904	Friday, May 01, 2009	21:54	37.11	12.40	25.84	396.03	420.62	24.75	95.77%	97.85%	96.69%	2	1	6.308	5.295	1.868
12903	Friday, May 01, 2009	21:21	22.90	8.38	15.80	383.39	398.37	15.11	95.68%	96.35%	97.70%	2	1	4.626	4.492	1.893
12902	Friday, May 01, 2009	20:34	27.45	9.78	18.93	366.54	384.62	18.23	96.28%	97.26%	95.63%	2	1	5.31	4.638	1.885
12901	Friday, May 01, 2009	19:42	29.70	10.07	20.90	347.95	367.93	20.09	96.09%	97.09%	96.96%	2	1	4.814	4.527	1.874
12900	Friday, May 01, 2009	18:59	26.21	9.48	17.99	332.44	349.51	17.28	96.05%	96.65%	95.29%	2	1	5.055	4.677	1.91
12899	Friday, May 01, 2009	18:19	25.71	8.97	18.01	316.41	333.62	17.34	96.31%	98.15%	97.81%	2	1	4.946	4.693	1.889
12898	Friday, May 01, 2009	17:34	26.60	9.72	18.12	299.93	317.31	17.46	96.35%	97.76%	97.57%	2	1	4.86	4.507	1.896
12897	Friday, May 01, 2009	16:00	27.77	9.42	19.64	281.80	300.64	18.96	96.52%	98.57%	97.85%	2	1	4.646	4.216	1.883
12896	Friday, May 01, 2009	15:11	27.43	9.68	19.05	264.76	282.96	18.34	96.25%	97.22%	95.53%	2	1	4.994	4.558	1.913
12895	Friday, May 01, 2009	14:11	28.13	9.53	19.87	246.32	265.45	19.21	96.69%	97.99%	98.13%	2	1	4.818	4.57	1.876
12894	Friday, May 01, 2009	11:35	66.80	8.27	63.59	187.67	247.10	60.05	94.43%	97.73%	96.96%	5	1	6.083	5.59	1.975
12893	Friday, May 01, 2009	10:52	26.49	9.37	18.37	170.69	188.44	17.82	97.04%	97.06%	98.05%	2	1	4.973	4.691	1.892
12892	Friday, May 01, 2009	9:48	28.67	10.26	19.75	151.82	170.89	19.09	96.65%	97.65%	97.28%	2	1	4.671	4.462	1.928
12891	Friday, May 01, 2009	9:02	27.40	6.86	20.54	132.25	152.13	19.93	97.02%	99.12%	99.82%	2	1	3.914	3.757	1.78
12889	Friday, May 01, 2009	7:28	28.14	9.75	19.69	95.35	114.22	18.88	95.92%	97.60%	97.68%	2	1	5.098	4.283	1.896
12888	Friday, May 01, 2009	6:38	28.50	10.07	19.73	76.52	95.44	18.96	96.07%	96.92%	96.39%	2	1	4.752	4.426	1.877

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-BEAM E0[0]) pre sfer E10	Column 24 Number_23_R: BEAM (R-BEAM E0[1]) post sfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Transfers	Set s	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance
Totals =>			1294.54			1249.00	96.48%	97.61%	97.50%	155	66	5.0697	4.7181	1.8813



Studies

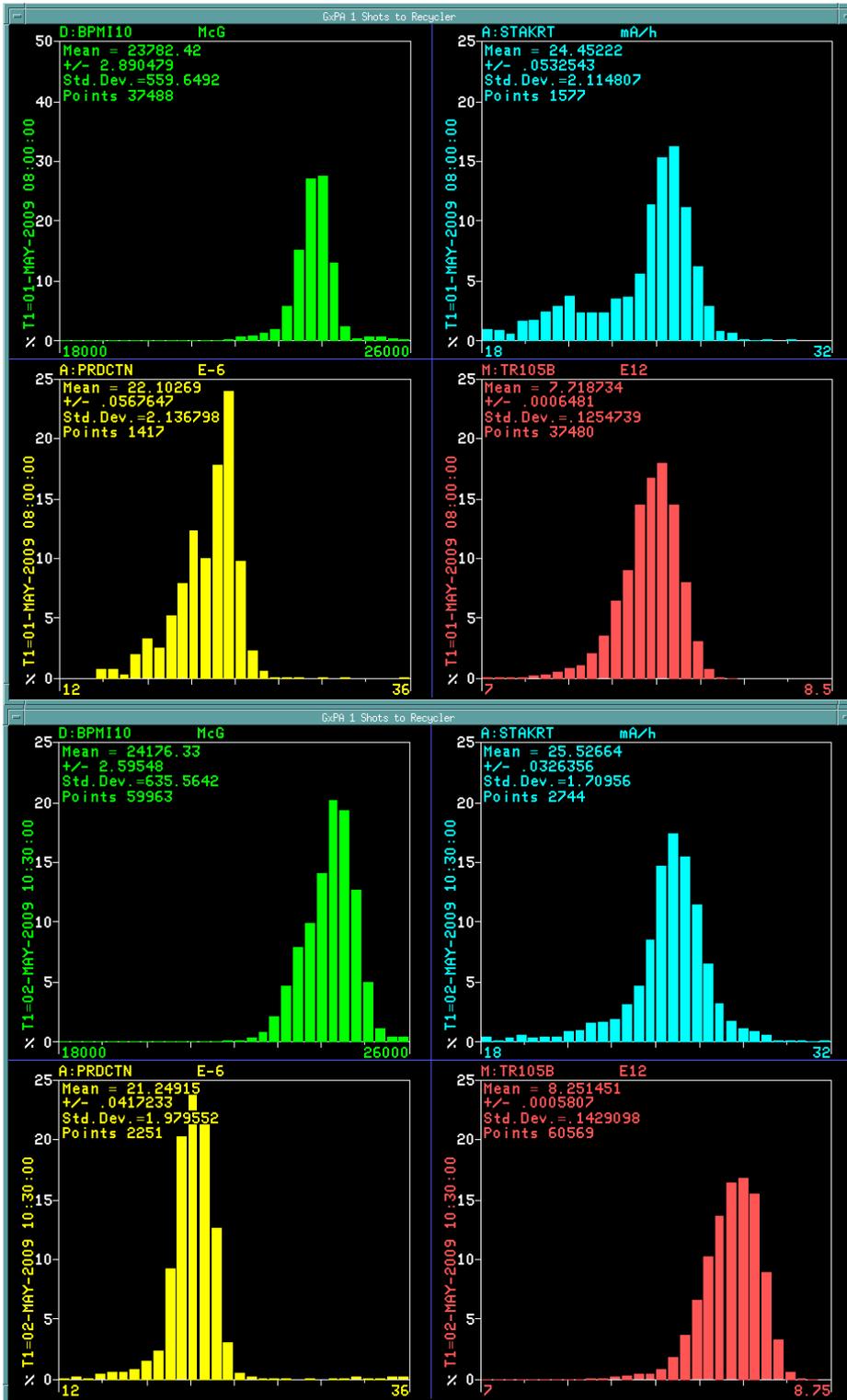
Requests

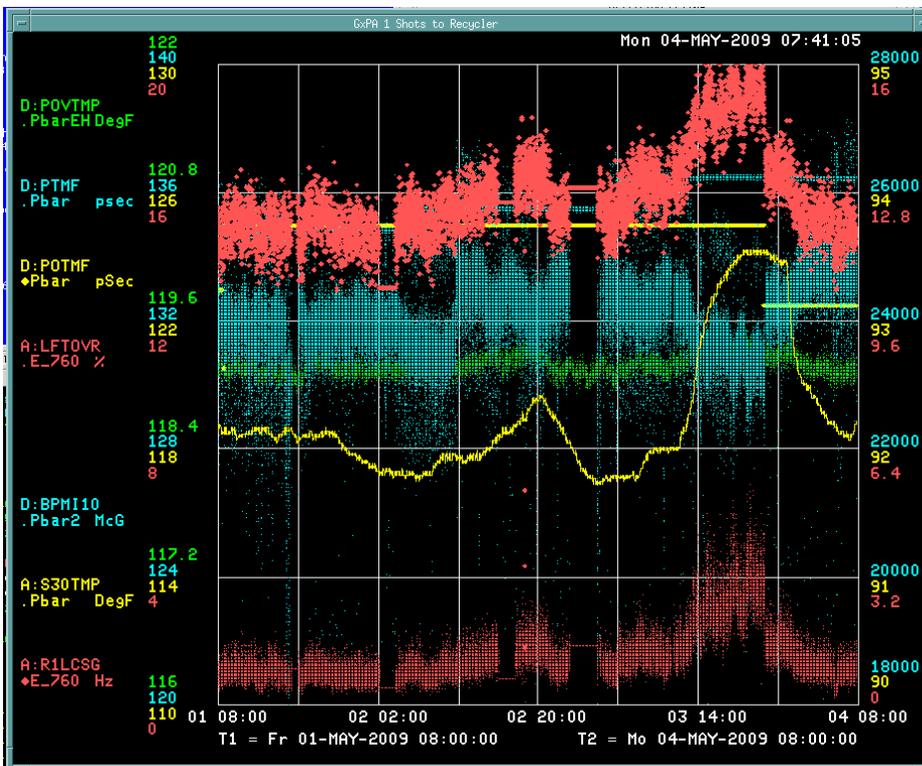
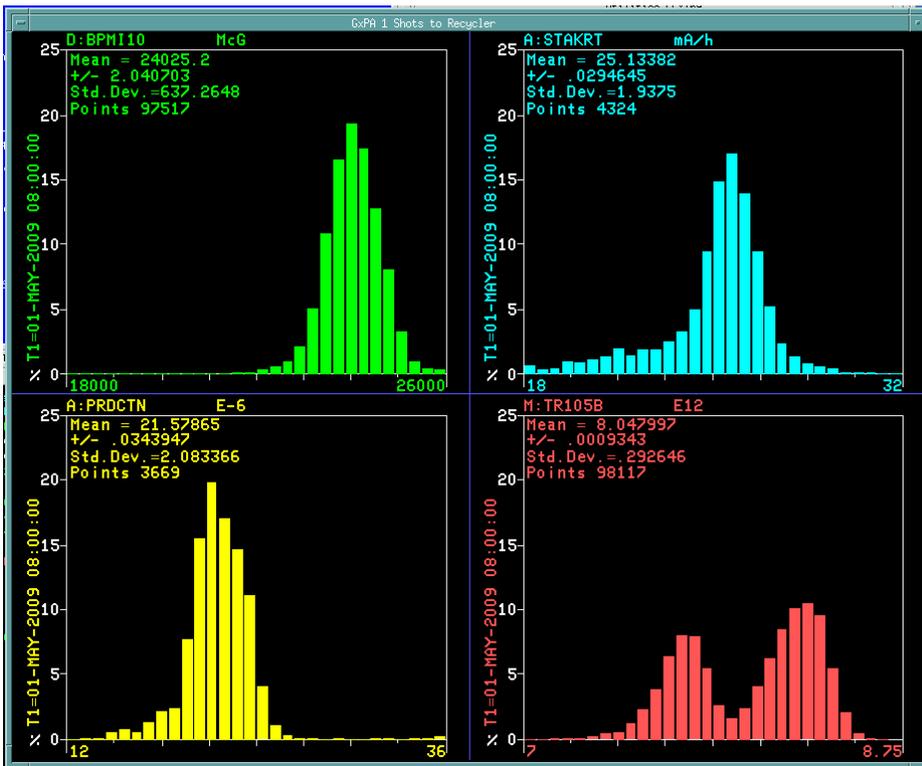
The Numbers

- Pauls numbers
 - Most in a half hour: 13.40 mA at Mon May 04 03:57:55 CDT 2009
 - Best Hour: 28.56 mA on 20-Dec-08
 - Average Production 19.05 e-6/proton Best: 25.41 e-6/proton on 01/30/2008
 - Average Protons on Target 7.98 e12 Best: 8.77 e12 on 07/24/2007
- Als numbers
 - Stacking
 - Pbars stacked: 1620.27 E10
 - Time stacking: 67.42 Hr
 - Average stacking rate: 24.03 E10/Hr
 - Uptime
 - Number of pulses while in stacking mode: 102798
 - Number of pulses with beam: 98868
 - Fraction of up pulses was: 96.18%
 - The uptime's effect on the stacking numbers
 - Corrected time stacking: 64.84 Hr
 - Possible average stacking rate: 24.99 E10/Hr
 - Could have stacked: 1684.67 E10/Hr
 - Recycler Transfers
 - Pbars sent to the Recycler: 1622.93 E10
 - Number of transfers : 155
 - Number of transfer sets: 71
 - Average Number of transfer per set: 2.18
 - Time taken to shoot including reverse proton tuneup: 00.95 Hr
 - Transfer efficiency: 96.06%

- Transfer efficiency: 96.06%
- Other Info
 - Average POT : 8.04 E12
 - Average production: 20.39 pbars/E6 protons
- * Missed one or more A:IBEAM7 events somewhere in the middle of the user selected time span. Calculated time shot using 13 secs per transfer.

Misc





Logbooks

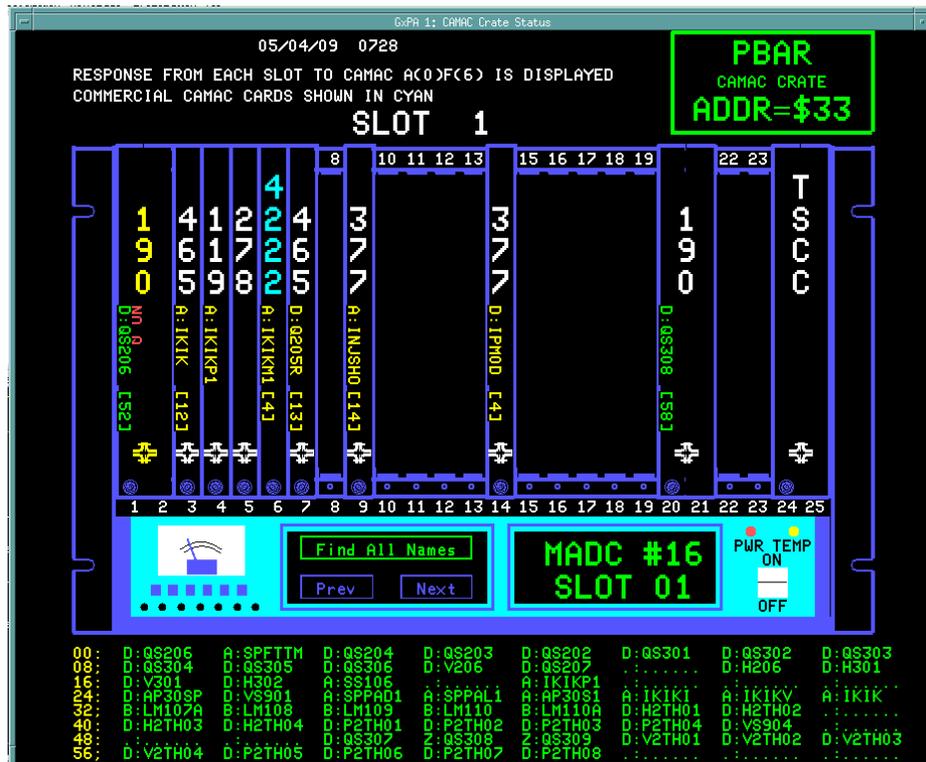
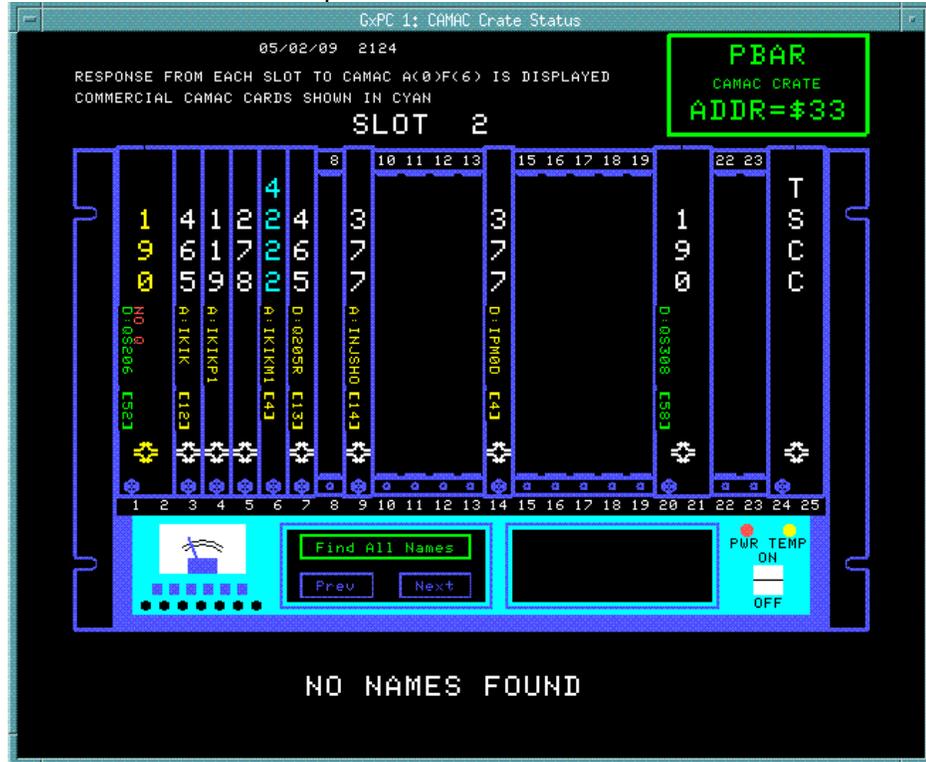
- MCR Elog:
 - Friday, May 1
 - 12:02:45- R:KPS4A tripped with a "Filament Ready" and a "Tube Temp" fault. We are contacting experts.
 - Pasted from <<http://www-bd.fnal.gov/cqi-mcr/elog.pl?nb=2009&action=view&page=last&frame=2&scroll=true>>
 - ◆ Fri May 1 13:47:34 comment by...prk -- The "Tube Temp" bit

has cleared but the filament is not resetting. Dirong Chen is investigating.

- ◆ Fri May 1 14:04:24 comment by...m.m -- Dirong made some adjustments to the reservoir voltage and was able to get the module reset.

▪ Saturday

- Pbar Crate 33, Slot 1 MADC #16 - No Q errors
 - ◆ Have reset multiple times.



- Pbar Elog:
- RunCo Elog:

o