

2011-02-11 Friday Morning Notes

Friday, February 11, 2011

7:34 AM

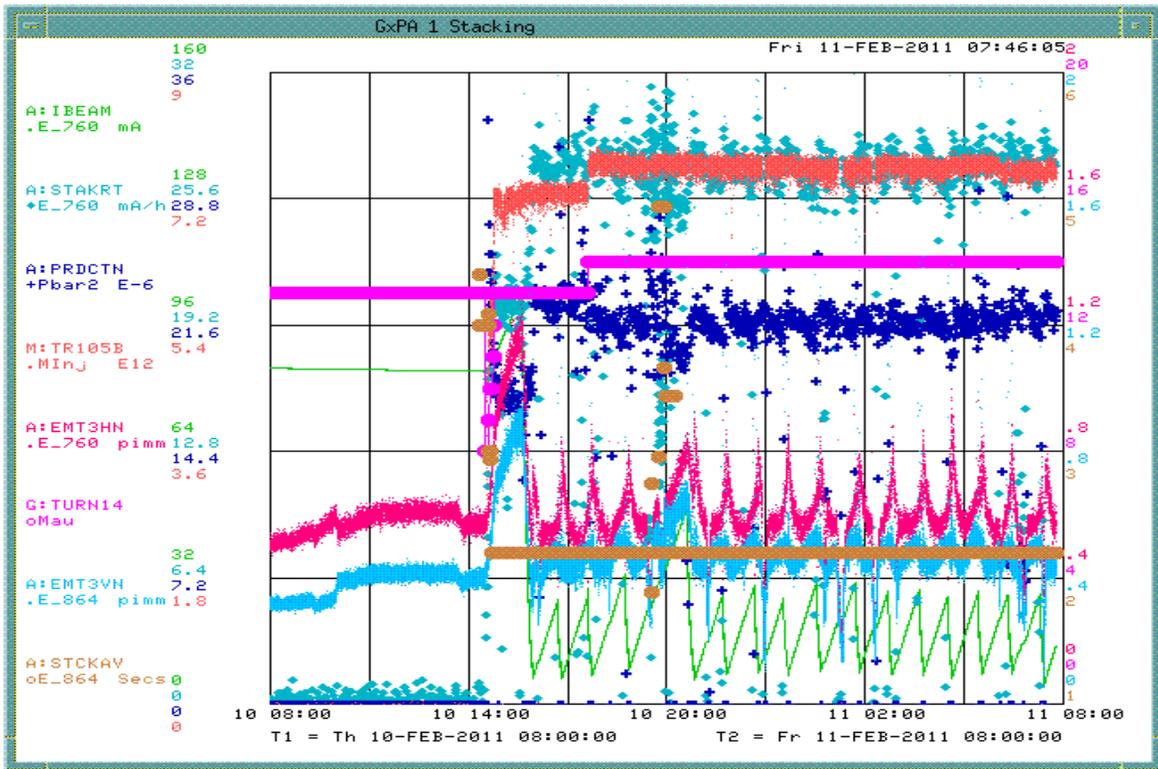
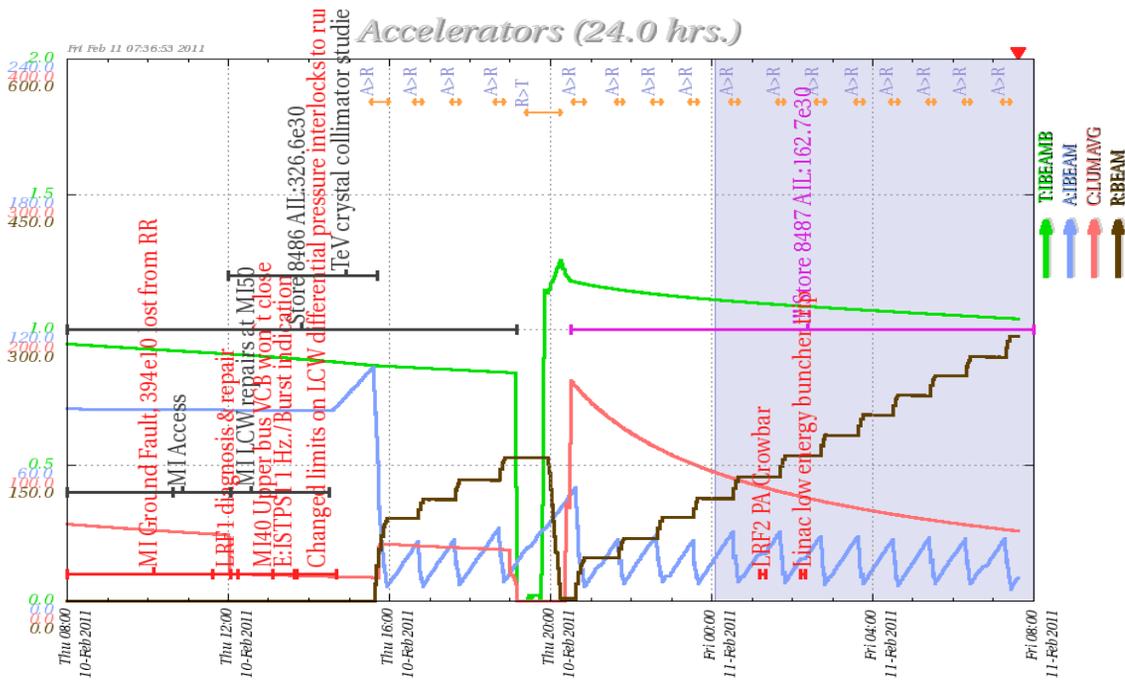
Stacking and Transfers

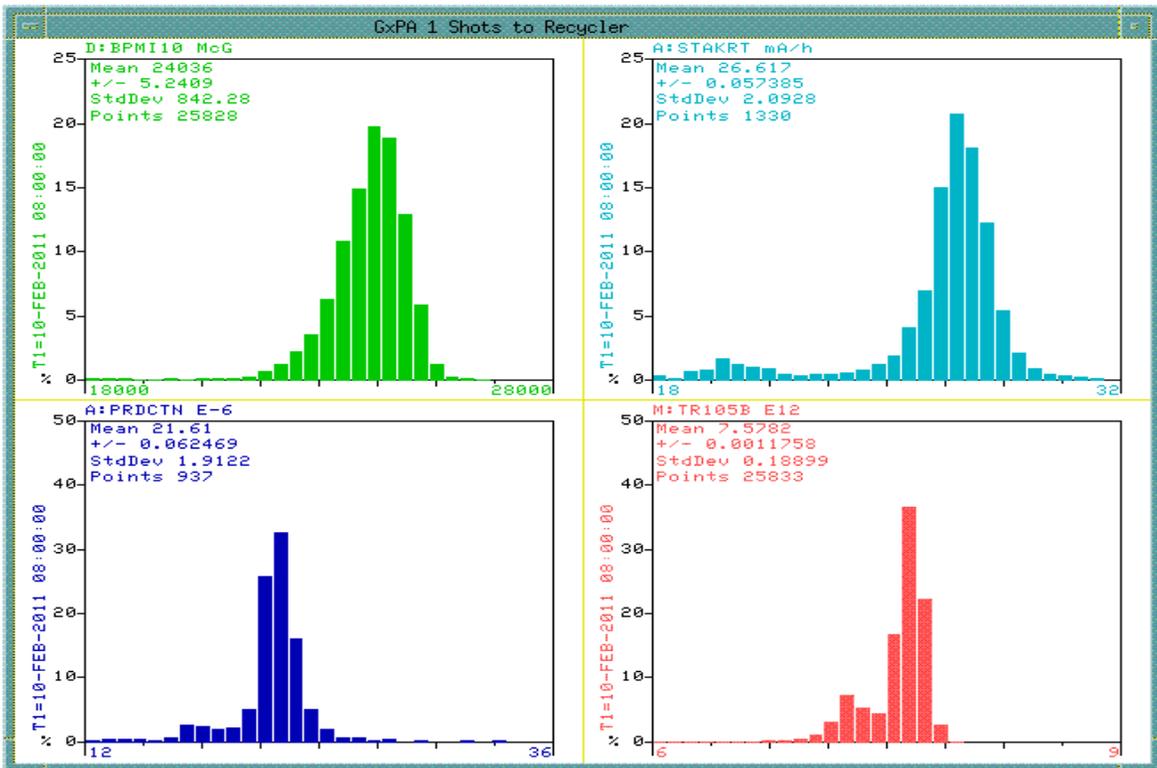
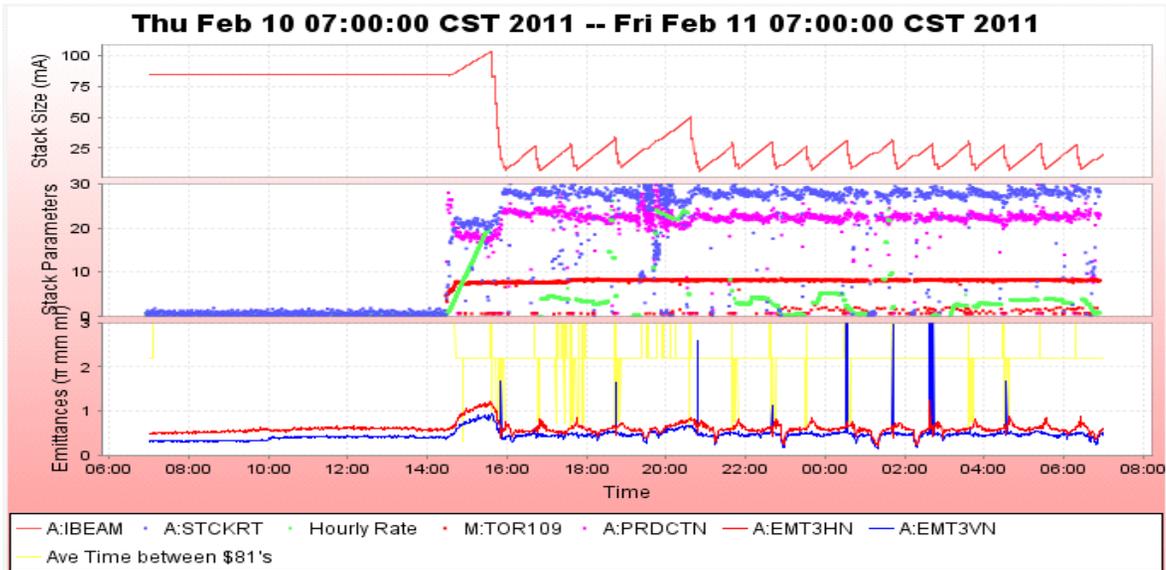
- Stacked 26.6mA/hr with a production of 21.6 pbars/Mp with 7.57 Tp on target.
- Unstacked 490E10 in 54 transfers over 16 sets with an overall average efficiency of 94.8%
 - Remove transfer 23262 from 104ma, and we get 95.5%
 - If also remove transfewr 23266 from 50mA, we get 95.7%

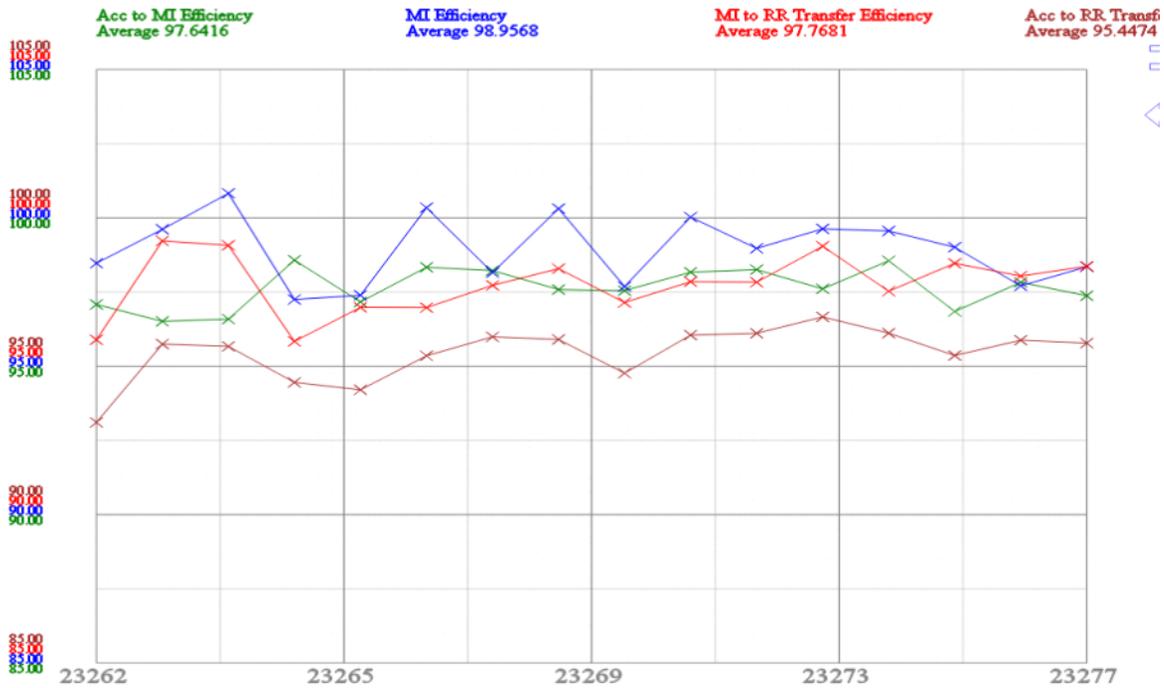
Numbers

- Stacking
 - Pbars stacked: 425.92 E10
 - Time stacking: 17.13 Hr
 - Average stacking rate: 24.87 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 27289
 - Number of pulses with beam: 26044
 - Fraction of up pulses was: 95.44%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 16.35 Hr
 - Possible average stacking rate: 26.06 E10/Hr
 - Could have stacked: 446.28 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 480.88 E10
 - Number of transfers : 53
 - Number of transfer sets: 16
 - Average Number of transfer per set: 3.31
 - Time taken to shoot including reverse proton tuneup: 00.19 Hr
 - Transfer efficiency: 94.30%
- Other Info
 - Average POT : 7.56 E12
 - Average production: 21.64 pbars/E6 protons

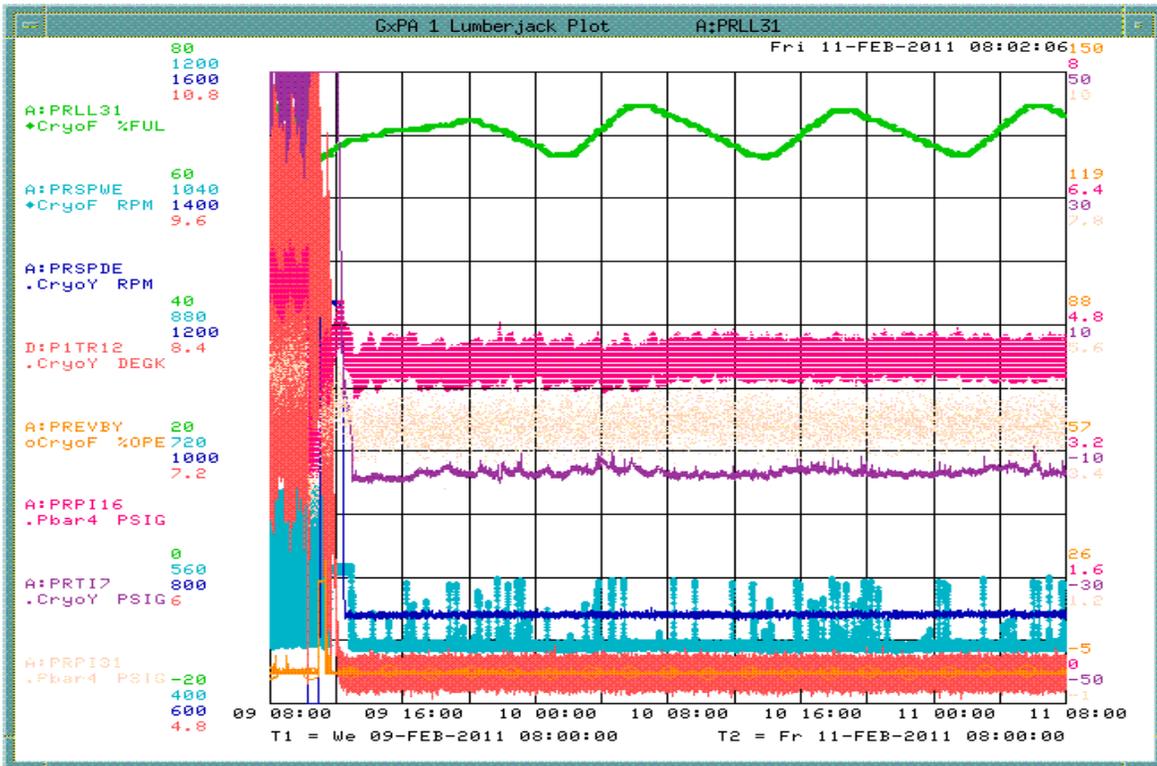
Plots



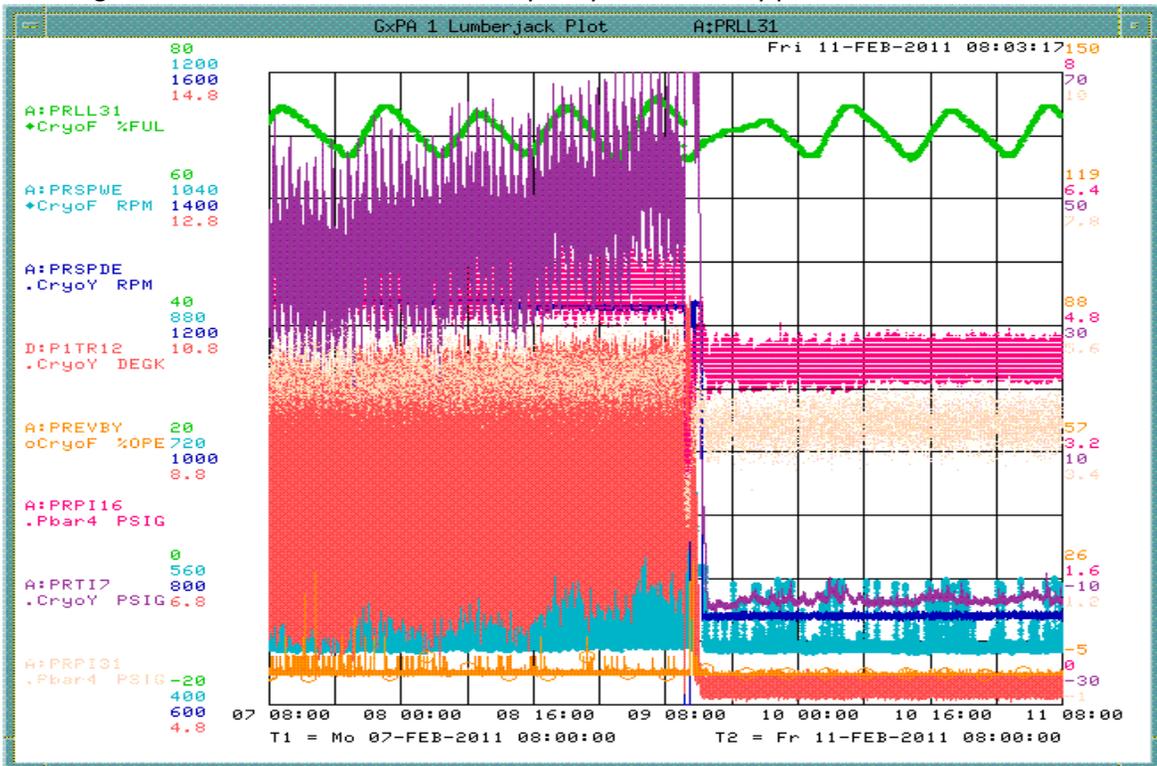




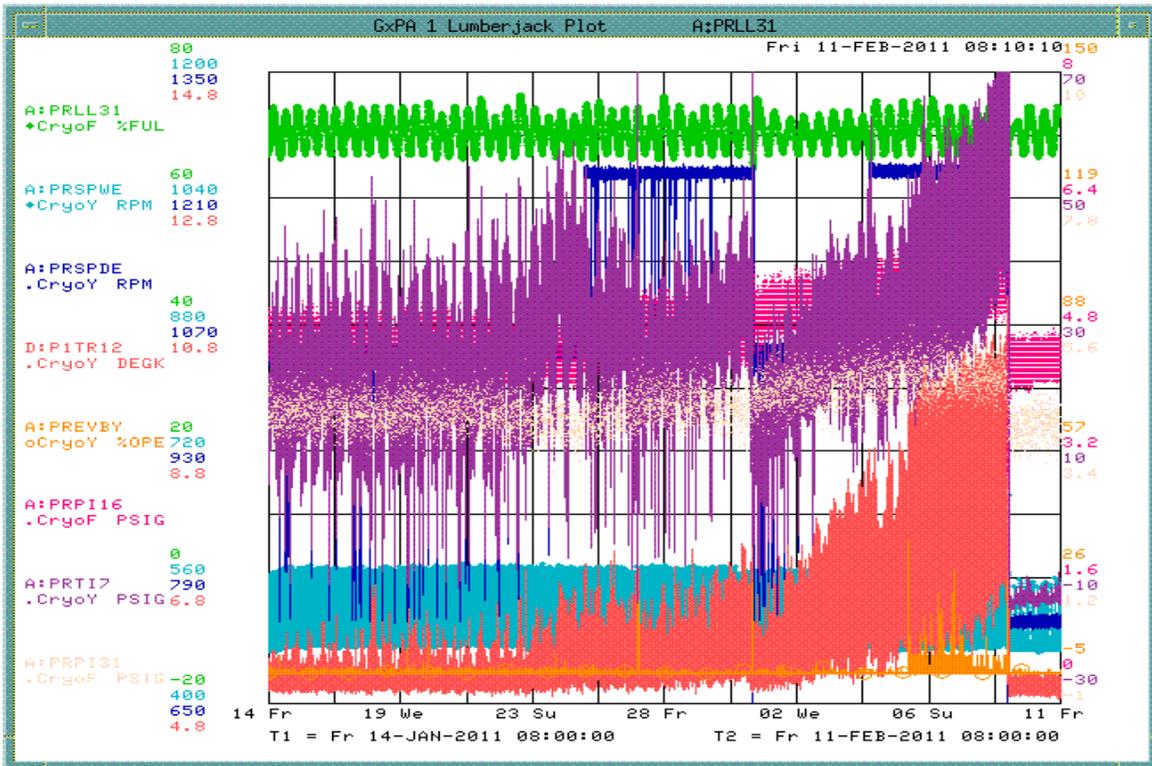
Column 1 Number 0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number 20_A1 BEAMB sampled on \$31 (A-BEAM7), E10	Column 22 Number 21_A1 BEAMB sampled on \$34 (A-BEAM9), E10	Unstacked (mA)	Column 23 Number 22_R: BEAMB ME0(0) pre fer, E10	Column 24 Number 23_R: BEAMB ME0(1) post fer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Trans fers	Sets	Column 5 Number 4_Acc Horizontal Emittance	Column 6 Number 5_Acc Vertical Emittance	Column 8 Number 7_Acc Longitudinal Emittance	
Totals =>				489.54			463.86	94.75%	97.54%	96.38%	94.01%	54	16	6.0435	4.6069	1.9297	
Daily Average =>				489.54			463.86					54	16				
23277	Friday, February 11, 2011	7:17	27.99	4.74	24.68	269.92	293.12	23.63	95.76%	97.56%	95.92%	93.58%	3	1	4.826	3.769	1.902
23276	Friday, February 11, 2011	6:18	27.67	7.44	23.00	249.06	270.73	22.04	95.83%	98.18%	95.68%	93.94%	3	1	5.993	4.57	1.966
23275	Friday, February 11, 2011	5:25	28.46	7.45	23.77	227.37	249.72	22.69	95.45%	97.05%	96.31%	93.47%	3	1	6.257	4.535	1.956
23274	Friday, February 11, 2011	4:30	27.33	6.48	23.28	205.88	227.93	22.42	96.31%	98.61%	98.53%	97.16%	3	1	5.952	4.453	1.95
23273	Friday, February 11, 2011	3:38	28.86	7.18	24.24	183.37	206.35	23.37	96.43%	97.71%	97.13%	94.90%	3	1	5.795	4.437	1.939
23272	Friday, February 11, 2011	2:42	28.70	7.37	24.08	161.03	183.81	23.14	96.10%	98.24%	97.39%	95.68%	3	1	6.24	4.714	1.965
23271	Friday, February 11, 2011	1:42	30.75	7.81	25.63	137.16	161.42	24.59	95.95%	97.89%	97.66%	95.60%	3	1	5.703	4.695	1.962
23270	Friday, February 11, 2011	0:32	30.92	8.07	25.55	113.40	137.47	24.30	95.14%	97.94%	95.67%	93.70%	3	1	5.814	4.893	1.951
23269	Thursday, February 10, 2011	23:32	26.65	7.21	22.20	92.49	113.67	21.28	95.86%	97.90%	98.19%	96.13%	3	1	6.192	4.625	1.978
23268	Thursday, February 10, 2011	22:39	29.87	7.88	24.72	69.33	92.78	23.71	95.93%	98.18%	96.77%	95.01%	3	1	6.407	4.694	1.923
23267	Thursday, February 10, 2011	21:41	27.64	7.26	23.10	47.59	69.47	22.07	95.52%	98.52%	98.01%	96.56%	3	1	5.977	4.491	1.959
23266	Thursday, February 10, 2011	20:37	50.17	6.13	49.28	2.67	47.83	46.16	93.66%	97.21%	95.07%	92.41%	5	1	6.497	5.021	1.925
23265	Thursday, February 10, 2011	18:44	32.71	8.47	26.99	133.77	159.08	25.54	94.65%	98.30%	96.03%	94.39%	3	1	5.725	4.581	1.908
23264	Thursday, February 10, 2011	17:37	27.40	7.17	22.97	112.40	134.13	21.96	95.57%	96.74%	96.90%	93.74%	3	1	5.92	4.373	1.925
23263	Thursday, February 10, 2011	16:42	26.32	6.25	22.56	91.37	112.73	21.56	95.58%	96.79%	96.44%	93.35%	3	1	5.671	4.239	1.917
23262	Thursday, February 10, 2011	15:37	103.94	6.48	103.51	0.31	92.11	95.40	92.16%	96.75%	95.37%	92.26%	7	1	7.727	5.93	1.749



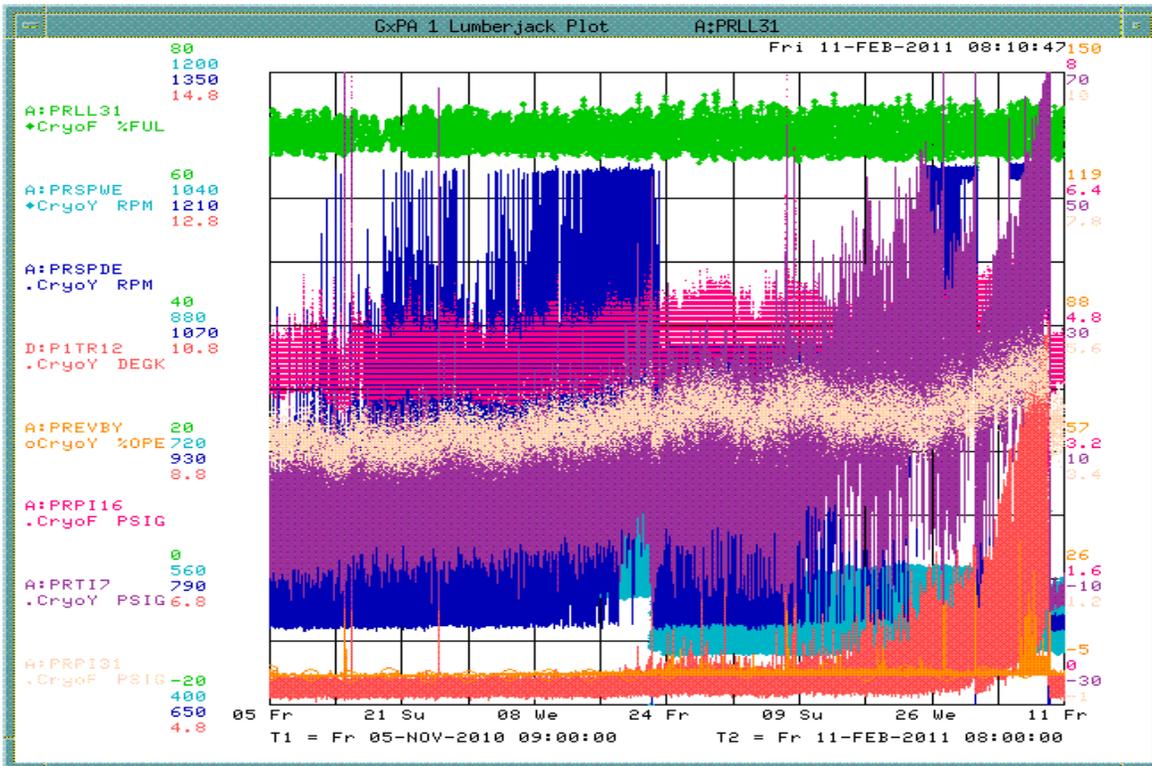
Pbar Frig much more stable after Wednesday's Cryo work - 2 day plot



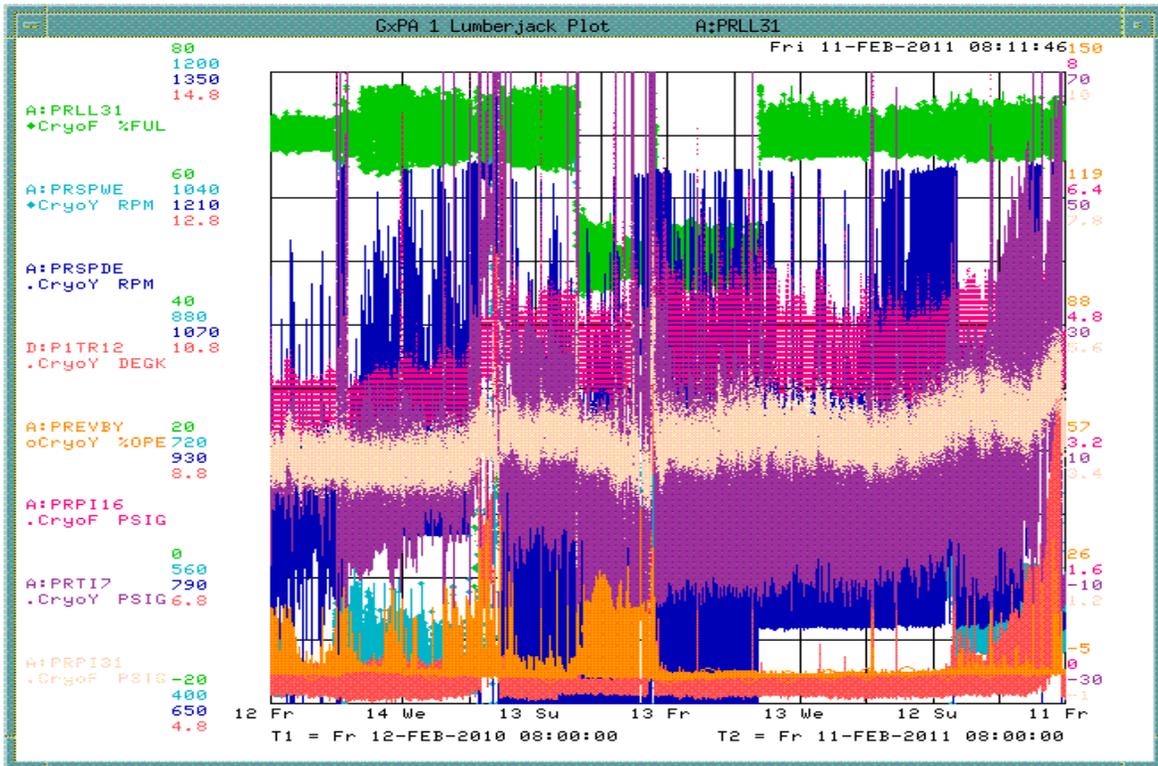
4 day plot



4 Week Plot



14 week plot



1 year plot