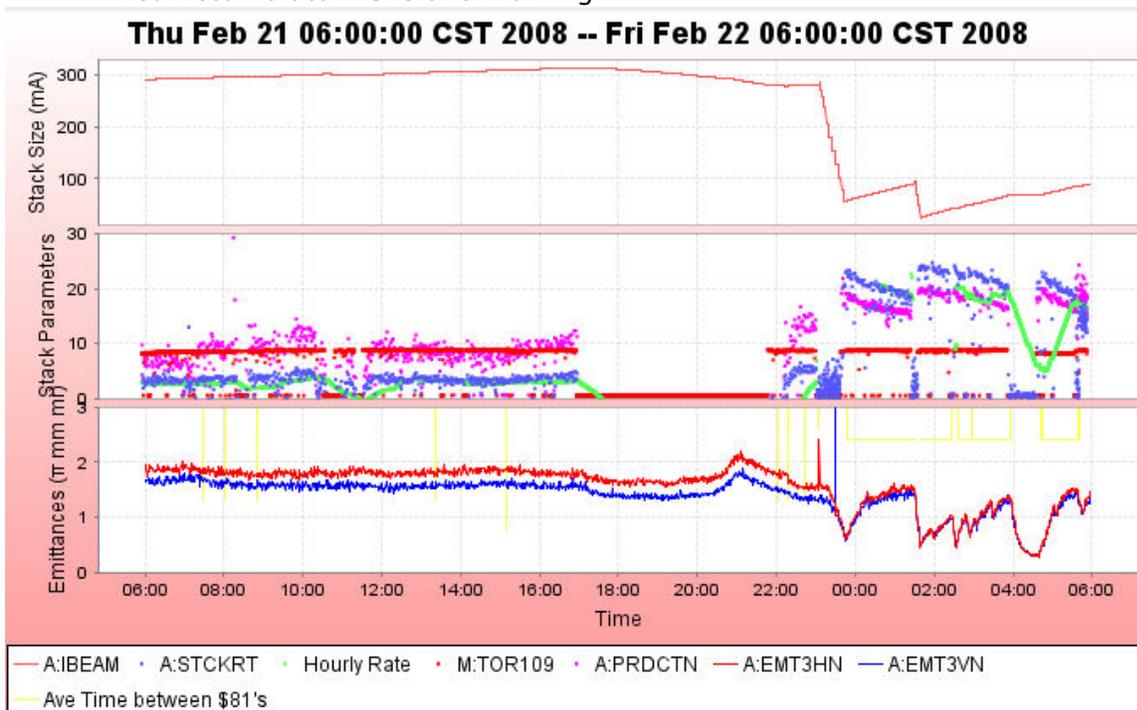


2008-02-22 Friday Morning Pbar Notes

Friday, February 22, 2008
5:37 AM

Stacking

- Running 8.2e12 on average at 11 turns on the stacking-only \$29s.
- Average Production was 9.53 e-6/proton due to the large stack.
- The stack peaked at 313.5mA.
 - When we turned off at 5pm for the MI access, the unstacking rate started out reasonable, but got worse and worse over time.
 - Experts stayed an worked on trying to improve our degrading lifetime.
 - Tune changes, ARF2 stabilizing RF changes, and damper changes were all tried to no avail.
 - Ended up running the flusher on the high energy side of the core and things finally started to improve.
 - By the time we returned to stacking, we had lost 34.4mA. On a positive note, we still had 278mA, which was still more than the previous record stack rate from November.
- During the day shift, DRF1-4 was pff pm a Driver Fault.
 - Experts bumped up the current on the driver and brought the station back to life.
- Our best stacking hour was 19.9mA/hr on the owl shift. This is still a little low, so we will work to get that back up to normal levels today.
- Target Station took down the Pbar permit on the owl shift and would not reset.
 - D:DPSTAT (Beam dump status) showed a dump water return flow indication.
 - Target experts were called in to investigate.
 - Ops reduced turns and were able to run while experts were enroute.
 - Experts found that the Filter Bypass turbine on the dump water system had gone erratic.
 - Experts bypassed this interlock and have added it to the worklist.
 - It is OK to run this way, since this was not the turbine for the primary return.
- Fired Accumulator TSPs this morning.



Transfers

- Transferred 289mA in 14 transfers over 2 sets.
- Experts were in to help with the transfers from the large stack.
 - We unstacked from 280mA and were 86% efficient all the way to Recycler!

Column 1 Number _0_Pbar	Column 4 Number_3_Transfer Time	Column 21 Number_2 0_A:IBEAM B sampled	Column 22 Number _21_A:IB	Unstacked (mA)	Column 23 Number _22_R:BE	Column 24 Number _23_R:BE	Stashed	Acc to RR Eff	Column 27 Number_7_MI 26_MI	Column 28 Number_2 7_MI Before	Acc to MI Eff	Acc to MI2 Eff	Transfers	Sets	
	2/22/2008	7:00:00 AM		288.600			246.86	85.54%	270.327	270.020	93.67%	93.56%	14	2	
7219	Friday, February 22, 2008	1:31:50 AM	90.188	25.388	64.800	189.845	244.752	54.91	84.73%	59.980	59.937	92.56%	92.50%	4	1
7218	Thursday, February 21, 2008	11:06:36 PM	280.588	56.788	223.800	0.075	192.025	191.95	85.77%	210.347	210.083	93.99%	93.87%	10	1

Studies

Requests and Plans for the Day

- Add 5-10 minutes during a Recycler transfer to do AP3 orbit work.
- Tune-up for the weekend.

Other Notes

- Paul's Numbers
 - Most in an hour: 19.88 mA at Fri Feb 22 00:45:31 CST 2008
 - Best: 25.19 mA on 30-Jan-08
 - Average Production 9.53 e-6/proton Best: 25.41 e-6/proton on 01/30/2008
 - Average Protons on Target 7.79 e12 Best: 8.77 e12 on 07/24/2007
 - Largest Stack 313.58 mA Best: 271.01 mA on 11/14/2007
- AI's Numbers
 - Stacking
 - Pbars stacked: 120.67 E10
 - Time stacking: 17.16 Hr
 - Average stacking rate: 07.03 E10/Hr
 - Uptime
 - Number of pulses while in stacking mode: 14531
 - Number of pulses with beam: 11980
 - Fraction of up pulses was: 82.44%
 - The uptime's effect on the stacking numbers
 - Corrected time stacking: 14.15 Hr
 - Possible average stacking rate: 08.53 E10/Hr
 - Could have stacked: 146.36 E10/Hr
 - Recycler Transfers
 - Pbars sent to the Recycler: 289.31 E10
 - Number of transfers : 14
 - Number of transfer sets: 1
 - Average Number of transfer per set: 14.00
 - Time taken to shoot: 00.79 Hr
 - Time per set of transfers: 47.35 min
 - Transfer efficiency: 170.61%
 - Other Info

- Other Info
 - Average POT : 8.07 E12
 - Average production: 12.49 pbars/E6 protons

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