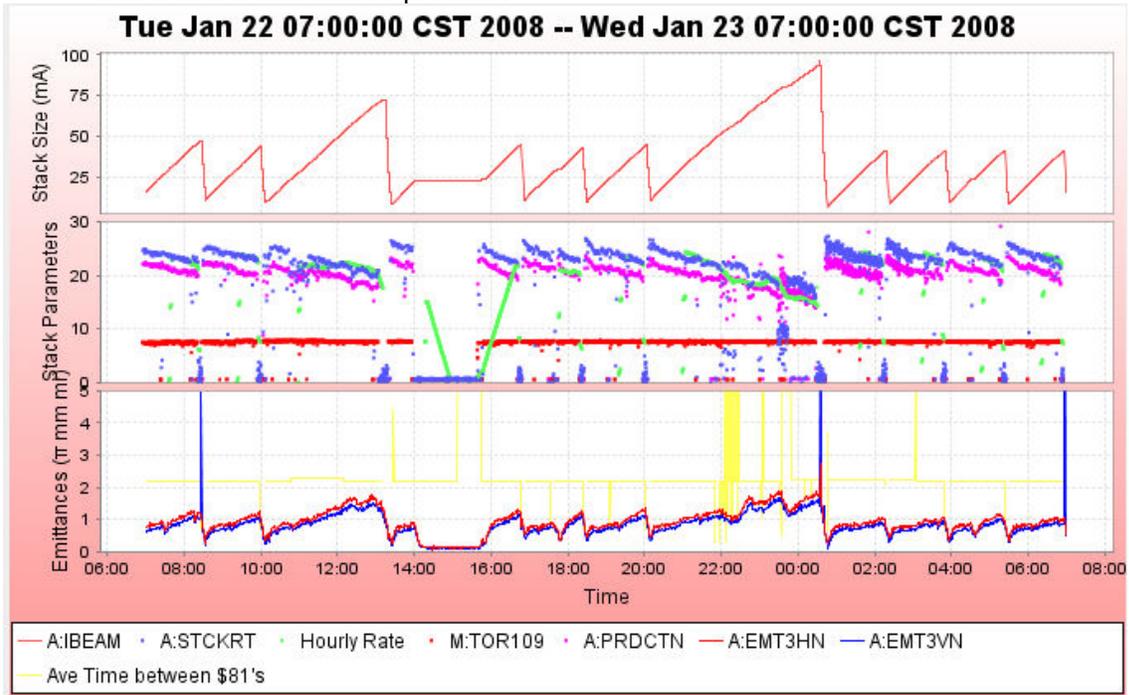


. Stacking

- Beam on target
 - Ran 10 turns over the last 24 hours at approximately $7.0e12$ on target with an 87% slip stacking efficiency.
 - Beam on target was up about $1.5e11$ and slip stacking efficiency was up about 2% for a few hours earlier in the day shift.
- Stack Rate
 - We had normal iterations of stack and transfer with the exception of one 70mA and one 94mA stack.
 - Peak stacking hour was 23.78mA/hr ending at 21:08.
 - Accumulating a total of 441mA.
- Average Production $17.18 e-6$ /proton, in the usual 19-22 range on our normal iterations of stack to 40mA and transfer.
- Tue Jan 22 09:51: The Flux Capacitor scope hung up. Experts had to power cycle the scope.
- Tue Jan 22 11:26: DRF1-7 tripped off with an ENI standby indication.
 - Turned off the station and ran the broken DRF cavity aggregate.
 - The ENI was blowing fuses.
 - When the ENI was replaced, but the station started tripping on PA inhibits.
 - The PA voltage and tube bias voltages were both lowered, and the station was tuned in so that it doesn't trip anymore.
 - Worklist entry is being made to replace the tubes on the station during the next access opportunity.
- D:ESEPV cap overvoltage trip at 00:48, reset and on
- U:95PWFL and some other Pbar 95 LCW parameters that come through the CUB01 front end stopped reading back. The FESS data collection PC at CUB was found to have failed. FESS will need to replace the PC to restore readbacks.
 - These are extra readbacks.
 - We still have our normal pressure, temperature and makeup flow readbacks.
- D:BPI10D, which provides one measure of circulating beam intensity in the Debuncher is not working. The Python script had to be restarted. Experts are working to make this a more automated process.

this a more automated process.



Transfers

- Unstacked 450e10 and 406e10 made it to the Recycler in 36 transfers over 11 sets.
 - 95% efficiency to the Main Injectorr
 - 90% efficiency to the Recycler.
 - Numbers are lower due to Transfer set 6935
- On transfer set #6935: Tue Jan 22 13:45:35 The average transfer efficiency between the MI & RR was about 75% for the three transfers. MI30 collimators were in during the transfers. It was partially retracted for the last transfer (which coincidentally had the best efficiency of the four). We'll start the next round of transfers with the collimators out and see if efficiency improves.
- Transfer 6937 I:BEAMS reports a large number

Column 1 Pbar Transfer Shot #	Column 2 Recycler Shot #	Column 4 Transfer Time	Column 21 A:IBEAMB sampled on S91 (A:IBEAM1), E10	Column 22 A:IBEAMB sampled on S94 (A:IBEAM2), E10	Unstack ed (mA)	Column 23 R:BEAMS (R:BEAM E0[0]) pre xfer E10	Column 24 R:BEAM (R:BEAM E0[1]) post xfer, E10	Stashed	Acc to RR Eff	Column 27 MI DCCT SMALL BEAM (I:BEAMS ,) E10	Column 28 MI Before Extractio n (I:BEAM6 ,) E10	Acc to MI Eff	Acc to MI2 Eff	Transfers	Sets
6943	4399	Wednesday, January 23, 2008 6:57:10 AM	40.988	8.588	32.400	170.931	201.843	30.91	0.95	31.389	30.620	0.968796	0.945062	3	1
6942	4398	Wednesday, January 23, 2008 5:24:35 AM	41.188	8.588	32.600	140.937	172.023	31.09	0.95	31.640	30.975	0.970552	0.950153	3	1
6941	4397	Wednesday, January 23, 2008 3:50:41 AM	40.988	9.388	31.600	111.717	141.584	29.87	0.95	30.548	30.523	0.966709	0.965918	3	1
6940	4396	Wednesday, January 23, 2008 2:17:35 AM	40.988	8.588	32.400	81.701	112.184	30.48	0.94	31.403	31.912	0.969228	0.984938	3	1
6939	4395	Wednesday, January 23, 2008 12:35:31 AM	93.387	7.388	85.999	11.352	83.193	71.84	0.84	79.843	79.250	0.928418	0.921522	5	1
6938	4393	Tuesday, January 22, 2008 8:03:04 PM	44.588	10.588	34.000	317.409	350.628	33.22	0.98	32.824	33.382	0.965412	0.981824	3	1
6937	4392	Tuesday, January 22, 2008 6:23:58 PM	42.787	9.988	32.799	290.500	322.895	32.40	0.99	3100.735	30.986	94.53736	0.944724	3	1
6936	4391	Tuesday, January 22, 2008 4:47:19 PM	44.988	10.987	34.001	261.360	294.193	32.83	0.97	32.405	32.307	0.95306	0.950178	3	1
6935	4390	Tuesday, January 22, 2008 1:15:37 PM	71.788	8.388	63.400	218.169	265.093	46.92	0.74	60.986	61.588	0.961924	0.97142	4	1
6934	4389	Tuesday, January 22, 2008 10:00:32 AM	43.588	9.388	34.200	189.001	221.341	32.34	0.95	33.385	32.595	0.97617	0.95307	3	1
6933	4388	Tuesday, January 22, 2008 8:27:17 AM	47.387	10.588	36.799	155.933	190.336	34.40	0.93	35.292	34.912	0.959048	0.948721	3	1
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just before lunch time.

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- Other notes.....
- Paul's 24 hour numbers
 - Most in an hour: 23.78 mA at Tue Jan 22 21:08:36 CST 2008
 - Best: 24.69 mA on 09-Jan-08
 - Average Production 17.18 e-6/proton Best: 23.53 e-6/proton on 11/11/2007
 - Average Protons on Target 6.63 e12 Best: 8.77 e12 on 07/24/2007
 - Largest Stack .00 mA Best: 271.01 mA on 11/14/2007
- Al's Numbers
 - Stacking
 - Pbars stacked: 441.20 E10
 - Time stacking: 20.72 Hr
 - Average stacking rate: 21.29 E10/Hr
 - Uptime
 - Number of pulses while in stacking mode: 33184
 - Number of pulses with beam: 31929
 - Fraction of up pulses was: 96.22%
 - The uptime's effect on the stacking numbers
 - Corrected time stacking: 19.94 Hr
 - Possible average stacking rate: 22.13 E10/Hr
 - Recycler Transfers
 - Pbars sent to the Recycler: 416.67 E10
 - Number of transfers : 33
 - Number of transfer sets: 11
 - Average Number of transfer per set: 3.00
 - Time taken to shoot: 01.54 Hr
 - Time per set of transfers: 08.39 min
 - Transfer efficiency: 85.46%
 - Other Info
 - Average POT : 6.96 E12
 - Average production: 19.85 pbars/E6 protons

* Blue indicates that Pbar started and/or ended in Recycler shot mode. See the message window for details.