

2011-03-30 Wednesday Morning Notes

Wednesday, March 30, 2011
7:32 AM

On-call

- Wednesday: DVM
- Thursday : Vladimir
- Friday: Keith
- Saturday: Steve
- Sunday: Jim
- Monday/Tuesday: Keith

Stacking and Transfers

- Stacked 26.6mA/hr with a production of 23.6 pbars/Mp with 7.78 Tp on target
 - Overnight, after \$21 was out of the TLG, Stacked 27.5mA/hr with a production of 23.5 with 7.8 tp on target
- Unstacked 325E10 in 39 transfers over 13 sets with an average overall efficiency of 95.5%
 - Transfer 2125 had a 4.39 horizontal TBT oscillation. Emittances were small, so transfer efficiency ok.

Interesting Operational Happenings

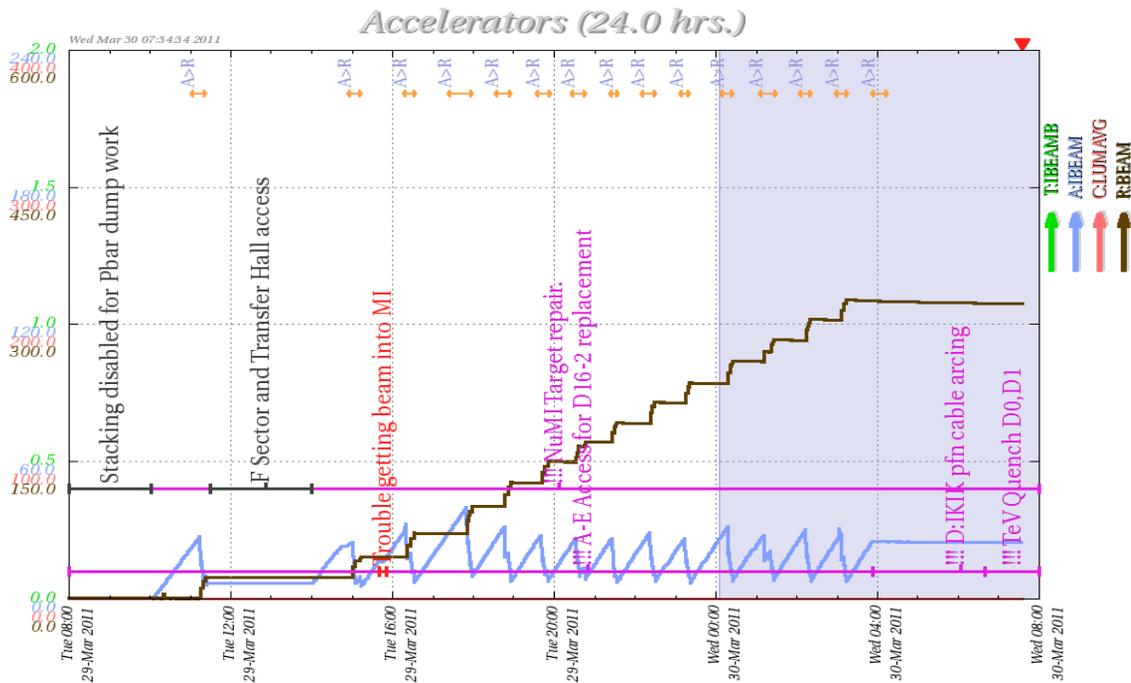
- Stacking and transfers came back to pre-shutdown levels with relative ease.
- 10am established stacking and got one iteration so stacking and transfers before the F-Sector access.
- DRF1-7 had a driver power supply failure. Just prior to this it was noticed that the station was out of tune, which was likely an early indication of the driver power supply going bad.
- There were several trips of the P2 permit. M:HV102 looks like it went for a walk, but corrected itself. We'll keep an eye on it.
- Pbar sequencer having problems ACL script stalling on "G:TLGSEQ is off or too close to end of the supercycle, waiting on \$00"
 - 15:13
 - 17:47
- D:Q926 DC overcurrent trip, reset and on.
 - 20:58
- MI TBT oscillation 4.39mm horizontal on pbar transfer
 - 21:37
- D:IKIK arcing PFV
- Dump Water System
 - We now have a second camera to monitor
 - Original Monitor (http://ap0sightglass-2.fnal.gov/view/viewer_index.shtml?id=8233)
 - New Monitor (http://131.225.138.84/view/viewer_index.shtml?id=21)
 - The camera images show that the reservoir tank level from yesterday is unchanged, indicating that we are not leaking!
 - Auto-venting is also another sign that we are not leaking!
 - CW isolation valve script appears to be working. We will be moving this script to a more permanent location today.
- D:DPWP3

Numbers

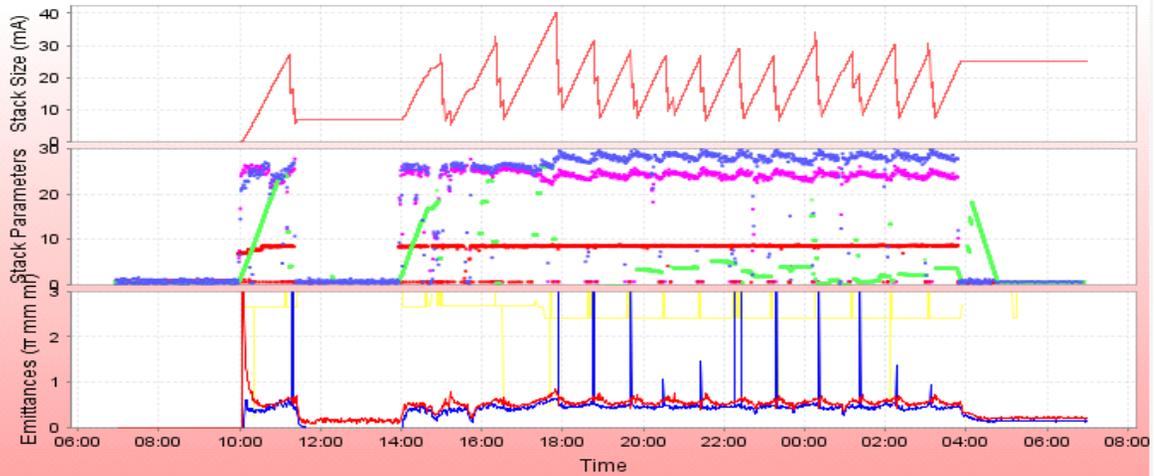
- Stacking
 - Pbars stacked: 390.69 E10

- Time stacking: 15.52 Hr
- Average stacking rate: 25.17 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 22314
 - Number of pulses with beam: 21245
 - Fraction of up pulses was: 95.21%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 14.78 Hr
 - Possible average stacking rate: 26.44 E10/Hr
 - Could have stacked: 410.35 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 358.50 E10
 - Number of transfers : 42
 - Number of transfer sets: 15
 - Average Number of transfer per set: 2.80
 - Time taken to shoot including reverse proton tuneup: 00.15 Hr
 - Transfer efficiency: 94.61%
- Other Info
 - Average POT : 7.74 E12
 - Average production: 23.76 pbars/E6 protons

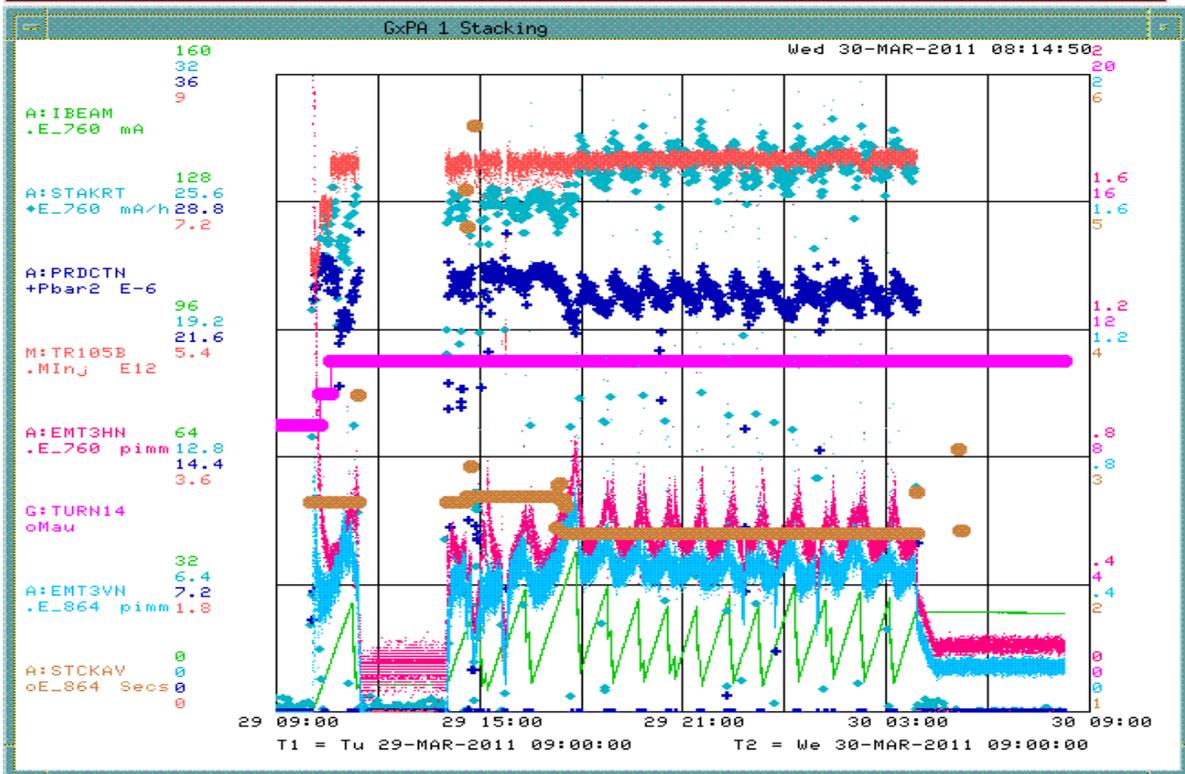
Plots

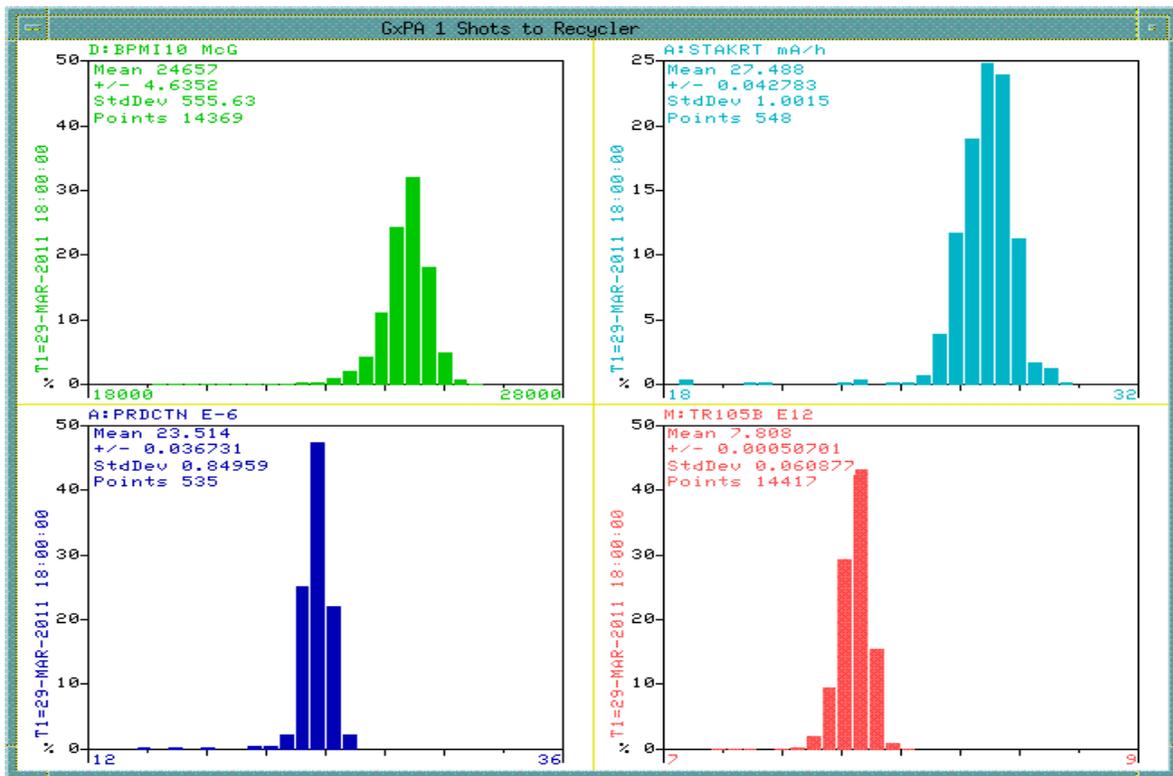
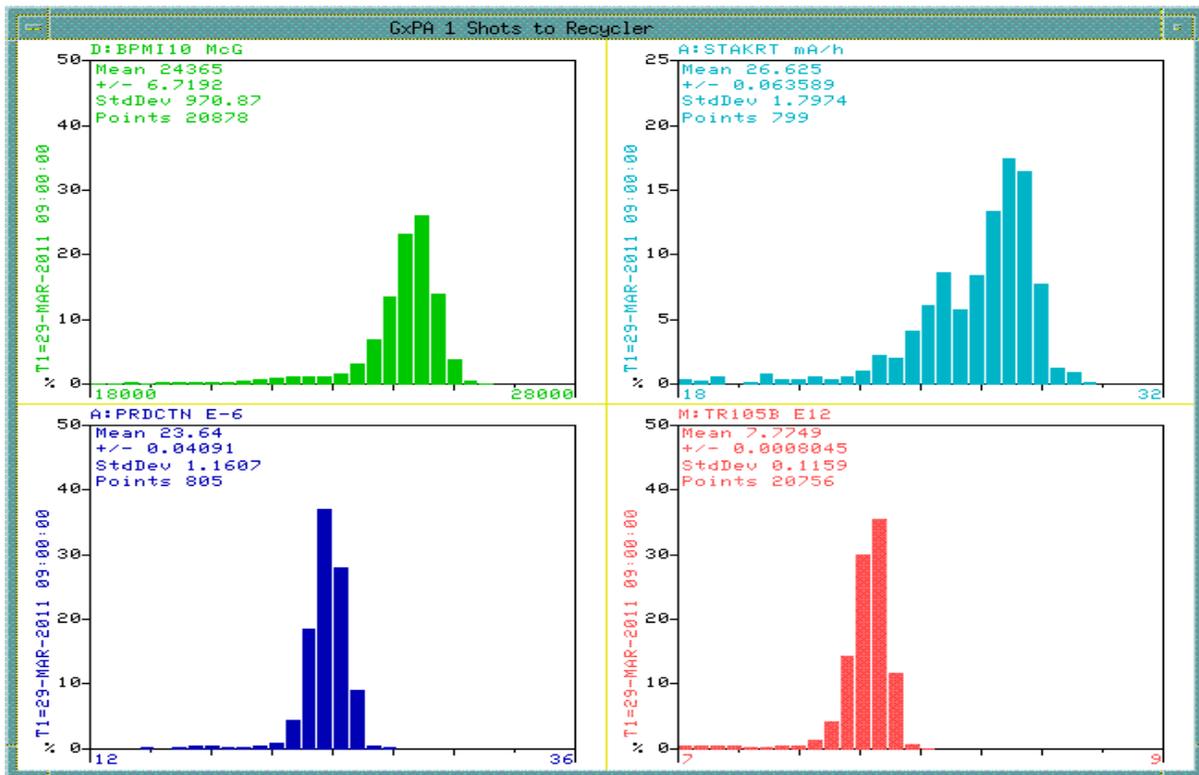


Tue Mar 29 07:00:00 CDT 2011 -- Wed Mar 30 07:00:00 CDT 2011

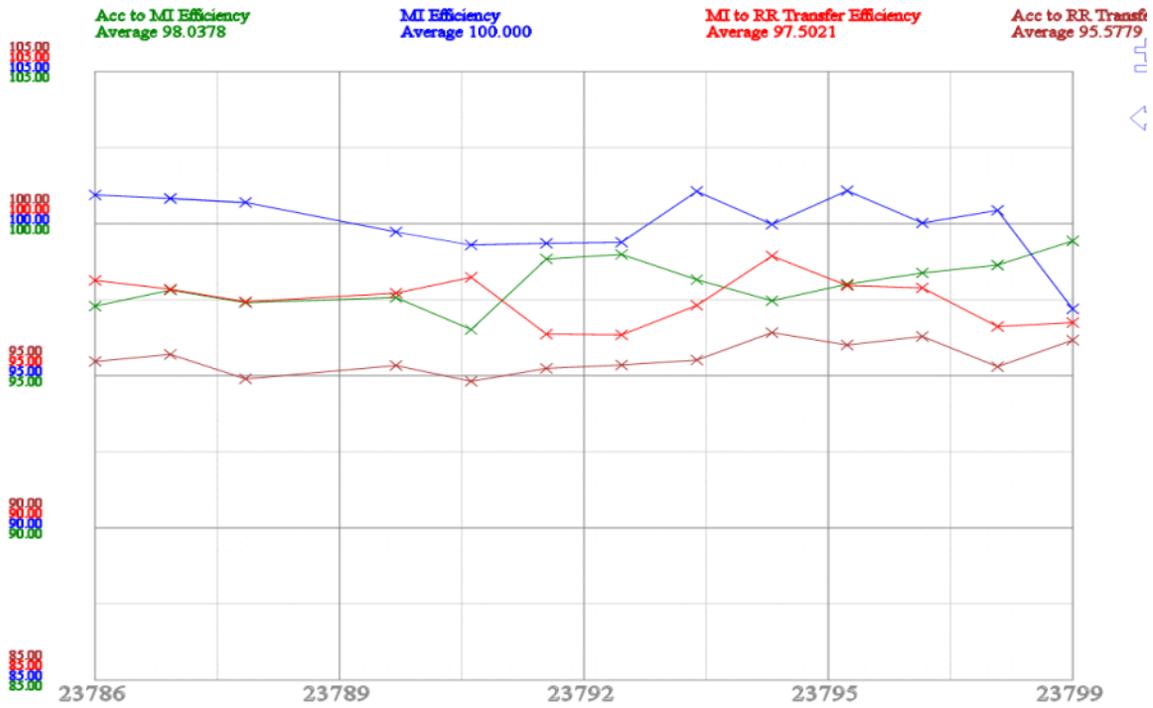


— A:IBEAM • A:STCKRT • Hourly Rate • M:TOR109 • A:PRDCTN — A:EMT3HN — A:EMT3VN
 — Ave Time between \$81's

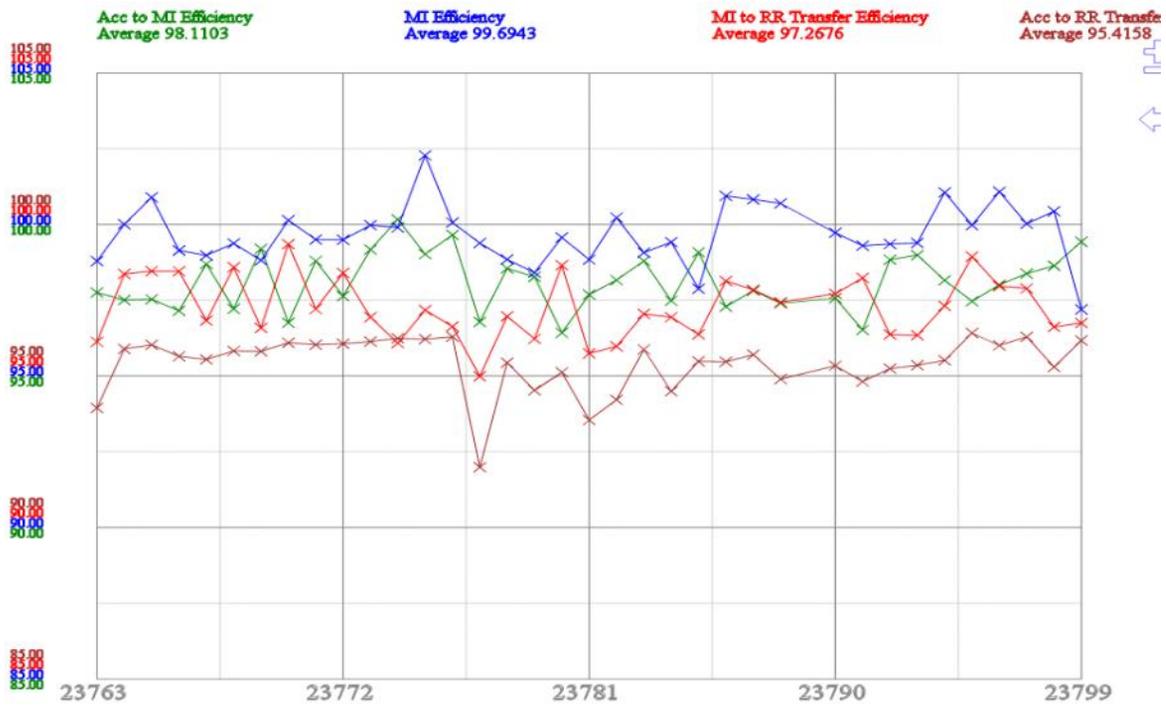




18:00 until this morning (\$29's only)



Since turning on



Shutdown is at transfer 23786

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 fer E10	Column 24 Number _23_R: BEAM (R:BEA ME0(1)) post fer, E10	Stacked	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 Horizont al Emittanc e	Column 6 Number _5_Acc Vertical Emittanc e	Column 8 Number _7_Acc Longitud inal Emittanc e	
Totals =>				325.87			311.10	95.47%	97.98%	97.89%	95.92%	39	13	5.4733	4.3091	1.9412	
Daily Average =>				325.87			311.10					39	13				
23799	Wednesday, March 30, 2011	3:06	28.65	7.26	24.22	304.70	327.43	23.31	96.23%	99.31%	97.23%	96.55%	3	1	5.337	4.231	1.974
23798	Wednesday, March 30, 2011	2:13	30.17	7.53	25.48	282.53	306.19	24.27	95.26%	98.57%	98.99%	97.58%	3	1	5.851	4.322	1.952
23797	Wednesday, March 30, 2011	1:11	27.99	8.14	25.89	259.48	283.79	24.97	96.45%	98.42%	98.23%	96.67%	3	1	5.283	4.254	1.957
23796	Wednesday, March 30, 2011	0:17	31.42	7.70	26.50	235.45	260.45	25.44	96.01%	98.01%	99.14%	97.16%	3	1	5.524	4.27	1.926
23795	Tuesday, March 29, 2011	23:14	26.91	6.66	23.02	214.41	236.23	22.22	96.51%	97.72%	97.76%	95.54%	3	1	5.52	4.353	1.955
23794	Tuesday, March 29, 2011	22:22	29.11	7.18	24.73	191.90	215.04	23.61	95.46%	98.22%	99.03%	97.27%	3	1	5.432	4.628	1.941
23793	Tuesday, March 29, 2011	21:25	26.66	6.52	22.96	171.58	192.69	21.77	94.83%	98.57%	97.32%	95.93%	3	1	5.455	4.255	1.969
23792	Tuesday, March 29, 2011	20:32	26.61	8.20	24.04	149.71	172.04	22.84	95.00%	98.56%	98.19%	96.77%	3	1	5.456	4.592	1.982
23791	Tuesday, March 29, 2011	19:41	28.46	7.51	24.65	127.08	150.01	23.35	94.71%	96.61%	96.37%	93.10%	3	1	5.613	4.34	1.954
23790	Tuesday, March 29, 2011	18:46	31.55	7.32	27.89	101.37	127.43	26.52	95.11%	97.45%	97.21%	94.74%	3	1	5.799	4.67	1.958
23788	Tuesday, March 29, 2011	16:21	30.83	7.03	28.06	45.75	72.00	26.59	94.78%	97.48%	97.77%	95.31%	3	1	5.308	4.193	1.89
23787	Tuesday, March 29, 2011	15:00	24.76	5.27	23.91	23.23	45.92	22.84	95.53%	97.88%	98.18%	96.10%	3	1	4.692	3.551	1.876
23786	Tuesday, March 29, 2011	11:15	27.36	5.64	24.54	0.59	23.37	23.38	95.29%	97.08%	97.11%	94.27%	3	1	5.883	4.358	1.902

PC P64 Sequencer

P64 Pbar Ops Sequencer DB 29-MAR-11 15:10:04 Pgm_Tools

```

SB      SA1002    6.7M Fast Time Plot
SC      SA1136    1.1H Acc Momentum Profile
SD      PA0001    5.2H Null
SE      SA1002    1.1H Fast Time Plot
Nonuser PA1179  6.6D Clock Logger
Load time   : 1.2 Minutes
Up time     : 6.6 Days
Program loads : 954953      Program stages : 0
User aborts  : 334         Program aborts  : 155
Settings     : Enabled indefinitely
Database     : Normal
Application timeout : Never
Fshare writes enabled : TRUE  Remote redirect enabled : FALSE
Checking TLG Status ...
G:TLGSEQ Is Off Or We Are Too Close To End Of SC. Waiting For #00 ...
G:TLGSEQ Is Off Or We Are Too Close To End Of SC. Waiting For #00 ...
G:TLGSEQ Is Off Or We Are Too Close To End Of SC. Waiting For #00 ...
G:TLGSEQ Is Off Or We Are Too Close To End Of SC. Waiting For #00 ...
COM: executing ACL script 'a2r_pb
COM: invoke--> ACL a2r_pbar_xfrs_
COM: completed ok
COM: invoke--> FLY_SPEC MI_WIRES 34

```

Abort

PE S53 DIGITAL STATUS

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S53 DIGITAL STATUS
parm *SA* X-A/D X=TIME Y=I:VP321 ,I:VP521
*save BL-- Eng-U I= 0 I=-4 , -3 , -10 , -10
s_MI AUTO F= 1 F= 6 , 7 , 10 , 10
.global .linac.. .booster ...mi... .tev... .sy... .p-bar... .misc... collider

D:Q926 EQ26-28 500A/100V Quad *See Alarm Log*
*More Info*
CONTROL POWER ON 1
LOCAL/REMOTE CONTROL REMOTE 1
GROUND FAULT NO 1
EXTERNAL REFERENCE PRESENT 1
DOOR INTERLOCKS OK 1
SCR TEMPERATURE NORMAL 1
TRANSF. TEMPERATURE NORMAL 1
P.S. WATER TEMPERATURE NORMAL 1
PHASE UNBALANCE OK 0
DC OVER CURRENT TRIP 1
SAFETY SYSTEM INTERLOCK OK 1
MAGNET TEMPERATURE NORMAL 1
15V P.S. NORMAL OK 1
EXTERNAL INTERLOCKS OK 1
INTERLOCKS COMPLETE OPEN 0
DC ON/OFF OFF 0
  
```

Pgm_Tools AGG CONTRL
*RESET
*ON
*OFF

Ctrl-Menu
0 *On
0 *Off < *
0 *Reset< T
0
0 Local
0 Alarm is
0 **ALARMING**
0 Speech is
0 BYPASSED
0 Edit

Messages

