2011-09-27 Tuesday Morning Notes

Tuesday, September 27, 2011
8:02 AM

Operational Notes

- D:QS719 is slowly failing. Setting is 21A, and the output saturates at -19A.
- DRF1-6 started acting up. Pat Sheahan decreased plate and driver HV for a total cavity output reduction of 40KV.
- Pbar 95 LCW leak (mostly EQ23) is now 145gal/day. We will run this way until we turn off.

It's the end of the run as we know it….

- Friday, September 30 will be the last day of Collder Run II stacking operations.
    - We will turn off early morning
    - ESH makes rings supervised access
    - 1300-1340 Tunnel Tour for press
    - 1400-1500 Ceremony
    - 1500-1700 Celebration
- Resume stacking
    - Stack to 100mA over the weekend and do Antihydrogen
    - When Tev warm up, can't stack anymore
    - Coasting Pbars for studies during the week
    - Final Pbars Ceremony.
- October
    - Reverse Proton Studies.

Collider Run II ends Friday. With it the Tevatron is retired, and the Antirproton source is no more.

- "It's the End of the Tev as we know it" (REM)
    - "But I (don't) feel fine…."
- "Tevatron Pie" (Don McLean)
    - "Inject the protons and the pbars and we make them collide. …this will be the day that Tev dies...this will be the day that Tev dies..."
- "Don't shut me down" (ELO)
    - And I'll tell you once more before we punch out the store, don't shut me down…
    - don't shut me downnnnn….bbbbbrrrrruuuuceeee…(hanna)...don't shut me downnnnn….bbbbbrrrrruuuuceeee…(hanna)

Numbers

- Stacking
    - Pbars stacked: 538.95 E10
    - Time stacking: 23.78 Hr
    - Average stacking rate: 22.66 E10/Hr

- Uptime
    - Number of pulses while in stacking mode: 38010
    - Number of pulses with beam: 33598
    - Fraction of up pulses was: 88.39%

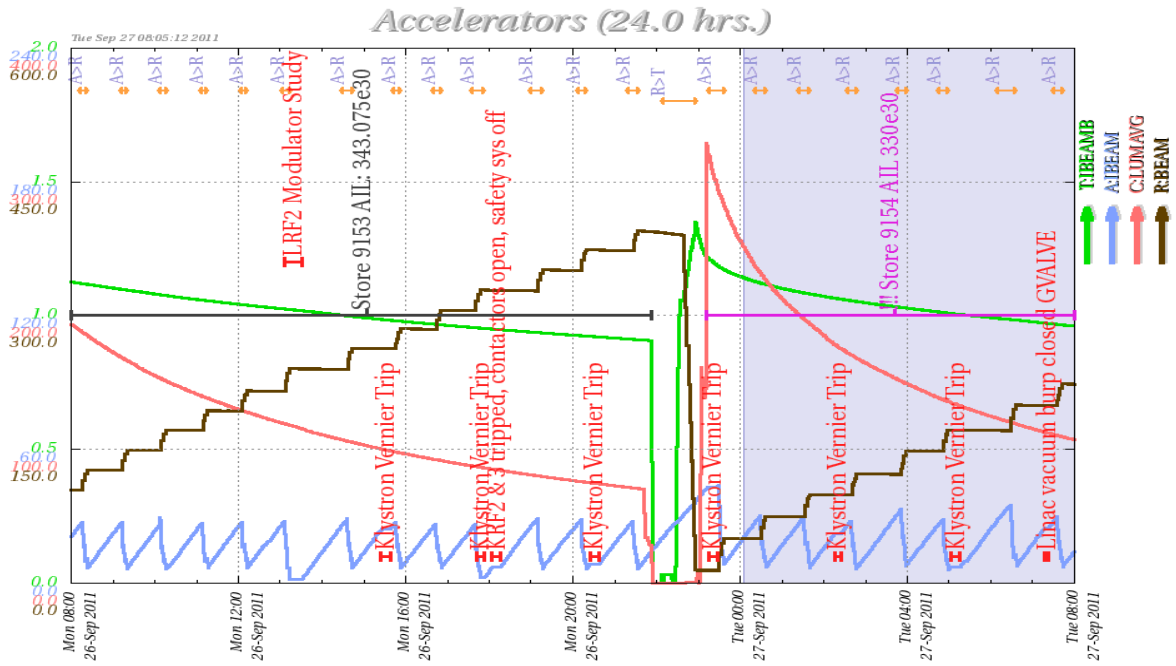
- The uptime's effect on the stacking numbers
    - Corrected time stacking: 21.02 Hr
    - Possible average stacking rate: 25.64 E10/Hr

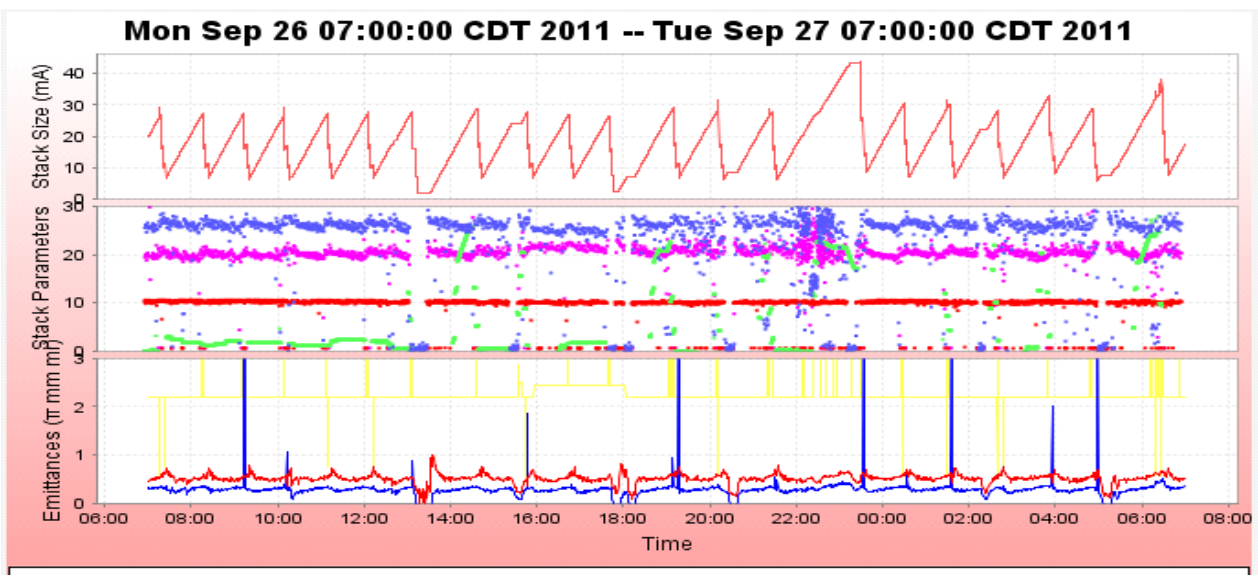
- Could have stacked: 609.73 E10/Hr

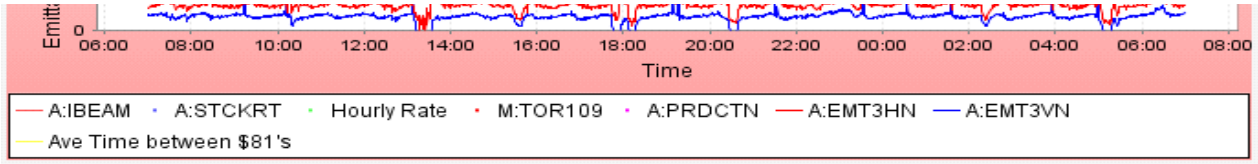
- Recycler Transfers
  - Pbars sent to the Recycler: 529.22 E10
  - Number of transfers : 62
  - Number of transfer sets: 21
  - Average Number of transfer per set: 2.95
  - Time taken to shoot including reverse proton tuneup: 00.22 Hr
  - Transfer efficiency: 95.38%

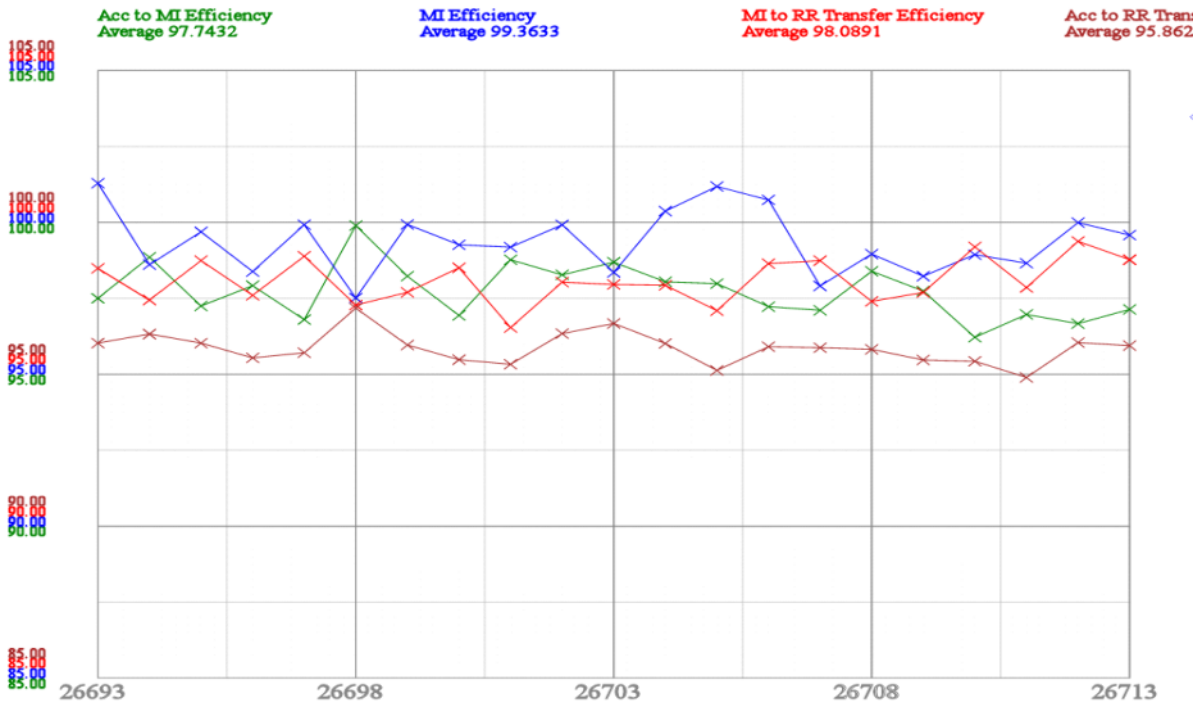
- Other Info
  - Average POT : 7.96 E12
  - Average production: 20.16 pbars/E6 protons

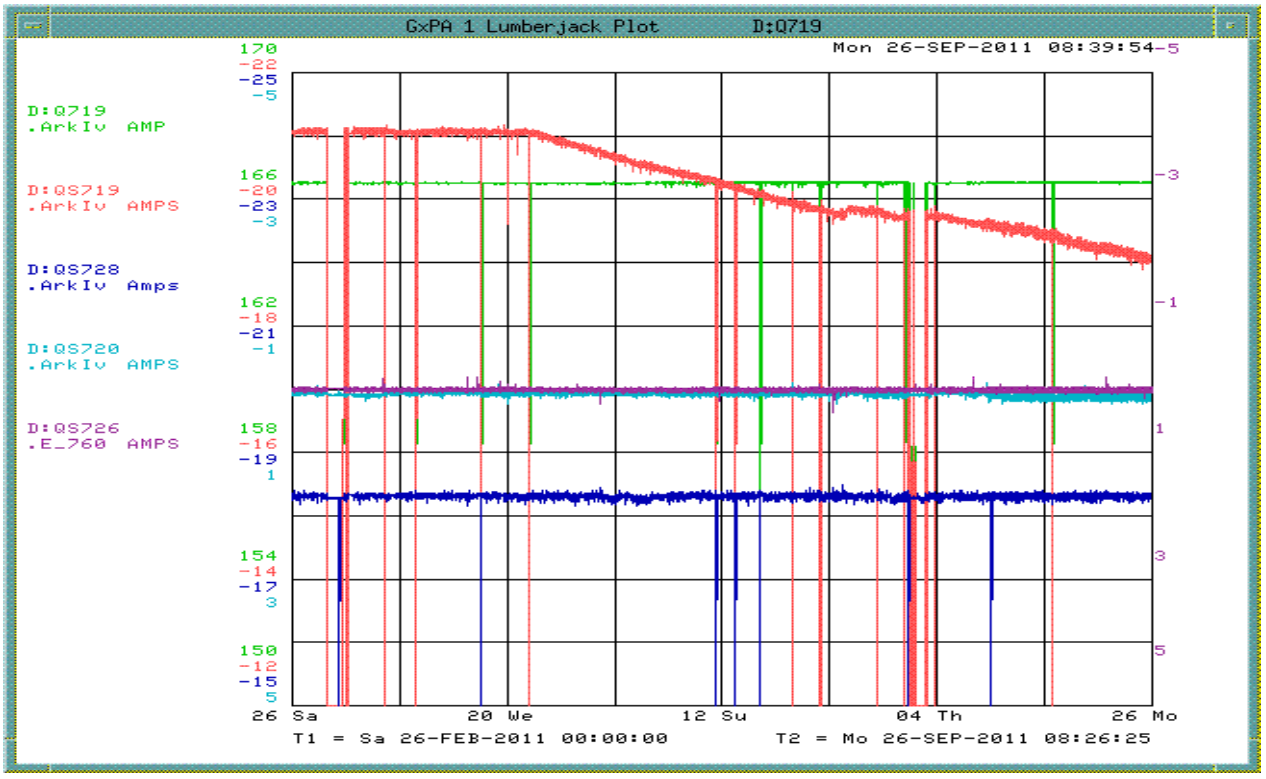
Plots



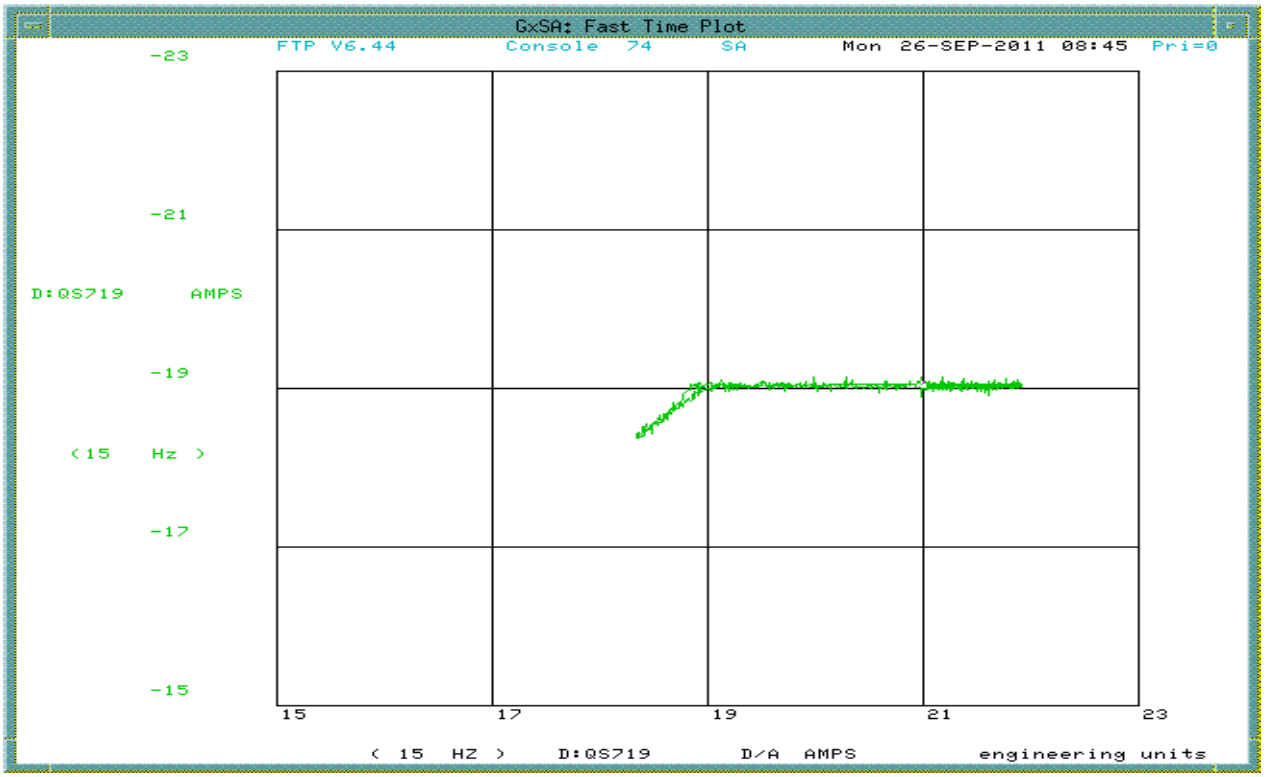




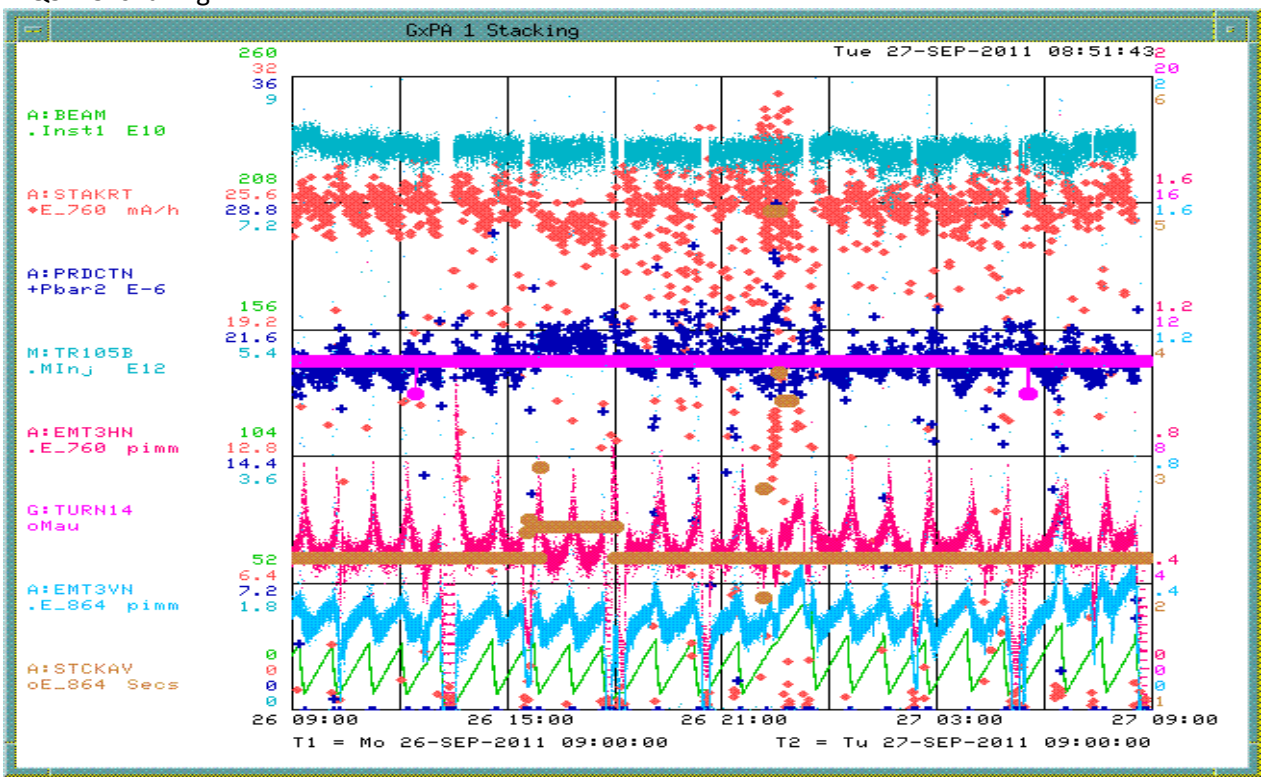


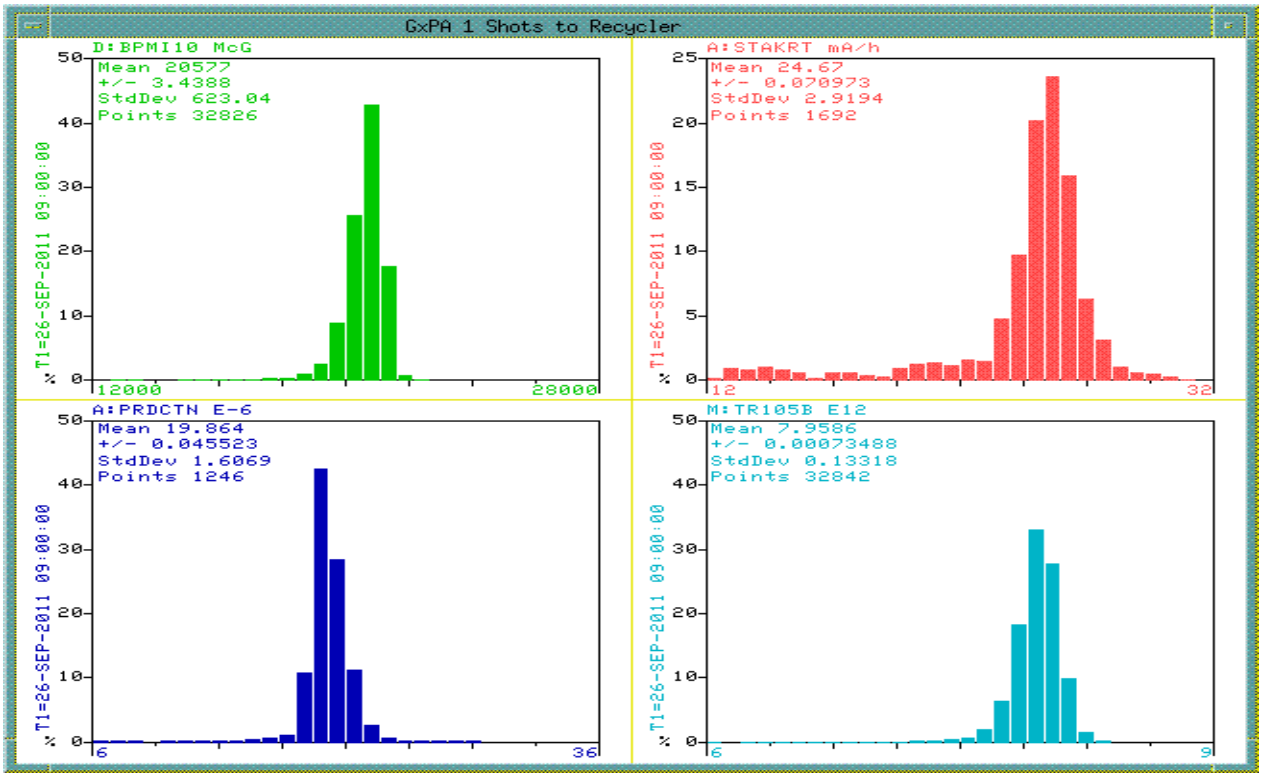


D:QS719 is failing



D:QS719 is failing.




GxPA 1 Shots to Recycler
D:BPMI10 McG
Mean 20577
+/- 3.4388
StdDev 623.04
Points 32826
T1=26-SEP-2011 09:00:00
12000
28000
A:STAKRT mA/h
Mean 24.67
+/- 0.070973
StdDev 2.9194
Points 1692
T1=26-SEP-2011 09:00:00
12
32
A:PRDCTN E-6
Mean 19.864
+/- 0.045523
StdDev 1.6069
Points 1246
T1=26-SEP-2011 09:00:00
6
36
M:TR105B E12
Mean 7.9586
+/- 0.00073488
StdDev 0.13318
Points 32842
T1=26-SEP-2011 09:00:00
6
9