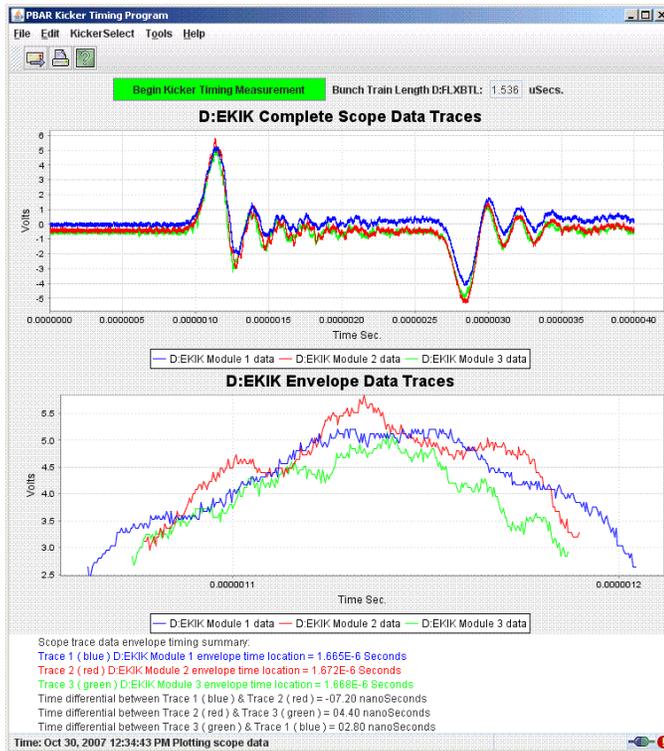


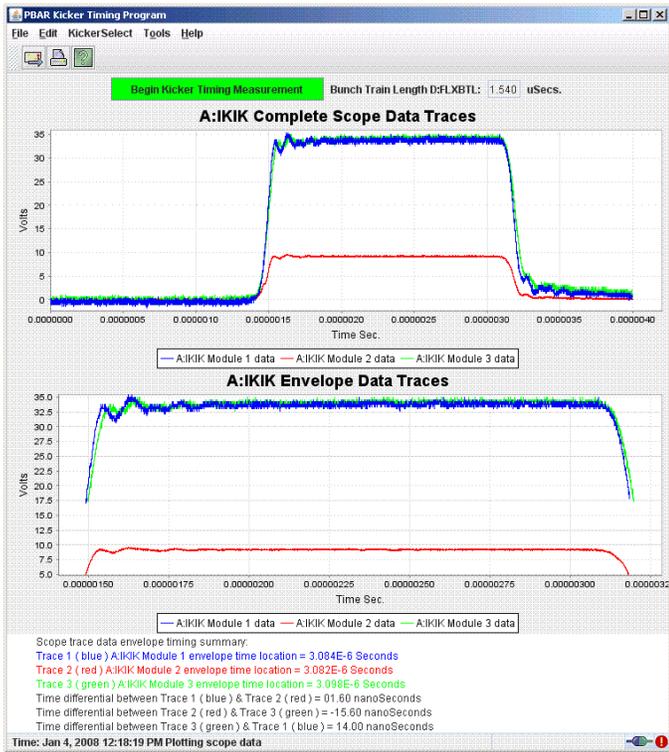
## D/A Kicker Timing:

- Prerequisites:
  - We must have very stable beam.
  - If beam goes away during the process, start over.
  - Turn off the stacktail monitor, since it will change stacktail power. Or you can watch the stacktail power on P34 and make sure to make your knob plots between changes.
- Start by running the Pbar Kickers Java application from <http://www-bd.fnal.gov/appix/start?p=40000142&n=35000508>.
- Make sure to have P60 D2A <3> up somewhere so that you can restore the kicker timers if the Java app sends bad values. You may also have to manually align one or more of the traces if you disagree with the Java app.
- Start by correcting the Debuncher Extraction Kicker.



Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar07&action=view&page=-4261&button=yes>>

- Next, correct the Accumulator Injection Kicker timing.



Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=-70&button=yes>>

```

Linux PA P60 POWER SUPPLY PARAM
P60 D/A KICKER TIMING SET D/A A/D Com-U ♦PTools♦
-<FTP>+ *SA+ X-A/D X=A:IKIKM1 Y=A:SPTW05,A:SPTW09,A:IBMINJ,
COMMAND ...X Eng-U I= 270.681 I= 0 0 0 -10
-< 3>+ One+ AUTO F= 271.681 F= 40 40 20 10
acc10 acc30 acc50 deb10 deb30 deb50 protn inj DTOA ext bostr
!D:EXTRAC SHOULD BE ON INPUT A FOR STACKING
-D:R2LLAM DRF2 LLRF AMPLITUDE 6 6.04 VOLT .
D:EXTRAC D TO A TRANSFER CONTROL AH
D:R2HLSC DRF2 Hi Lvl Stat/Cntrl .

MULT :6
-D:EKIKM1*.5 DEB EXT KI 271.795 271.786 271.786 USEC ..
-D:EKIKM2*.5 DEB EXT KI 271.849 271.792 271.792 USEC ..
-D:EKIKM3*.5 DEB EXT KICKER MAIN C 271.965 271.965 USEC ..
-A:IKIKM1*.5 ACC IN KIC 271.181 271.149 271.149 USEC ..
-A:IKIKM2*.5 ACC IN KIC 271.203 271.171 271.171 USEC ..
-A:IKIKM3*.5 ACC IN KIC 271 270.968 270.968 USEC ..

-A:IBMINJ Stail mon inject be 6.478 6.806 6.806 e07

MULT :3 A:IKIK TIMING
-A:IKIKM1*.5 ACC IN KIC 271.181 271.149 271.149 USEC ..
-A:IKIKM2*.5 ACC IN KIC 271.203 271.171 271.171 USEC ..
-A:IKIKM3*.5 ACC IN KIC 271 270.968 270.968 USEC ..

-D:ESEPC DEB EXT SEPT CHARGE T .2 .2 SECS ...-
D:R2HLFB DRF2 Fanback Voltage 230.7 Volt
D:R2HLSC DRF2 Hi Lvl Stat/Cntrl .

MULT :3 D:EKIK TIMING
-D:EKIKM1*.1 DEB EXT KI 271.795 271.786 271.786 USEC ..
-D:EKIKM2*.1 DEB EXT KI 271.849 271.792 271.792 USEC ..
-D:EKIKM3*.1 DEB EXT KICKER MAIN C 271.965 271.965 USEC ..

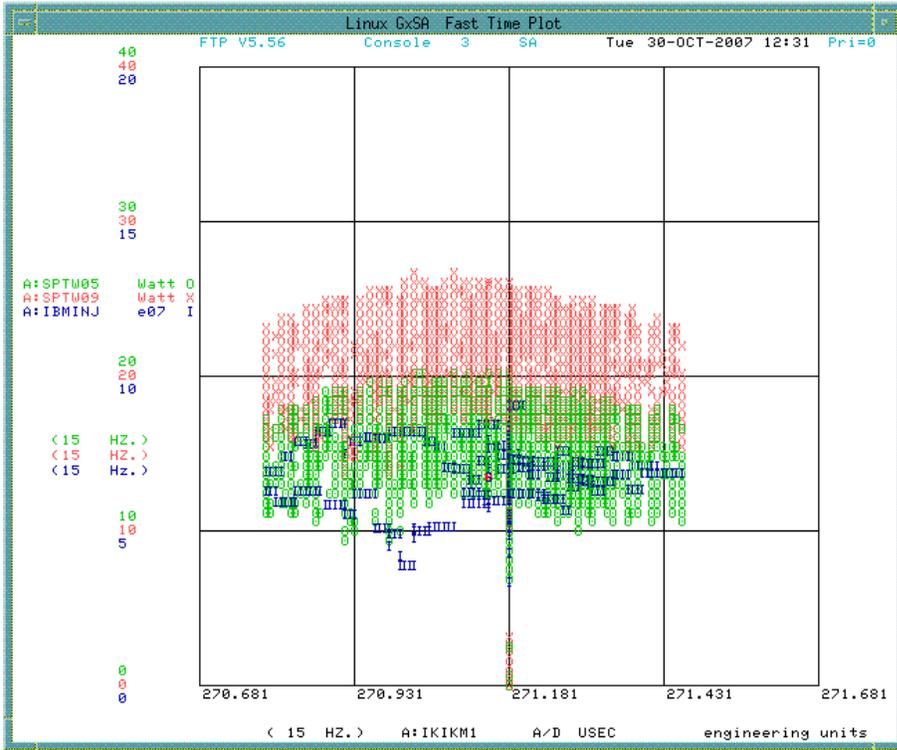
-D:SA13T Trigger for D:SB13SA 1.7 1.7 secs ..
A:STCKRT Pbar Stacking Rate 12.58 mA/h
A:PRDCTN PBARS PER P @ TOR109 16.55 E-6
Z:PRDTMP PBARS PER P @ TOR109 16.65 E-6

-D:EKIKEC DEB-EKIK error count 808585464 808585464 cnt
-A:IKIKEC ACC-IKIK e 814304785 814306861 814306865 cnt

```

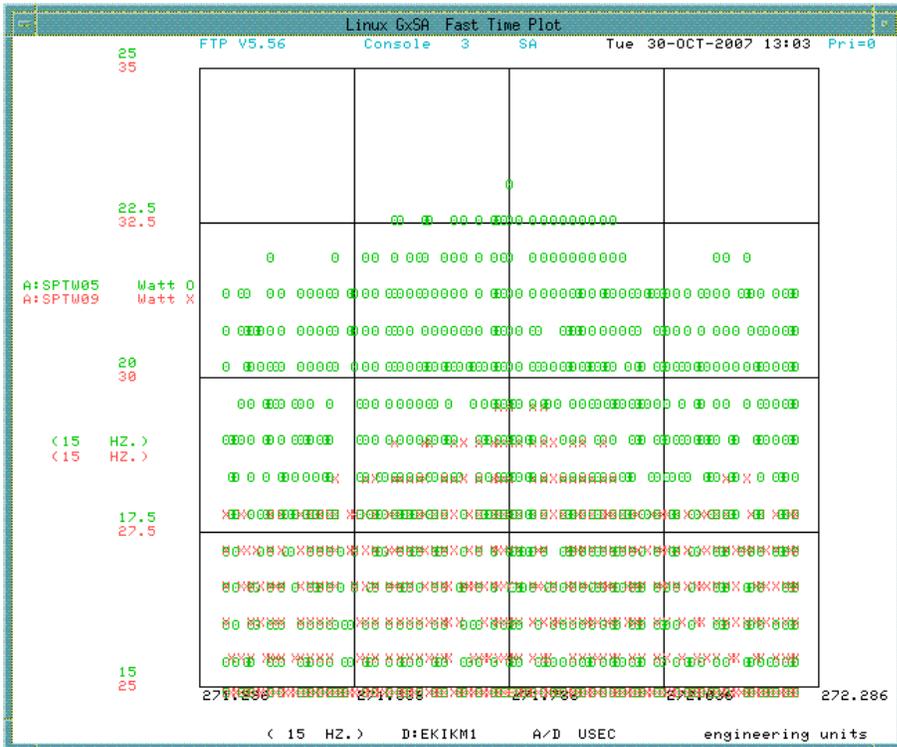
Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar07&action=view&page=-4264&button=yes&invert=yes>>

- Next, we align A:IKIK to D:EKIK, by doing the A:IKIK timing MULT:3. The distribution should look like below. Leave the mult at the peak of stacktail power. Beam must be stable. Start over if the plot does not look symmetrical.

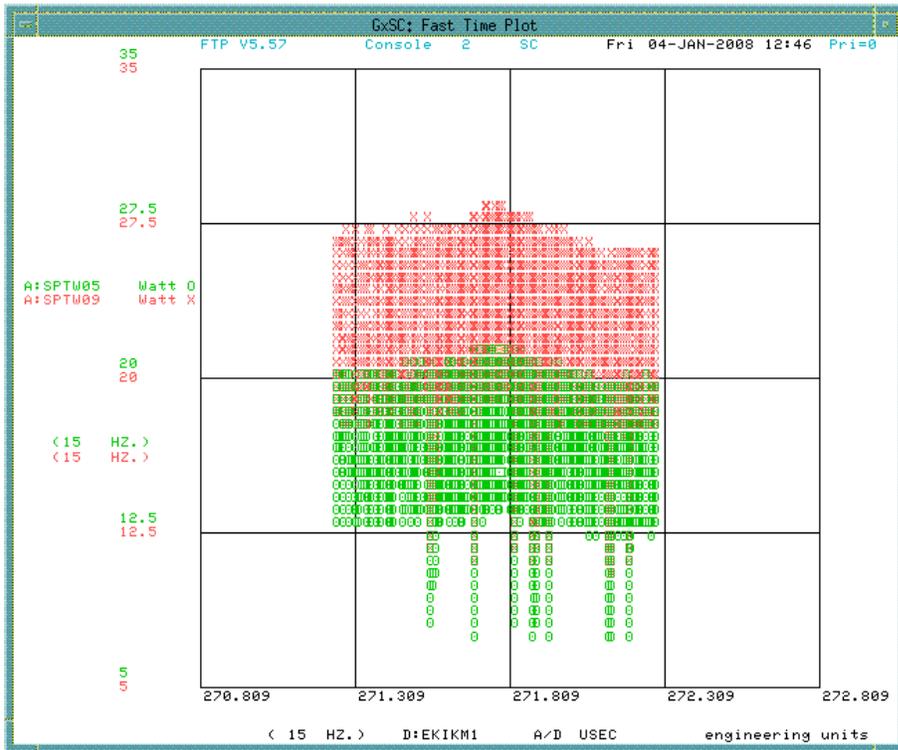


Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar07&action=view&page=-4263&button=yes&invert=yes>>

- Next, we align the kickers with the DRF2 gap by using the Kicker MULT:6. This plot should be flat across the aperture. At the location of the gap, is another flat region with only marginally more beam. Leave the mult at the center of the gap.



Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar07&action=view&page=-4268&button=yes&invert=yes>>



Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=-73&button=yes&invert=yes>>