Subject: Re: FRS - TPC Calibrations
Posted by mlcortes on Wed, 16 Jul 2014 11:06:38 GMT
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Hi Scott,

I checked the 4 files and I see the masks for all of them.
Here is the assignment I am using for the TPC signals (this should be in the file Frs/tracking.config):

```
 ##############################################################################
# TPC S21
 ##############################################################################
processor Frs/TpcS21 FRS.StandardTpc
 times[0:7]        <-  FrsTpcCrate.tdc0[16:23]
 amplitudes[0:7]    <-  FrsTpcCrate.adc0[16:23]
 fiber             <-  FrsTpcCrate.tdc1[23]
 display    x:y       in TPCs/TpcS21
 display    x                       in TPCs/TpcS21
 display    y                       in TPCs/TpcS21
 display    x_fiber:y_fiber              in TPCs/TpcS21
 display    checksums | gate_checksums     in TPCs/TpcS21/checksums
end
 ##############################################################################
# TPC S22
 ##############################################################################
processor Frs/TpcS22 FRS.StandardTpc
 times[0:7]        <-  FrsTpcCrate.tdc0[24:31]
 amplitudes[0:7]    <-  FrsTpcCrate.adc0[24:31]
 fiber             <-  FrsTpcCrate.tdc1[23]
 display    x:y      in TPCs/TpcS22
 display    y                       in TPCs/TpcS22
 display    x                       in TPCs/TpcS22
 display    x_fiber:y_fiber              in TPCs/TpcS22
 display    checksums | gate_checksums     in TPCs/TpcS22/checksums
end

 ##############################################################################
# TPC S41
 ##############################################################################
processor Frs/TpcS41 FRS.StandardTpc
 times[0:7]        <-  FrsTpcCrate.tdc1[0:7]
 amplitudes[0:7]    <-  FrsTpcCrate.adc1[0:7]
 fiber             <-  FrsTpcCrate.tdc1[25]
 display    x:y     1000,-50,50:800,-50,50  in TPCs/TpcS41
 display    y                        in TPCs/TpcS41
 display    x                       in TPCs/TpcS41
 display    x_fiber:y_fiber              in TPCs/TpcS41
 display    checksums | gate_checksums      in TPCs/TpcS41/checksums
end
 ##############################################################################
```

```
# TPC S42
 ##############################################################################
processor Frs/TpcS42 FRS.StandardTpc
 times[0:7]         <-  FrsTpcCrate.tdc1[8:15]
 amplitudes[0:7]    <-  FrsTpcCrate.adc1[8:15]
 fiber              <-  FrsTpcCrate.tdc1[26]
 display     x:y     1000,-200,200:1000,-200,200  in TPCs/TpcS42
 display     y                           in TPCs/TpcS42
 display     x         in TPCs/TpcS42
 display     x_fiber:y_fiber               in TPCs/TpcS42
 display     checksums | gate_checksums      in TPCs/TpcS42/checksums
end
```

Then I look at the x:y histogram and I see the fibers. It may be good to leave smart histograms to start. If there is no good calibration you can be out of range and see nothing.
Is also to note that the input "fiber" in each processor is not really relevant as coincidences were made before passing the signals to the electronics (This may not be the case for all the experiments).
Also notice that at some point there was a problem with a TPC and not all the signals were used for the analysis. I think there is an elog entry about it. If i find it I let you know.
About the size of the grid, usually is the 12 x 6mm, nevertheless the logbook should say which fiber was used. Do you have a scan of the logbook?

Cheers,