Subject: Re: FRS - TPC Calibrations
Posted by thuyuk on Wed, 03 Jun 2015 10:24:24 GMT
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Dear TPC and FRS experts,

My problem with the calibration of the TPCs is somehow complicated, since the time window to acquire the y-axis information was not properly set during the experiment (this was noted after the beam-time). Therefore, I seem to have very limited region of the TPCs in S4 in the vertical axis, meanwhile I have no problem with the horizontal axis. Please check out the following plot for better understanding:

In this image, it is seen that the x-axis distribution is more or less fine, but the y-axis has some kind of limited region drawn. This plot has been created using one of the runs where the primary beam is used and focused in S4. Therefore we expect to have the statistics should accumulate around (0,0) point. But, I have no idea whether the beam should form a circular shape in this case, or it should be dispersed along the horizontal axis.

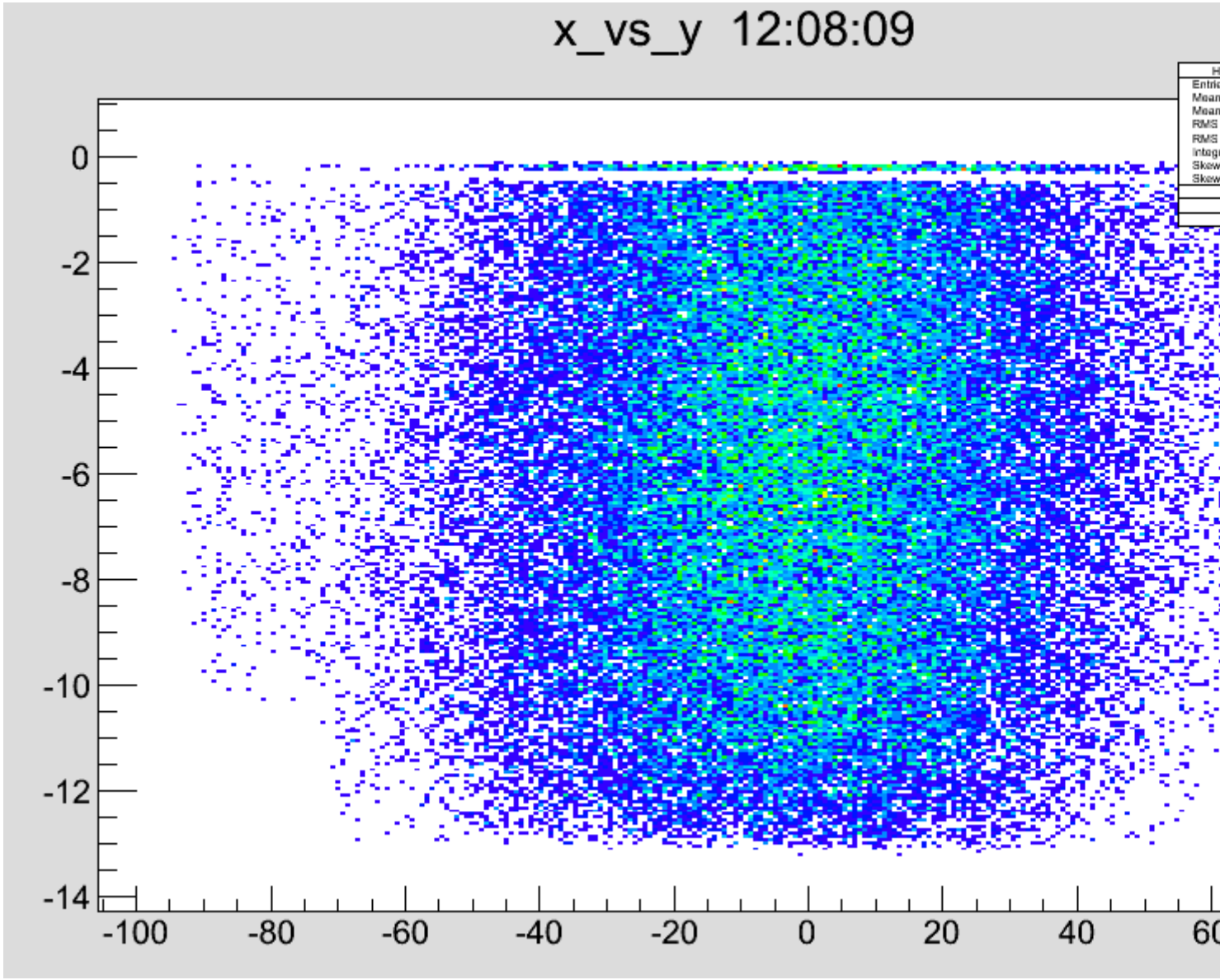
Anyone who is expert on FRS could tell me, by heart, that what should one expect for the beam cross section shape?

I'm hopeless, because the calibration coefficients determined using the calibration runs with the fiber mask do not work. I have to make the best guess and try to get some information from the TPCs, otherwise the Doppler correction in my experiment fails, and I will never get a proper gamma spectrum.

Thank you and best regards,
tayfun

File Attachments

1) Screenshot from 2015-06-03 12:08:35.png, downloaded 1501 times


x_vs_y 12:08:09
0
-2
-4
-6
-8
-10
-12
-14
-100
-80
-60
-40
-20
0
20
40
60