
Subject: Re: forward endcap quest goes on
Posted by [Aleksandra Biegun](#) on Thu, 02 Jul 2009 13:57:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Irina, hi All,

the problem Irina has had with the forward endcap with GEANT 4 is fixed now. Somehow, the single Reflection() I have made for Quarter number 2 and 4 caused the problem with the Z shift.

So, I have changed the macro which creates the geometry of the forward endcap (FwEndCap) and now it is called: createRootGeoFileFwEnd_fixed.C. It does not have Reftlection() function. It is committed to svn to: `../trunk/macros/emc/` and creates the root file with the same name like was before, i.e. `emc_module3new.root` (also committed to svn), so you don't need to do any changes, just do svn update.

I also had to change a little bit `../trunk/emc/EmcTools/PndEmcStructure.cxx`.

I put the same plots made twice: for GEANT 4 and, to compare, for GEANT 3.

At the plots:
`z_ene_hits_digi_clusters_g[GEANT]_fwendcap_m3changed_fixed.png`

you can see that Z-position for all 4 Quarters of the FwEndCap is in the same Z for GEANT 4. For GEANT 3 it was fine before.

The mapping is also fine, should be the straight line in each Quarter (each copy), what you can see at plots:
`xpad_x_points_m3_g4_fixed.png` - for X direction
`ypad_y_points_m3_g4_fixed.png` - for Y direction

Quarters of the FwEndCap are placed in the clockwise direction looking downstream.

Different parameters for Points, also Z-position of all 4 Qarters, are shown at plots:

`points_g4_fwendcap_m3changed_fixed.png` - for GEANT 4
`points_g3_fwendcap_m3changed_fixed.png` - for GEANT 3.

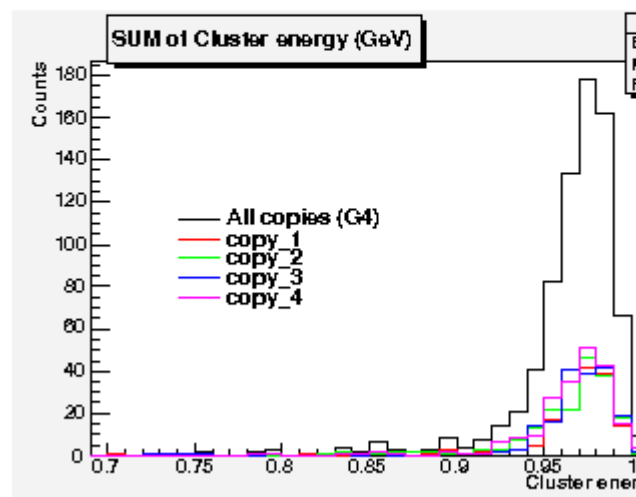
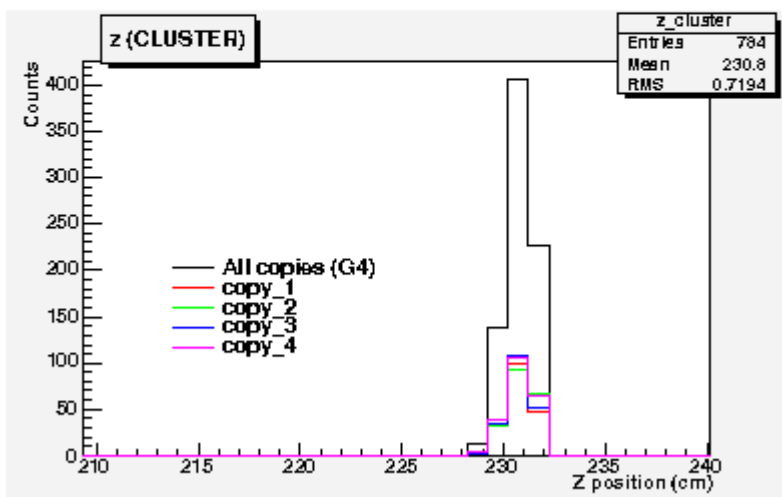
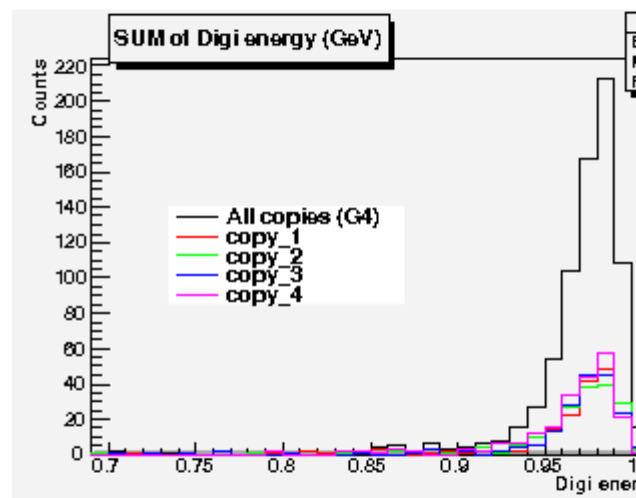
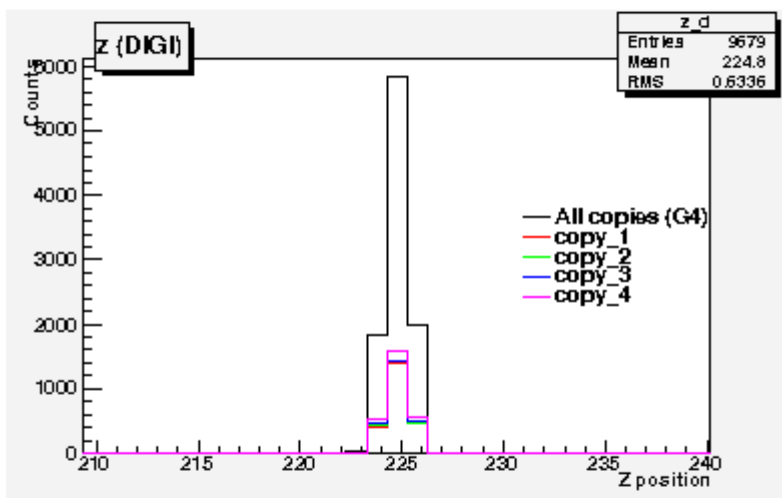
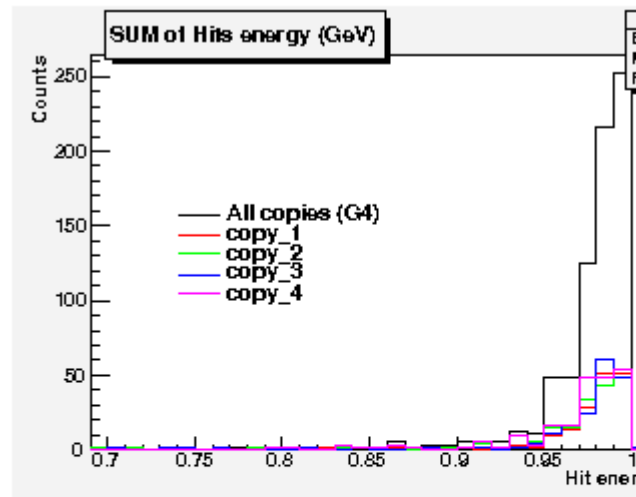
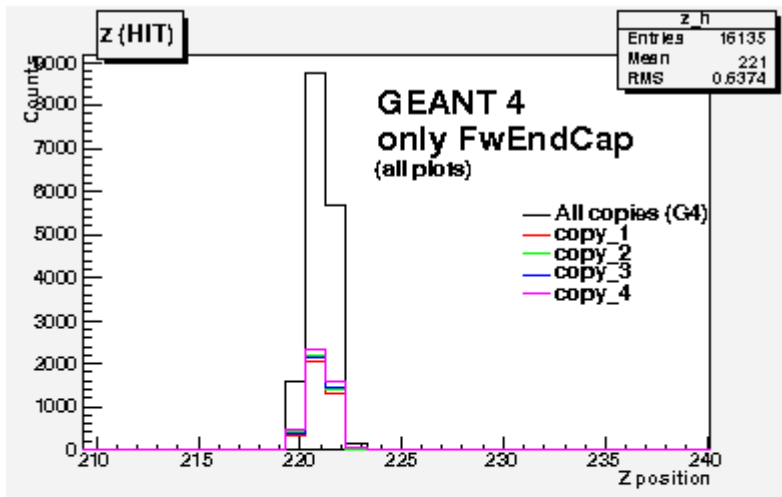
Irina, please check it. I do hope there will not be any problem, but in case of any, let me know.

If you have any question, do not hesitate to ask.

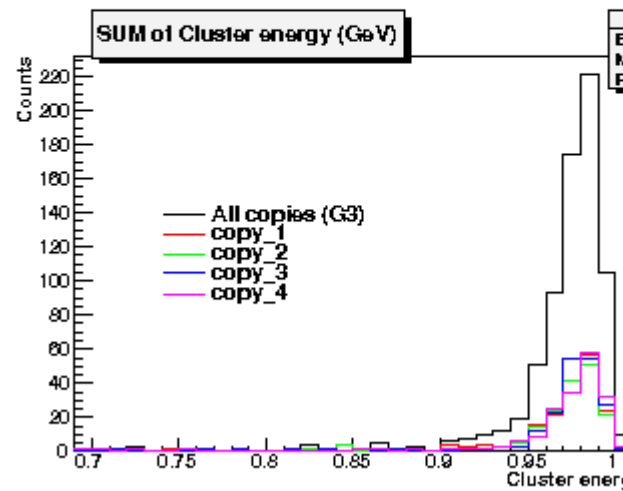
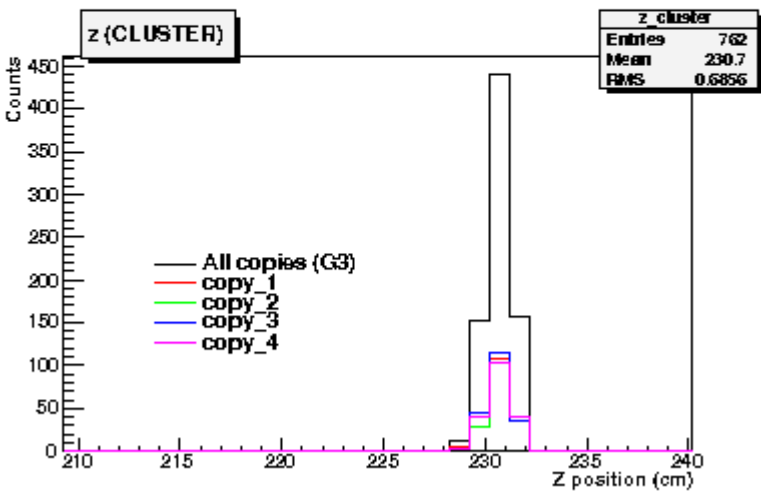
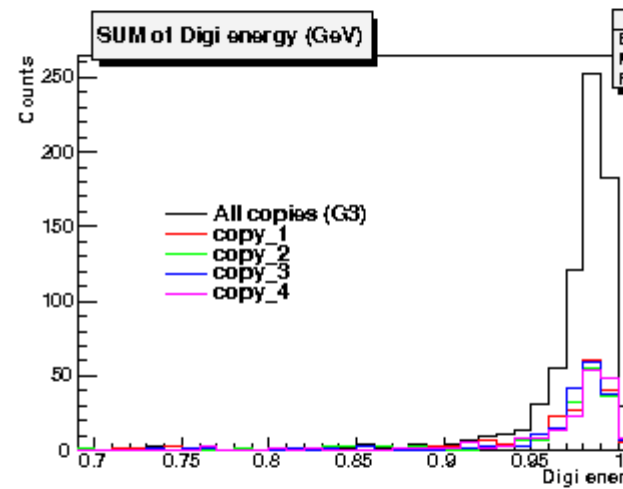
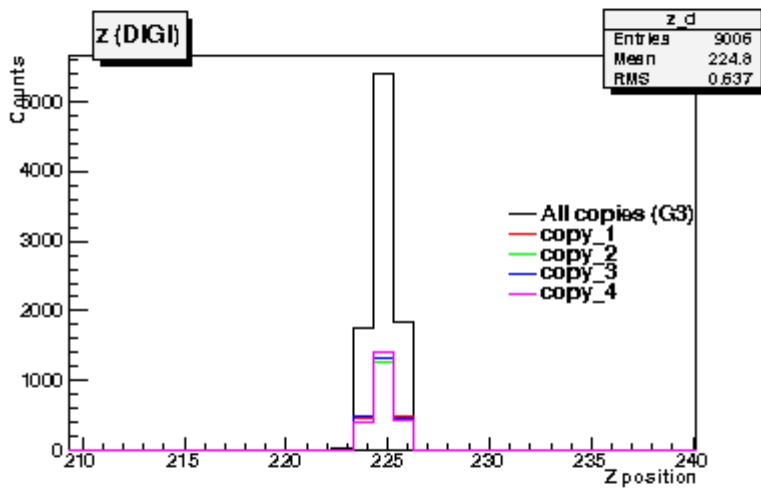
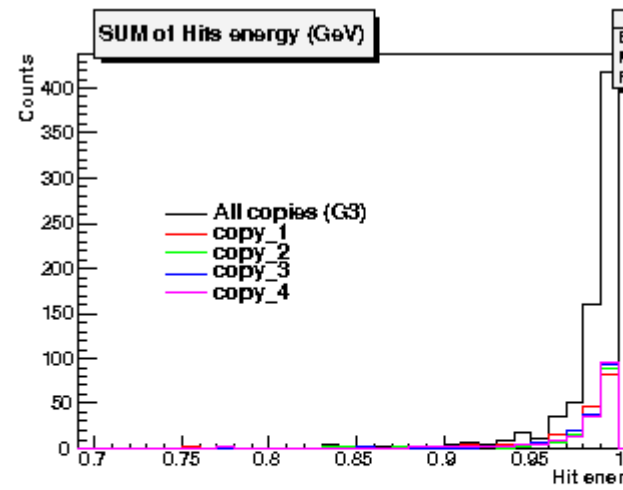
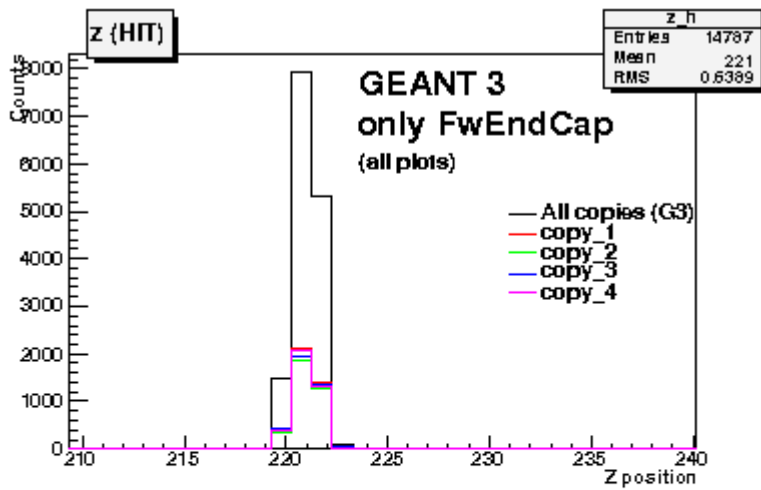
Best regards,
Ola.

File Attachments

1) [z_ene_hits_digi_clusters_g4_fwendcap_m3changed_fixed.png](#),
downloaded 363 times

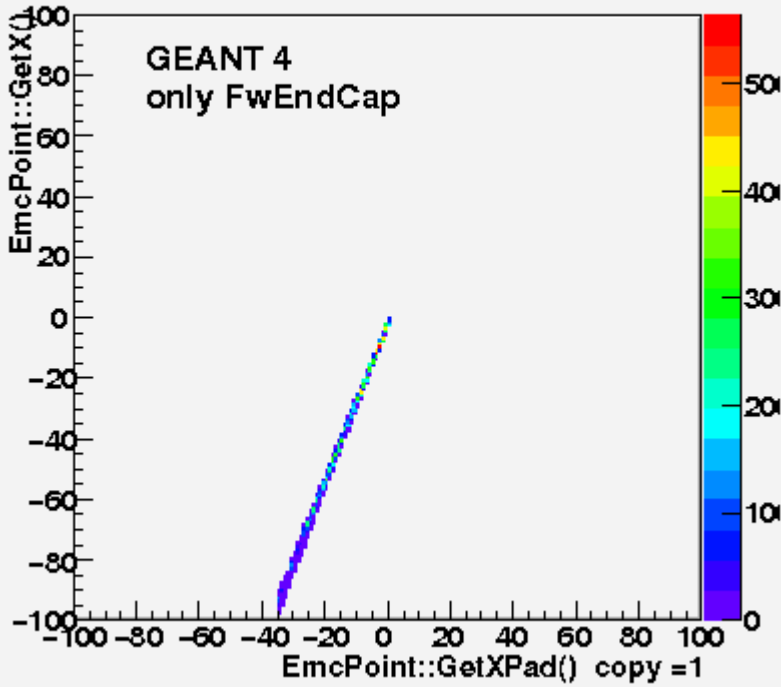


2) [z_ene_hits_digi_clusters_g3_fwendcap_m3changed_fixed.png](#), downloaded 359 times

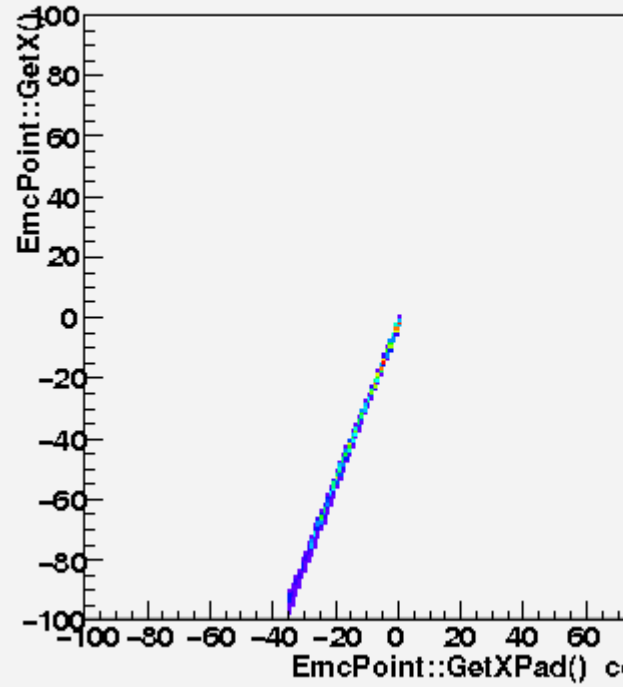


3) [xpad_x_points_m3_g4_fixed.png](#), downloaded 340 times

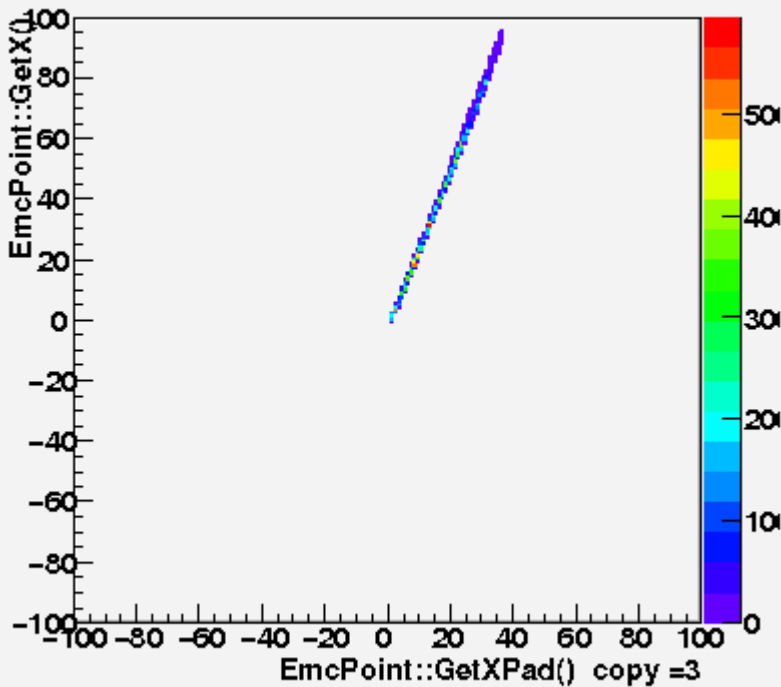
x vs xpad_cp1_ (POINT)



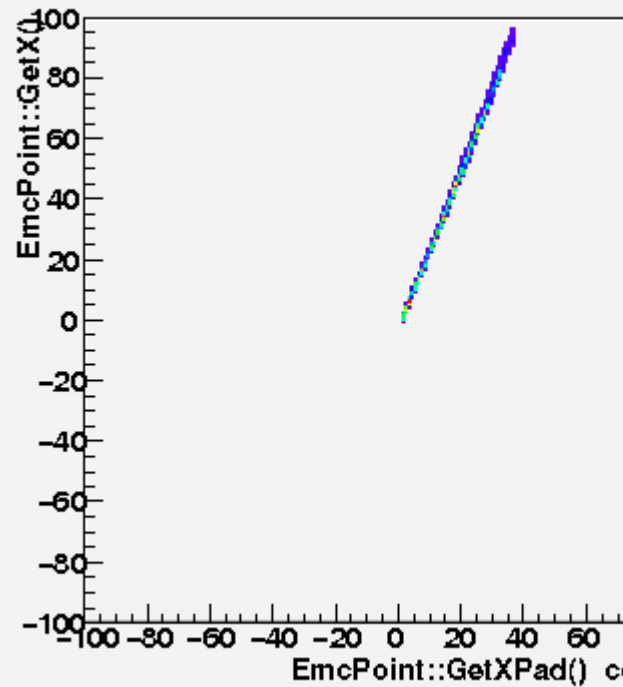
x vs xpad_cp2_ (POINT)



x vs xpad_cp3_ (POINT)

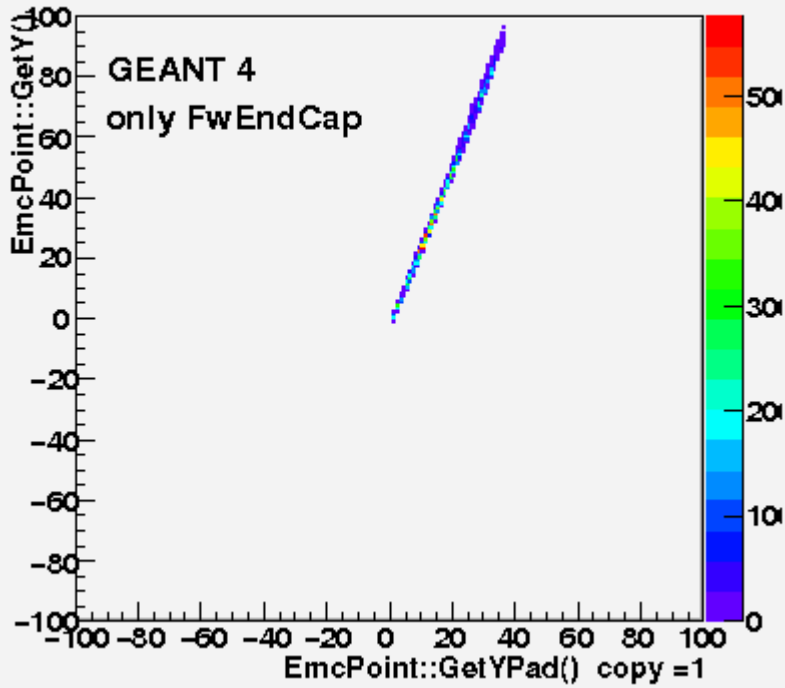


x vs xpad_cp4_ (POINT)

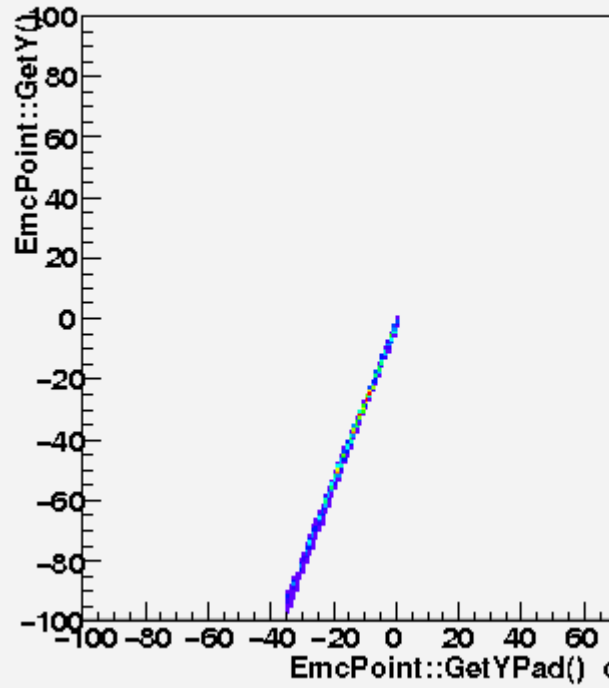


4) [ypad_y_points_m3_g4_fixed.png](#), downloaded 332 times

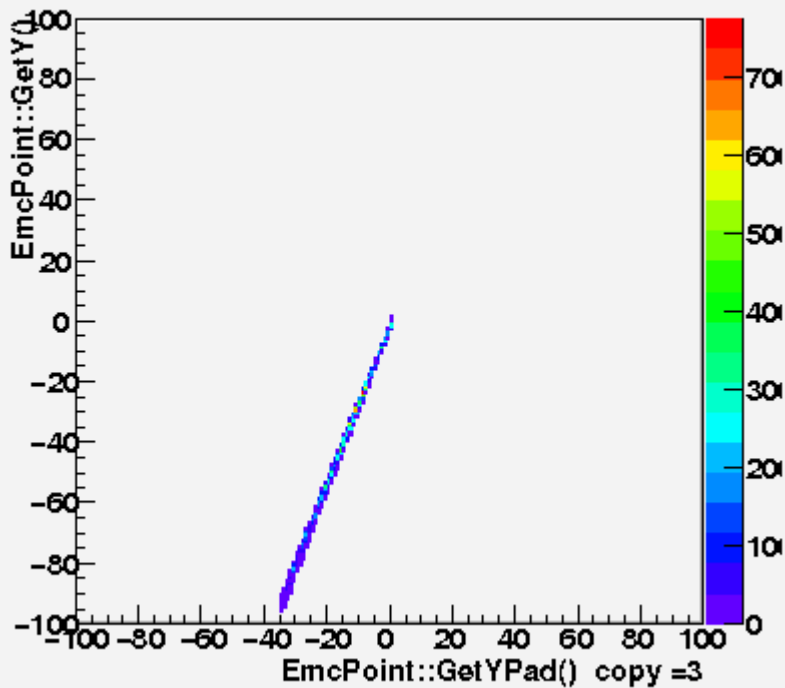
y vs ypad_cp1_ (POINT)



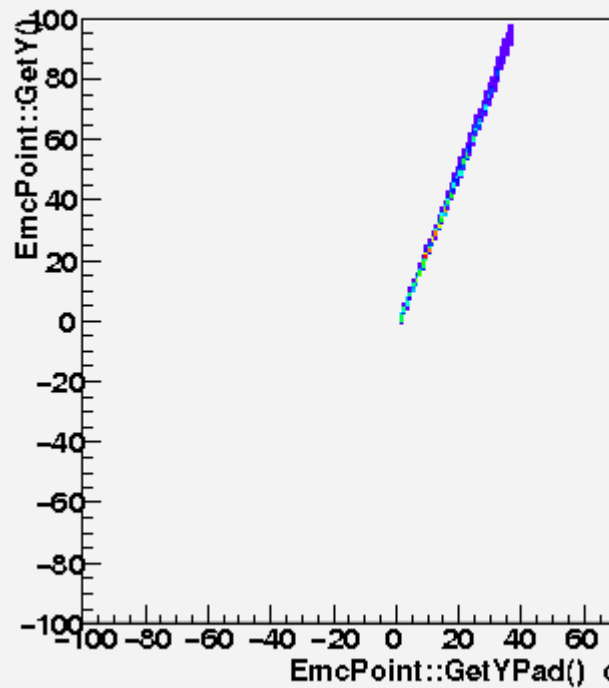
y vs ypad_cp2_ (POINT)



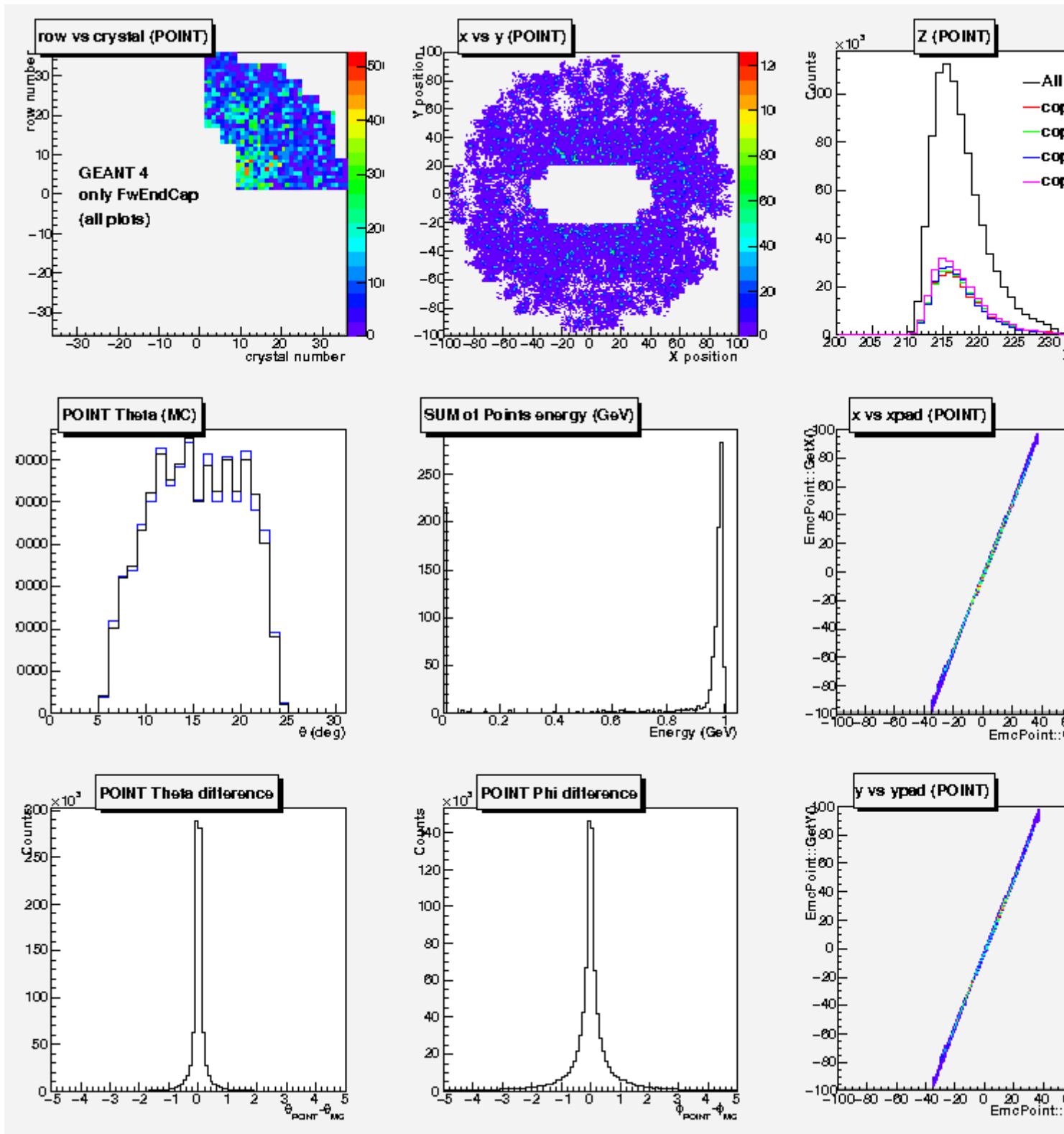
y vs ypad_cp3_ (POINT)



y vs ypad_cp4_ (POINT)



5) [points_g4_fwendcap_m3changed_fixed.png](#), downloaded 340 times



6) [points_g3_fwendcap_m3changed_fixed.png](#), downloaded 335 times

