

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 Reflection() 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 Quarters, 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.

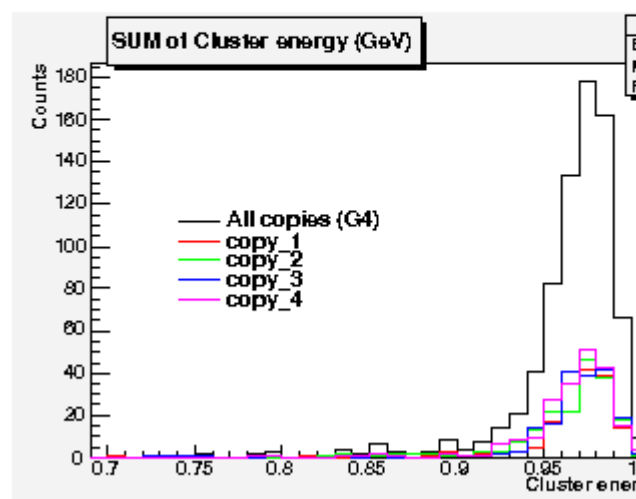
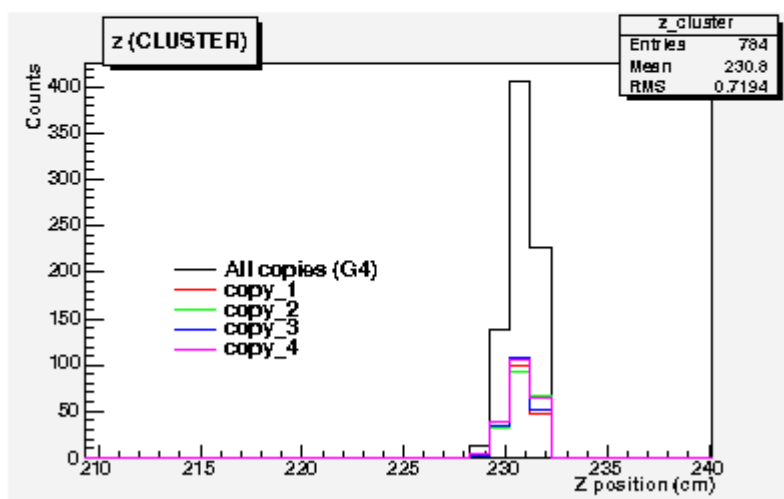
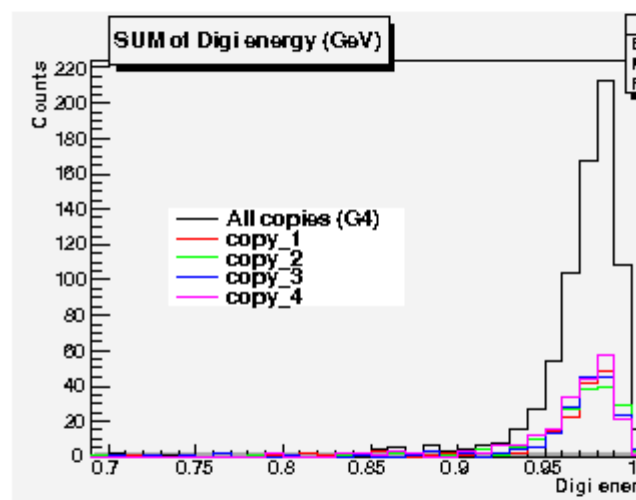
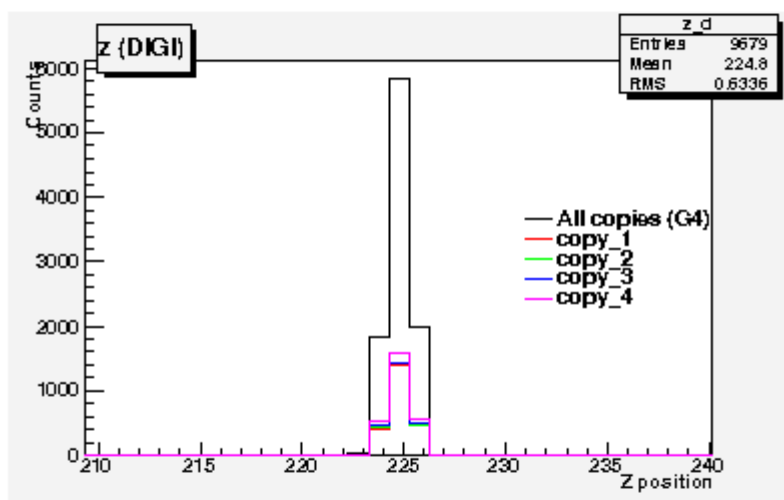
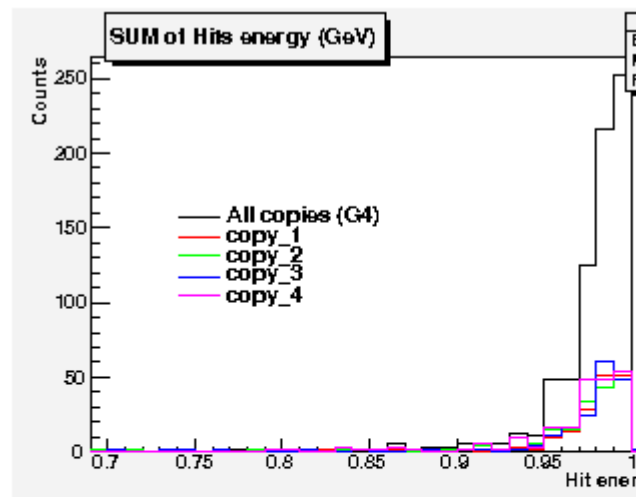
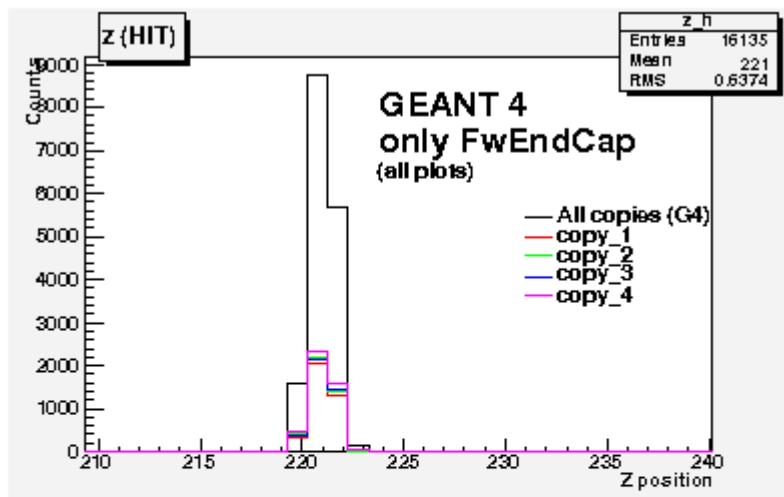
If you have any question, do not hesitate to ask.

Best regards,  
Ola.

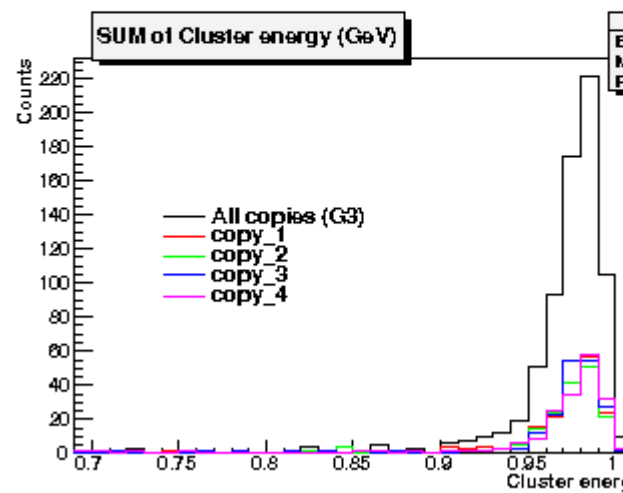
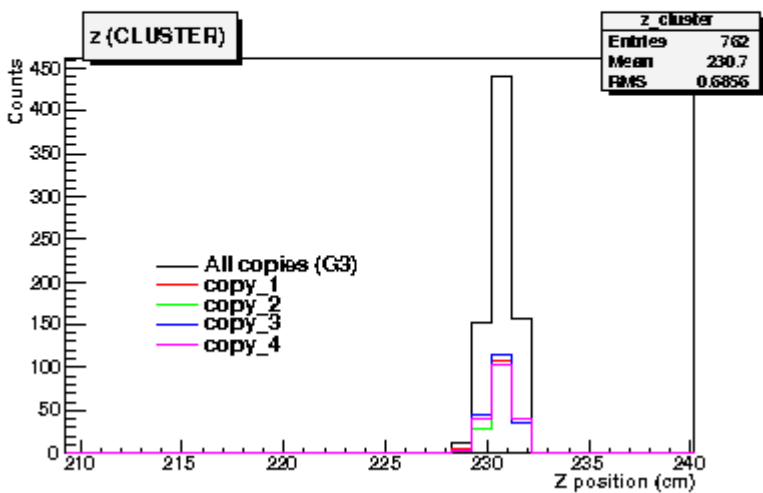
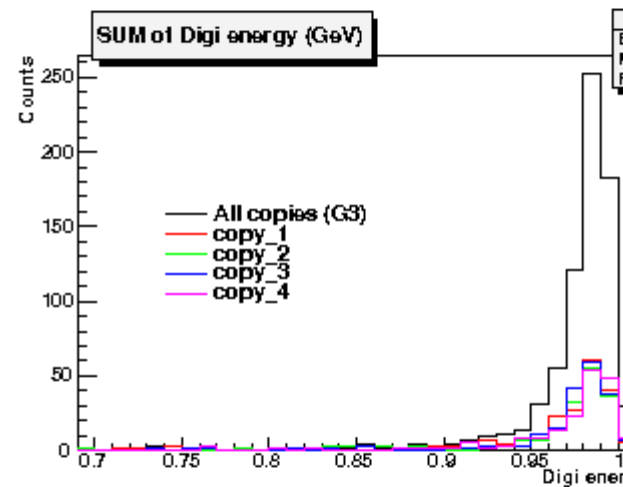
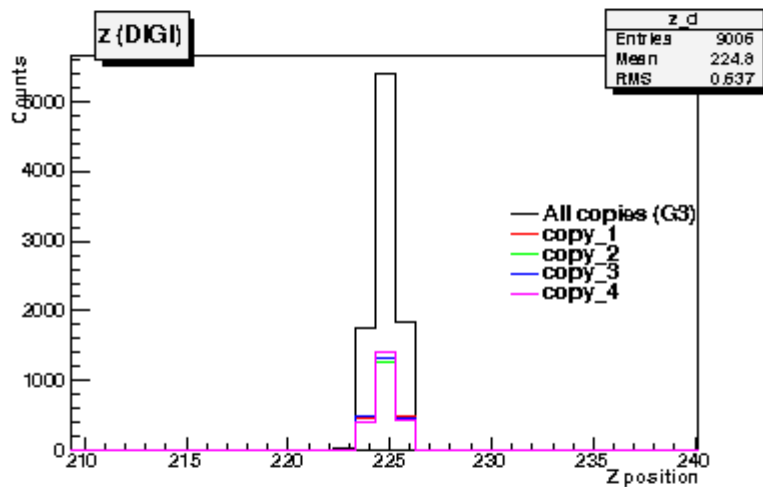
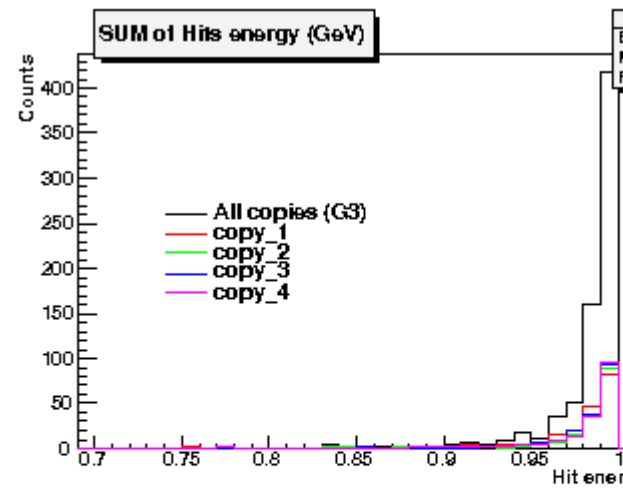
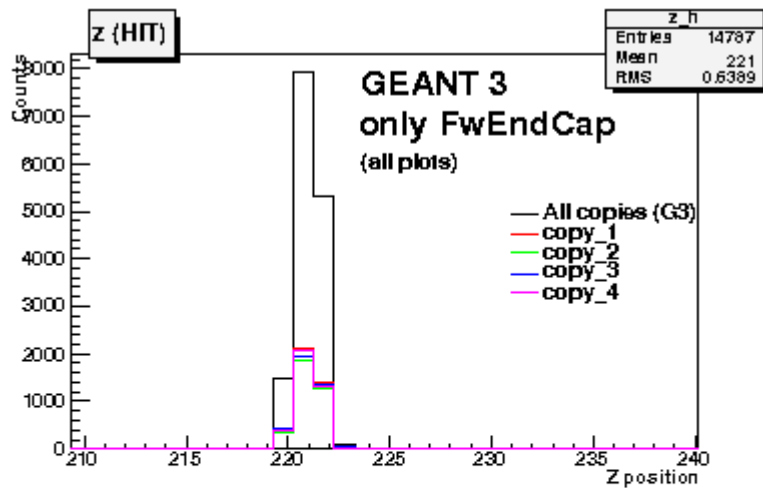
### File Attachments

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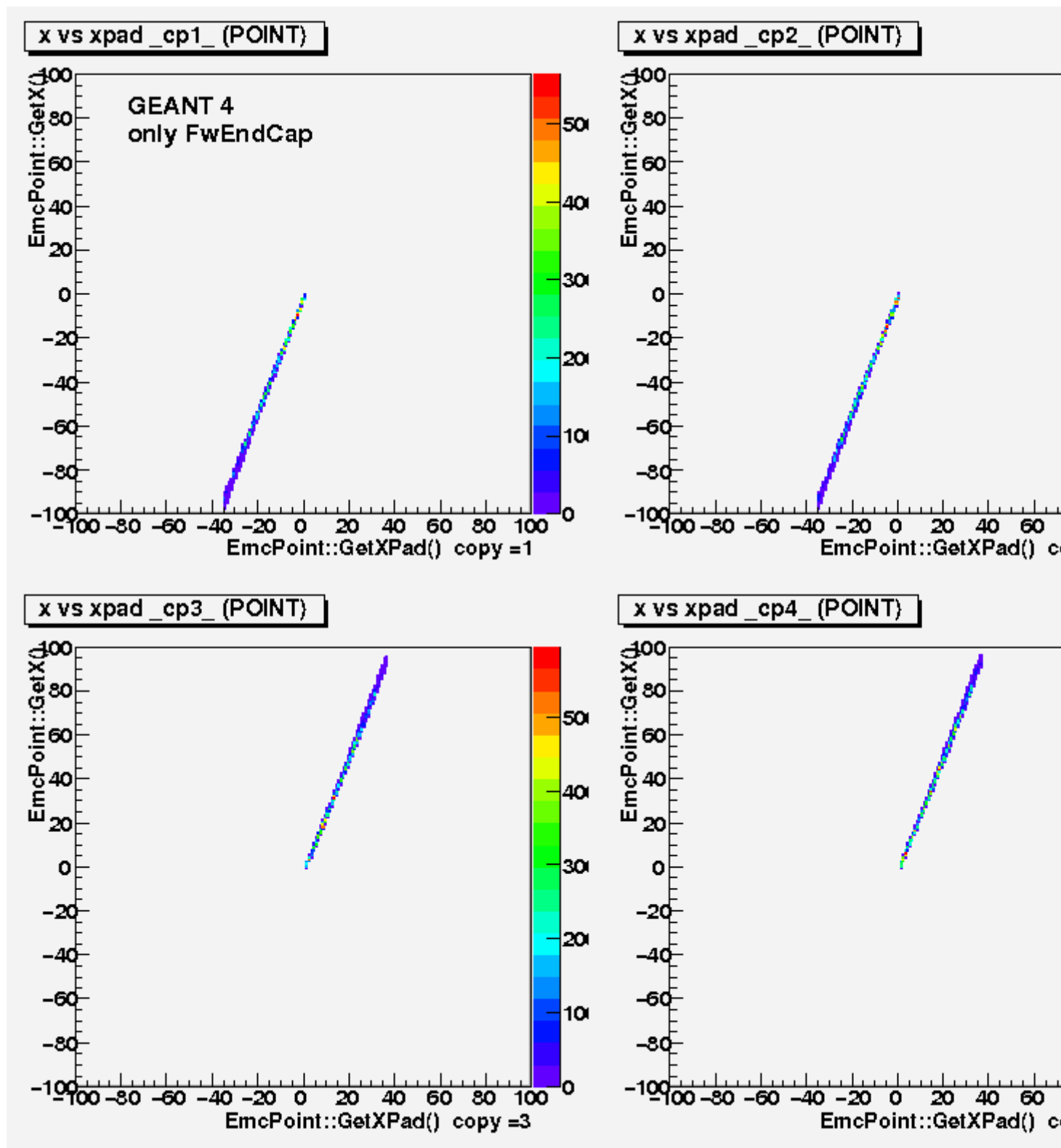
1) [z\\_ene\\_hits\\_digi\\_clusters\\_g4\\_fwendcap\\_m3changed\\_fixed.png](#),  
downloaded 779 times



2) [z\\_ene\\_hits\\_digi\\_clusters\\_g3\\_fwendcap\\_m3changed\\_fixed.png](#),  
downloaded 770 times

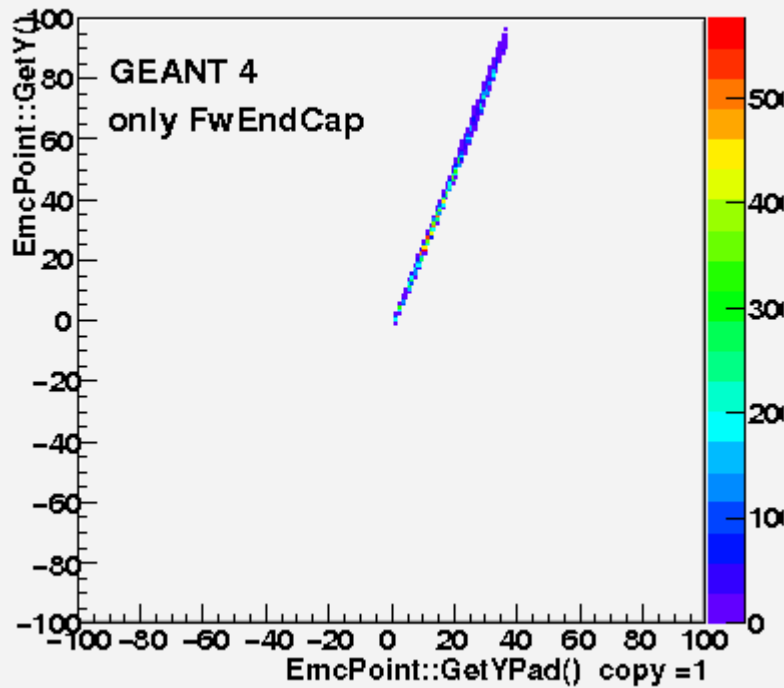


3) [xpad\\_x\\_points\\_m3\\_g4\\_fixed.png](#), downloaded 753 times

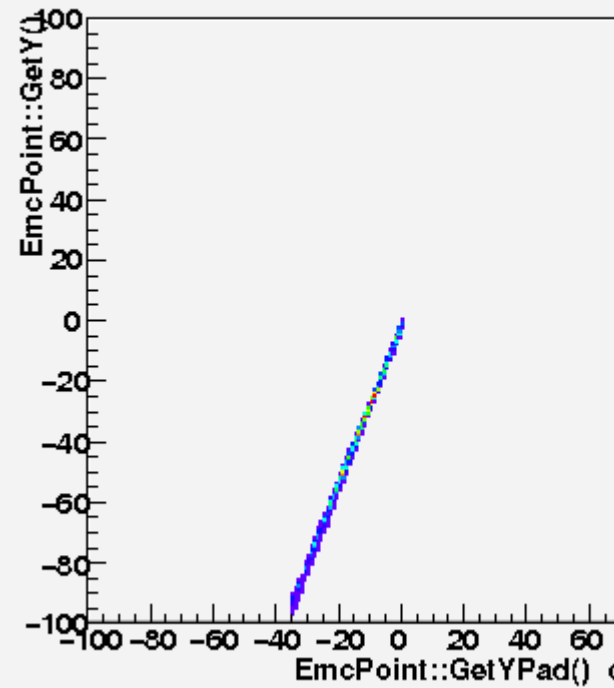


4) [ypad\\_y\\_points\\_m3\\_g4\\_fixed.png](#), downloaded 727 times

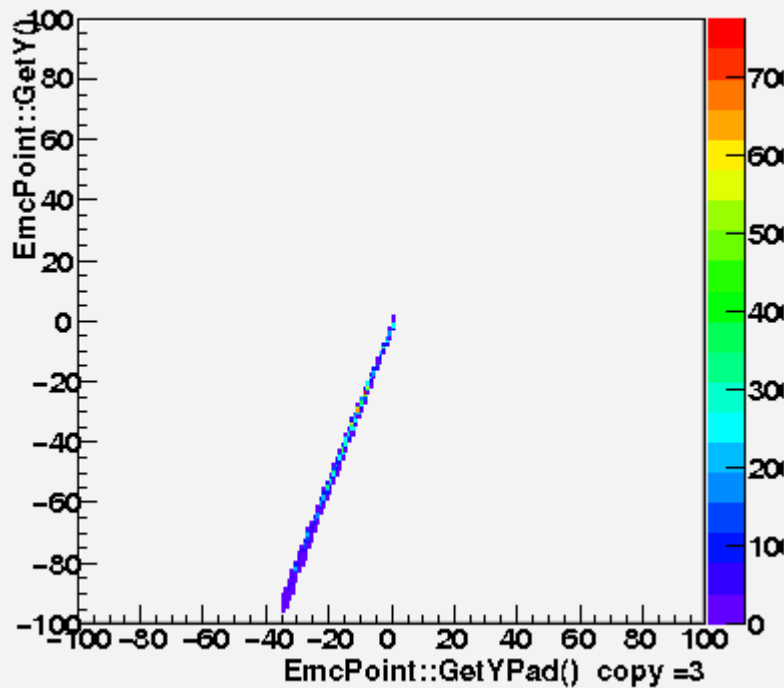
y vs ypad\_cp1\_ (POINT)



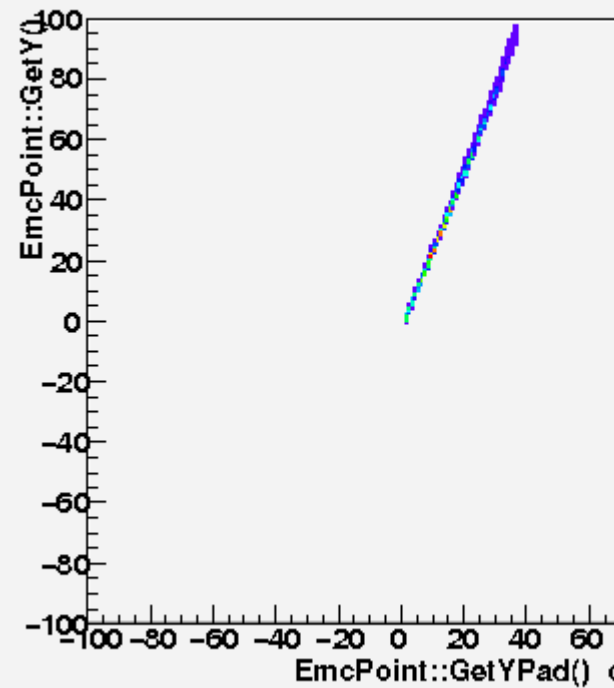
y vs ypad\_cp2\_ (POINT)



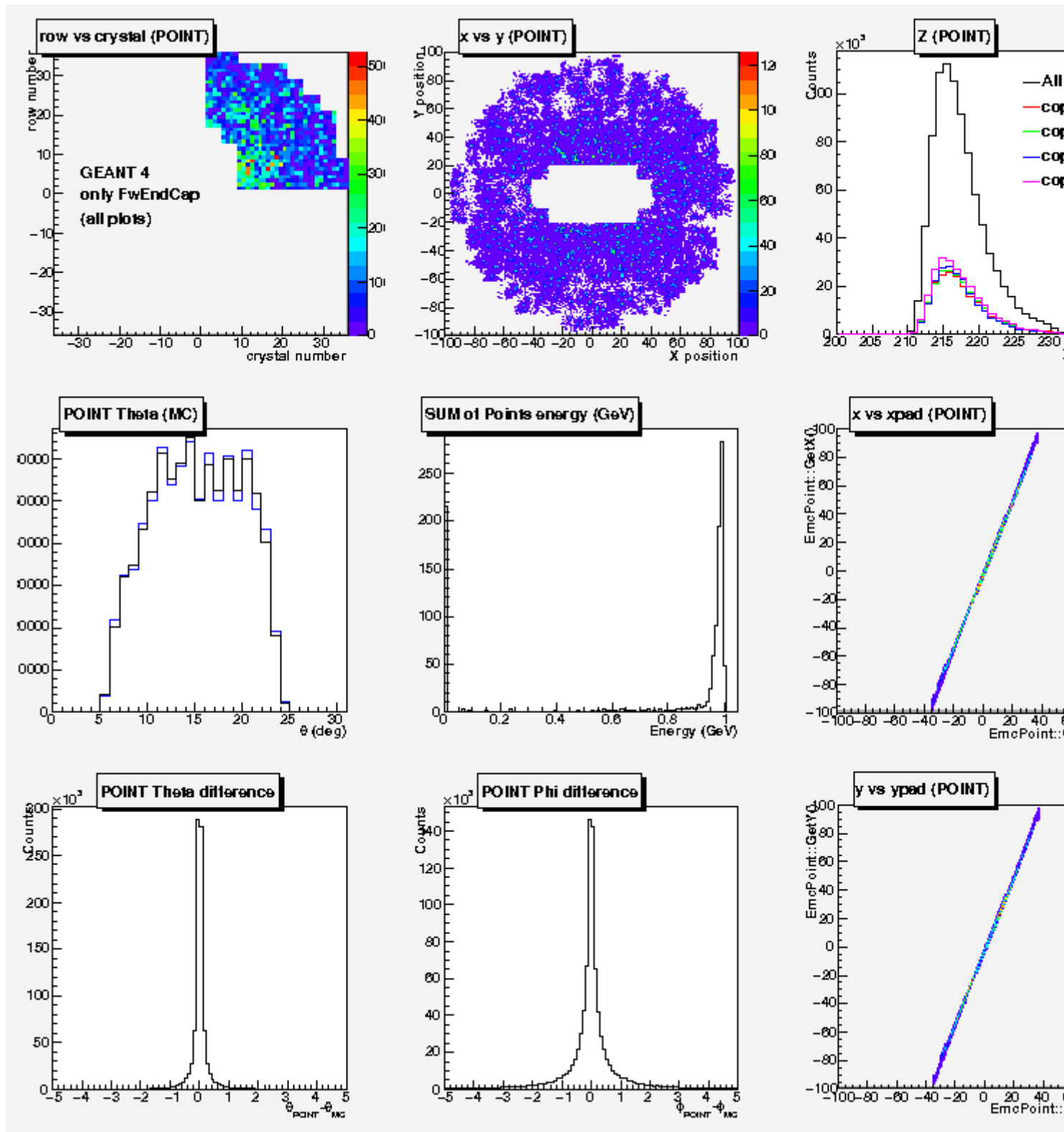
y vs ypad\_cp3\_ (POINT)



y vs ypad\_cp4\_ (POINT)



5) [points\\_g4\\_fwendcap\\_m3changed\\_fixed.png](#), downloaded 734 times



6) [points\\_g3\\_fwendcap\\_m3changed\\_fixed.png](#), downloaded 693 times

