Subject: Re: Hole geometry
Posted by Aleksandra Wronska on Fri, 15 Jun 2007 10:20:41 GMT
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Hi Stefano,

as for the fig. 8.88, it was produced by Piotr Hawranek some time ago. Unfortunately, he is unable to find the coefficients anymore. I see now three ways out in order to get a calibration:
1) take a ruler, measure the points coordinates and refit them,
2) more sophisticated: use g3data to get points coordinates, then refit them,
3) repeat simulations and recompute the correction factors.
If you can wait until Monday, I'll do 2) for you.
However, I see that you've started doing things which I wanted to do for Dubna. Can we split the tasks somehow? Any suggestions concerning things which need to be looked at?

As for the geometry, in particular the location and the dimensions of the hole, I still believe that my implementation was right.
I looked into the geometry created mith my old macro (still in the release 785). The picture looks differently from what you were showing, because the hole was not central!

Moreover, the rejected area is not, as you write, from -12 cm to +12 cm! The formula suggests that the gap in X is hole_xsize/2 (because 2*cellxsize/2 is occupied by crystals adjacent to the hole) and is centred in hole_xpos. I do not see what is wrong with it.

The number of rejected crystals depends on the hole position and its size, which were the macro parameters. If you set the hole_xsize=200 and hole_xpos=0 you should get exactly the picture which you are showing as the second one. I assumed the chicane option because I wasn't aware that we only have the straight beam pipe implemented. However, as the chicane is the default solution right now, we'll have to work on implementation of it, too.

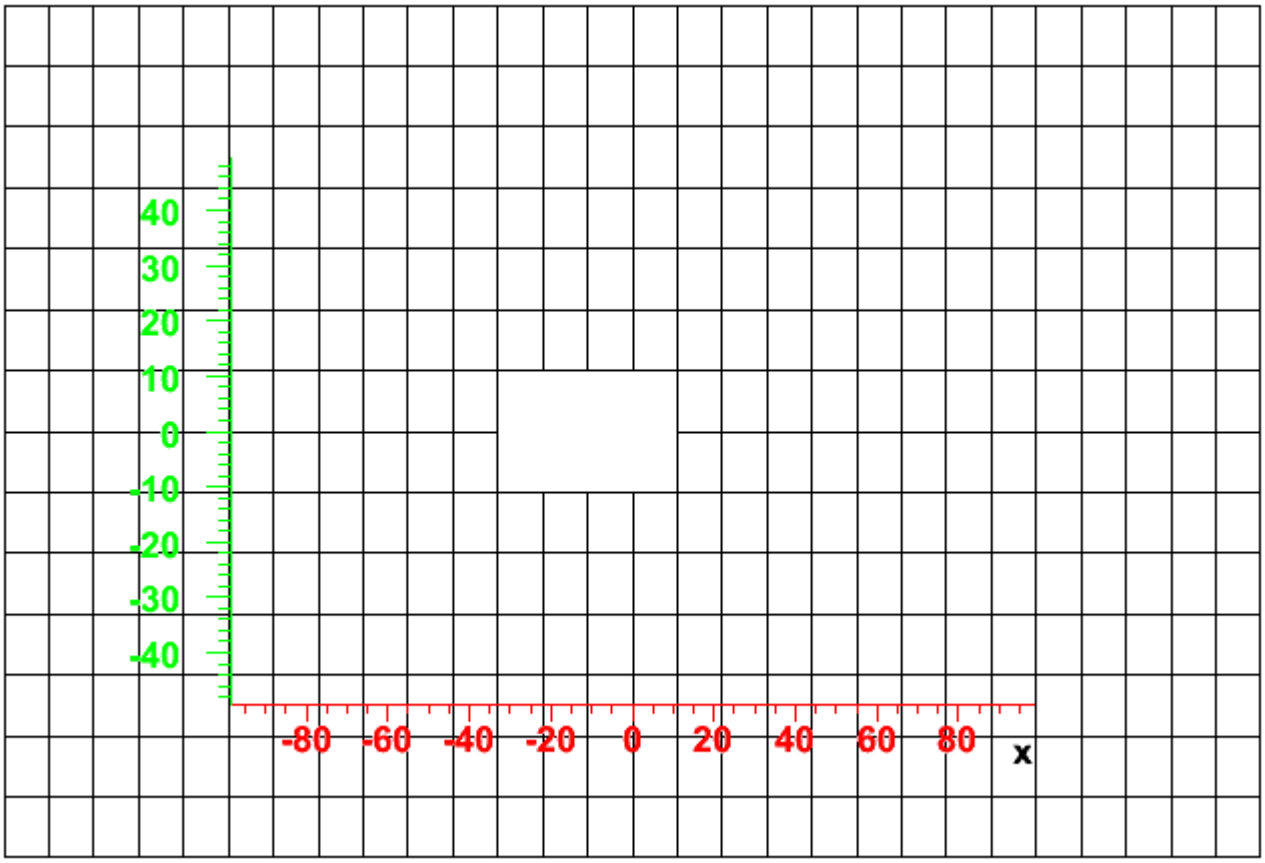
I created one geometry file with this kind of setup, but before committing it I would like to ask confirmation...
whatever you do to the geo file, if you retain the possibility to easily change the basic parameters (see above), it's fine for me.

...from the experts.
Whom do you exactly mean...?

cheers,
ola

File Attachments

1) fsc_rev785.gif, downloaded 911 times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