Scintillator Simulation Update
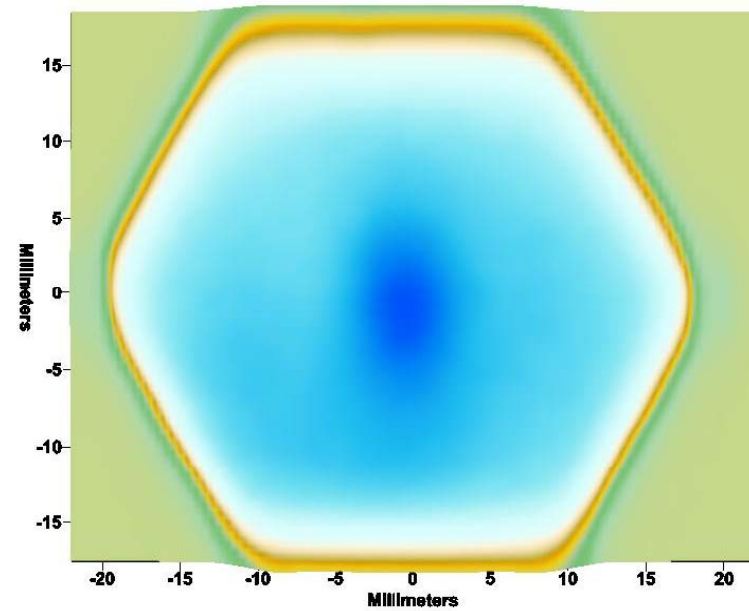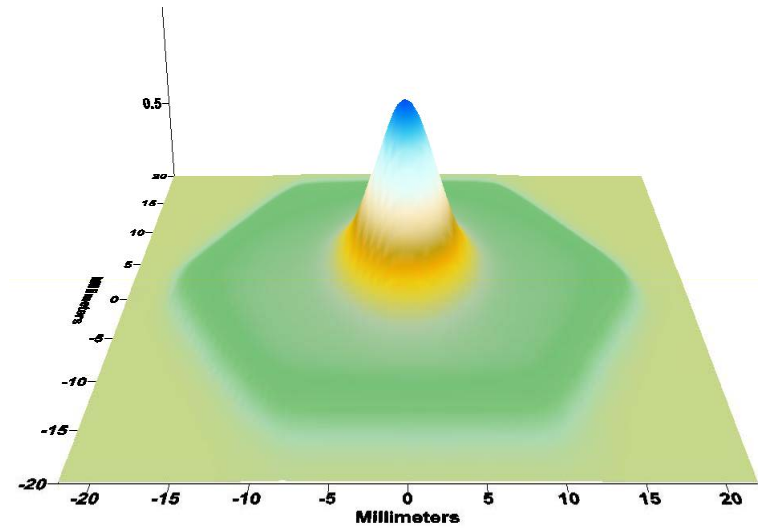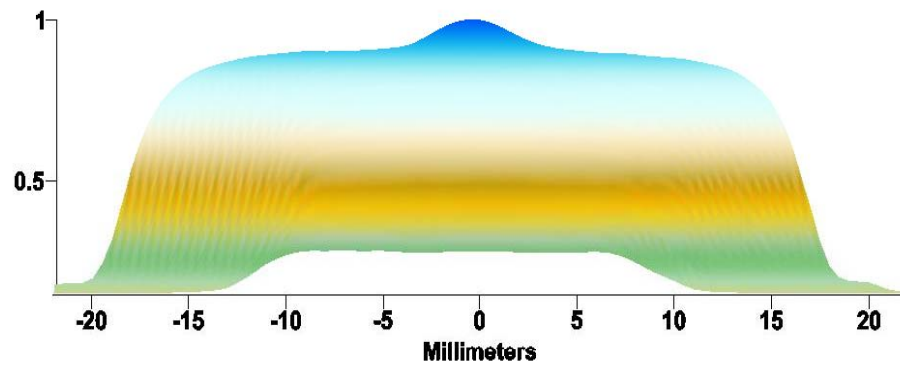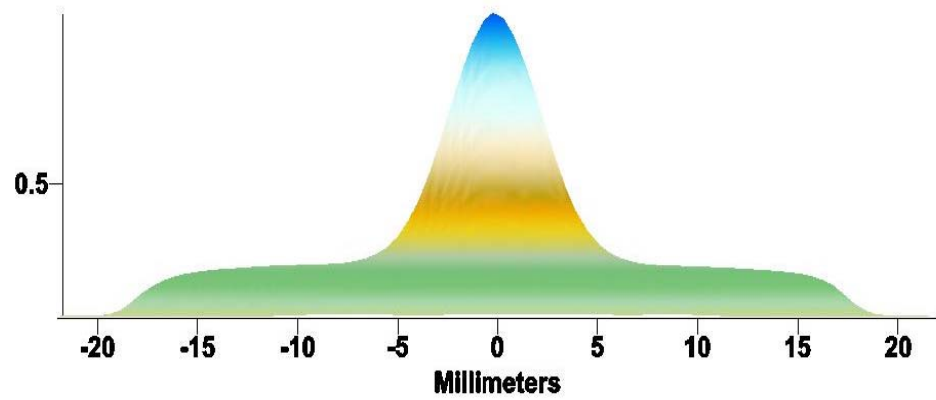
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Simulation Changes

- The user can now decouple the SPD placement from the scintillating cell placement. This uses two new commands.
    - NumSPD: This command allows the user to set the number of SPDs to place
    - PlaceSPD: This command is what actually sets the decouple flag for the simulation. The user then gives a three vector and a unit to place the center of the SPD.
- It is now possible to change the Z position of the particle gun when the option scanXY is on.
- Shortcomings:
    - The SPD placement command also places the reflective disk. So it is very easy to place SPDs such that the reflective disk volumes overlap.
    - The SPD copy number is not being properly stored. Each placed SPD is sensitive and records hits, but they all are ID'ed as SPD 0.
- One workaround is in place for the first shortcoming The thickness of the SPD was increased so that as long as all the disks lie in the same plane, optical photons will strike the SPD regardless of any overlapping reflective disk.
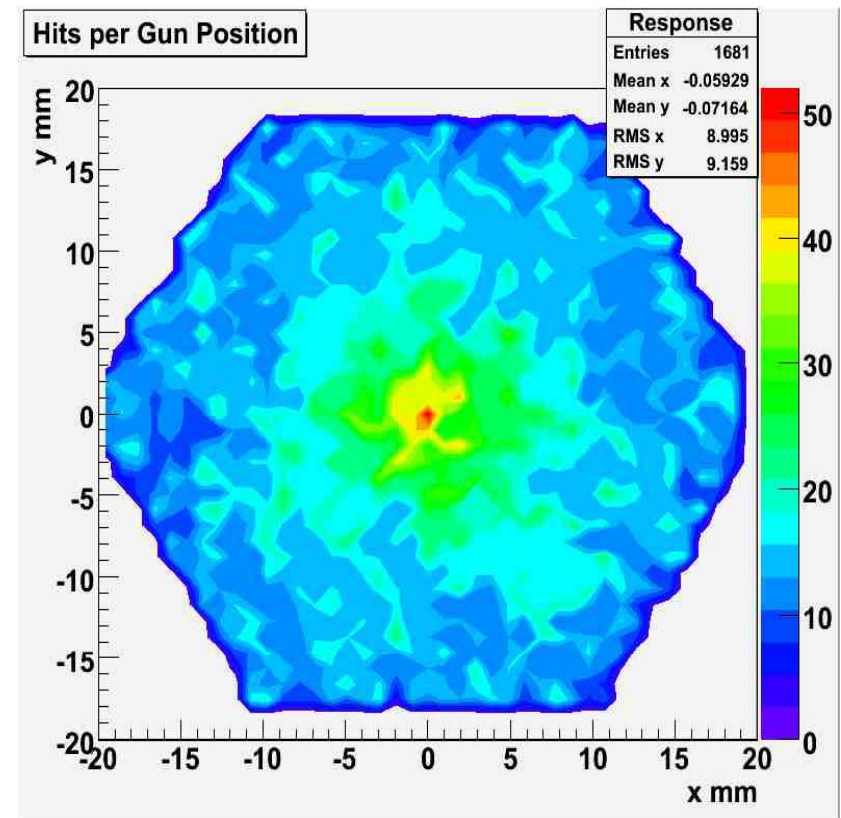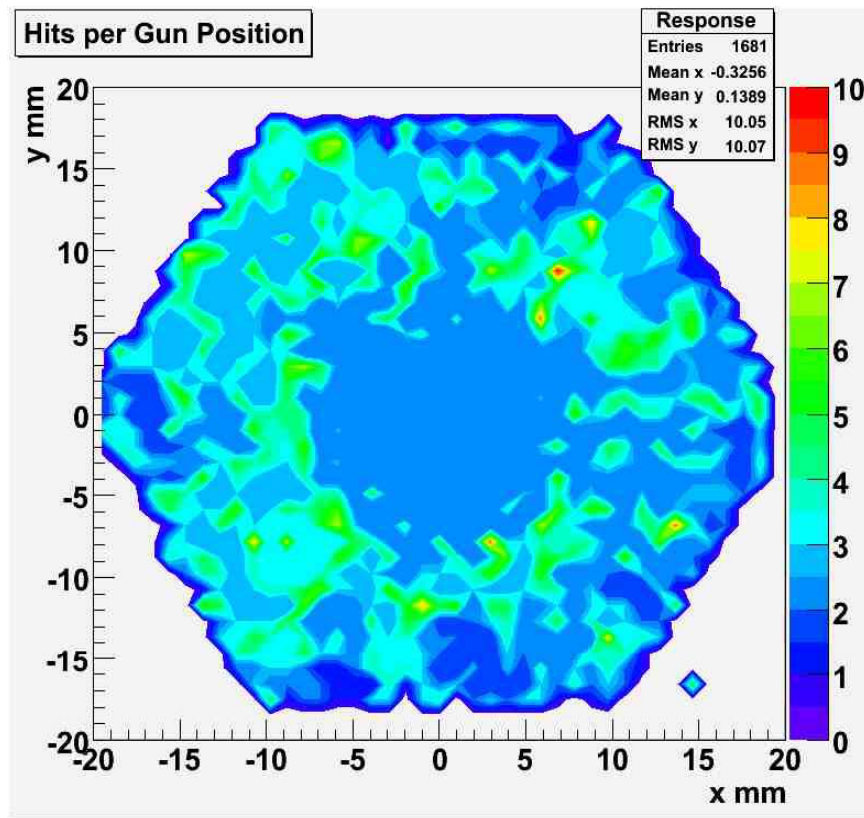
Actual Cell Data

New Response Graphs

Questions?