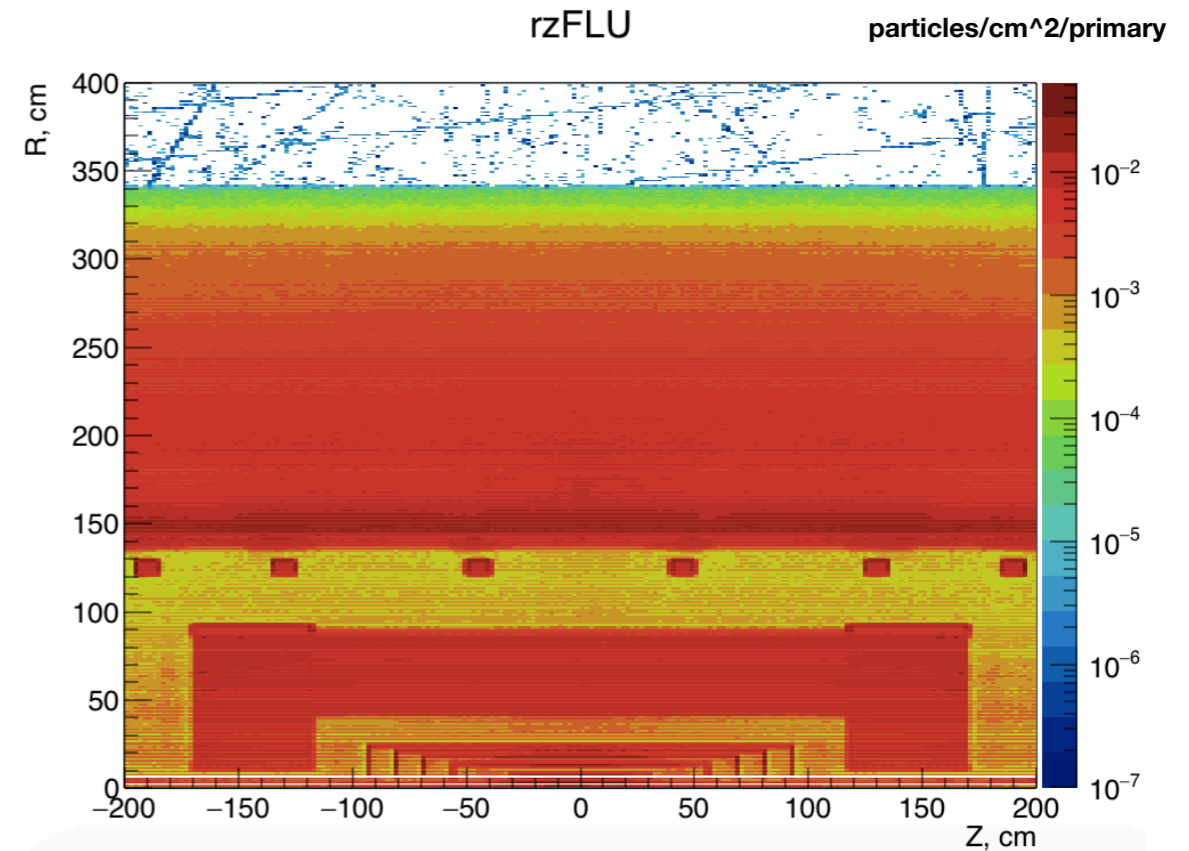
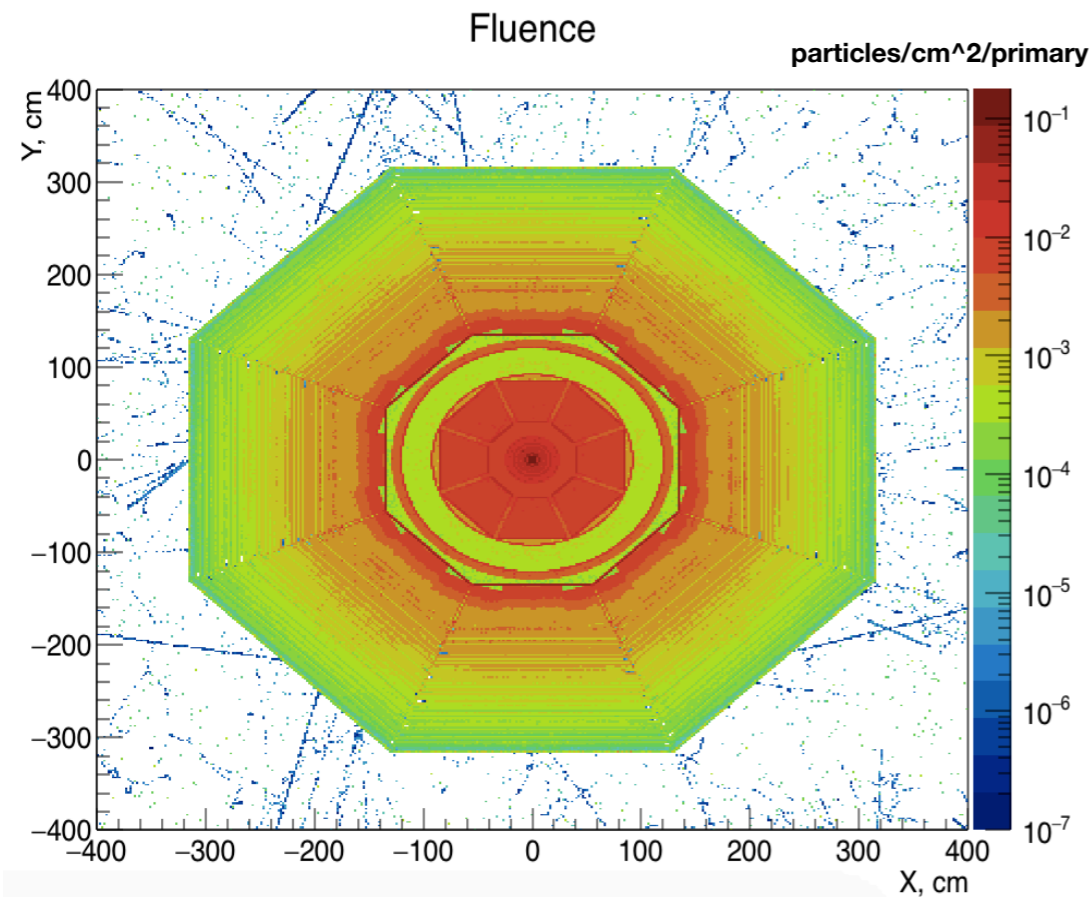


Dose studies: FairRadGridManager

Allows to calculate fluence in XY plane for each defined mesh.

Average values of fluence over $z = (-400, +400)$ cm are shown.



Used on the level of FairMCApplication.

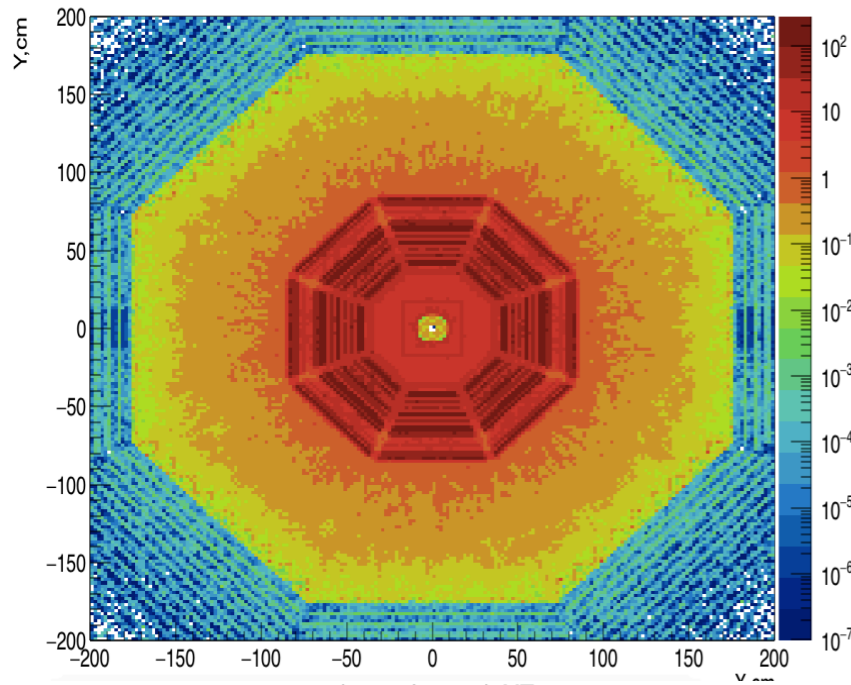
```
fLength = fLength / fBinVolume;
aMesh->fillFluence(fPosOut.X(), fPosOut.Y(), fLength);

// fill SEU
if (part->P() > 0.02) {
    aMesh->fillSEU(fPosOut.X(), fPosOut.Y(), fLength);
}
```

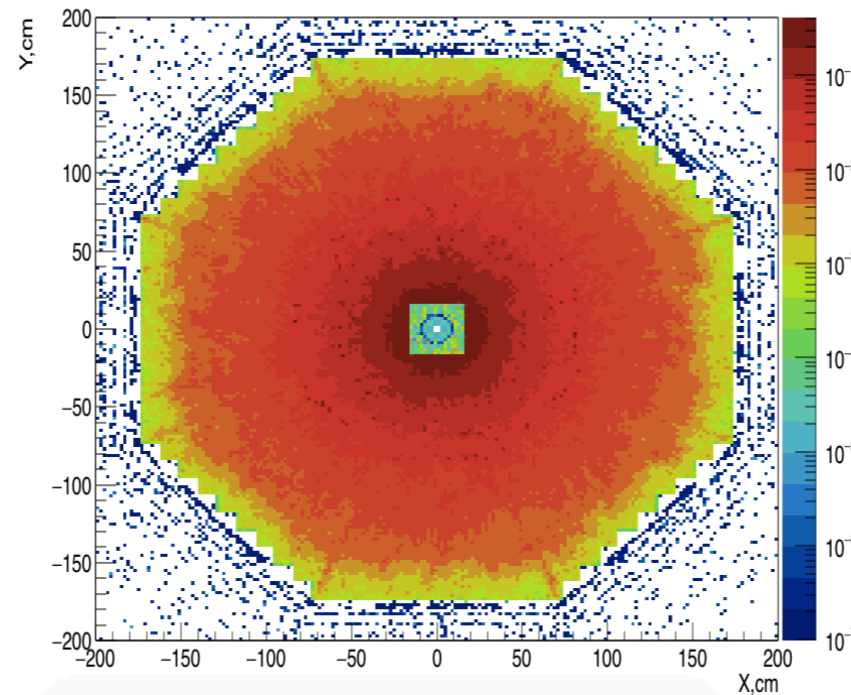
Dose studies: FairRadMapManager

dose_charged_XY

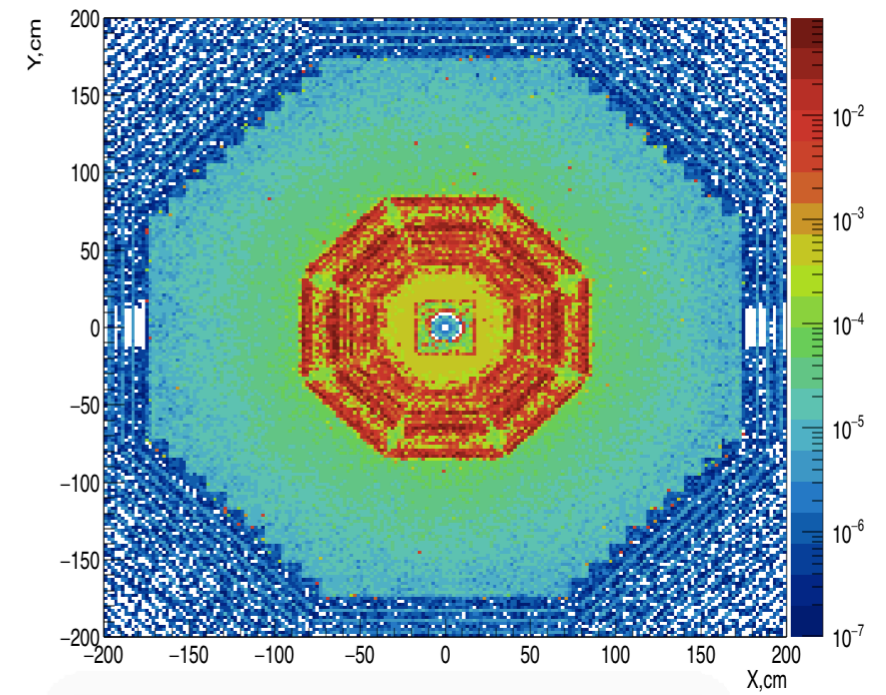
Gr/a



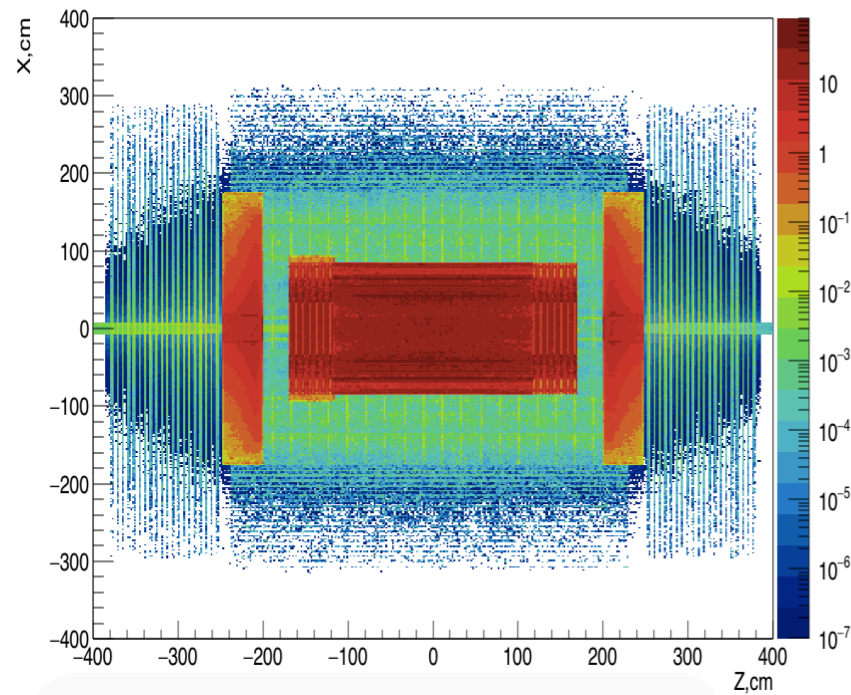
dose_gamma_XY



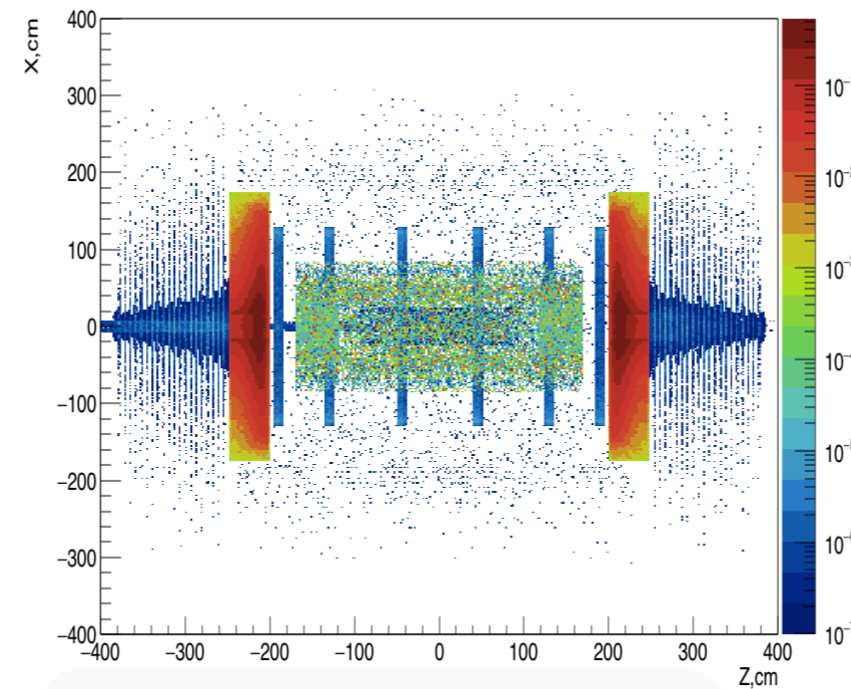
dose_neutrons_XY



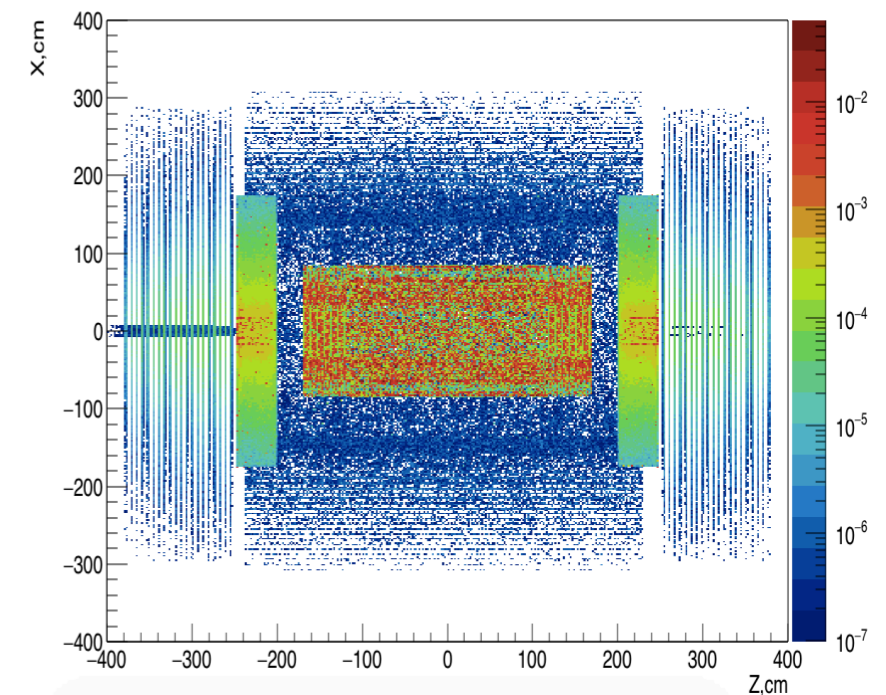
dose_charged_XZ



dose_gamma_XZ



dose_neutrons_XZ



- Plots are shown in range of $z = (-400, +400)$ cm;
- Need to merge barrel ecal cells;
- RadMapManager calculates the integral energy deposit in each volume in the geometry;

Dose studies

FairRadMapManager

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- What energy dose will be accumulated during a certain time of operation?
- Create all physical volumes with correct material assignment
- Run the simulation engine
- FairRadMapManager will sum up every deposited energy in each volume in the geometry

