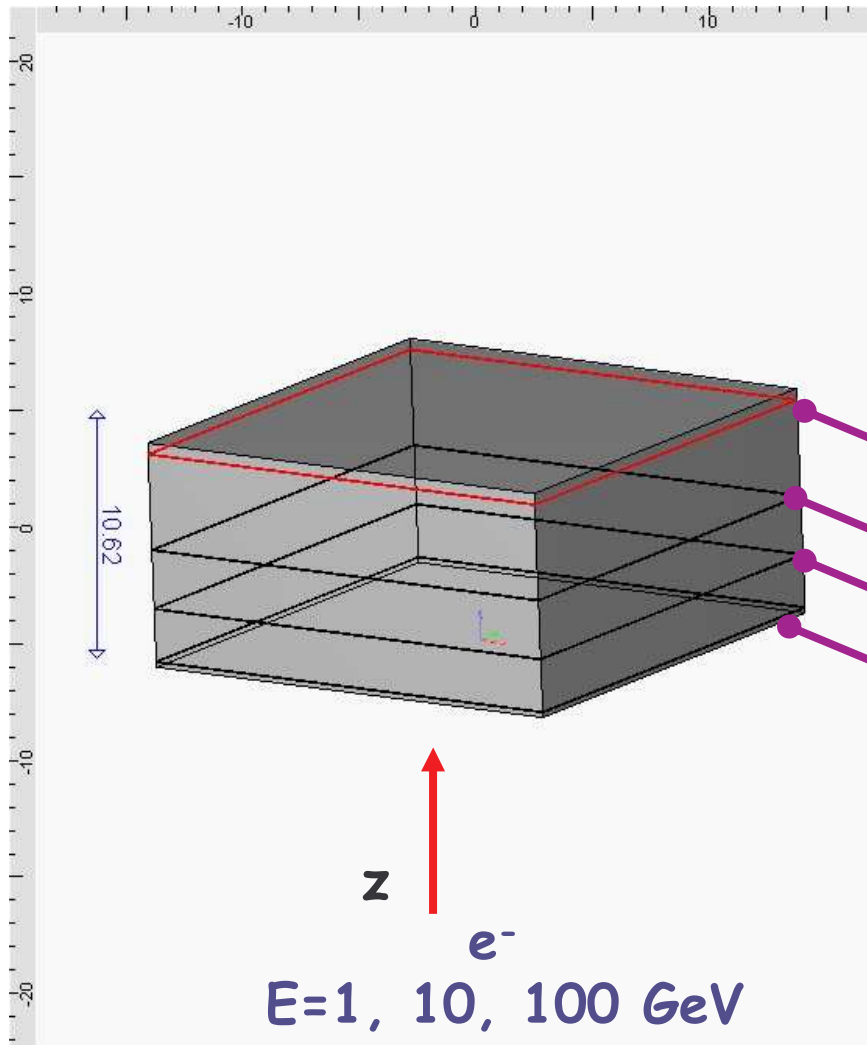


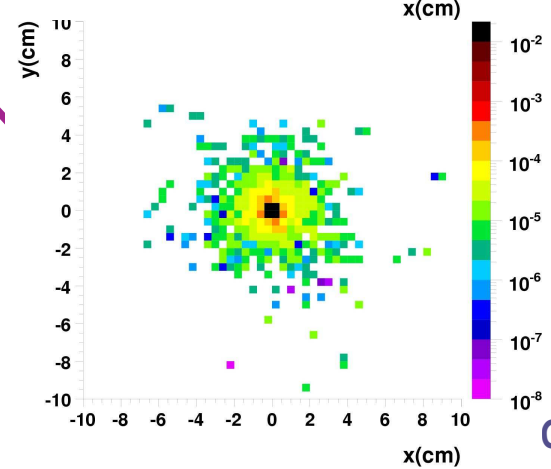
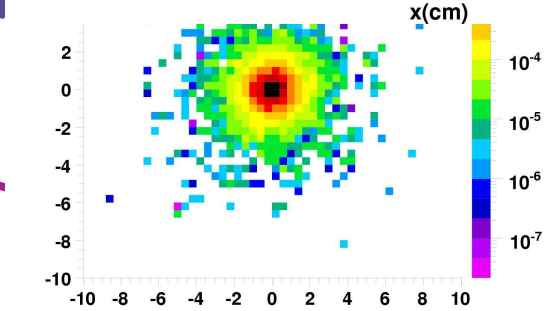
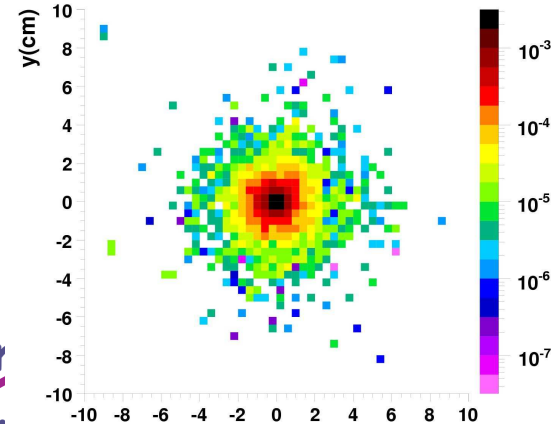
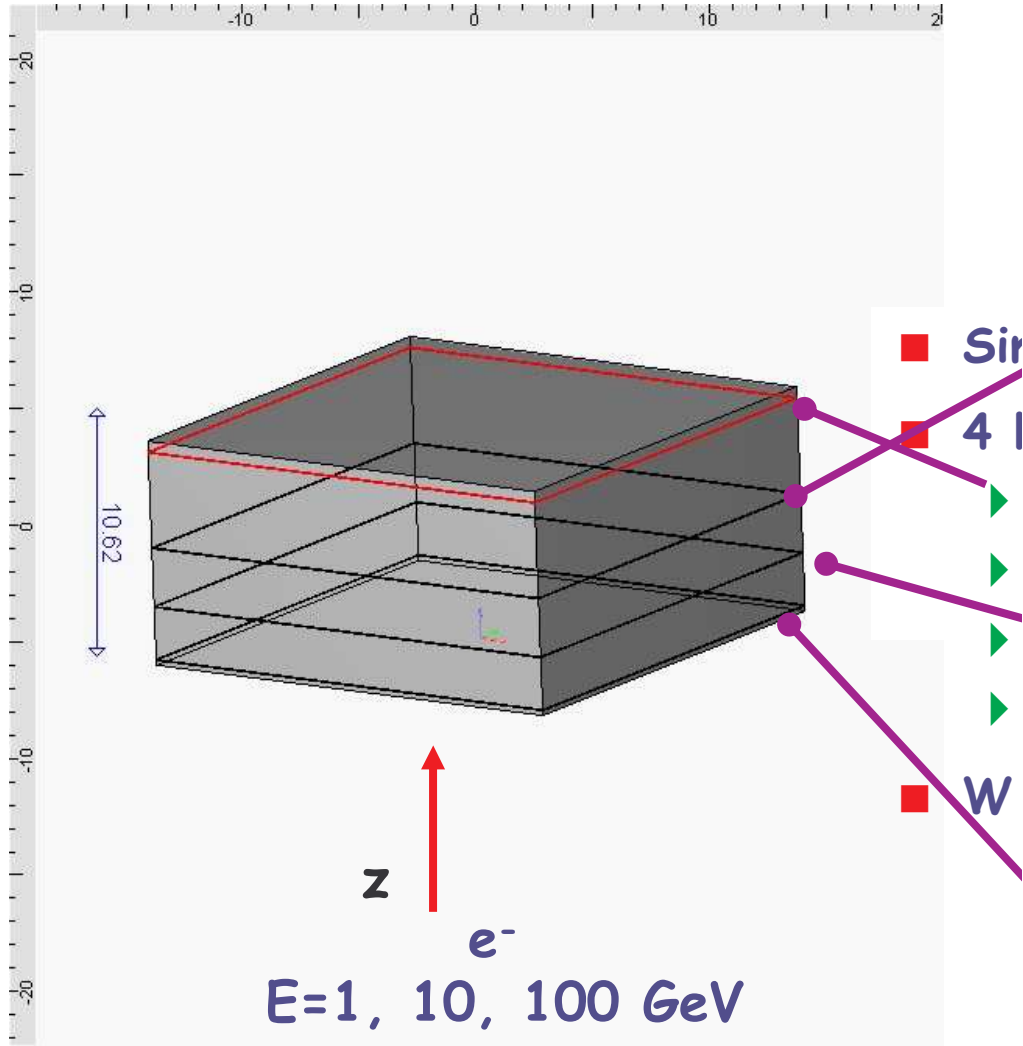
Low energy photon fluxes into MAPS



- Fluka 2006.3b, precision defaults
- Initial scoring of deposited energy and flux of charged/neutrals
- Simple model, 15x15x10cm W block
- 4 layers of 500 μm Si, at depths of
 - ▶ 93.8 mm
 - ▶ 51.5 mm
 - ▶ 25.5 mm
 - ▶ 2.1 mm
- W $X_0=3.5$ mm
- Very simple model - additional complexity (layers of Cu/G10, etc.)?

Low energy photon fluxes into MAPS

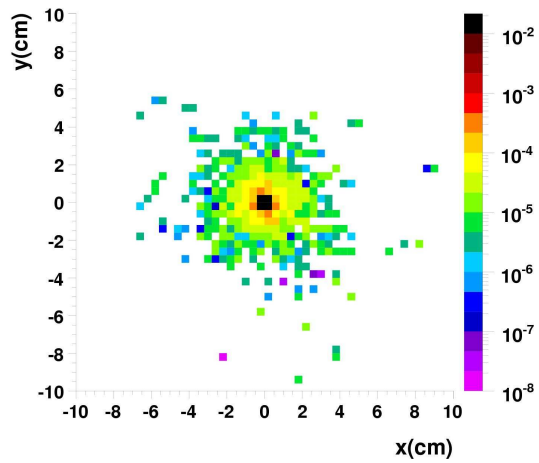
energy density ($\text{GeV}/\text{cm}^3/\text{primary}$)



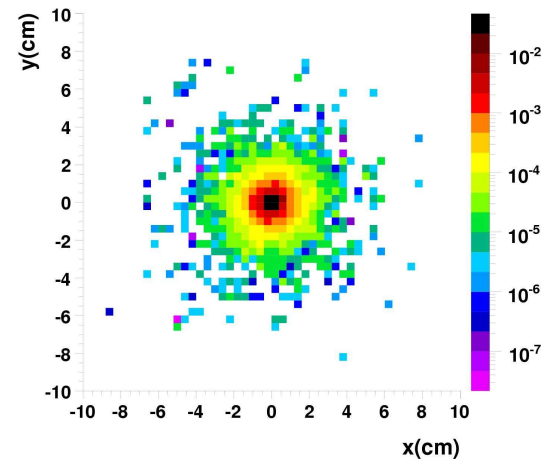
m W block
depths of



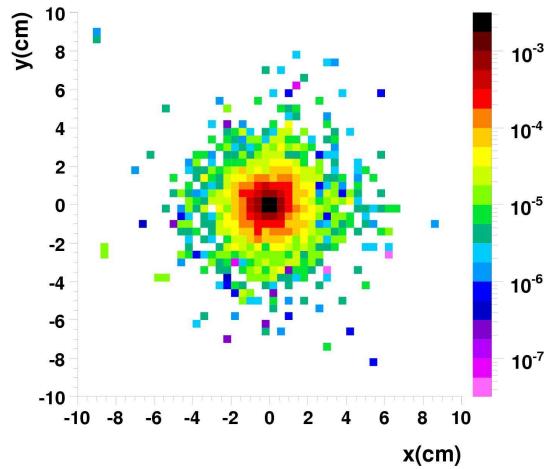
energy density (GeV/cm³/primary)



energy density (GeV/cm³/primary)

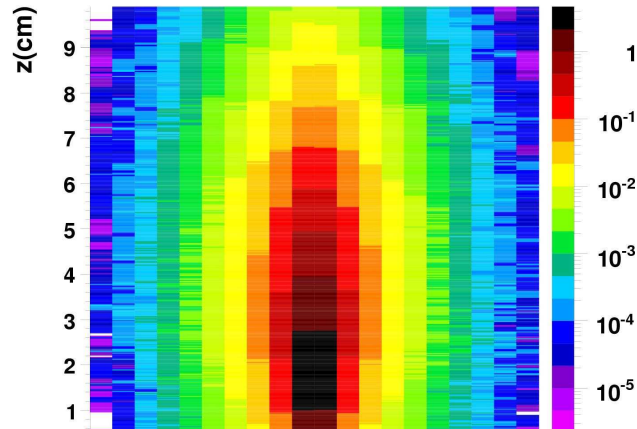


energy density (GeV/cm³/primary)



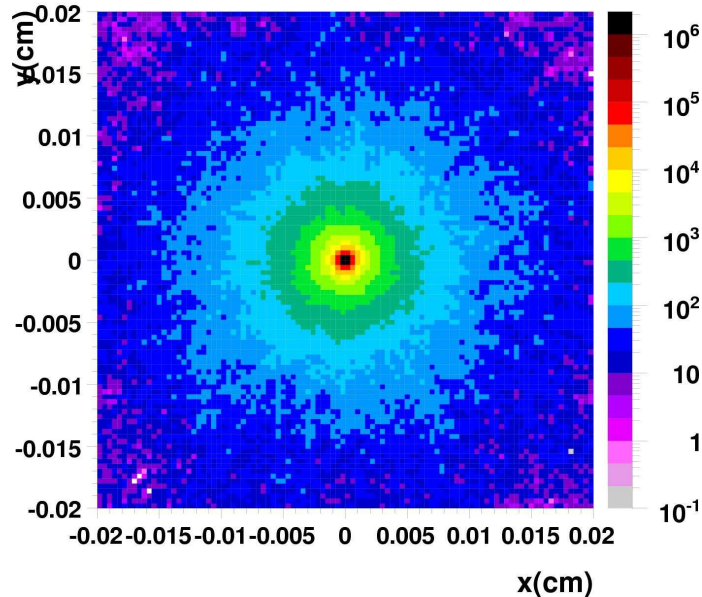
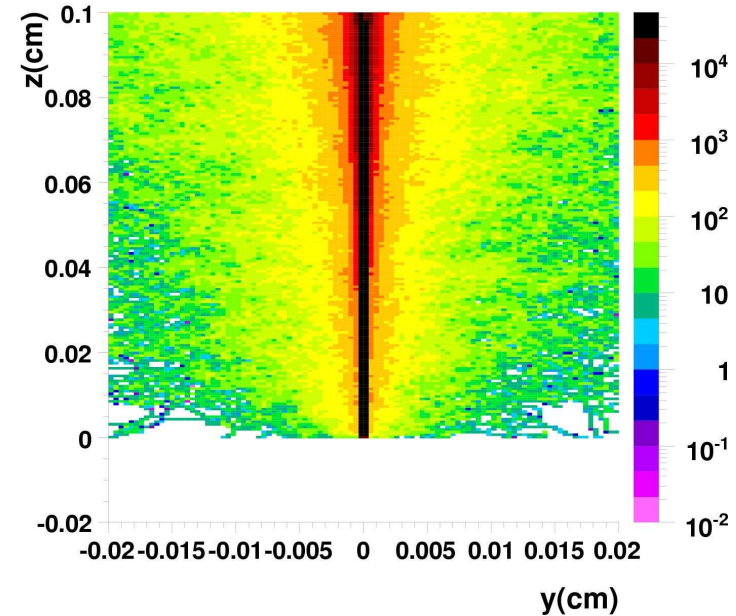
Example particle fluences

fluence (cm/cm³/primary)



fluence (cm/cm³/primary)

fluence (cm/cm³/primary)



To Do

- Check low energy photon cut-offs really are low (~keV)!
- Use energies 10 GeV, 100 GeV
- Compare fluences above threshold to acceptable rates for sensor saturation...