

README (2016.11.11)

Sample geometry: Compton camera with GAGG (Geant4 4.9.6.p03 code)

History

- 2016.11.11 created
 - 2018.9.6. revised
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1) Build & Run

See **HowToBuild.md**.

2) Geometry

A Compton ring consists of two modules with inner diameter 20 cm and outer diameter 39 cm in atmospheric air. Each module has a scatter box (**Scabox**) and an absorber box (**Absbox**).

Source: Na-22 (0,-4 cm,+3 cm)

Scabox consists of 8x8 scatter voxels (**scavoxel**), which is 5x10x10mm. Absbox consists of 8x8 scatter voxels (**absvoxel**), which is 10x10x10mm. The distance between Scabox and the origin is 10 cm. The distance between Scabox and Absbox is 8 cm. (See source files for more information about GAGG properties and detail geometry.)

Both scavoxel and absvoxel are assign as “sensitive detector”. (See Geant4 guidance documents)

3) Output Data

Use **result.txt**, which is raw data of geant4 Simulation. (See source files for more information about data properties.)
