

BoGEMMS fits files

Tracker analysis:
the events with energy deposition > 0 are selected

The volume id is converted into strip (x and y view) and the tray id (which starts from bottom) into plane id (which starts from top)

The fits file G4.RAW.eASTROGAM.fits is created and it contains the information at the level of the hit

The files coming from the eASTROGAM_Geometryv1 are going to be analyzed in order to pass from the hit level to the strip one

It is considered the energy deposition for every event and then the code makes the division between the compton scattering primary events and the primary pair production ones

The energy is summed along the strip and the energy threshold is applied

The files L0.eASTROGAM.fits and STRIP.dat are created and they contain the information at the level of the strip

The code determinates the cluster and its barycenter

The files L0.5.eASTROGAM.fits, CLUSTER.dat, CLUSTER_PAIR.dat, CLUSTER_COMPTON.dat are created and they contain the information at the level of the cluster

Calorimeter analysis:
the events with energy deposition > 0 are selected

The energy stored in bars (for every event) is summed and the energy threshold is applied

The files G4.CAL.eASTROGAM.fits and SUM.CAL.eASTROGAM.fits are created and they contain the information about the calorimeter

AC analysis:
the events with energy deposition > 0 are selected

For every panel the deposited energy (for each event) is summed

The files G4.AC.eASTROGAM.fits is created and contains the information about the anti-coincidence system