

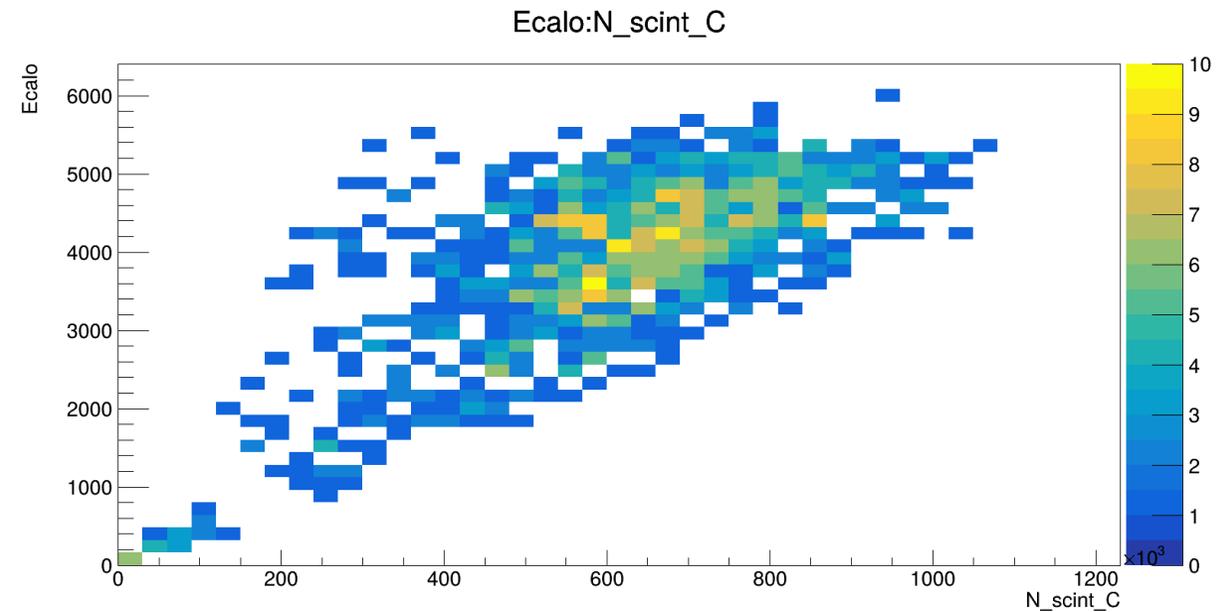
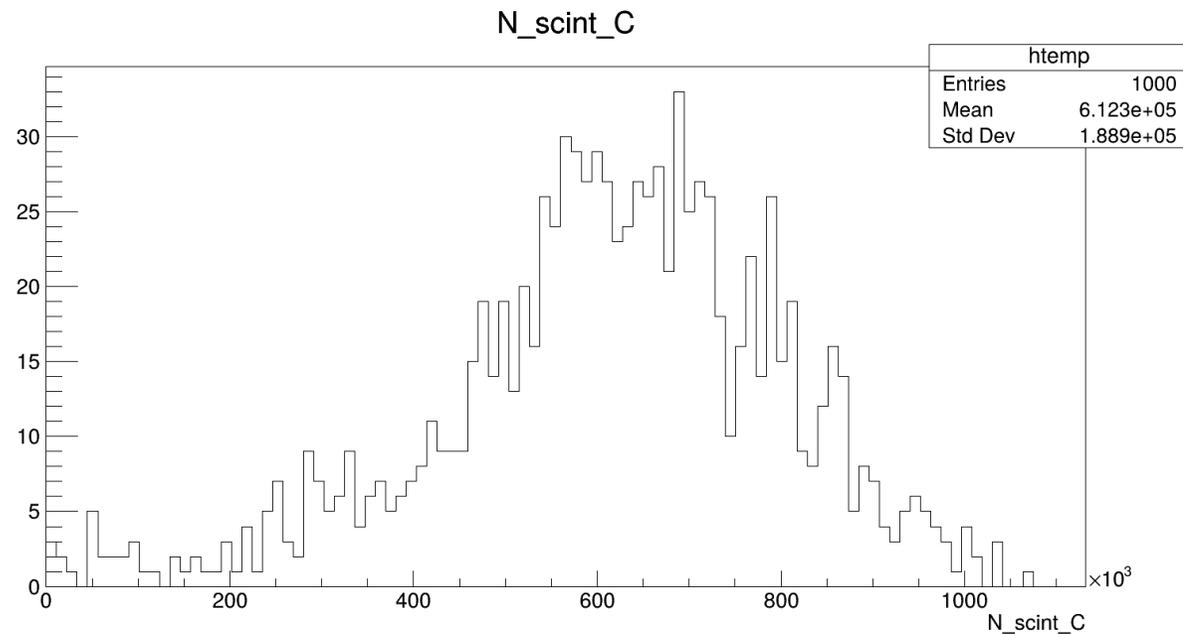
DualReadout Calorimeter Geant4 Simulation

D. Boccanfuso, F. Cirotto, A. D'Avanzo, C. Di Fraia

24/10/2024

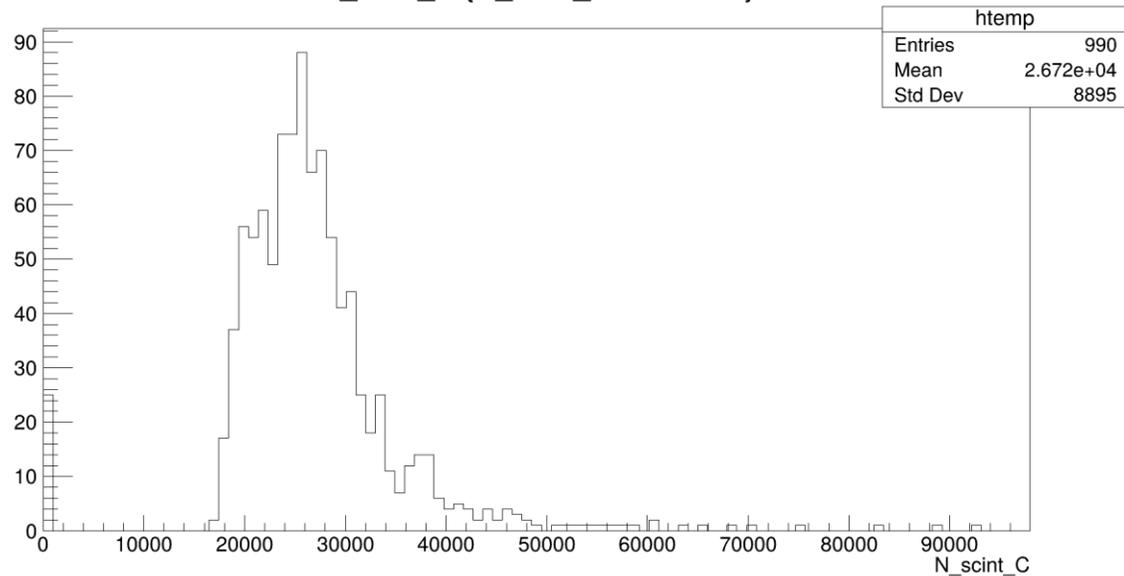
Update

Fixed bug regarding the number of photons in SiPMs. There is some proportionality between the number of photons in SiPMs and deposited energy.

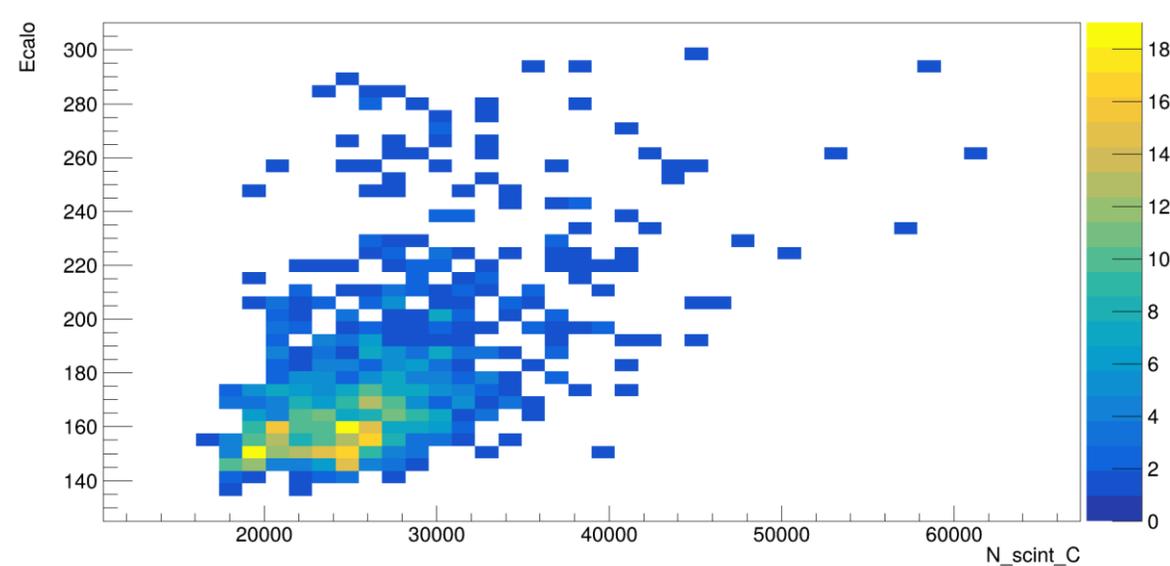


1k muons, 120 GeV, BGO

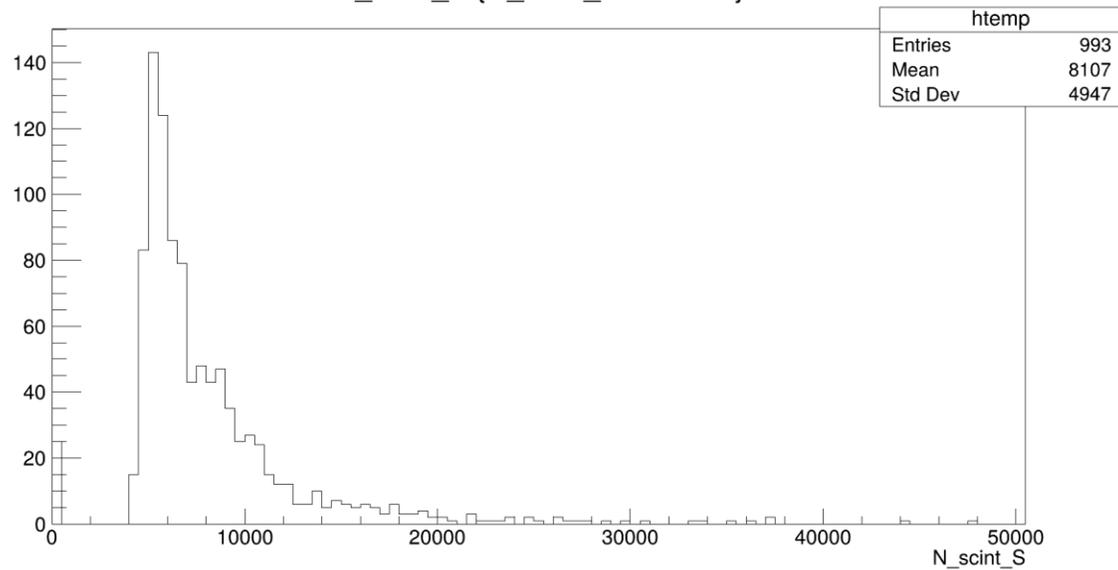
N_scint_C {N_scint_C < 100000}



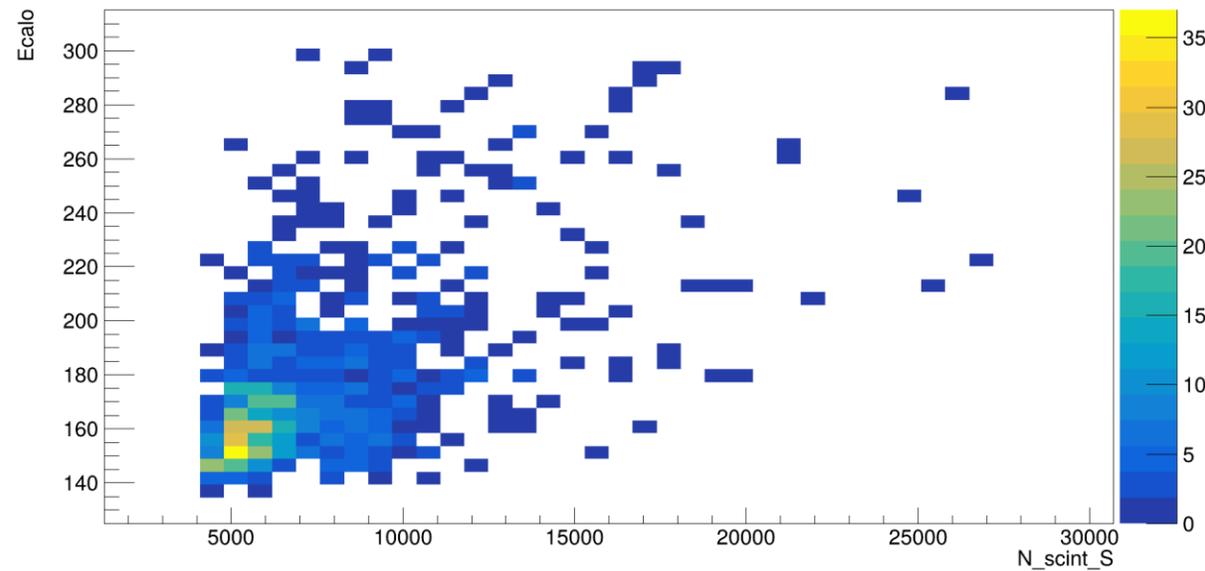
Ecalo:N_scint_C {Ecalo < 300 && Ecalo > 50 && N_scint_C < 80000}



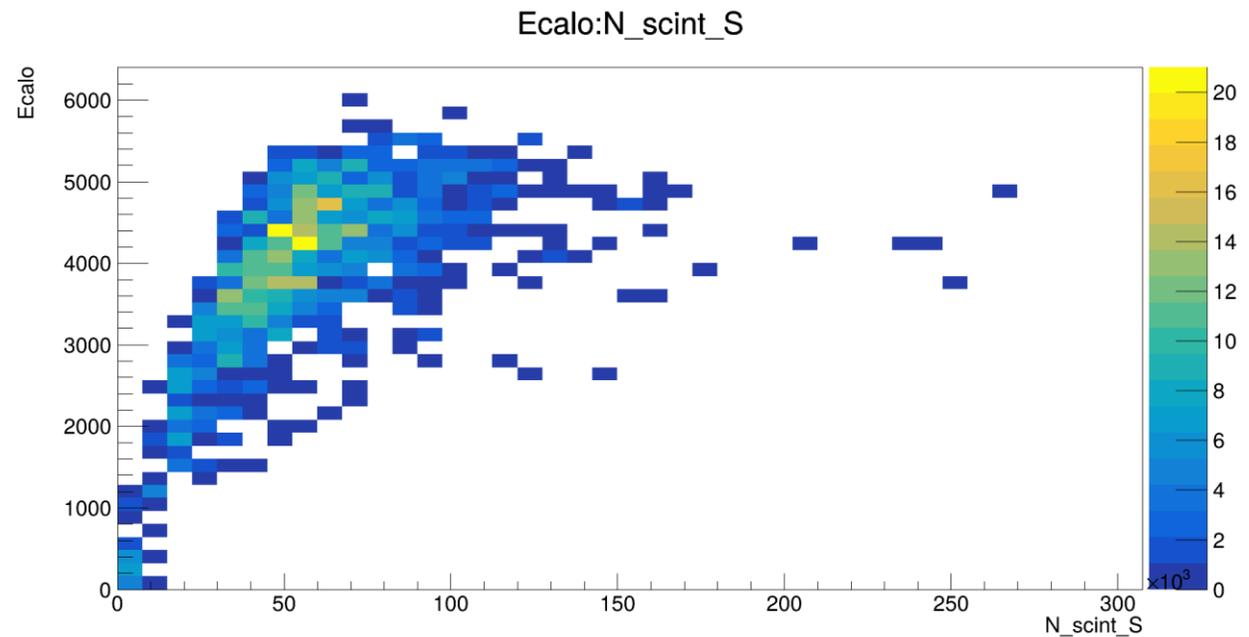
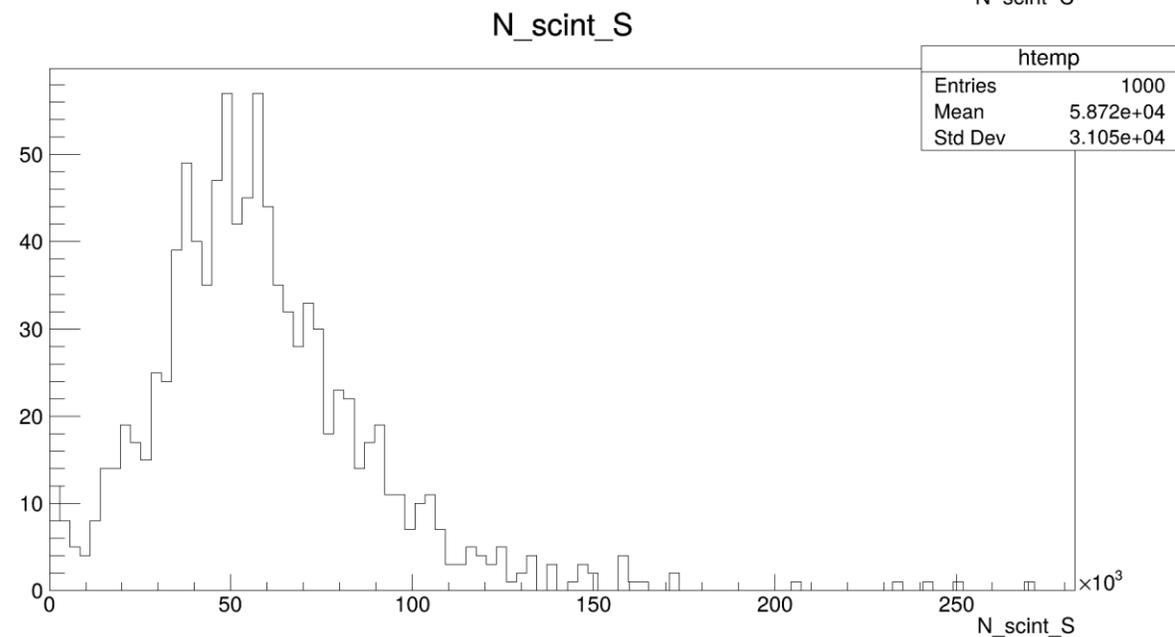
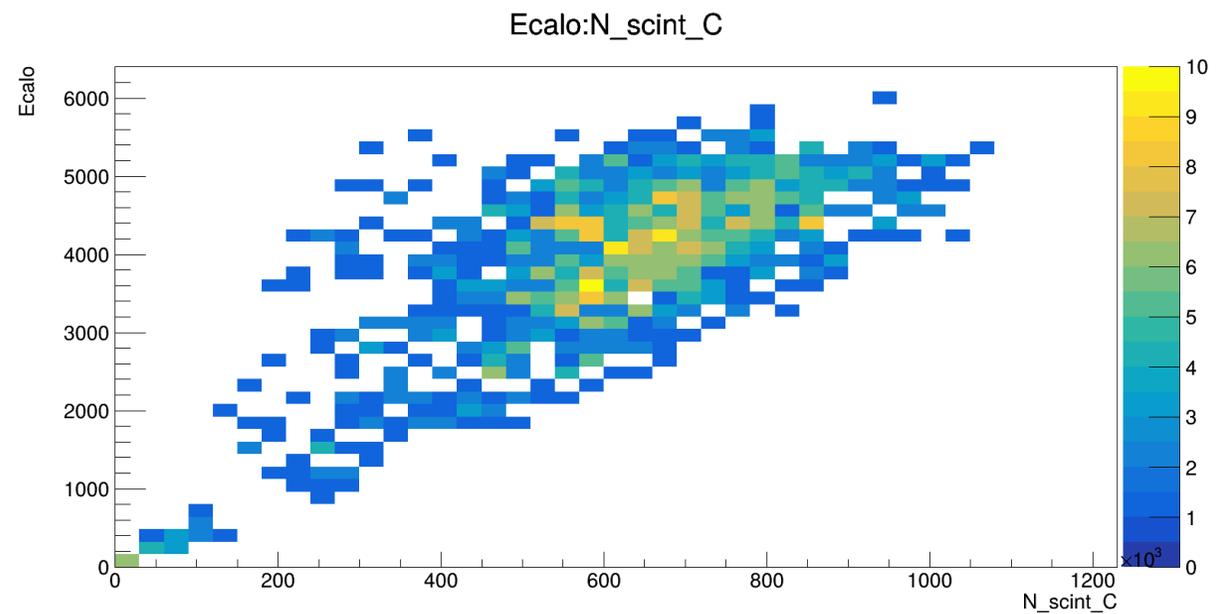
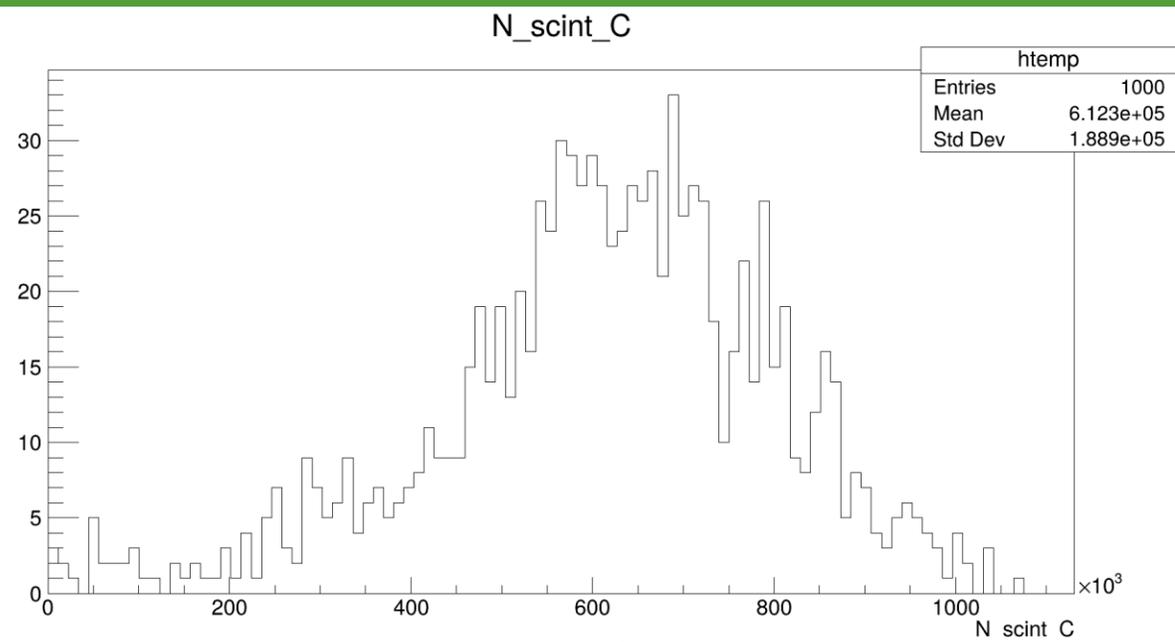
N_scint_S {N_scint_S < 50000}



Ecalo:N_scint_S {Ecalo < 300 && Ecalo > 50 && N_scint_S < 80000}

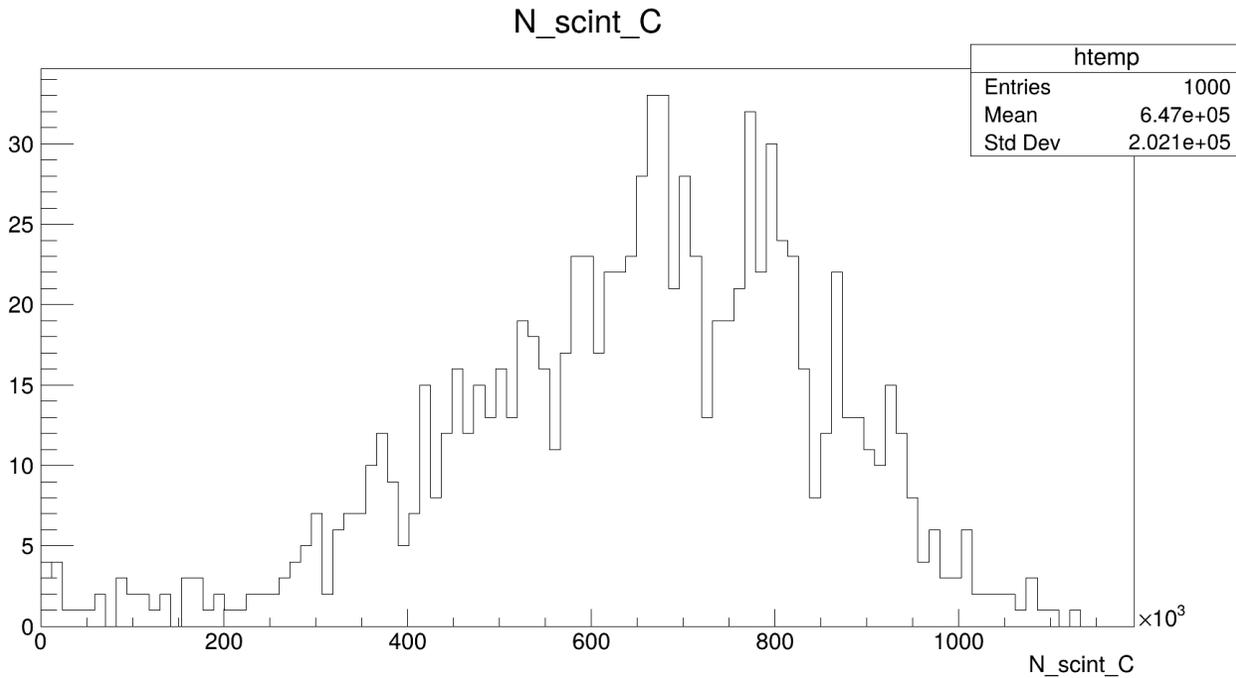
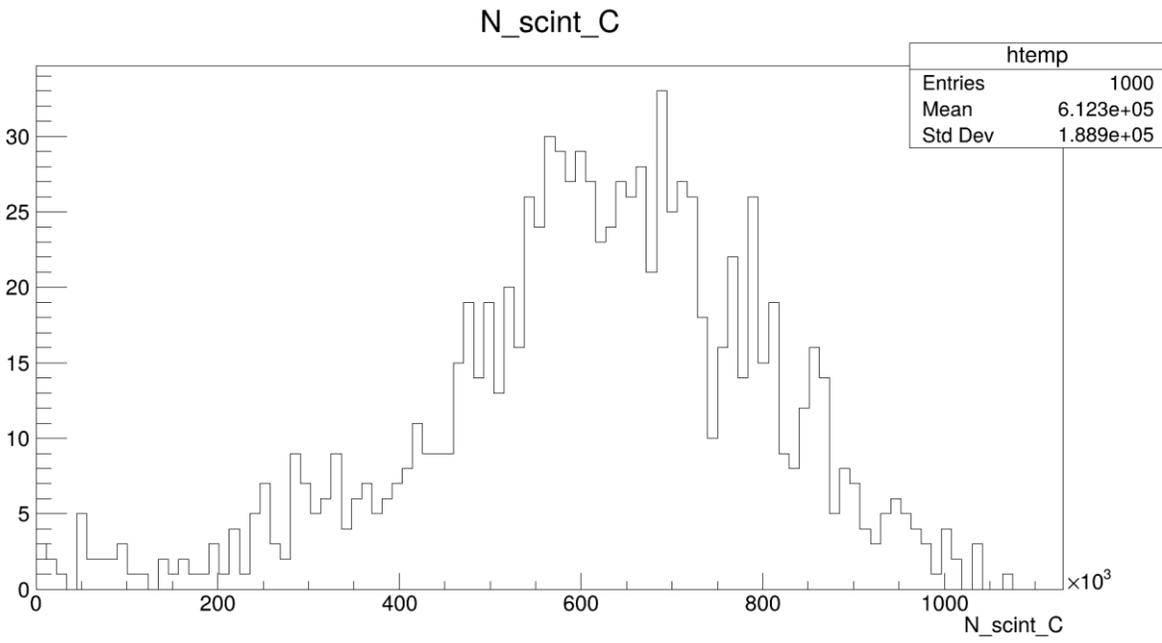


1k e+, 10 GeV, BGO



Wrapping, 100% reflectivity

$6.123 \times 10^5 \rightarrow 6.47 \times 10^5$



To do

- Optical Filter
- Optical Grease(?)
- Storing measured photon energy
- Missing Absorption Length for BSO