Simulation parameters :

e+ energy : 45 GeV (no energy spread)

Gun : 0,001 mm x 0,001 mm (sigma) – gaussian shoot – beam spread: 50 e^(-6) rad

z position of :
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0 mm // GUN
4610*mm; // Be target subdet=1
6863*mm; // dipole magnet subdet=2
7866*mm; // D2-geant4 subdet=3
19719*mm; // ECAL center subdet=4
22121*mm; // D3-geant4 subdet=5

Rootple variables :

subdet = 1 (Be target) 2 (magnet box IN) 3 (magnet box OUT) 4 (ECAL IN) 5 (ECAL OUT)

idp id particle (pdg code)

ipar id parent particle (ipar=0 if particle is the primary e+)

itrack track number

p momentum (MeV)

xh, yh, zh hit global position at the entrance of a subdet

px, py, pz momentum at the hit

xv, yv, zv vertex position if particle if has been generated

kinev kinetic energy (MeV) at the vertex production of a secondary particle

pxvdir, pyvdir, pzvdir director cosines at the vertex production of a secondary particle

pro physical process which generated the particle (0=primary e+, 1= compton, 2= Brem, 3 = pair production, 5= ionization, 6= photoelettr., 7= msc , 8 annihil)

iev # MC event

istep # step in simulation

inexstep 0=the current step is the last one ; 1= ….. is not ….