

First suspect point:

Quote: Loading Geant4 granular libraries ...

Error in <TUnixSystem::DynamicPathName>: libG4OpenGL[.so | .sl | .dl | .a | .dll] does not exist in ./usr/local/panda/fairroot/fairsoft/tools/root_v5.20.00/lib:/usr/local/panda/fairroot/fairsoft/tools/root_v5.20.00/lib:/usr/lib:/usr/X11R6/lib:/home/mertens/pandaroot/cbuild/lib:/home/mertens/pandaroot/cbuild/lib:/home/mertens/pandaroot/tools/root/lib:/home/mertens/pandaroot/generators/lib:/home/mertens/pandaroot/generators/lib:/home/mertens/pandaroot/transport/geant3/lib/tgt_linux:/home/mertens/pandaroot/transport/geant4/lib/Linux-g++:/home/mertens/pandaroot/transport/geant4_vmc/lib/tgt_linux:/home/mertens/pandaroot/transport/vgm/lib:/home/mertens/pandaroot/cern/clhep/lib:/usr/local/panda/fairroot/fairsoft/tools/root_v5.20.00/cint/cint/s t l

In your system you do not have OpenGL and/or Motif libraries. Then your Geant4 was not compiled with them and it has not created libG4OpenGL. I think (and hope) this should not affect the analysis.

To solve this, you should install OpenGL/Motif in your computer, then rebuild (first you have to clean it) Geant4 and G4VMC.

Second suspect point:

Quote:

Warning in <TClass::TClass>: no dictionary for class RangeValues is available
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fPt" will not be saved
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fPhi" will not be saved
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fEta" will not be saved
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fRapidity" will not be saved
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fP" will not be saved
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fTheta" will not be saved
Warning in <TStreamerInfo::Build>: PndFlatParticleGenerator: RangeValues has no streamer or dictionary, data member "fCosTheta" will not be saved

This has to be investigated. I think this is not safe.

Third suspect point:

Quote: Info in <TG4RootNavMgr::ConnectToG4>: ROOT detector construction class connected to G4RunManager

Adding HadronPhysicsList QGSP_BERT_EMV

<<< Geant4 Physics List engine packaging library: PACK 5.4

<<< Geant4 Physics List simulation engine: QGSP_BERT_EMV 1.0

Adding SpecialPhysicsList stepLimiter+specialCuts+specialControls
Debug mode is switched on.

You have "particular" geant4 configurations, "QGSP_BERT_EMV" physics lists and options "stepLimiter+specialCuts+specialControls". Do you really need them? They could be sources of errors.

You could try the standard and tested one in your gconfig/g4Config.C, "QGSP" (or "emStandard" to not use hadronic processes) as physics list, and no options after (no step limiter and so on).

Another test could be done by using geant3, to understand if it is related only to g4 code or even to g3.

In each case, maybe the error could be related to vmc options that were never tested (at least they were never tested by us with our code). Let's try
