

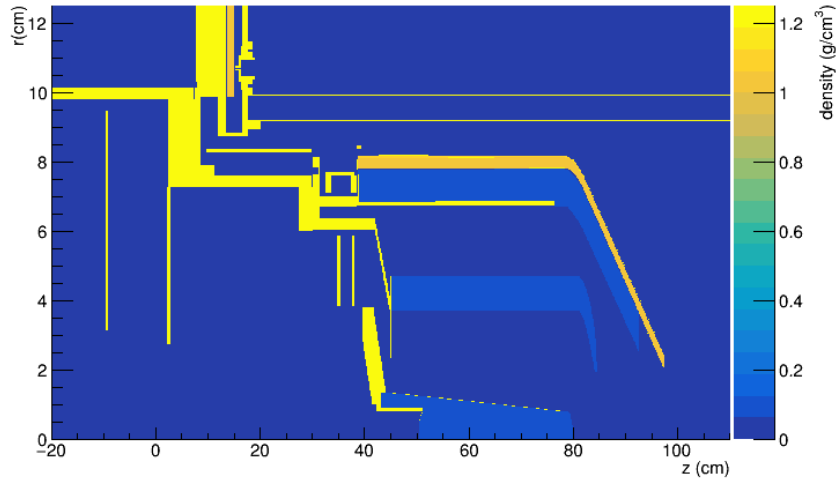
# Updates to CCDB

- New variation added to CCDB called “mc\_cpp” (based on “mc\_generic”)
- New material maps generated for HDDS 3.11 for both GlueX and CPP
- “Material Maps” refers to maps used by tracking reconstruction for energy loss and covariance matrix propagation
- Maps are cylindrically symmetric and index only in r and z

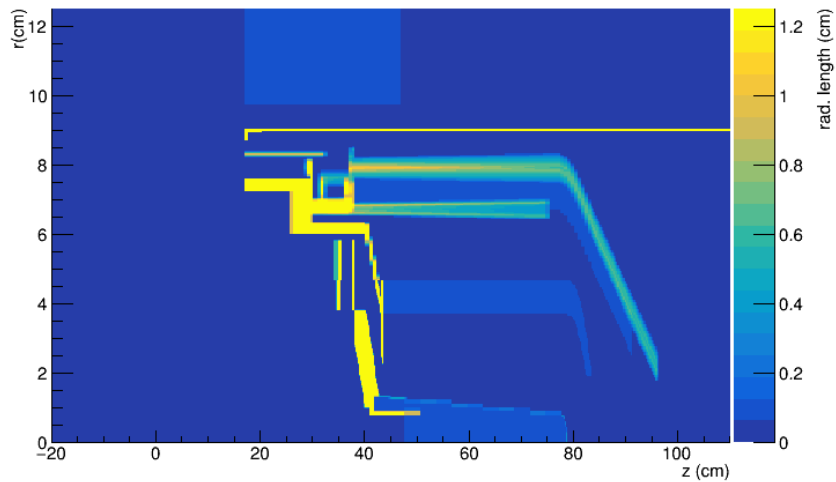
# Target Region

**NEW**

Material Map from FindMatLL(...)

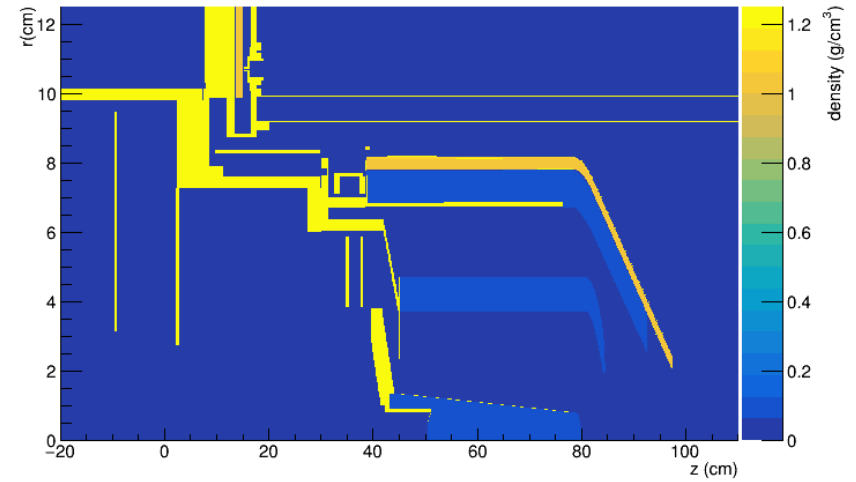


Material Map from FindMatTable(...)

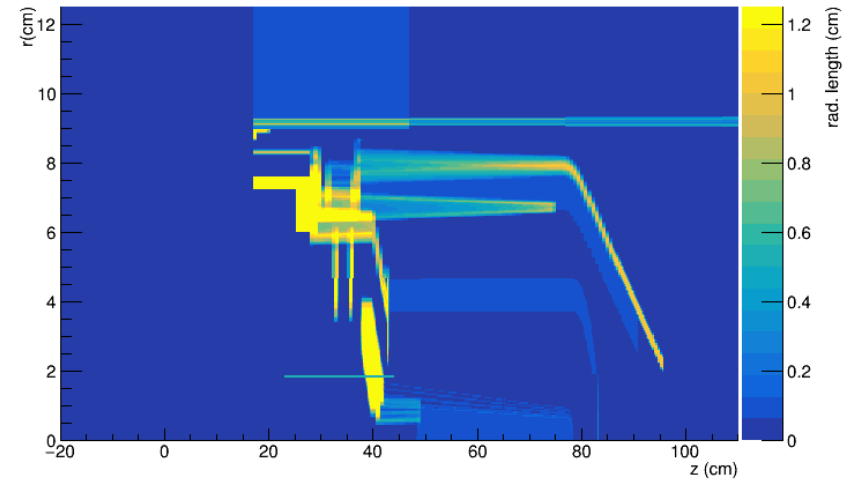


**OLD**

Material Map from FindMatLL(...)



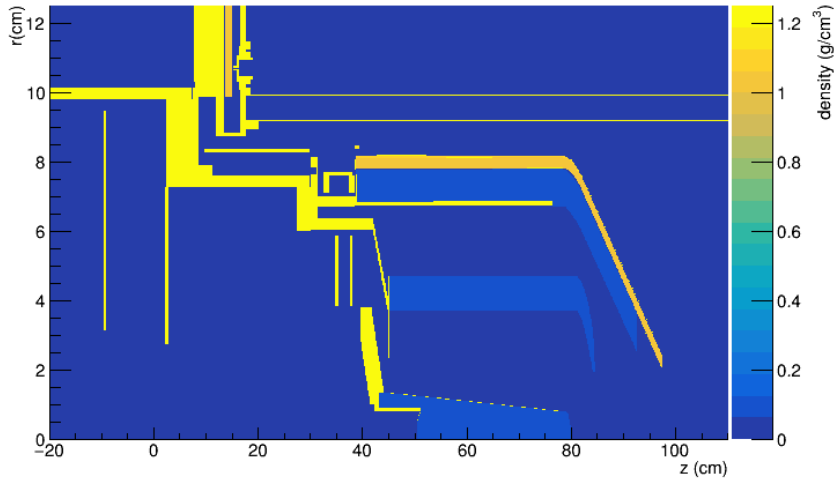
Material Map from FindMatTable(...)



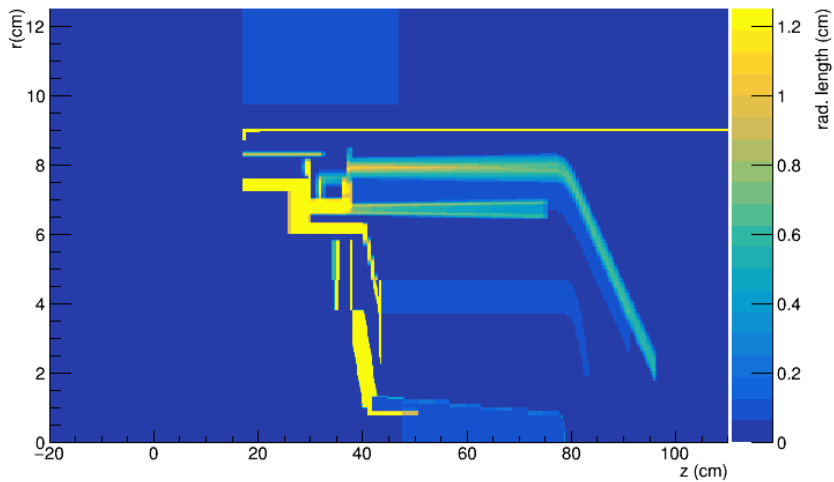
# Target Region

GlueX

Material Map from FindMatLL(...)

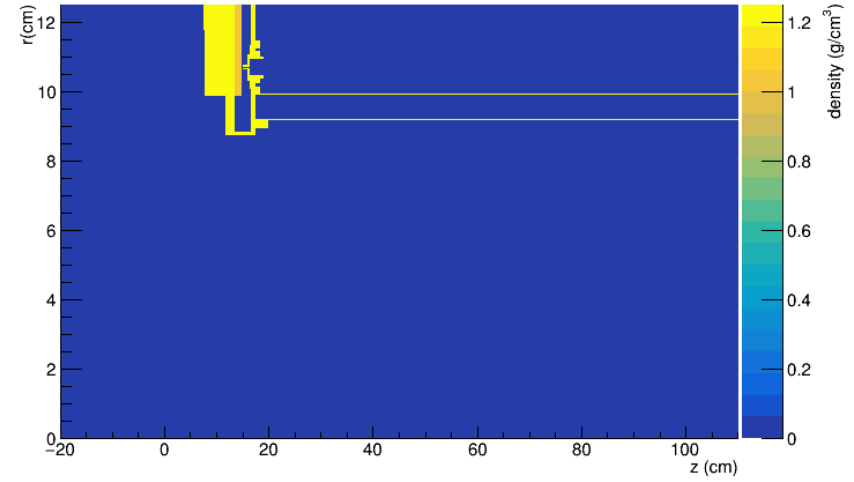


Material Map from FindMatTable(...)

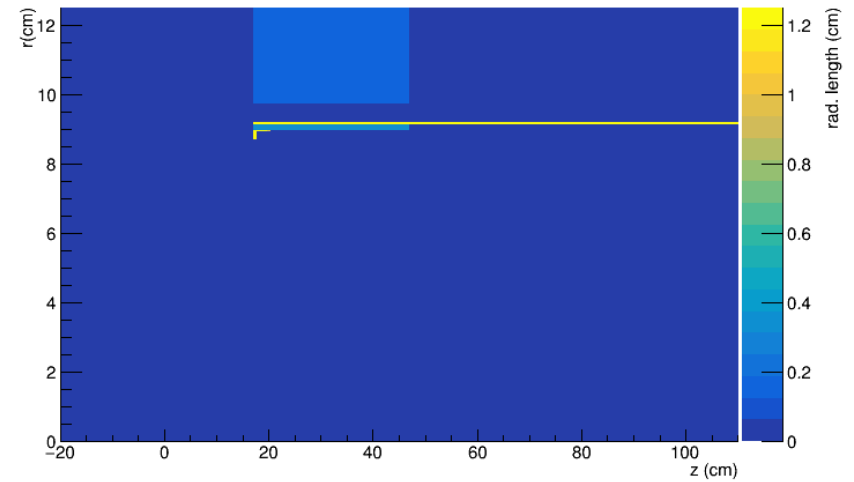


CPP

Material Map from FindMatLL(...)



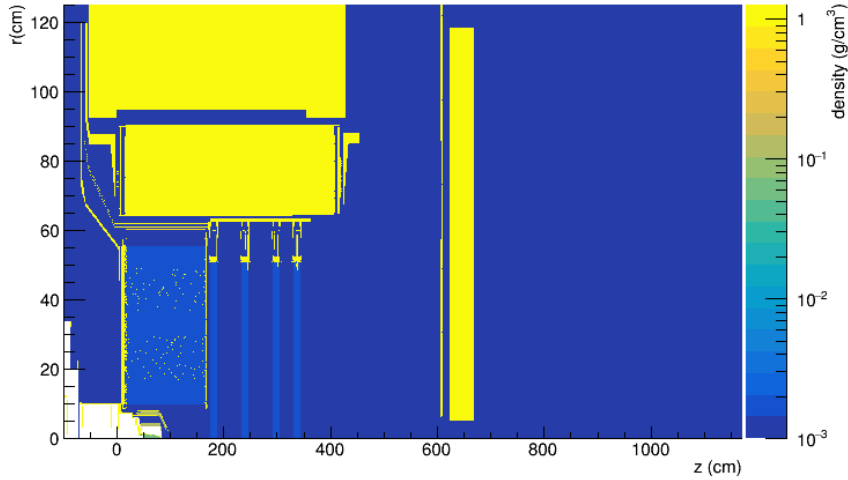
Material Map from FindMatTable(...)



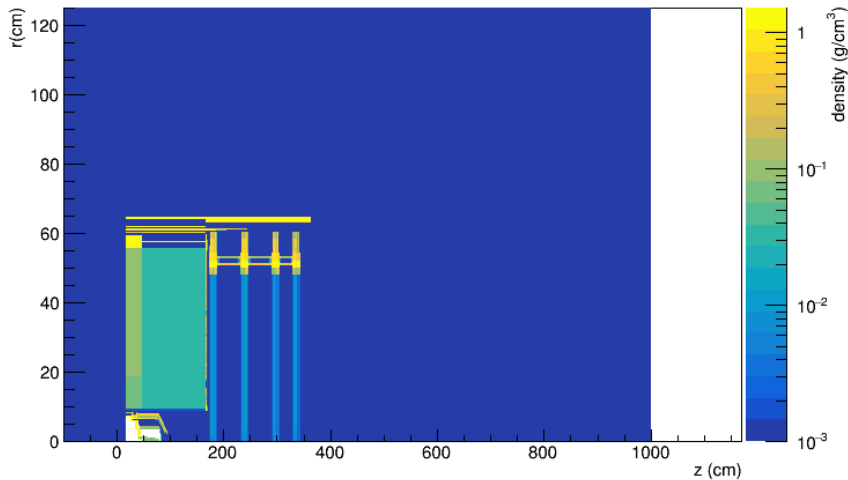
# Whole Detector

GlueX

Material Map from FindMatLL(...)

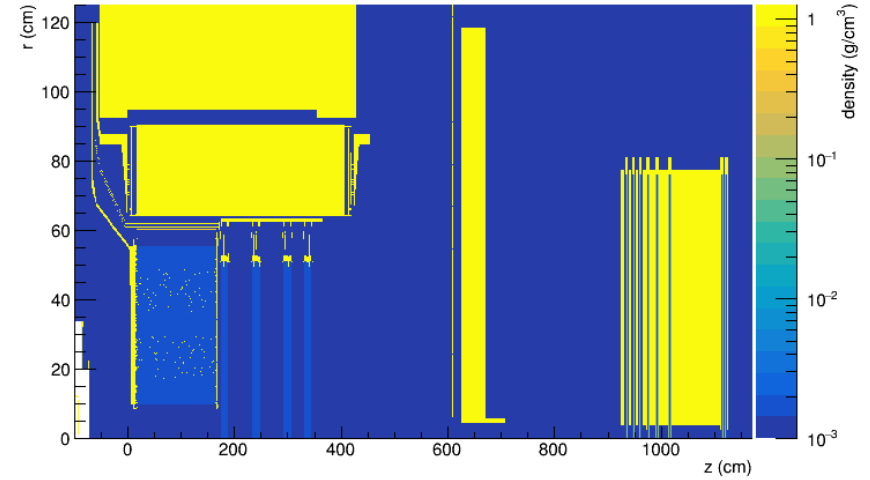


Material Map from FindMatTable(...)

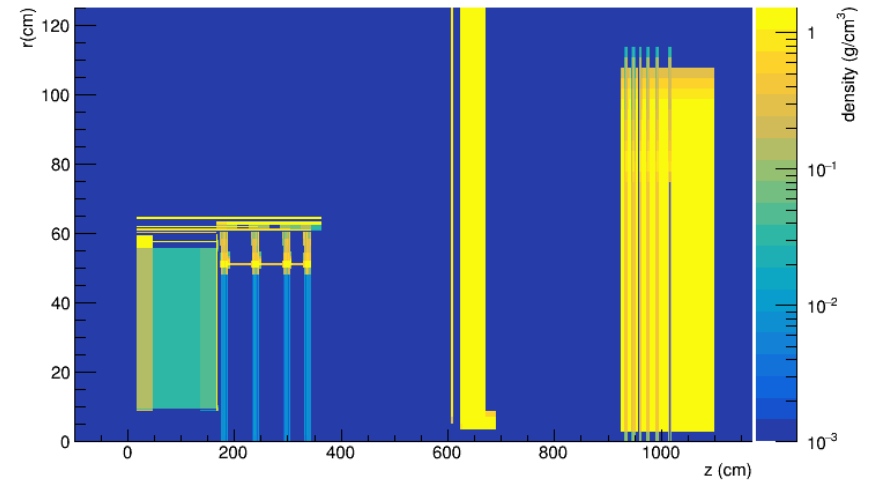


CPP

Material Map from FindMatLL(...)



Material Map from FindMatTable(...)



- Four new maps added for CPP to include TOF, FCAL, and FMWPC regions
- Material map generation procedure updated
  - New python script generates all section maps in parallel
  - All maps may be generated in ~45min as opposed to several hours

<https://github.com/JeffersonLab/sim-recon/tree/master/src/programs/Utilities/mkMaterialMap>