

eAST: Structural Changes

- Moved CMakeLists.txt to the top level

→ "Standard" installation workflow

```
$ cd east
$ mkdir build ; cd build
$ cmake ../ -DCMAKE_INSTALL_PREFIX=<path>
$ make -j 6 install
```

- make install moves data files as well, this and the source directory are now searched → no hardcode in run.mac

```
+ /eAST/component/beampipe/materialFile
Components/Beampipe/data/Detector_chamber_210222_test1_BG-04-07-2021.mat
```

```
// Enable search paths for component and b-field data
auto UImanager = G4UImanager::GetUIpointer();
G4String searchpath = UImanager->GetMacroSearchPath();
if (searchpath!="") searchpath += ":";
searchpath += CMAKE_INSTALL_FULL_DATADIR;
```

Question: Can MacroSearchPath also be controlled via G4* environment variable?

For eAST Developers

- If you add a resource file anywhere but in Core/data, update CMakeLists.txt

```
+ # Install other data to CMAKE_INSTALL_FULL_DATADIR
+ install(
+   DIRECTORY ${PROJECT_SOURCE_DIR}/Core/data
+   DESTINATION ${CMAKE_INSTALL_FULL_DATADIR}/Core )
```

```
+ # Install solenoid data to CMAKE_INSTALL_FULL_DATADIR
+ install(
+   DIRECTORY ${PROJECT_SOURCE_DIR}/Solenoid/data
+   DESTINATION ${CMAKE_INSTALL_FULL_DATADIR}/Solenoid )
```

- If you add a class that reads resources, follow this template:

```
G4String eASTVDetectorComponent::LocateDataFile( const G4String fn ) const
{
    auto UImanager = G4UImanager::GetUIpointer();
    auto ret = UImanager->FindMacroPath(fn);
    G4cout << "LocateDataFile: Returning " << ret << G4endl;
    return ret;
}
```