External library areas for diffuse models and catalog products

Introduction

In order to have a standard place for finding diffuse models and source lists (from the catalog group work), we are reviving the use of the external library area that supports the ScienceTools and GlastRelease packages.

In the past, we had used the extFiles area for storing diffuse models in the galdiffuse subdirectory, but for various reasons, this area was not updated with the new models that were developed after launch. One drawback of the extFiles area is that the "versioning" mechanism we are using (subdirectories with v#r# labels) applies to the entire directory tree, and another issue is that access to the extFiles area was limited to just a few individuals.

In the new scheme, separate areas have been created for the diffuse and catalog groups to place their respective data products. These new areas will be used for identifying and distributing the versions of their data products that are intended for use in publication-quality analyses. Having separate areas will enable these groups to install appropriate versions of their products as they see fit. In addition, coordinators from the science groups will have access to these areas on afs so that they can install the files themselves.

Directory structure

Here is the current directory structure. The parts of this structure that are mandatory are /afs/slac/g/glast/ground/GLAST_EXT/diffuseModels/v#r# and /afs /slac/g/glast/ground/GLAST_EXT/catalogProducts/v#r# . The diffuse and catalog groups are free to organize their areas below these paths while keeping mindful that any scripts or software that access these areas still have to know how to access the desired files (more on this below).

```
/afs/slac/g/glast/ground/GLAST_EXT/
diffuseModels/
v0r0/
gll_iem_v02.fit
isotropic_iem_02.txt
catalogProducts/
v0r0/
1FGL/
gll_psc_v02.xml
gll_psc_v03.fit
```

Incorporation into ScienceTools Releases

ScienceTools incorporates the information on the versioning of the external libraries area via two configuration files used in the SCons build scheme: allExt ernals.scons and externals.scons. When new versions of the catalogProducts and diffuseModels areas are ready for inclusion in ST (initially at the ST-LATEST level), the group coordinators should send requests to Joanne (jrb@slac.stanford.edu) or Heather (heather625@gmail.com) to have these files updated with the new version numbers.

The software installers use the information in the SCons configuration files to determine which external libraries need to be installed in the user's area.

Responsible Parties

Questions regarding the content of the two areas should be directed to the following maintainers:

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