Science Tools Update, April 15, 2008

Science Tools Working Group

We met last week (10 attendees) and probably will meet next week.

The current version of the Science Tools is **v9r5**. As of Friday, Navid made the standard builds available via the installer.

If you weren't one of the 55 people in the C&A meeting on Monday, you might want to check out the presentations on aspects of spectral analysis.

You might also be interested in the plans regarding Data Quality Flags that Anders prepared for last week's SO meeting but will give this week.

Data products: No news. Runs for the record in terms of delivering examples of all of the LAT science data products to the GSSC are being orchestrated for requirements sign off.

Databases and related utilities

No news

Likelihood analysis

From Jim: "I've enabled TS calculations for diffuse sources in **pyLikelihood**. This was disabled by default for gtlike since TS is computed automatically for all point sources in the model, and it doesn't really make sense to do this for the Galactic and extragalactic components, which can only be excluded reliably by the fact that they are "Diffuse" sources, so all diffuse sources are excluded in **gtlike**. For pyLikelihood, users have to actively request for a TS, so there is no unwanted/unnecessary computational burden if it can be done for diffuse sources. This is still in pyLikelihood HEAD."

GRB tools

No news

Pulsar tools

As of last week the infrastructure of the pulsar tools was almost ready to accept new timing models for binary pulsars. From Masa: "Nothing special in the pulsar tools development since the last Wednesday. James and I will detail the development plan (and hopefully start working on it) this week."

See discussion in JIRA (GRINF-38) regarding whether to add a column in FT1 recording the amount of time that the space craft has been out of GPS lock.

Observation simulation

No news

User interface and infrastructure (& utilities)

From Jim: "I've proposed to C&A (and Level-1 processing) that the FT1 cuts and event class definitions be moved from **fitsGen** to a package external to ST so that it can be under separate version control. See the discussion here. The new package is **evtClassDefs**." This factoring is important for separating software issues from cut definitions in terms of configuration control.

Pass 6 IRFs: Riccardo has checked his edisp changes. These need to be propagated to irfs/latResponse.

Eric W. has got v9r4p1 building under the HEASARC hmake system and has got 32-bit and 64-bit Linux and 10.4 OS X (Power PC and Intel) builds to prove it. These are being provided to participants in the GLAST Users Group Beta test. The builds for Mac OS X required a change in the configure script for building the CLHEP shared library. He can fill us (Navid) in if we will be making Mac OS X builds; and perhaps he already has.

Source Catalog

Did not meet last week.