Science Tools Update, August 12, 2008

Science Tools Working Group

We will have a short meeting tomorrow, 8-8:30 am Pacific, before the Catalog meeting.

The current release version of the Science Tools remains **v9r7**. Here again are the **differences** from v9r6p3. See the Science Tools Update for July 29 for a summary of the differences.

Jim reports that **v9r7p1** will be tagged soon (building as of 7:10 am Pacific today), with a fix to **gtmodel** and an important update to **gtmktime** for analyzing pointed observations (see below)

Chris informs me that **gtbin** and **gtbindef** have been released to the world by the GSSC to support analysis of GBM data.

A tutorial on high-level analyses is most likely going to be scheduled for Monday, September 15, the day of splinter session meetings before the collaboration meeting at SLAC. Details are still TBD.

Data products: No news.

Databases and related utilities

My understanding (from Julie) is that Tom, Navid, and Tony have worked out a way for the data server at GSSC to use the authentication system at SLAC. Also, Tony is working on getting the Astro Data Server online (with some updates); in addition he plans to introduce a 'skimmer' for FT1 files. I'm not sure where it will be announced, but LAT people will get word.

Jim reports that in Science Tools **v9r7p1** will add a "capability to **gtmktime** wherein it will compute the appropriate ROI-based zenith angle cut if the corresponding DSS keywords are present from **gtselect**:

```
ki-rh2[jchiang] gtmktime
Spacecraft data file[] ../FT2_merged.fits
Filter expression[IN_SAA!=T] LIVETIME>0
Apply ROI-based zenith angle cut[yes]
Event data file[] events_100_300000.fits
Output event file name[] foo.fits
ki-rh2[jchiang]
```

In the above, the user has the ability to disable this. (dataSubselector v6r2)"

Likelihood analysis

Jim reports that Science Tools **v9r7p1** will have "a fix for gtmodel wherein the normalization of the model maps was somewhat off from the fit result (Likelihood v13r17)"

GRB tools

No news

Pulsar tools

From Masa: "James and I went through the code to finalize our clean-up works, and ended up finding some issues and bugs (including the one reported as JIRA PULS-44). We are currently working on them."

Observation simulation

No news

User interface and infrastructure (& utilities)

No news

Source Catalog

Met last week; see Dave's notes linked to the agenda page. The topics included (provisionally) naming ASP sources and derivation of light curves for the sources. Alignment checks in Toby's analysis were also discussed, as well as Kent's detection of sources by eye from Toby's maps.