Science Tools Update, July 15, 2008

Science Tools Working Group

No meeting again this week. There's not a lot of news to report this week.

The current release version of the Science Tools is **v9r6p3**. Here are the **differences** from v9r5p6. It has a few updates that will be of interest to interactive users of the Science Tools (as opposed to ASP).

Data products: No news.

Databases and related utilities

No news

Likelihood analysis

Jim updated **gtltcube** to optionally apply a zenith angle cut in calculating the livetime cubes. The cut cannot be applied later. Cuts on zenith angle can significantly influence the exposure for pointed observations (when the FOV can become partially occulted by the earth). Note: Likelihood does not handle zenith angle cuts in data, however, meaning that for pointed-mode analyses, ROIs and source regions need to be defined carefully, or time range filtering should be applied to select time ranges when a particular region is not at large zenith angle.

See the note below about gtselect

GRB tools

No news

Pulsar tools

From Masa: "Nothing special in the pulsar tools development. FYI, James and I are doing final checks before tagging the pulsar tools with improved time-handling classes, etc., although users will see only a few differences on the surface with the new versions."

Observation simulation

Toby's relaxing of the consistency checking in astro, which allows the simulated pointing histories from the GSSC to be used with gtobssim and Gleam, is in the current release of the Science Tools. This doesn't solve the problem of why the consistency checks were failing, but allows simulations, e.g., of L&EO observations, to proceed.

User interface and infrastructure (& utilities)

Jim has fixed a bug in **gtselect** to have it update the TSTART and TSTOP keywords if multiple input FT1 files are given. This is important because **gtmkti me** uses these keywords.

It appears that with the current release of Science Tools we are now using Ape instead of PIL for prompting. I'm not sure how you would notice the difference but it seems to not have broken anything

Source Catalog

Met twice last week. Jean presented and we discussed First-Light source detection and counterpart assessments.