

Science Tools Update, February 10, 2009

Science Tools Working Group

The current release of the Science Tools is **v9r10**. Here are the [differences](#) from v9r9. This is an incremental release but if you are a user of likelihood you will want to switch to the new release.

The first public distribution of the Science Tools was [released](#) on Feb. 6 by the FSSC. You will see that they have binary distributions for several versions of Linux and Mac OS X. Eric W. reports that Ubuntu builds have also just been made. The FSSC distribution is based on **v9r8p2** of the Science Tools; the public distribution is a [subset of the packages](#) of our builds.

Data products: No new news about reprocessing

Databases and related utilities

No news

Likelihood analysis

v9r10 includes Steve Fegan's speed-up of the evaluations of the likelihood function. Speed-ups seem to be by a factor of ~2. This is really like something for nothing, and Jim points out that it should be especially noticeable in **gtfindsrc**.

Jim reports that it also includes the fix for the **gtsrcmaps** offset issue found by Jean Ballet, who found that the diffuse model for the Galactic plane was displaced by ~0.5 pixel after convolution in gtsrcmaps.

And he reports that **v9r10** addresses interface requests from Jean for pyLikelihood. This includes allowing users to select plot colors and line styles.

GRB tools

No news

Pulsar tools

No news - Masa is still working on other FSSC tasks.

Observation simulation

No news

User interface and infrastructure (& utilities)

Jim points out that **v9r10** includes a new version of the tip package that allows large (>2^31 row) FITS tables, if you want to use files that large. This is not currently working on the Windows builds.

Jim also points out that **v9r10** includes handling of phi-dependence of IRFs in irfs/latResponse and irfs/handoff_response. Azimuth dependence is not currently included in IRFs distributed with the Science Tools, or in the evaluation of livetime cubes, but that is coming.

Source Catalog

The [Bright Source List paper](#) is out and the main table is [available in various forms](#) from the FSSC.