

# Science Tools Update, March 31, 2009

## Science Tools Working Group

The current release of the Science Tools remains **v9r11**.

**Data products:** Reprocessing is still in planning. Julie has prepared a dictionary file for the new, trimmer LS1 definition, [described by Steve](#) at a C&A meeting last month. This has been turned into a test file sent to the FSSC for scrutiny.

## Databases and related utilities

No news

## Likelihood analysis

- The next ST release will have the convergence tolerance specified as an absolute rather than a relative quantity by default. This is less likely to result in surprises (inadequate convergence) with larger data sets. (Likelihood v14r6, pyLikelihood v1r12)
- A bug-fix for using exponentially cut-off power-law models with binned likelihood was implemented. (Likelihood v14r6p1)

## GRB tools

No news

## Pulsar tools

From Masa: "We just published a new document describing what the pulsar tools do in detail. We will move it to somewhere more official on the FSSC web site, but we need to figure out where is best for it." This is a complete definition of what each tool does and how the various modules relate.

We learned last week that the FSSC has decided that Masa's updated pulsar tools documentation will first appear with the [FSSC's documentation of the Science Tools](#) and then be made available to Chuck for reformatting for the User Workbook. Presumably this procedure will apply for other updates to the documentation that originate the FSSC. We do need to figure out how to make documentation updates flow the other way, and to keep each other mutually informed about updates.

Lucas at Bordeaux is working on some examples of pulsar analysis that will include cases for which TEMPO2 ("[The world's most powerful pulsar timing package](#)") is needed.

## Observation simulation

No news

## User interface and infrastructure (& utilities)

Eric W. reports that he has successfully imported Science Tools **v9r11** into the HEASARC build system and is starting to systematically port it to a number of versions of Linux. What the FSSC currently has [available](#) is based on **v9r8p2**.

## Source Catalog

Last week most of the discussion again was related to the 6-month source list that Jean has developed; Toby described evaluating error ellipses (vs. error circles) using pointfit.