

Science Tools Update, September 29, 2009

Science Tools Working Group

The current release of the Science Tools is now **v9r15p5**. Here are the [package differences](#) from v9r15p4. Most of the changes relate to likelihood analysis and this is the first release that has the sourcelike package. Some specifics are given below.

Eric W. reports that at the FSSC they have been "oing some tweaking to our test procedures, and we've now incorporated the sane package in our builds so that we can compare our numerical results directly to those at SLAC."

Data products: No new news.

Databases and related utilities

No news

Likelihood analysis

Jim reports that the new UpperLimits functionality mentioned in last week's report is included in Science Tools **v9r15p5**. See Jim's documentation at [Likelihood Usage Notes](#).

He also reports that the new implementation of the rate-dependent inefficiency corrections that he [described](#) in the C&A meeting yesterday, is in irfs/irfInterface v2r4p1 and the ST LATEST1.2789 build. This is not yet released. Philippe's test of the corrections for the spectral analysis of Vela look promising, removing much of the $\sim\pm 3\%$ flux variation (>100 MeV) over the precession period. The detailed rate-dependent inefficiency corrections can be thought of as the next order of correction beyond P6v3, which has a kind of all-sky average correction.

v9r15p5 includes the sourcelike package. I'd refer you to Josh Lande regarding use or testing of the sourcelike tools; I see that some [documentation](#) is available in Confluence.

GRB tools

No news

Pulsar tools

From Masa: "Nothing special in the pulsar tools development. Some minor improvements were made in error/warning messages. The changes were cvs-committed to the SLAC repository, but the new versions were not tagged for future release yet."

Observation simulation

No news

User interface and infrastructure (& utilities)

No news

Source Catalog

The 11-month source list and the development of the year-1 catalog continue to be the focus.