Checkout3 Status

> ⓘ **Note**
>
> In case you are wondering, the home page for Checkout 3 is here.

News about Checkout 3

22 September 2005 (Digel)

- Jean Ballet noticed that the 'Other 3EG' sources in the sky model for checkout 3 are not actually present in the data. This was a mistake on my part. The file checkout3_other3eg.xml is available with the other XML files of the sky model, but the sources were not included in the list of sources given to gtobssim.
- A report by Gino Tosti on running the science tools under Windows has been posted. The page Checkout3 Windows has been created for Windows-related issues and reports.
- The current version of the Science Tools is now **v6r0p4**. Notably it includes the new *gtaddlivetime* tool by Jim Chiang; see the description in today's Science Tool Update. It also has a broken power-law source *BrokenPowerLaw2* for likelihood source models that allows the overall flux to be specified as one of the parameters and *exposure_map* now allows access to all of the IRFs (Chiang).

16 September 2005 (Chiang)

- The LIVETIME column in the STC3-FT2.fits file has incorrect entries. During SAA passages, the value of this column should be zero, but it was not set correctly in converting from the ASCII version of the pointing history file. Also, the livetime fraction was apparently not set to 0.9 as previously advertised. Instead the livetime fraction is unity. Since the Checkout 3 data were generated with 100% livetime, this will continue to be used in the new file, but the livetimes during the SAA passages will zeroed. A corrected file is available as STC3-FT2_v1.fits.gz and should be made available from the Checkout 3 data server in due course.

- The spacecraft position data was not being read correctly from the FT2 file by the astro::GPS class. This has been corrected in astro v1r10p5 and will be incorporated in ScienceTools v6r0p3, to be tagged and released this afternoon. This bug fix affects only barycenter arrival time corrections for Pulsar analyses.

10 September 2005
ScienceTools has been tagged at **v6r0p2**. I have no idea if the alleged prompting problems on Windows have been addressed. This release includes significant bug-fixes for doing likelihood analyses using MapCube sources. (Chiang)

10 September 2005
An incremental release of the Science Tools (to **v6r0p2**) is in the works. Notably this will fix problems with prompting for some of the tools under Windows.

Massimiliano and Jim have tracked down the problems with the light curves of the simulated pulsars in the Checkout 3 data apparently have been tracked down in PulsarSpectrum (how it found out where the Earth is) and in the astro package (how it interpolated entries in the FT2 file). The interpolation of Earth positions between FT2 entries seems to work very well most of the time, but return 0's for the rest. This is still being fixed. A new Checkout 3 data set may be generated at that time. Meanwhile, you can still generate pulsars with the light curves that you specify by running gtobssim without an FT2 file.

I'm still looking for volunteers to serve as evaluators for the various areas. I am also still interested to hear if you will be running the tools under Windows. (Digel)

6 September 2005
Checkout 3 kicks off; see e-mail to scisoftlist. As the e-mail message describes, the Windows release of the science tools is not usable yet, and the pulsars in the Checkout 3 data set, which was generated with a precomputed orbit/attitude history, have light curves that do not match the inputs. This problem does not affect pulsars simulated in gtobssim with no precomputed orbit/attitude history. (Digel)