

Revision History

Version 0.80

1. First public release

Version 0.81

1. Link to Ezyfit added
2. Distribution fitting added
3. Multi-file import/open added

Version 0.82

1. Fix bugs introduced in 0.81

Version 0.83

1. Phase correlation and raster added
2. Cursors and x-axis limits in data views now saved in scSaveAs and retrieved in scOpen. The scProcessDataView function has been added to update sigTOOL data views using these.
3. Event filtering based on cursor positions introduced.
4. Some mex-files recompiled under R2006a for improved backwards compatibility
5. Call to javaObjectMT in jcontrol constructor removed (not available in earlier MATLAB versions).

Version 0.84

1. Data selection in result view fixed
2. Improved CFS file import – now deals with files generated off-line better
3. File Information now works
4. Numerous minor changes

Version 0.85

1. jcontrol class methods changed for compatibility with R2008b onwards.
2. Minor improvements

Version 0.86

1. Further GUI improvements for R2008b compatibility
2. Occasional bug with ABF file import fixed
3. wvFFTFilt added for FFT-based filtering with FIR filters
4. Various minor changes/improvements

Version 0.87/0.88

1. Include interface to FastICA and Icaso for independent component analysis
2. wvFilter now replaces wvFiltFilt and wvFFTFilt. FIR filters are now always implemented in a single pass. A fast FFT-based algorithm is used wherever possible (with correction for filter delay). IIR filters are still implemented via a two-pass, zero phase-shift algorithm.
3. Further GUI improvements for R2008b compatibility. Fix problems occurring when uipanel given explicitly as parent of jcontrol object.
4. Change URL to <http://sourceforge.net/projects/sigtool/>

Version 0.89

1. Unneeded calls to java set look and feel removed – these caused problems with later calls to MATLAB's property and variable inspectors.
2. Background changes within jcontrol methods for R2009a compatibility.
3. Fix pre-time values in ImportABF.
4. Neuroshare mexprog recompiled under R2006a and MS C++ 2005 Express. New mexprog.mexw32 compatible with R2006a-R2009a.
5. Support for Wave_clus now compatible with version 2.0
6. sigTOOLResultData objects may now contain custom-defined objects in the data property
7. Joint peri-event time histograms (JPETHs) analysis has been added to the Spike Train menu.
8. Saving and loading cursors to a MAT-file now implemented.

Version 0.9

1. Fixes in SON32 library
2. Update to calls to MATLAB view() function when plotting result objects. This was needed for compatibility with future MATLAB releases.
3. Preliminary support has been included for loading the Weill Medical College STAD/STAM file format. This feature is under development.
4. 1-D Current source density: force initial depth to zero when scalar increment specified.
5. Add axes limit controls to Result Manager.
6. Include custom cursor control of axes in 2D result views and support standard MATLAB pan/zoom.

Version 0.91

1. Add column display to Display Manager
2. Add datasourcetitle field to sigTOOLResultData objects.
3. Add scCreateChannelHeader function
4. Add Axes Features to Result Manager
5. Fix preferences file problem

Version 0.92

1. Add support for importing Multi Channel Systems, NeuroShare Native and CONSAM data files
2. Improved handling of custom result objects
3. Add custom open and save functions to result views. These allow sigTOOLResultData objects to be saved as structures to a standard MAT-file and reloaded.
4. Fix batch import folder names
5. Bug Fix: scSaveAs was applying shift and defaulting to double to save timestamps. As shift will usually have been zero, results will have been flints in most instances and data will generally have been written to disc as integer (automatically by TMWs save) but recast to double when reloading.
6. Support added for channel cell arrays with channels{1} empty. Define new findFirstChannel method for scchannel objects.
7. Improvements in ImportNS.
8. Fix Channel Manager, no longer duplicated on redraw.
9. File Information improved
10. Basic error checking added when opening files. scOpen will report errors/warnings to the command line. The Result Manager shows a warning icon if errors/warnings are present. The presence of these errors/warnings suggests bugs in the file import processes. Error checking is done by the scCheckChannels function which gives details of the errors/warnings in its help text.
11. Single channel viewer added – this is still under development and will change in future releases.
12. Minor improvements (including to scImport, and CreateCursor)

Version 0.93

1. MATLAB Neuroshare API now provided compiled for 32 bit Linux (tested) and Mac OS10.4 (untested and provided only for completeness). Neuroshare import is provided only where the manufacturers provide an appropriate shared library for their files on the target platform (Presently n=2 for Linux 32, n=0 for OS10.4). See About sigTOOL pdf file for full range of formats/platforms supported.
2. Provide platform-independent support for HEKA DAT files (PatchMaster and ChartMaster software)
3. Improve ABF support. The entire ABF file header is now imported. Code recompiled under R2006a and MS C++ 2005 Express for compatibility with MATLAB R2006a onwards.
4. Introduce groups to the Channel Manager tree. Channels may now be collected into groups and channels derived from a parent channel will be displayed as branches from the parent channel. The data view shows the channels in the order they appear in the Channel Manager rather than purely in ascending order by channel number. getSourceChannel and getGroupNumber methods for scchannel objects added.
5. Add Fast Save and Fast Open features.
6. Add sigTOOL menu to the Help menu – includes registration and bug reporting features.

7. Interface to waveclus now maintains the timestamp resolution of the source channel instead of defaulting to microseconds.
8. Minor changes for compatibility with MATLAB R2010a (7.10) [includes addition of `severLessThan` function].

Version 0.94

1. Fixes backwards compatibility issues for users of MATLAB R2006a through R2007b. Problems:
 - a. `scPreferences` mat-file was distributed in `-v7.3` format
 - b. `calls to memory()` not available in early versions
 - c. `pan/zoom` calls in unsupported format for early versions

Version 0.95

1. Includes Neuroshare drivers (`mexprogs`) for Windows, Mac and Linux [32 and 64 bit] courtesy of the Neuroshare project and MultiChannel Systems.
2. All-platform support for MultiChannel Systems MCD files
3. 32/64 bit Windows support for PLX files

Version 0.95 is likely to be the last pre-release before the sigTOOL 1.00, which contains more substantial improvements. These include:

1. A new set of data object classes providing faster data access
2. A new file structure with support for HDF5
3. Improved GUI
4. Support for ImageJ
5. GPGPU processing support

sigTOOL 1.00 will require MATLAB R2008a but will otherwise be backwards compatible with earlier sigTOOL versions. Release is expected mid- to late- 2011.