



*Tutorials and worked examples for simulation,  
curve fitting, statistical analysis, and plotting.*  
<http://www.simfit.org.uk>

Each time a procedure outputs a table of results to the display, a copy is written to a results file for archive purposes. So, there is no need to copy the results at run-time, but it is important to appreciate the steps needed to retrieve this information for retrospective use. The way this SIMFIT scheme works will now be explained, noting that the files are saved in the folder `C:\...\Libraries\Documents\Simfit\res`.

### 1. File names of the results files

The 101 results files are named in sequence as follows.

```
f$result.txt  
f$result.001  
f$result.002  
...  
f$result.100
```

### 2. Action taken each time a program starts

The last file `f$result.100` is deleted and the list of saved files is renamed so that `f$result.099` becomes `f$result.100` all the way down to `f$result.txt` which becomes `f$result.001`, then a new file `f$result.txt` is opened ready to receive the anticipated results.

### 3. The format of results files

The results files are standard ASCII text files which, using a monospaced font like Courier, will be lined up as rectangular tables with associated header and trailer sections. They can be edited and printed using any text editor, such as program **notepad**.

### 4. Notation used for numbers in the results files

These are in scientific notation using decimal points as follows

```
5.4321E-03 (i.e. 0.0054321)  
5.4321E+00 (i.e. 5.4321)  
5.4321E+03 (i.e. 5432.1)
```

and the number of significant figures is determined by the analytical technique being used. Of course all numbers are stored in the computer to full 64-bit precision, but the number output to tables is designed to reflect the number that would be meaningful. So, for instance, parameter estimates from curve fitting are usually only meaningful up to about four significant figures, while four decimal places is probably sufficient for probability estimates and significance tests.

### 5. Extracting tables

The results files are available for viewing, printing, saving with new names, and for extracting tables as tabbed-text, html, xml, or  $\LaTeX$  from the [Results] button on the main SIMFIT menu.

Finally, it should be obvious that any results that may be useful retrospectively must be saved before the file is rolled off the end of the list. Another issue is that when SIMFIT starts it checks that all results file that are effectively empty are deleted with subsequent rolling and renaming, which can sometimes cause a delay when SIMFIT starts. Such empty files are created when a program is started but not then used to create results.