

Curve Fit 0.7e Notes

Curve Fit version 0.7e contains two improvements over version 0.7d. The first is the calculation of uncertainties in the fitted coefficients, and the second is an improved printing procedure.

Estimated Uncertainties. Whenever the automated curve fitting procedure is completed a modal dialog box appears showing the fitted coefficients along with the estimated uncertainties in the coefficients. If, in the fitting process, a coefficient was not optimised then it will show an error of zero indicating that it was fixed. The dialog box can be reviewed later by selecting **Coeff. Errors...** from the **Plot** menu.

The estimated uncertainties only have a valid meaning for coefficients that are calculated automatically by the fitting algorithms. Hence if one or more coefficients are altered manually, the **Coeff. Errors...** menu item will be disabled. Similarly it will be disabled if a new function is chosen.

To maintain file compatibility between version 0.7c, 0.7d and 0.7e of Curve Fit, the estimated uncertainties are not saved to the disk file. However, the forthcoming version 0.8 will allow these uncertainties to be saved.

New Printing Procedure. In past versions of Curve Fit, an unorthodox method of printing smooth curves to the laser writer has been adopted. The method has now been simplified. Curve Fit 0.7e automatically creates a picture which has embedded comments that are recognised by the laser writer. These 'picture comments' tell the laser writer to apply a smoothing algorithm to the curve that is to be drawn.

The picture comments are also included when the plot is copied to the clipboard. This allows other applications (such as MS Word) to print the plot without losing print quality. MacDraw II can recognise the picture comments and so the plot can be annotated/edited without losing the information contained in the picture comments.

Bugs. If you find any bugs in either of these enhancements, please contact me on electronic mail at:

kevin@carbon.chem.csiro.au

or by writing to:

Kevin Raner

4/371 Stephenson Rd.,
Mt. Waverley, Vic 3149
Australia.