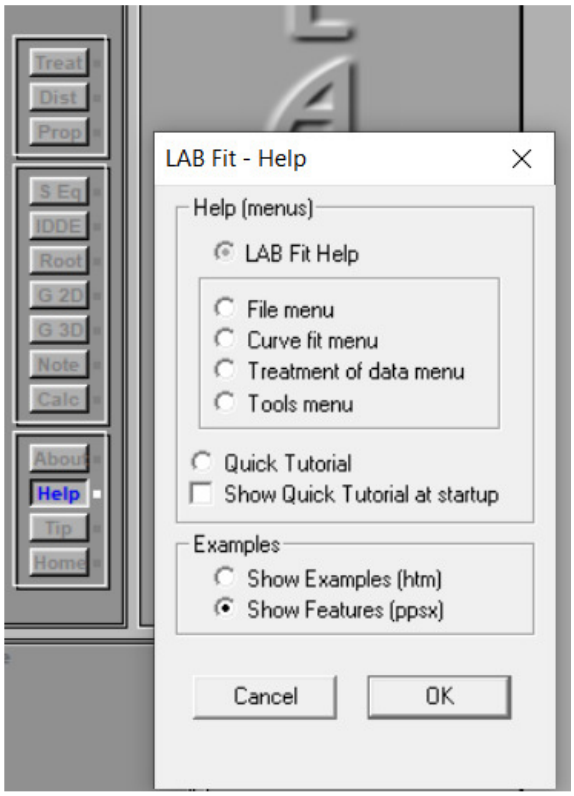
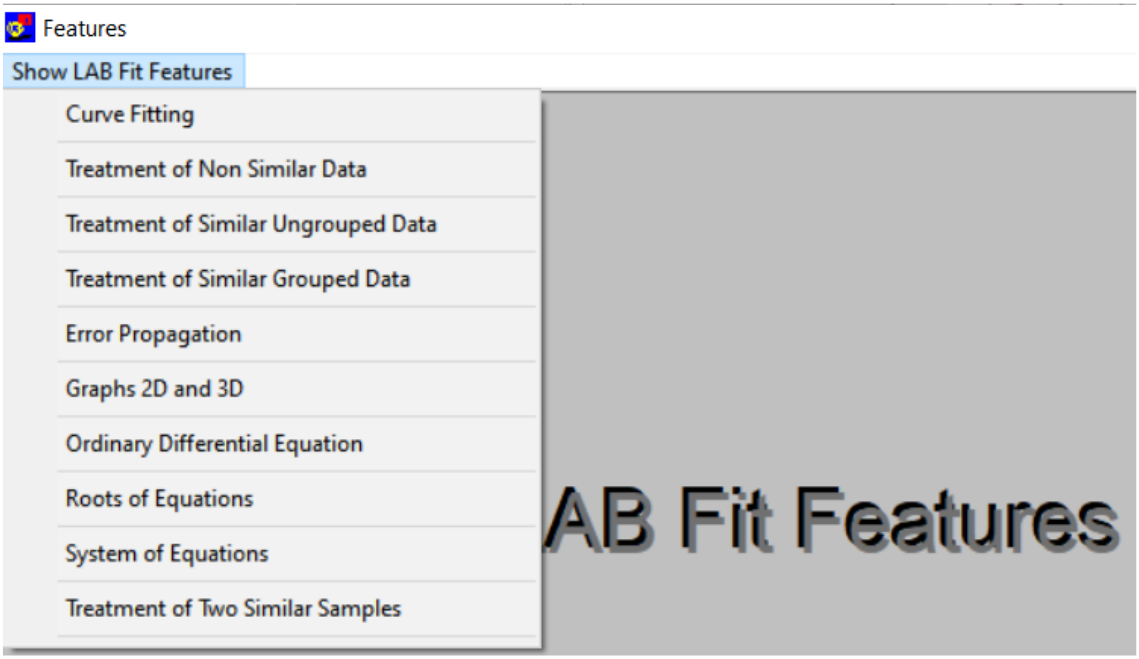
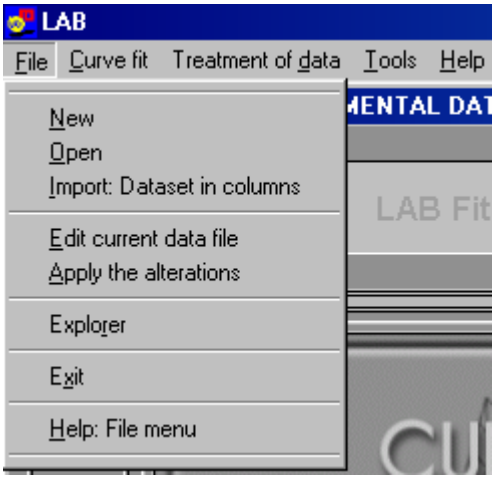
Clicking "Help" and choosing "Show Features (ppsx)"…



…you will watch several movies with help about...



The "File" Menu



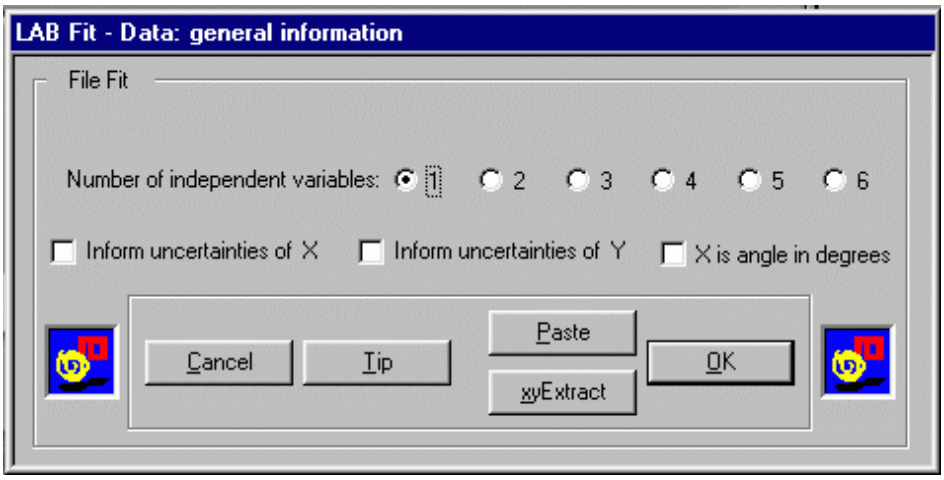
The "File" menu is the one where the user is able to **create**, **open** or **modify** a **data file** for the later functions' fit.

"New" and "Open" Options

To fit a function to a data set, the data file must be informed. To do so, at the "File" menu, use the "New" or "Open" options. Use the former if you want to supply new data and use the latter if you want to open an already existing data file.

New

To **create** a new data file the user must, at the "File" menu, click on "New" (or at the button with the same name). At next, the following dialog box will appear:



In this dialog box, it must be informed:

1) the number of independent variables (maximum 6);

2) the variables that have uncertainties to be informed (if there are any);

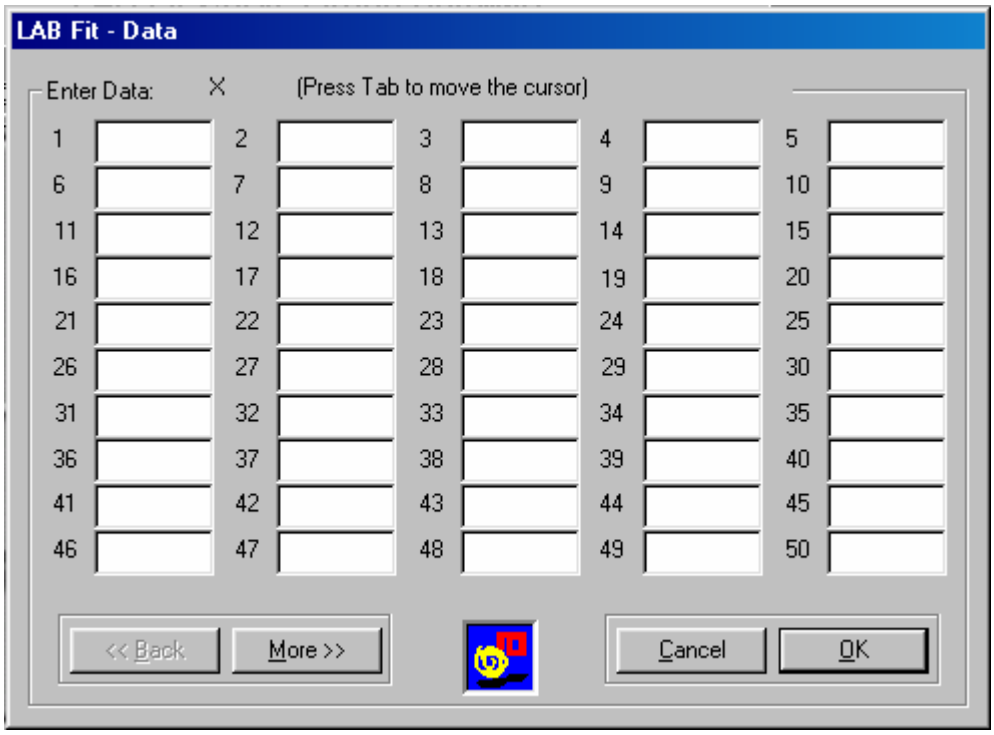
3) if the independent variable is an angle in degrees.

Options

a) If you have data in columns to be copied from the clipboard (up to 300 points, if there are more use “Imp” button on the toolbar), click on the “Paste” button **to paste** them.

b) In case that you have a 2D graph in a bmp file format, click on the "xyExtract" button for the digitizing process (see details on the Help menu of the **xyExtract Graph Digitizer** program).

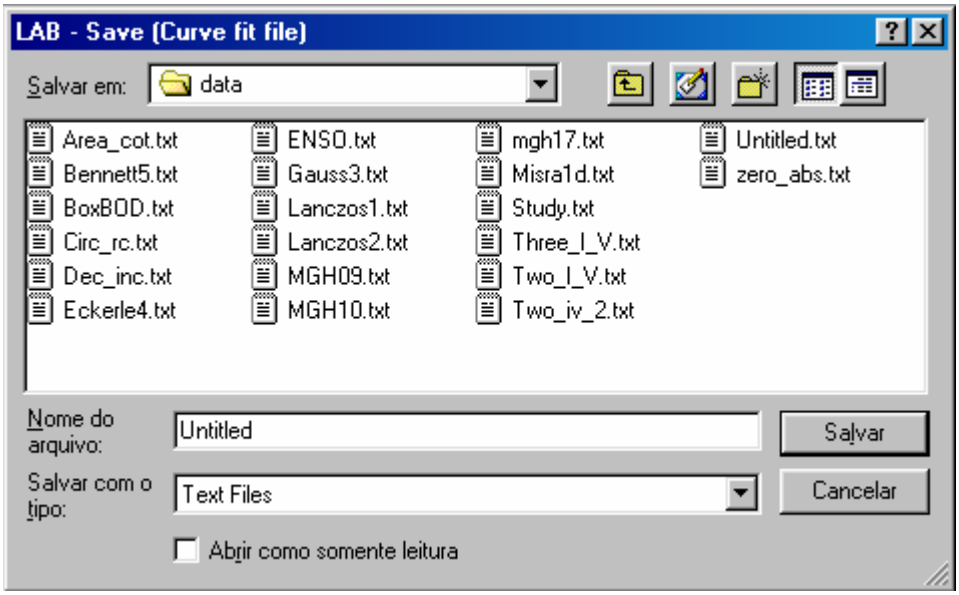
c) If you want to inform your data manually, click on the “OK” button. The **data acquisition dialog box** will then appear, seen at next:



Initially, the x values must be informed, that means, the values of the **independent variable**. In case of having more than 50 values, just click on the “More” button and continue informing the additional values.

When you have finished informing the values of x, click on the “OK” button that the values of the uncertainties of x (if there are any) or the values of y will be asked at the box of data acquisition. Then, you must do as usual to inform the values.

When you are finished informing all the values, click on “OK”, and then the browser is opened and the data file must be identified by a unique **name** (up to 40 characters), the filename is written clicking, then, on “Save”.

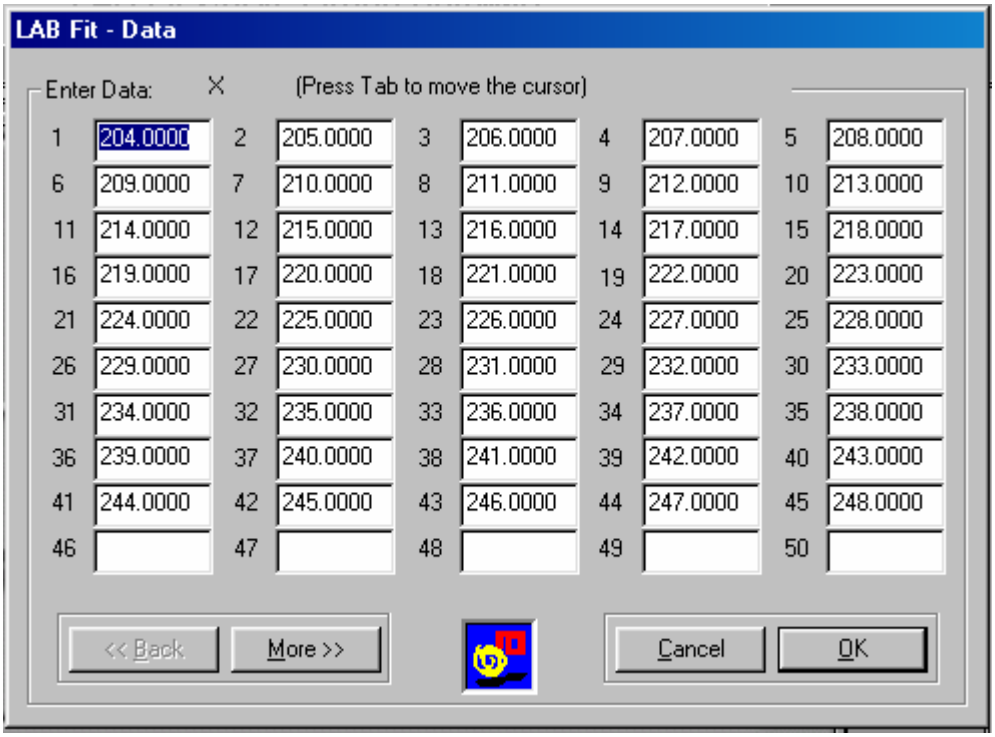


In future accesses, the file will be identified by this name, with the txt extension.

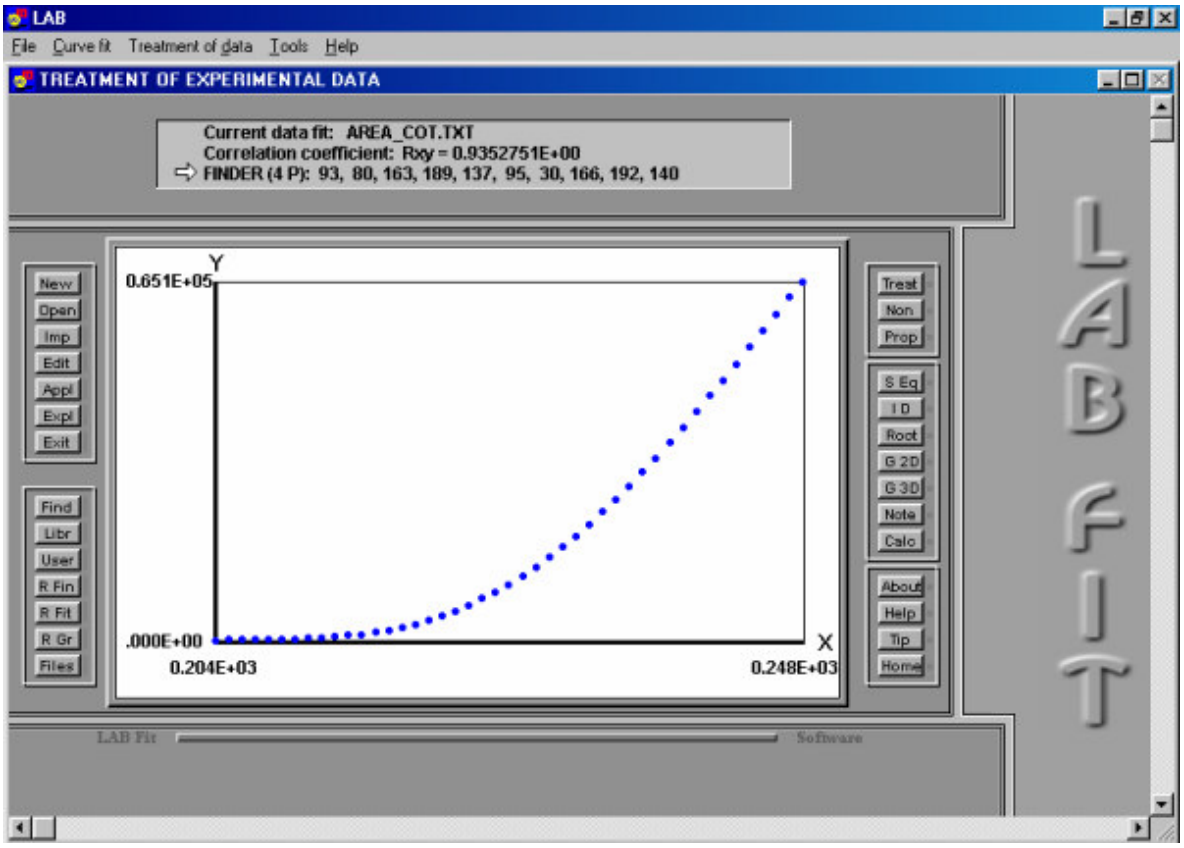
Open

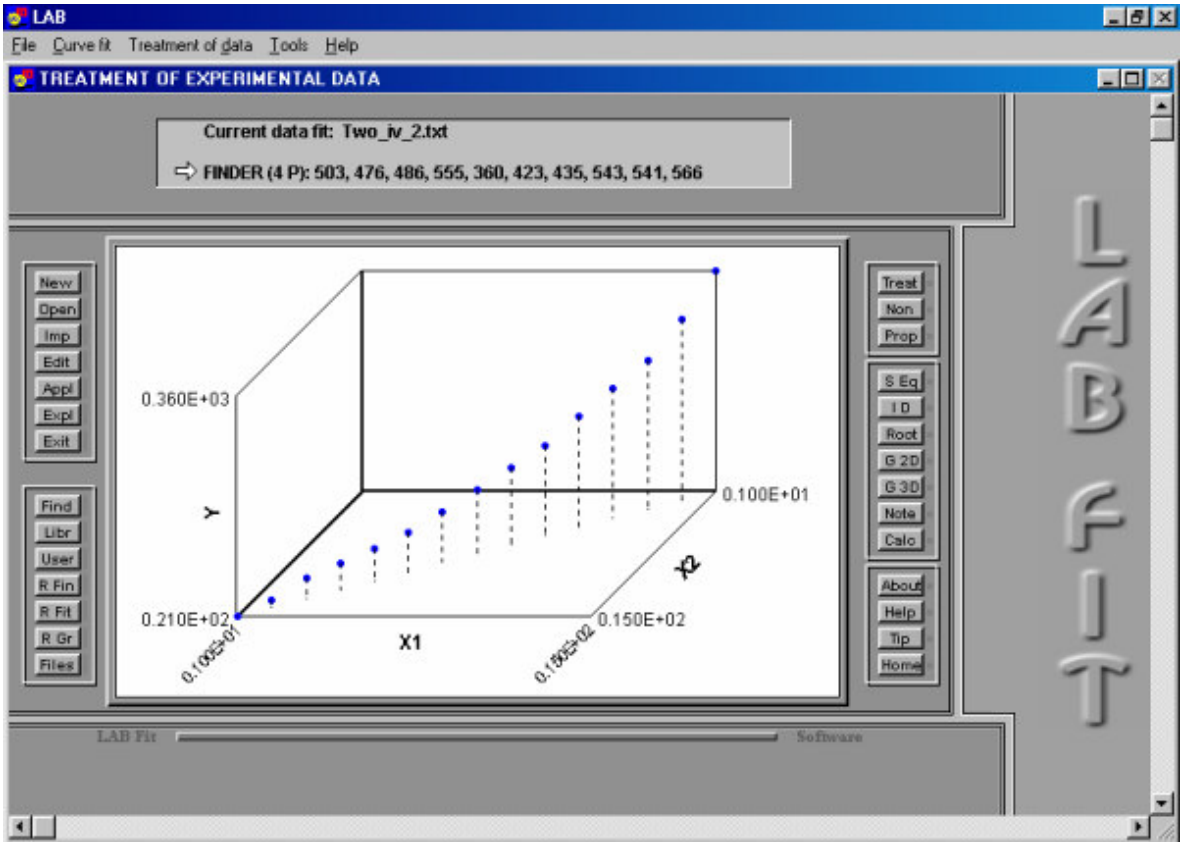
To **open** a dataset, at the "File" menu, click on "Open" (or also at the button with the same name) that the **dialog box for the files' selection** (browse) will appear.

Then, just select the desired file and click on "Open" that the respective data file will be opened. If the user selects, for example, the file Area_cot.txt, **the box of data acquisition** will appear, as it is shown at next:



If there are any corrections, they must be done now. If there are more than 50 data values, the user must click on the "More" button to access additional 50 data values. With everything ok, when "OK" is clicked, the other data (sigmax or y or sigmay) will be shown at the **box of data acquisition**. When all the data of the file is checked, if it is a fit of a function of 1 or 2 independent variables, a representative sketch of the points on an appropriated axis system will be presented on the screen:

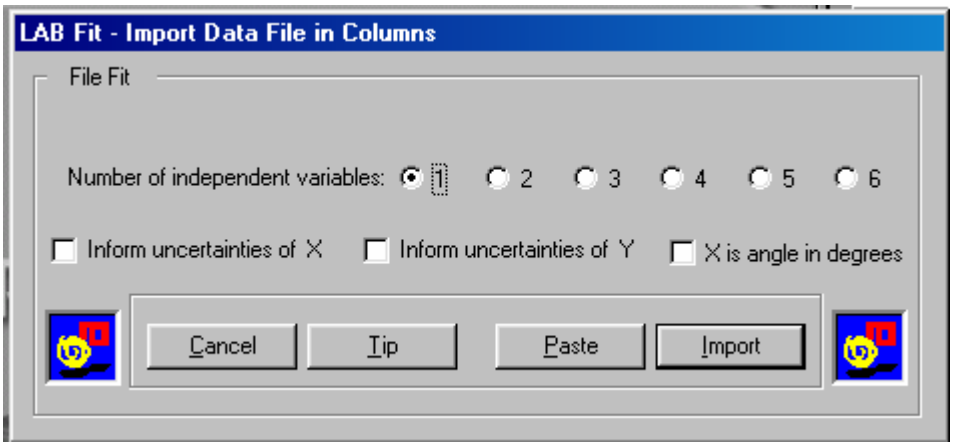

LAB
File Curve fit Treatment of data Tools Help
TREATMENT OF EXPERIMENTAL DATA
Current data fit: AREA_COT.TXT
Correlation coefficient: Rxy = 0.9352751E+00
FINDER (4 P): 93, 80, 163, 189, 137, 95, 30, 166, 192, 140
Y
0.651E+05
.000E+00
X
0.204E+03
0.248E+03
New
Open
Imp
Edit
Appl
Expl
Exit
Find
Libr
User
R Fin
R Fit
R Gr
Files
Treat
Non
Prop
S Eq
I D
Root
G 2D
G 3D
Note
Calc
About
Help
Tip
Home
LAB Fit
Software
LAB FIT


LAB
File Curve fit Treatment of data Tools Help
TREATMENT OF EXPERIMENTAL DATA
Current data fit: Two_iv_2.txt
FINDER (4 P): 503, 476, 486, 555, 360, 423, 435, 543, 541, 566
0.360E+03
Y
0.210E+02
0.100E+01
X2
0.150E+02
X1
New
Open
Imp
Edit
Appl
Expl
Exit
Find
Libr
User
R Fin
R Fit
R Gr
Files
Treat
Non
Prop
S Eq
I D
Root
G 2D
G 3D
Note
Calc
About
Help
Tip
Home
LAB Fit
Software
LAB FIT

The fit of a function to the experimental points can, then, be performed using the option of the "Curve fit" menu.

Importing a dataset (Imp)

In case the user has a **non-formatted file** (not using the **LAB Fit** data file pattern) (txt, for example) with the data in columns, the **LAB Fit** has the "Import: Dataset in columns" option at the "File" menu (or the "Imp" button) for the acquisition and reading of these data. The following dialog box will appear when this option is selected:



Then, when choosing among the possible types of data in columns,

(X,Y) (only the mean values of the points are known),

(X,Y, SIGMAY) (the mean values and the uncertainties of Y are known),

(X,SIGMAX,Y) (the mean values and the uncertainties of X are known),

(X,SIGMAX,Y,SIGMAY) (the mean values and the uncertainties of X and Y are known),

A **dialog box for the selection of files** (browse) will appear and the user must indicate the data file that, will be read at the indicated format, and that will be changed to the **LAB Fit** data file pattern.

Applying changes to a dataset (Edit and Appl)

The user has **two options** to **modify** data of a file.

To **modify** a data set **during the opening process of the file**, at the "File" menu, click on **"Open"**, or at the button with the same name. As the data values are being presented they can be modified.

To **modify** a **data set already opened**, that means, in focus, the user must, at the “File” menu, choose the “Edit current data file” option (or click on the “Edit” button) that a txt file with the data will appear and they can be modified.

To **commit** the alterations (after saving and closing the modified file), the user must, at the “File” menu, choose the “Apply the alterations” option (or click on the “Appl” button).