Command	FLIST

PURPOSE   List experimental and fit data with their uncertainties

PARAMETERS

WINDOWS   List of windows, interpreted as follows:
- number: analyzer condition
- letter: display window
- # :   temporary window
- *   all fit windows (defined by the command "FWIN")

/DISPLAY_WINDOW   List the data of all display windows.

/CURSOR   Define lower and upper limit of data range to be listed by the cursor

/CONDITIONS   The data of all conditions of the displayed analyzer (unless equal to the analyzer limits) are listed.

/LOOP   Windows are entered by cursor or terminal input loop. For details see command "FWIN".

/GRAPHIC   Data are written to the current picture.

REMARKS   If defined by the command "FERR", symmetric experimental errors are calculated; fit errors are derived from the variances and covariances of the fit parameters. Thus the fit errors correspond to the uncertainty of the fit function for the different x values. Fit errors can only be evaluated, if experimental errors are provided on input and if the fit has converged.

If not specified differently, all data within the display region are listed.

Fit values and their uncertainties are listed for the x values, for which data are given on input. Use the following procedure to evaluate and list the fit values and their errors for x values, for which no experimental data exist:

1) Add some arbitrary "experimental" data values and errors to the array of input values for those x values, for which you need the fit values and their uncertainties. For Pseudoanalyzers, any x values can be added. They need not to be equidistant. These values must be different from zero, if zeroes are excluded from the fit. (See command "SET / FITMODE(ZEROES)".)

2) Exclude these additional data from the fit by the fit window(s), using the command "FWIN" or "FWIN / LOOP".

3) Define the fit function and perform the fit.

4) List the experimental and fit values of all data with their uncertainties, including for the arbitrarily added data points, by the command "FLIST".

EXAMPLE

FLIST List the input data, their errors, the fit values, and the fit errors for all input data inside the display region. The example is given for an exponential fit function:

```
flist
   <X>      EXP      FIT       ERR(EXP)   ERR(FIT)   DIFF/ERR
   0.25    11150   11103.503   105.59356  90.600494  0.33418669
   0.75     6666    6713.9762   81.645576  41.598924 -0.5235736
   1.25     4033    4059.7527   63.505905  28.501277 -0.38433216
   1.75     2478    2454.8184   49.779514  24.458811  0.41795953
   2.25     1481    1484.3597   38.483763  20.371361 -0.07715772
   2.75      907     897.55058  30.116441  15.968132  0.27720792
<I> Data are analog (histogram), corresponding to a continuous distribution.
   X values: centres of the bins.
   Experimental values: counts per bin.
   Fit values: height of fit function (dy/dx) times bin width.
Enter command:
```

FLIST / G Write experimental and fit data of the displayed range into the current picture.