

FIT ITERATIONS

PURPOSE

Specifies the maximum number of iterations allowable for subsequent FIT commands.

DESCRIPTION

The FIT command automatically terminates itself when it has converged to the least squares solution. The number of iterations for such convergence varies with the model and the data. The FIT ITERATIONS command will not affect the number of iterations to least squares convergence. It simply terminates the iterations if convergence to the least squares solution has not occurred before the specified maximum number of iterations. Note also that if the maximum number of iterations has occurred, the analyst may resume the iterations (picking up where it had left off) by simply re-entering the FIT command.

SYNTAX

FIT ITERATIONS <n>

where <n> is a positive integer number or parameter that specifies the desired maximum number of iterations.

EXAMPLES

```
FIT ITERATIONS 30
FIT ITERATIONS 100
```

DEFAULT

The default maximum number of iterations is 50.

SYNONYMS

None

RELATED COMMANDS

| | | |
|------------------------|---|---|
| FIT | = | Carries out a least squares fit. |
| FIT STANDARD DEVIATION | = | Set the minimum standard deviation for a fit command. |
| WEIGHTS | = | Set the weights for a fit command. |
| PRED | = | A variable where predicted values are stored. |
| RES | = | A variable where residuals are stored. |

APPLICATIONS

Fitting

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
. DAN CHWIRUT ULTRASONIC REFERENCE BLOCK ANALYSIS
. PERFORM A NON-LINEAR REGRESSION
SKIP 25
READ CHWIRUT1.DAT Y X
LET ALPHA = 0.15
LET A = 0.004
LET B = 0.01
FIT ITERATIONS 200
FIT Y = EXP(-ALPHA*X)/(A+B*X)
```