

Command FPOLYNOMIAL

**PURPOSE** Specify a polynomial as fit function.

**PARAMETERS**

ORDER Order of the basic polynomial, default 0.

/SQRT The square root of the basic polynomial is extracted.

/EXP(m) The basic polynomial is multiplied by the exponential function of a polynomial of order m (without a constant term).

**REMARKS** Function and fit parameter indices are defined by the following expressions.

Polynomial (optionally square root radicand):

$$f(x) = a_1 + a_2 \cdot x + \dots + a_{n+1} \cdot x^n$$

Polynomial multiplied by an exponential:

$$g(x) = f(x) \cdot \exp(a_{n+2} \cdot x + \dots + a_{n+m+1} \cdot x^n)$$

**EXAMPLE**

FPOL 2

Specify the fit function

$$f(x) = a_1 + a_2 \cdot x + a_3 \cdot x^2$$

FPOL 1 / S E(1)

The specified fit function reads

$$f(x) = (a_1 + a_2 \cdot x) \cdot \exp(a_3 \cdot x)^{1/2}$$