

gaussianmia

Evaluation of a Gaussian and its derivatives.

Syntax

GAUSSIANMIA,x,a,f,pder

Return Value

f - (float or float array) Gaussian curve

pder - (float or float array x 4) Derivatives

Arguments

x - (float array) Parameters

a - (float array) Abscissae where we want to evaluate the Gaussian

Keywords

none

Example

Evaluate the value of a Gaussian $f = a(0) * \exp(-((x - a(1))/a(2))^2./2) + a(3)$ with coefficients a = (0.1 2.0 3.0,0.0), at the abscissae -1.0, 0.0 and 1.0.

```
IDL> gaussianmia,[-1.0,0.0,1.0],[0.1, 2.0,3.0,0.0],f,pder
IDL> print,f
0.0606531 0.0800737 0.0945959
```