By default the auto-trace and auto-residual waves are 50x50 or 25x25x25 or 15x15x15x15. Use /L=*dimSize* for other sizes. Make your own wave and use /D=*waveName* or /R=*waveName* if you want a wave that isn't square. In this case, the wave dimensions must be the same as the dependent data wave.

Confidence bands are not available for multivariate fits.

Wave Subrange Details

Almost any wave you specify to FuncFitMD can be a subrange of a wave. The syntax for wave subranges is the same as for the Display command; see **Subrange Display Syntax** on page II-321 for details. Note that the dependent variable data (*waveName*) must be a multidimensional wave; this requires an extension of the subrange syntax to allow a multidimensional subrange. See **Wave Subrange Details** on page V-274 for a discussion of the use of subranges in curve fitting.

The backwards compatibility rules for **CurveFit** apply to FuncFitMD as well.

A subrange could be used to pick a plane from a 3D wave for fitting using a fit function taking two independent variables:

```
Make/N=(100,100,3) DepData
FuncFitMD fitfunc2D, myCoefs, DepData[][][0] …
```

See Also

The **CurveFit** operation for parameter details.

The best way to create a user-defined fitting function is using the Curve Fitting dialog. See **Using the Curve Fitting Dialog** on page III-181, especially the section **Fitting to a User-Defined Function** on page III-190.

For details on the form of a user-defined function, see **User-Defined Fitting Functions** on page III-250.

FUNCREF

FUNCREF *protoFunc func* [**= *funcSpec***]

Within a user function, FUNCREF is a reference that creates a local reference to a function or a variable containing a function reference.

When passing a function as an input parameter to a user function, the syntax is:

`FUNCREF` *protoFunc func*

In this FUNCREF reference, *protoFunc* is a function that specifies the format of the function that can be passed by the FUNCREF, and *func* is a function reference used as an input parameter.

When you declare a function reference variable within a user function, the syntax is:

`FUNCREF` *protoFunc* `func = funcSpec`

Here, the local FUNCREF variable, `func`, is assigned a *funcSpec*, which can be a literal function name, a $ string expression that evaluates at runtime, or another FUNCREF variable.

See Also

Function References on page IV-107 for an example and further usage details.

FuncRefInfo

FuncRefInfo(*funcRef*)

The FuncRefInfo function returns information about a **FUNCREF**.

Parameters

funcRef is a function reference variable declared by a FUNCREF statement in a user-defined function.

Details

FuncRefInfo returns a semicolon-separated keyword/value string containing the following information:

See Also

Function References on page IV-107 and **FUNCREF** on page V-278.