```
Function/DF MainRoutine()
   DFREF dfr = Subroutine("MyDataFolder")
   Display dfr:wave0, dfr:wave1
End
```

Data Folder Reference Waves

You can create waves that contain data folder references using the **Make** /DF flag. You can use a data folder reference wave as a list of data folders for further processing and in multithreaded wave assignment using the MultiThread keyword.

Data folder reference waves are recommended for advanced programmers only.

Note: Data folder reference waves are saved only in packed experiment files. They are not saved in unpacked experiments and are not saved by the SaveData operation or the Data Browser's Save Copy button. In general, they are intended for temporary computation purposes only.

Make/DF without any assignment creates a wave containing null data folder references. Similarly, inserting points or redimensioning to a larger size initializes the new points to null. Deleting points or redimensioning to a smaller size deletes any free data folders if the wave contained the only reference to them.

To determine if a given wave is a type that stores data folder references, use the **WaveType** function with the optional selector = 1.

For an example using a data folder reference wave for multiprocessing, see **Data Folder Reference Multi-Thread Example** on page IV-325.

Accessing Waves in Functions

To access a wave in a user-defined function, we need to create, one way or another, a wave reference. The section **Accessing Global Variables and Waves** on page IV-65 explained how to access a wave using a WAVE reference. This section introduces several additional techniques.

We can create the wave reference by:

- Declaring a wave parameter
- Using $<string expression>
- Using a literal wave name
- Using a wave reference function

Each of these techniques is illustrated in the following sections.

Each example shows a function and commands that call the function. The function itself illustrates how to deal with the wave within the function. The commands show how to pass enough information to the function so that it can access the wave. Other examples can be found in **Writing Functions that Process Waves** on page III-171.

Wave Reference Passed as Parameter

This is the simplest method. The function might be called from the command line or from another function.

```
Function Test(w)
   WAVE w                  // Wave reference passed as a parameter

   w += 1                  // Use in assignment statement
   Print mean(w)           // Pass as function parameter
   WaveStats w             // Pass as operation parameter
   AnotherFunction(w)      // Pass as user function parameter
End

Make/O/N=5 wave0 = p
Test(wave0)
```