A dash appears between pairs of <coordinates>. The first set of coordinates of a pair specifies the starting coordinates of a block while the second set of coordinates of a pair specifies the ending coordinates of the block.

For a 2D dataset with three selected blocks, this might look like this:

```
3,4-6,7/11,13-15,17/21,30-37,38
```

which specifies these three blocks:

```
row 3, column 4 to row 6, column 7
row 11, column 13 to row 15, column 17
row 21, column 30 to row 37, column 38
```

Here is an example of a complete point dataset region info string with the additional information shown in red:

```
D:/Group1/Dataset3.REGIONTYPE=POINT;NUMDIMS=2;NUMELEMENTS=3;COORDS=3,4/11,13/2
1,30;
```

Here is an example of a complete block dataset region info string with the additional information shown in red:

```
D:/Group1/Dataset4.REGIONTYPE=BLOCK;NUMDIMS=2;NUMELEMENTS=3;COORDS=3,4-
6,7/11,13-15/17/21,30-37/38;
```

The wave returned after calling HDF5LoadData on a two-row dataset region reference dataset would contain two rows of text like the examples just shown. Each row in the dataset region reference dataset refers to one dataset and to a set of points or blocks within that dataset.

The "HDF5 Dataset Region Demo.pxp" experiment provides further information including examples and utilities for dealing with dataset region references.

Saving HDF5 Object Reference Data

Most HDF5 files do not use reference datatypes so most users do not need to know this information.

An HDF5 dataset or attribute can contain references to other datasets, groups and named datatypes. These are called "object references". You can instruct HDF5SaveData to save a text wave as an object reference using the /REF flag. The /REF flag requires Igor Pro 8.03 or later.

The text to save as a reference must be formatted with a prefix character identifying the type of the referenced object followed by a full or partial path to the object: "G:", "D", or "T:" for groups, datatypes, and datasets respectively. For example:

```
Function DemoSaveReferences(pathName, fileName)
   String pathName         // Name of symbolic path
   String fileName         // Name of HDF5 file

   Variable fileID
   HDF5CreateFile/P=$pathName /O fileID as fileName

   // Create a group to target using a reference
   Variable groupID
   HDF5CreateGroup fileID, "GroupA", groupID

   // Create a dataset to target using a reference
   Make/O/T textWave0 = {"One", "Two", "Three"}
   HDF5SaveData /O /REF=(0) /IGOR=0 textWave0, groupID

   // Write reference dataset to root using full paths
   Make/O/T refWaveFull = {"G:/GroupA", "D:/GroupA/textWave0"}
   HDF5SaveData /O /REF=(1) /IGOR=0 refWaveFull, fileID
```