

CHAPTER 2

Using HEC-DSSVue: An Overview

With HEC-DSSVue, you can access, view, and manipulate data stored in HEC-DSS database files using a variety of utilities and functions available from the main HEC-DSSVue screen, shown in Figure 2.1.

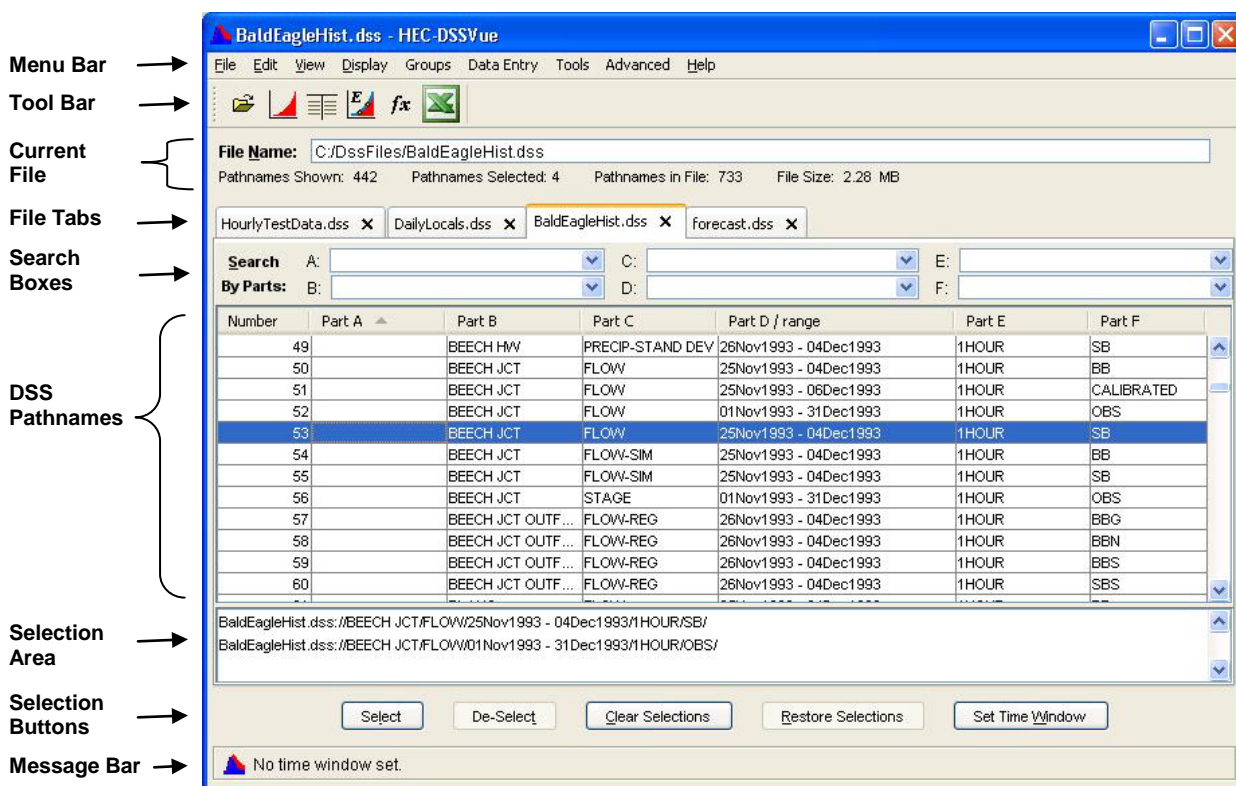


Figure 2.1 HEC-DSSVue Main Window

This chapter provides an overview of the HEC-DSSVue's main window components and their basic functions.

2.1 HEC-DSSVue Main Window

The main window of HEC-DSSVue (Figure 2.1) consists of a **Menu Bar**, **Tool Bar**, **Current File Information**, **Files Tabs**, **Search Boxes**, a list of **DSS Pathnames**, **Selection Area**, **Selection Buttons**, and **Message Bar**. The following sections describe these features in detail.

2.1.1 Menu Bar

Main menu options in HEC-DSSVue (Figure 2.2) allow you to search for, select, and edit HEC-DSS data sets; control the display of pathnames and access plots and tables among other tasks. The HEC-DSSVue main menu options are as follows:

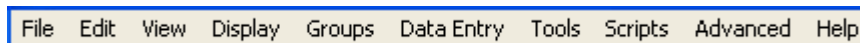


Figure 2.1 HEC-DSSVue Menu Bar

File	File menu commands include New, Open, Close DSS File(s), Print Catalog Preview, Print Catalog, and Exit . The file menu also lists the last six opened files.
Edit	Edit menu commands are Tabular Edit, Graphical Edit, Edit in Excel, Select All, Rename Records, Delete Records, Undelete, Duplicate, Copy To, and Merge Records .
View	The View menu allows you to customize the display of HEC-DSS pathnames, refresh the catalog and search pathnames. Available commands are Pathname List, Pathname Parts, Condensed Catalog, No Pathnames, Unsorted List, Search pathnames by string, Search pathnames by parts, and Refresh Catalog .
Display	Use the Display menu to view data. Options in this menu are Plot, Plot Individual Data Sets, Tabulate, Tabulate in Excel, Display Data Options, Supplemental Information, Time Window, Charts, and NC DWR Duration Hydrograph .
Groups	Use the Group menu to organize selected records into groups or view and edit existing Groups. Group menu commands include Save Selected, Get, Plot, Plot Individual Sets, Tabulate, Math, and Merge .
Data Entry	The Data Entry menu is used to add data and files to records. Commands include Manual Time Series, Manual Paired Data, Manual Text, Import, and Export .
Tools	The Tools menu provides tools for manipulating DSS records. These tools include Math Functions, Compare, Search for Value, Check File Integrity, Squeeze, Script Editor, and Script Selector .

- Custom** (Optional) If your office has written their own plug-ins, those plug-ins can be made available under the **Custom** menu. The menu name is set from the plug-in. See the Writing Plug-ins Appendix for more information.
- Scripts** (Optional) If you use scripts, you can activate the **Scripts** menu from the **Script Editor** (under **Tools**) and have quick access to your selected scripts from this menu.
- Advanced** Through the **Advanced** menu you can create, view, or print a **Condensed Disk Catalog**, **Abbreviated Disk Catalog**, or a **Full Disk Catalogs**. Additional options are **Console Output**, **DSS Output**, **Status**, **Debug**, and **Program Options**.
- Help** The **Help** menu contains the **About** option, which displays the HEC-DSSVue version information and gives access to the terms and conditions of the software.

2.1.2 Tool Bar

The **Tool Bar** buttons provide shortcuts to frequently used menu commands:



Opens the **Open HEC-DSS File** browser that allows you to select and open a HEC-DSS file. This button would be equivalent to selecting **Open** in the **File** menu.



Plots the selected data, equivalent to selecting **Plot** in the **Display** menu.



Displays the selected data in a table, equivalent to selecting **Tabulate** in the **Display** menu.



Graphically edit the selected data, equivalent to selecting **Graphical Edit** in the **Edit** menu.



Open the **Math Functions** dialog with the selected data, equivalent to selecting **Math Functions** in the **Tools** menu.



(Optional) Open the selected records in Microsoft Excel, equivalent to selecting **Tabulate in Excel** in the **Display** menu. This function relies on the Excel plug-in to be installed.

2.1.3 File Tabs

Multiple DSS files can be opened and viewed in HEC-DSSVue at the same time (Figure 2.3). Each time you open a new dss file, a tab is created with the name of the dss file shown on it. The pathnames

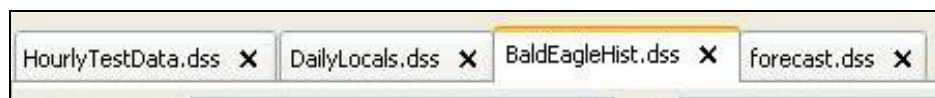


Figure 2.2 File Tabs

displayed are from the selected tab's DSS file. If more than one file is opened, selected pathnames will include the name of the DSS file they are from. For example:

BaldEagleHist.dss://BALDE/FLOW/01DEC1993/1HOUR/BB/.

2.1.4 Current File Name

The **Current File** area displays the information of the selected tab's DSS file. The **File Name** box (Figure 2.4) displays the file name and location of the selected HEC-DSS file.

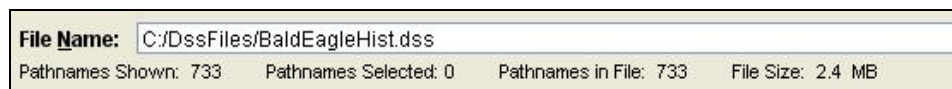


Figure 2.3 File Name Box

***Tip:** If you know the exact location and name of the HEC-DSS database file you wish to open, you can type it directly into the **File Name** box (Figure 2.4) and then click the **Enter** key to open it.*

Beneath the **File Name** box (Figure 2.4) is statistical information on the pathnames contained in that file. **Pathnames Shown** displays the number of pathnames available in the DSS file and shown in the DSS Pathname list. **Pathnames Selected** provides the number of pathnames currently selected from the file. **Pathnames in File** shows the total number of records in the file, including files and images. And finally, **File Size** displays the amount of disk space the file uses.

2.1.5 Search Boxes

Searches of the DSS pathnames can be made by full pathnames or by pathname parts. These search methods are set through the **View** menu.

The selected search method will display a checkmark next to the menu option, see Figure 2.5.

To search and display all pathnames containing a specific text, from the **View** menu click **Search pathnames by string** (Figure 2.6). Then type the text into the **Search Pathnames** box and click **Search**. The pathnames in the file that contain the text will be displayed in the **DSS Pathname** table, see Figure 2.6.



Figure 2.5 View Menu

To search using DSS parts, select from the **View** menu click **Search pathnames by parts** (Figure 2.7). Six **Search By Parts** filter boxes will

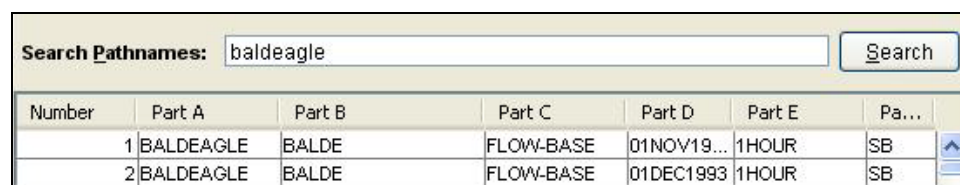


Figure 2.6 Search Pathnames by String

display, one for each DSS part. The available part names contained in the selected DSS file are listed in the filter boxes. When a part is selected in a filter box, only the pathnames that contain the filter text are shown in the **DSS Pathname** table (Figure 2.7).

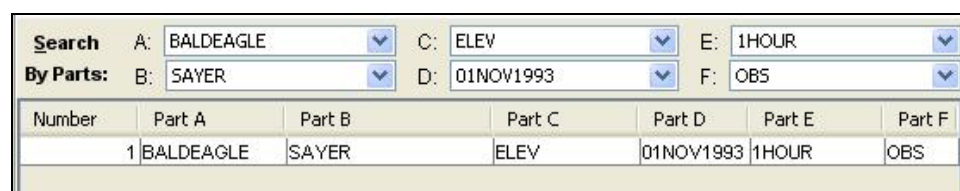


Figure 2.7 Search Pathnames by Parts

2.1.6 List of HEC-DSS Pathnames

Once you have opened an HEC-DSS file, its pathnames appear in a pane beneath the **Search By** filters (Figure 2.8). The pathnames can be displayed as a pathname sorted list (**Pathname List**), by DSS Parts (**Pathname Parts**), in the **Condensed Catalog** format, with **No Pathnames*** displayed, or as an **Unsorted List***. These options are selected from the **View** menu (Figure 2.5), as described in Section 2.5.1. An example of **Pathname by Parts** is shown in Figure 2.8.

Number	Part A	Part B	Part C	Part D	Part E	Part F
1	BALDEAGLE	BALDE	FLOW-BASE	01NOV1993	1HOUR	SB
2	BALDEAGLE	BALDE	FLOW-BASE	01DEC1993	1HOUR	SB
3	BALDEAGLE	BALDE	FLOW-DIRECT	01NOV1993	1HOUR	BB
4	BALDEAGLE	BALDE	FLOW-DIRECT	01DEC1993	1HOUR	BB
5	BALDEAGLE	BALDE	FLOW-DIRECT	01NOV1993	1HOUR	CALIBRATED
6	BALDEAGLE	BALDE	FLOW-DIRECT	01DEC1993	1HOUR	CALIBRATED
7	BALDEAGLE	BALDE	FLOW-DIRECT	01NOV1993	1HOUR	SB
8	BALDEAGLE	BALDE	FLOW-DIRECT	01DEC1993	1HOUR	SB
9	BALDEAGLE	BALDE	PRECIP-EXCESS	01NOV1993	1HOUR	BB
10	BALDEAGLE	BALDE	PRECIP-EXCESS	01DEC1993	1HOUR	BB
11	BALDEAGLE	BALDE	PRECIP-EXCESS	01NOV1993	1HOUR	CALIBRATED
12	BALDEAGLE	BALDE	PRECIP-EXCESS	01DEC1993	1HOUR	CALIBRATED

Figure 2.8 List of HEC-DSS Pathnames by Parts

****Note:** The **No Pathnames** option is typically used to access very large databases using only scripted functions. The **Unsorted List** option can be used to view pathnames in very large databases without the time required to sort the pathnames.*

2.1.7 Selected Pathnames

When you select a pathname (see Section 2.6), it appears beneath the list of all pathnames in the **Selection Area** (Figure 2.9). It includes the name of the DSS file followed by the full DSS pathname. You can change the height of the **Selection Area** by grabbing the separator line between the two lists with your mouse, and moving it up or down. Your mouse pointer will change to a double ended arrow when you are over the separator line, indicating you can slide the line up or down.

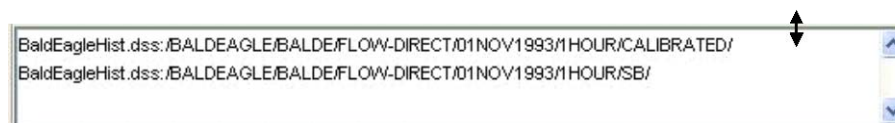


Figure 2.9 Selected Pathnames

You can also **Quick Select** pathnames if the **Selection Area** is empty by just highlighting pathnames from the main list with your mouse, and then selecting a function such as plot or tabulate. The **Selection Area** must be empty to use **Quick Select**.

2.1.8 Selection Buttons

There are five buttons located below the **Selection Area** (Figure 2.10). They are as follows:

Select

You add a pathname to the selection list by highlighting it and then clicking the **Select**

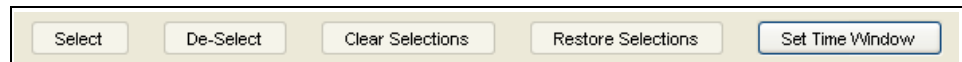


Figure 2.10 Select, De-Select, Clear Selections, Restore Selections, and Set Time Window Buttons

button. The **Select** button will remain inactive until a pathname is highlighted.

***Tip:** You can also select pathnames by double-clicking on a pathname in the list or clicking on a pathname to highlight it, then click and hold the right mouse key and drag the pathname to the **Selection Area**.*

De-Select

To remove a pathname from the **Selection Area** list, highlight the pathname in the **Selection Area** then click the **De-Select** button.

***Tip:** You can de-select by double-clicking on a pathname in the **Selection Area** list.*

Clear Selections

You can remove all pathnames from the **Selection Area** list by clicking the **Clear Selections** button.

Restore Selections

The **Restore Selections** button restores all selections you have cleared or de-selected from the **Selection Area** list.

Set Time Window

You can set the time window of the data to view with the **Set Time Window** button.

2.2 Message Bar

The **Message Bar** (Figure 2.11) appears at the bottom of the DSSVue main window and displays the current status. Messages displayed in the bar include information on current processes or information regarding



Figure 2.11 Message Bar

settings within the current DSSVue main window, such as the Time Window. For example, if the Time Window is set, the Time Window range will be displayed or if you are copying a large amount of data, the

status of the copy will be displayed in the **Message Bar** during the copy process.

2.3 Drag and Drop

HEC-DSSVue supports a variety of Drag and Drop operations. You can drag pathnames from the main screen to any open table or plot to add those data sets to the table or curve. You can copy data from one DSS file to another by dragging the pathnames of the data sets you want to copy to the tab of the file you want to copy to, or to the main window of another instance of HEC-DSSVue. An example is shown in Figure 2.12.

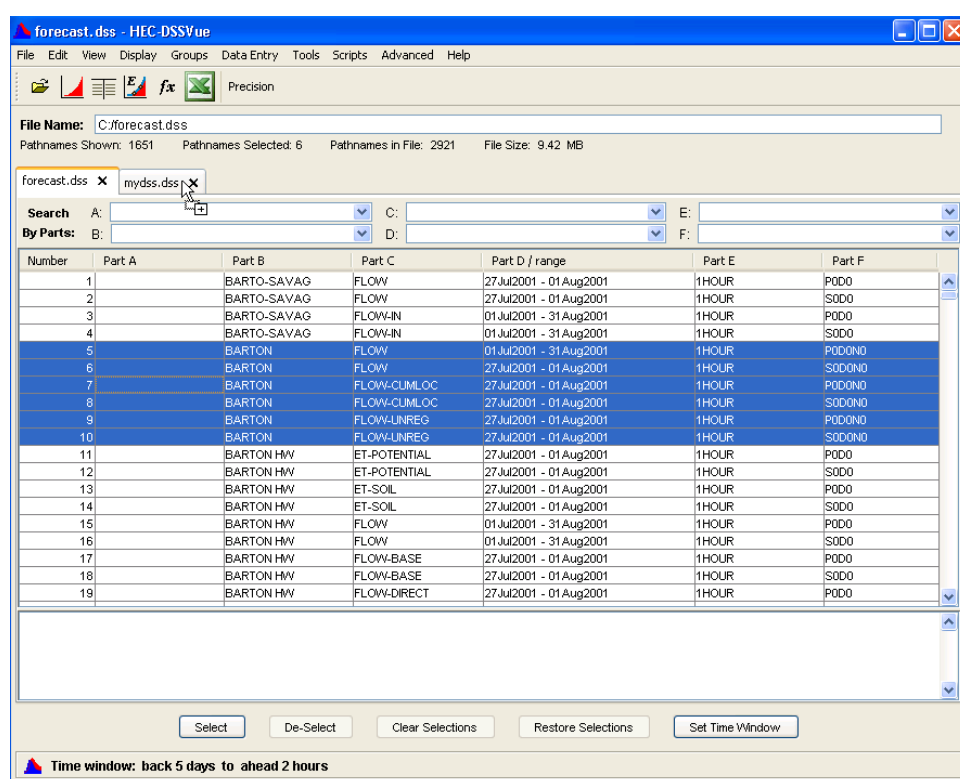


Figure 2.12 Copying data from one DSS file to another using Drag and Drop

You can import data into a DSS file by dragging the data or files from Windows Explorer onto the HEC-DSSVue screen. If you have a plug-in loaded that recognizes the file extension, that data will automatically be imported. For example, you can drag a ".shef" file or ".ncdc" file to import shef data or import climate data from the National Climatic Data Center.

You can drag regular files onto HEC-DSSVue and they will be stored in the FILE convention in that DSS file. For example, you can drag a .pdf file or .xls file onto HEC-DSSVue to be stored in the DSS file. When you

plot or tabulate those data sets, HEC-DSSVue will launch the native application for that data set.

You can also drag pictures (e.g., ".jpg") files on to the main screen to store them, and then view them back as a slide show.

2.4 File Menu Operations

HEC-DSSVue's **File** menu allows you to create a **New** HEC-DSS file, **Open** an existing HEC-DSS file, **Close DSS File(s)** you have opened, show the **Print Catalog Preview**, **Print Catalog**, open a recently viewed file, and **Exit** the program. If you are running HEC-DSSVue in a client-server mode, you can **Open a Remote** file or create a **New Remote** file. The following sections discuss these operations in detail.

2.4.1 Creating a New HEC-DSS File

To create a new HEC-DSS database file, from the **File** menu, click **New**. When the **Create new HEC-DSS File** dialog box opens (Figure 2.13), select where you would like to create the file using the **Look in** list or file icons. Type in a name for the new file in the **File name** box and then click

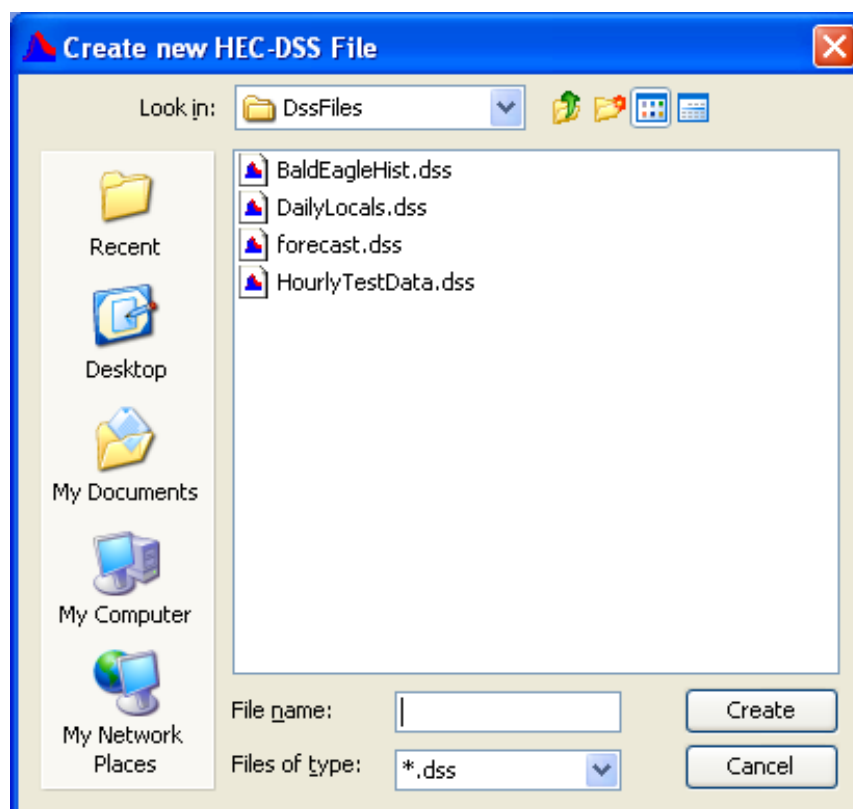


Figure 2.13 Create new HEC-DSS File Dialog Box

the **Create** button. A new HEC-DSSVue file will be created in the location you selected. Data can then be added using the tools located under the **Data Entry** menu, copied in through the many different plug-ins available, or copied from other DSS files*.

**Note: If you copy records from an existing file, a new DSS file will be created automatically if one does not already exist.*

2.4.2 Opening an HEC-DSS File

To open a DSS file, from the **File** menu, click **Open**. The **Open HEC-DSS File** browser will display, shown in Figure 2.14.

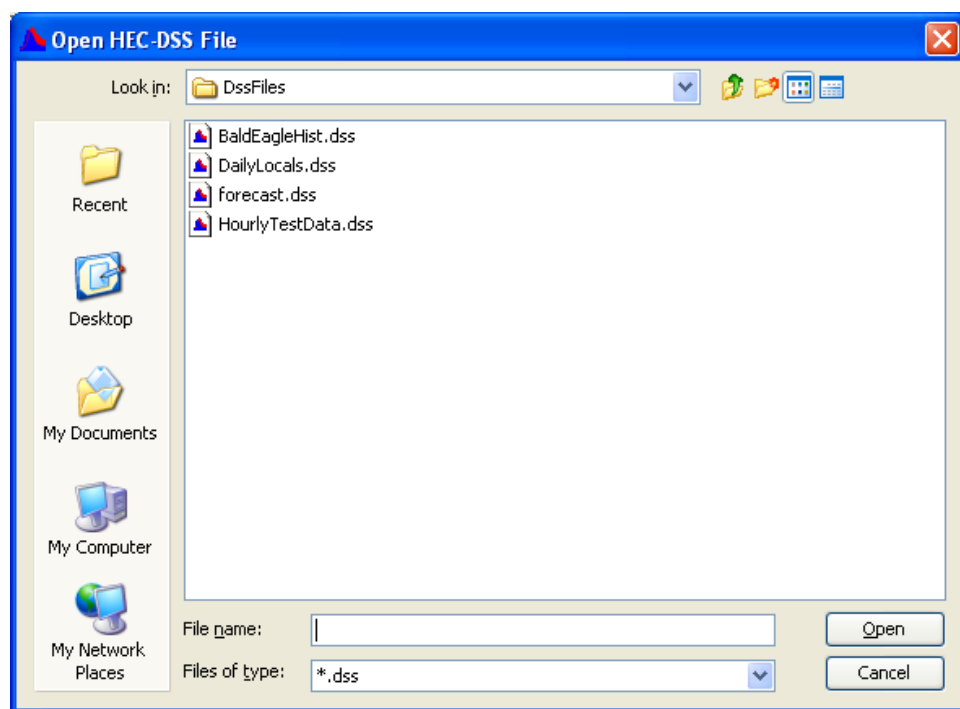


Figure 2.14 Open HEC-DSS File Browser

*Note: If you know the name of the HEC-DSS database file you wish to open, you can type the file name (including the path) directly into the **File Name** box on the main DSSVue window (see Figure 2.1, page 2-1).*

From the **Open HEC-DSS File** browser, use the standard Windows controls to browse to the HEC-DSS file that you wish to open, click **Open**.

The name of the file you have selected will now appear in the **File name** box (see Figure 2.1, page 2-1), and the pathnames of the records contained in the file will display in the **List of HEC-DSS Pathnames**.

2.4.3 Closing an HEC-DSS File

To close the currently selected HEC-DSS database file, from the **File** menu, click **Close**. This will allow some older MS-DOS based programs to access the file or for you to rename or delete the file. HEC-DSS will automatically close un-accessed file files after about a minute. They will be automatically re-opened on the next access.

***Note:** HEC-DSS is a multi-user database system. Some older MS-DOS programs exclusively locked HEC-DSS files. HEC-DSS will automatically close un-accessed file files after about a minute. They will be automatically re-opened on the next access.*

2.4.4 Printing the Catalog

You can print the catalog of a DSS file directly (**Print Catalog**) or you can preview what the catalog will look like before you print (**Print Catalog Preview**). For further printing of DSS catalogs, see Chapter 4.

A catalog for the DSS file consists of a list of the pathnames contained in the file, similar to what is displayed in the **DSS Pathname** list area. From the **View** menu the user can determine how the catalog will display the pathnames. For example, the catalog could be displayed as a sorted list or by pathname parts. The catalog for the currently selected DSS file can be printed or viewed in a separate window.

To preview the catalog in a separate window and then print:

1. From the **File** menu, click **Print Catalog Preview**, a **Properties** dialog box will open (Figure 2.15) that is specific for setting up a report for printing. The **Properties** dialog box offers various print options, on three separate tabs.
2. The **Page** tab allows you to specify the page **Orientation**, **Scaling**, and **Selection**; you can also choose to print the

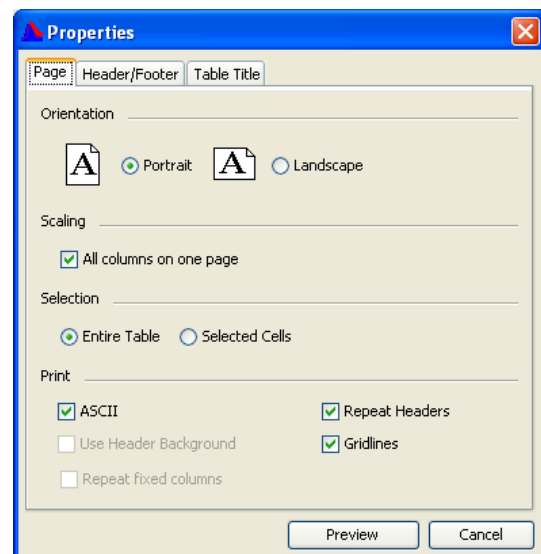


Figure 2.15 Properties Dialog Box

table as **ASCII**, **Repeat Headers** on every page, and print the **Gridlines**.

3. On the **Header/Footer** tab, you can type in the header and footer you want to appear on your printed pages.
4. The **Table Title** tab offers a default title for the table based on the data source. You may edit this title.
5. Once the user has the report setup, click **Preview**, the **Print Preview** dialog box will open (Figure 2.16).

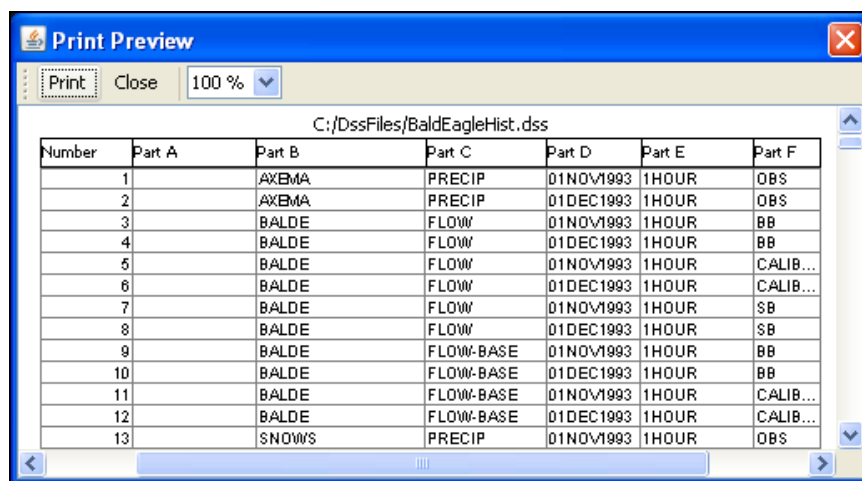


Figure 2.16 Print Preview Dialog Box

6. To print the catalog, click **Print**, a **Print** dialog box will open, click **OK**, and the report will print to the selected printer.

To preview the catalog in a separate window and then print:

1. From the **File** menu, click **Print Catalog**, a **Properties** dialog box will open (see Figure 2.15, page 2-11) that is specific for setting up a report for printing. The **Properties** dialog box offers various print options, on three separate tabs.
2. From above, review Steps 2 thru 4 for available print options.
3. Click **Print**, a **Print** dialog box will open, click **OK**, and the report will print to the selected printer.

2.4.5 Exiting HEC-DSSVue

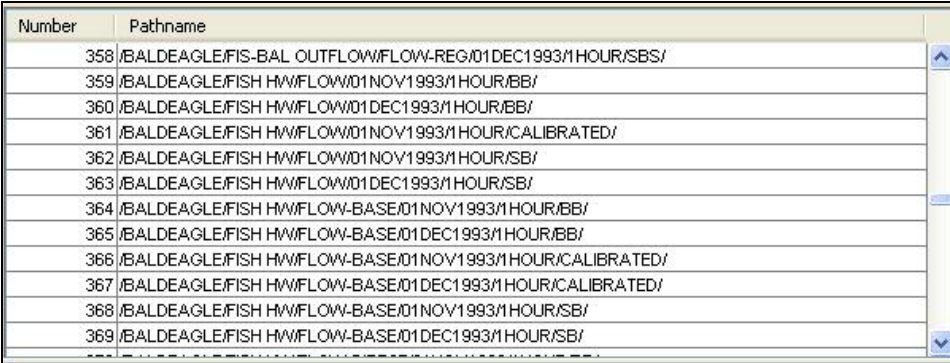
To exit HEC-DSSVue, from the **File** menu, click **Exit**. (If you have opened HEC-DSSVue from another application, such as CWMS or ResSim, click **Close** from HEC-DSSVue's **File** menu.)

2.5 View Catalog

The **View** menu allows you to change the appearance the catalog that is associated with a DSS file.

2.5.1 Choosing a Display Mode for HEC-DSS Pathnames

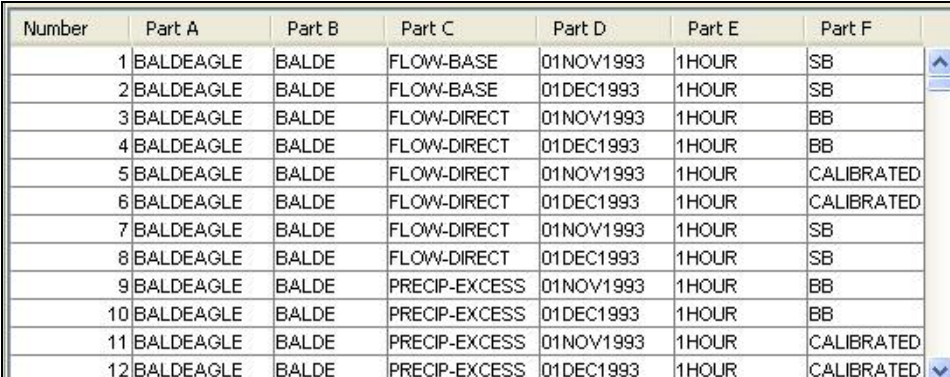
To specify the display mode for HEC-DSS Pathnames, choose **Pathname List**, **Pathname Parts**, **Condensed Catalog**, or **No Pathnames** or **Unsorted List** from the **View** menu. A **Pathname List** of HEC-DSS files displayed is shown in Figure 2.17.



Number	Pathname
358	/BALDEAGLE/FIS-BAL OUTFLOW/FLOW-REG/01DEC1993/1HOUR/SBS/
359	/BALDEAGLE/FISH HW/FLOW/01NOV1993/1HOUR/BB/
360	/BALDEAGLE/FISH HW/FLOW/01DEC1993/1HOUR/BB/
361	/BALDEAGLE/FISH HW/FLOW/01NOV1993/1HOUR/CALIBRATED/
362	/BALDEAGLE/FISH HW/FLOW/01NOV1993/1HOUR/SB/
363	/BALDEAGLE/FISH HW/FLOW/01DEC1993/1HOUR/SB/
364	/BALDEAGLE/FISH HW/FLOW-BASE/01NOV1993/1HOUR/BB/
365	/BALDEAGLE/FISH HW/FLOW-BASE/01DEC1993/1HOUR/BB/
366	/BALDEAGLE/FISH HW/FLOW-BASE/01NOV1993/1HOUR/CALIBRATED/
367	/BALDEAGLE/FISH HW/FLOW-BASE/01DEC1993/1HOUR/CALIBRATED/
368	/BALDEAGLE/FISH HW/FLOW-BASE/01NOV1993/1HOUR/SB/
369	/BALDEAGLE/FISH HW/FLOW-BASE/01DEC1993/1HOUR/SB/

Figure 2.17 HEC-DSSVue - Data Selection List window, Pathname List displayed

You can also view the pathnames as a **Pathname Parts** List (Figure 2.18).



Number	Part A	Part B	Part C	Part D	Part E	Part F
1	BALDEAGLE	BALDE	FLOW-BASE	01NOV1993	1HOUR	SB
2	BALDEAGLE	BALDE	FLOW-BASE	01DEC1993	1HOUR	SB
3	BALDEAGLE	BALDE	FLOW-DIRECT	01NOV1993	1HOUR	BB
4	BALDEAGLE	BALDE	FLOW-DIRECT	01DEC1993	1HOUR	BB
5	BALDEAGLE	BALDE	FLOW-DIRECT	01NOV1993	1HOUR	CALIBRATED
6	BALDEAGLE	BALDE	FLOW-DIRECT	01DEC1993	1HOUR	CALIBRATED
7	BALDEAGLE	BALDE	FLOW-DIRECT	01NOV1993	1HOUR	SB
8	BALDEAGLE	BALDE	FLOW-DIRECT	01DEC1993	1HOUR	SB
9	BALDEAGLE	BALDE	PRECIP-EXCESS	01NOV1993	1HOUR	BB
10	BALDEAGLE	BALDE	PRECIP-EXCESS	01DEC1993	1HOUR	BB
11	BALDEAGLE	BALDE	PRECIP-EXCESS	01NOV1993	1HOUR	CALIBRATED
12	BALDEAGLE	BALDE	PRECIP-EXCESS	01DEC1993	1HOUR	CALIBRATED

Figure 2.18 HEC-DSSVue - Data Selection List window, Pathname Parts displayed

The **Condensed Catalog** style (see Figure 2.19, page 2-14) abridges time series data sets so that the date span for the entire data set displays in place of the "D" part.

The **Unsorted List** style (see Figure 2.20, page 2-14) displays the pathnames without sorting them. This is useful to see the pathnames in a very large database without using the overhead of sorting. This is also the fastest method to show the pathnames in a database.

Number	Part A	Part B	Part C	Part D / range	Part E	Part F
358	BALDEAGLE	MILES HW	PRECIP-EXC...	26Nov1993 - 04Dec1993	1HOUR	SB
359	BALDEAGLE	MILES HW	PRECIP-INC	26Nov1993 - 04Dec1993	1HOUR	BB
360	BALDEAGLE	MILES HW	PRECIP-INC	26Nov1993 - 06Dec1993	1HOUR	CALIBRATED
361	BALDEAGLE	MILES HW	PRECIP-INC	26Nov1993 - 04Dec1993	1HOUR	SB
362	BALDEAGLE	MILES HW	PRECIP-STA...	26Nov1993 - 04Dec1993	1HOUR	BB
363	BALDEAGLE	MILES HW	PRECIP-STA...	26Nov1993 - 06Dec1993	1HOUR	CALIBRATED
364	BALDEAGLE	MILES HW	PRECIP-STA...	26Nov1993 - 04Dec1993	1HOUR	SB
365	BALDEAGLE	MILES JCT	FLOW	25Nov1993 - 04Dec1993	1HOUR	BB
366	BALDEAGLE	MILES JCT	FLOW	25Nov1993 - 06Dec1993	1HOUR	CALIBRATED
367	BALDEAGLE	MILES JCT	FLOW	01Nov1993 - 31Dec1993	1HOUR	OBS
368	BALDEAGLE	MILES JCT	FLOW	25Nov1993 - 04Dec1993	1HOUR	SB
369	BALDEAGLE	MILES JCT	FLOW-SIM	25Nov1993 - 04Dec1993	1HOUR	BB

Figure 2.19 HEC-DSSVue - Data Selection List window, Condensed Catalog displayed

Number	Pathname
1	/BALDEAGLE/MILES HW/FLOW/01NOV1993/1HOUR/CALIBRATED/
2	/AAA/AXEMA/PRECIP/01DEC1993/1HOUR/OBS/
3	/BALDEAGLE/SAYER/PRECIP-EXCESS/01NOV1993/1HOUR/CALIBRATED/
4	/BALDEAGLE/BEE-FIS OUTFLOW/FLOW-REG/01DEC1993/1HOUR/BBS/
5	/BALDEAGLE/BEECH HW/FLOW-BASE/01DEC1993/1HOUR/CALIBRATED/
6	/BALDEAGLE/FISH HW/PRECIP-EXCESS/01NOV1993/1HOUR/SB/
7	//TYRON/PRECIP-CUM/01NOV1993/1HOUR/NCDC/
8	//SPRCR JCT/FLOW/01DEC1993/1HOUR/CALIBRATED/
9	/BALDEAGLE/SAYER/PRECIP-STAND DEV/01DEC1993/1HOUR/BB/
10	/BALD EAGLE CREEK/LAKE TO LOCK HAV/STATION-FLOW/01DEC1993:1300/BBNN/
11	//AXEMA/PRECIP/01DEC1993/1HOUR/OBS/
12	//BALDE/FLOW/01NOV1993/1HOUR/CALIBRATED/

Figure 2.20 HEC-DSSVue – Data Selection List window, Unsorted List displayed

2.5.2 Searching and Filtering HEC-DSS Pathnames

With HEC-DSSVue, you can select specific data sets from a list of pathnames (or catalog) in the database. You can refine the list by searching for either a string in the pathnames or for pathname parts. The following sections describe searching and filtering options.

Searching Pathname Strings

The **Search Pathnames by String** feature allows you to search for records whose pathnames contain specific strings of characters. For example, if you search for "FLOW" the list will display only pathnames containing the string "FLOW" in the pathname.

To Search Pathnames by String:

1. From the **View** menu, click **Search Pathnames by string**.
2. In the **Search Pathnames** box (see Figure 2.21, page 2-15), type the character string you want to filter the pathnames with.
3. Click **Search**.

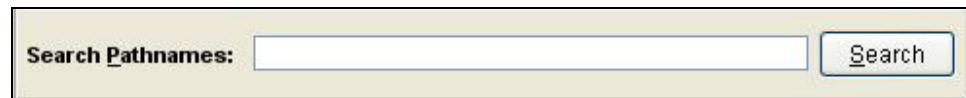


Figure 2.21 Search Pathnames Box

Filtering HEC-DSS Pathnames by Parts

The **Search by Parts** feature lets you choose specific pathname parts from those available in a HEC-DSS file.

To **Search by Parts**:

1. From the **View** menu, click **Search pathnames by parts**.
2. Click on the down arrows beside the pathname parts you want to search. This allows you to view lists of available names in the file (Figure 2.22).
3. When you have a pathname part list open, you can scroll through the list to locate the pathname part you want.
4. Click on a pathname part to select it.
5. To return to the previous list, click on the blank field at the top of the list.

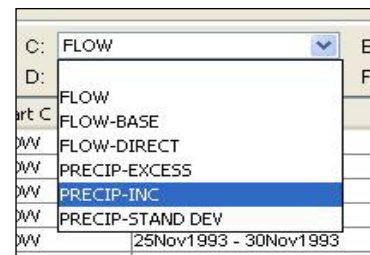


Figure 2.22 Selecting Pathname Parts

2.5.3 Refreshing the Catalog

The catalog automatically refreshes whenever you add, delete, or rename records. For very large files or network files, a dialog box will be shown asking if you want to create a new catalog. When the catalog is refreshed, it re-inventories all records on disk to get a pathname for every record. To generate a new catalog manually, click **Refresh Catalog** from the **Edit** menu.

2.6 Selecting Pathnames

Once you have filtered a HEC-DSS file for the pathnames you want, you select specific pathnames to visualize data for or perform a utility function on. When you select a Pathname, it will appear in the **Selected Pathnames List**.

There are several ways to select pathnames:

- Double-click on an individual pathname in the HEC-DSS Pathname List.
- Highlight a pathname in the HEC-DSS Pathname List then click **Select** (Figure 2.10). Until you select a pathname, the **Select** button remains inactive.
- Click and drag your mouse to select a series of pathnames, and then click **Select**. You can also use **Ctrl**+click to select multiple, non-consecutive pathnames.
- Hold down the **Ctrl** key and click on pathnames to highlight them, or hold down on the shift key to highlight all pathnames between mouse clicks, and then click **Select**.
- If you wish to select all of the pathnames, click **Select All** from the **Edit** menu.
- If no pathnames are selected, you can just highlight one or more pathnames and then perform the function that you intended. If pathnames have already been added to the selection box, those pathnames will be used instead of the highlighted ones.

2.7 De-Selecting Pathnames

To de-select a pathname currently in the **Selected Pathnames** List:

1. Click the record's pathname in the **Selected Pathnames** List to select it.
2. Click **De-Select**, the pathname will no longer appear in the **Selected Pathnames** List.

You can also de-select pathnames by double-clicking on a pathname in the **Selection Area** list.

To remove all pathnames from the **Selected Pathnames** List, click **Clear Selections**. To restore selections you have cleared, use **Restore Selections**.

2.8 Visualizing HEC-DSS Data with Plots and Tables

Once the **Selected Pathnames** List contains all the pathnames you wish to display, you can generate plots and tables.

To create a plot or table from the **Display** menu, click **Plot** or **Tabulate**. You can also click the **Plot**  button or the **Tabulate**  button.

From a plot window, you can also tabulate data using the **Tabulate** command in the plot's **File** menu. Likewise, to open a plot from a table, you can use the **Plot** command in the table's **File** menu.

Examples of the plots and tables HEC-DSSVue can produce are shown in Figure 2.23.

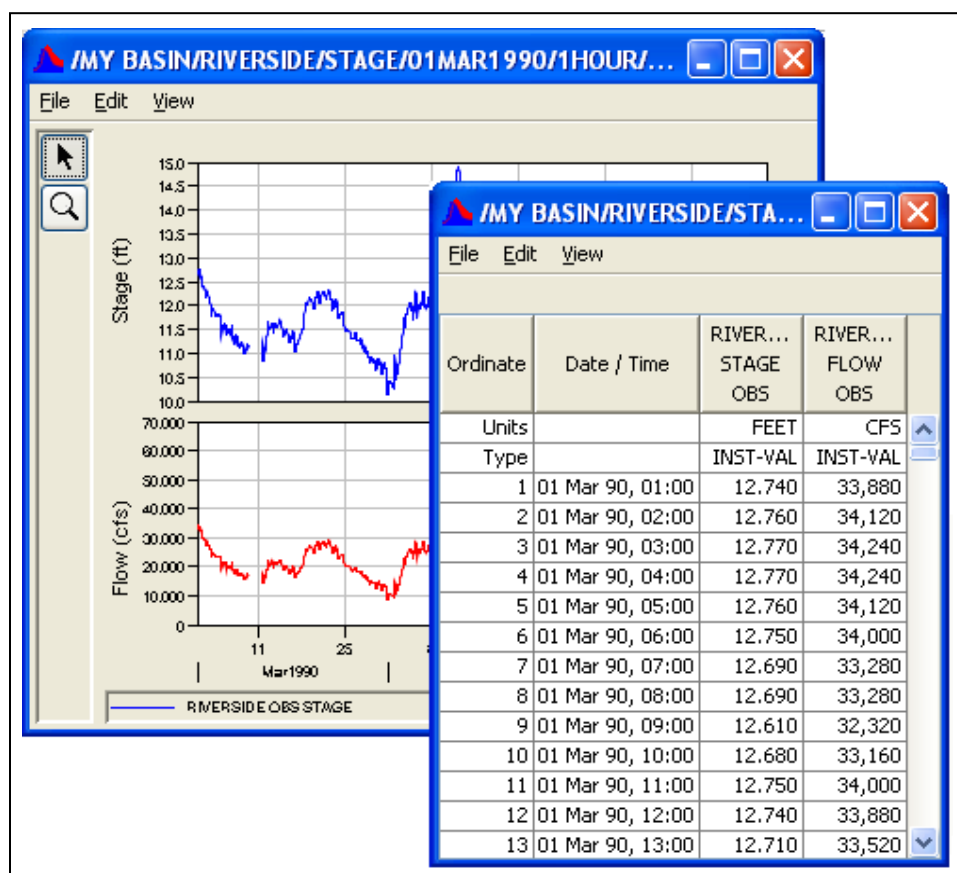


Figure 2.23 Example Plot and Table

HEC-DSSVue plots are highly customizable. You can add titles, specify colors and patterns of backgrounds and lines, change line styles, add markers and callouts, add borders to labels, and customize legends, axes, and tic marks. For more information refer to Chapters 6.

2.9 Groups

Data sets can be assembled together in Groups. Groups provide easy access of plotting, tabulating, and editing frequently accessed records without having to search for them in the DSS file. The **Groups** capability is often used when the same time series data sets with different time windows are accessed frequently. The Group information is stored in a text file in the User's Application Data area, under HEC-DSSVue.

The **Groups** menu option gives you the ability to create groups and access previously created groups. The following sections describe the **Groups** menu options in detail.

2.9.1 Creating and Saving Groups

To create a **Group**:

1. Select all the records you would like in the group in the **Selected Area**. If you set a time window, that will be saved along with the group
2. From the **Groups** menu, click **Save Selected**. The **Input** dialog will appear (Figure 2.24). Type the group's name in the **Enter group name** box and click **OK**.

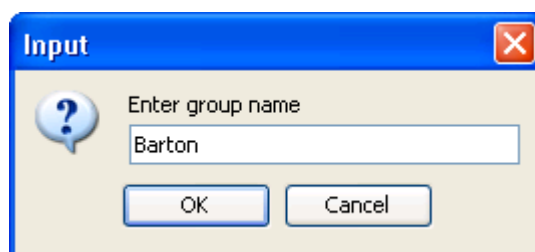


Figure 2.24 Input Dialog Box

3. The **Saved Group** message (Figure 2.25) will appear when the group has been saved. Click **OK**.



Figure 2.25 Saved Group Message

4. The group will be saved and listed in the **Groups** submenus, see Figure 2.26.

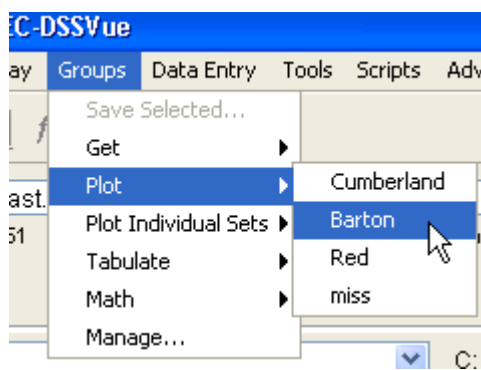


Figure 2.26 Group Submenus

2.9.2 Selecting Groups

When a **Group** is selected, all the records contained in the group are added to the **Selected Pathnames** List. To select a previously created **Group**, from the **Groups** menu, point to **Get**, select the name of the **Group**.

2.9.3 Plotting Groups

To plot a group, from the **Groups** menu, point to **Plot**, select the name of the group. A plot window will appear plotting all the records contained in the group as shown in Figure 2.27 below.

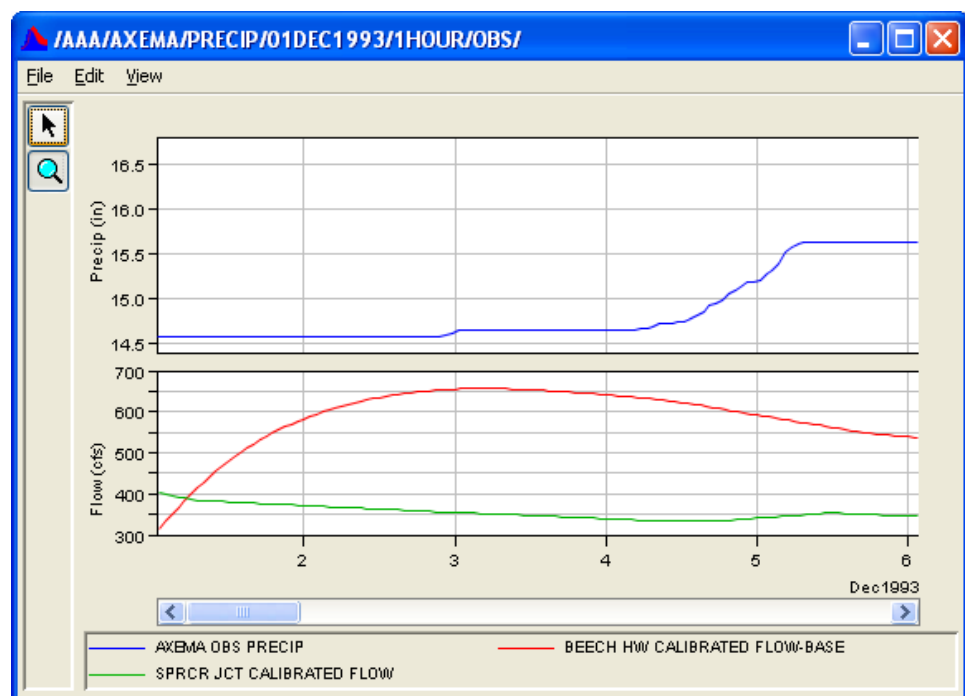


Figure 2.27 Group Plot

If you would like to plot a group, but only display one record at a time in the plot, from the **Groups** menu, point to **Plot Individual Sets**, then the name of the group. A plot window will appear that has a **Select Data Set** list (see Figure 2.28, page 2-20), listing all the records in the group. The first record in the group will be selected in the **Select Data Set** list and the records data will be plotted. To plot a different record in the group, simply select the record in the **Select Data Set** list and the current data in the plot will be replaced with the newly selected data.

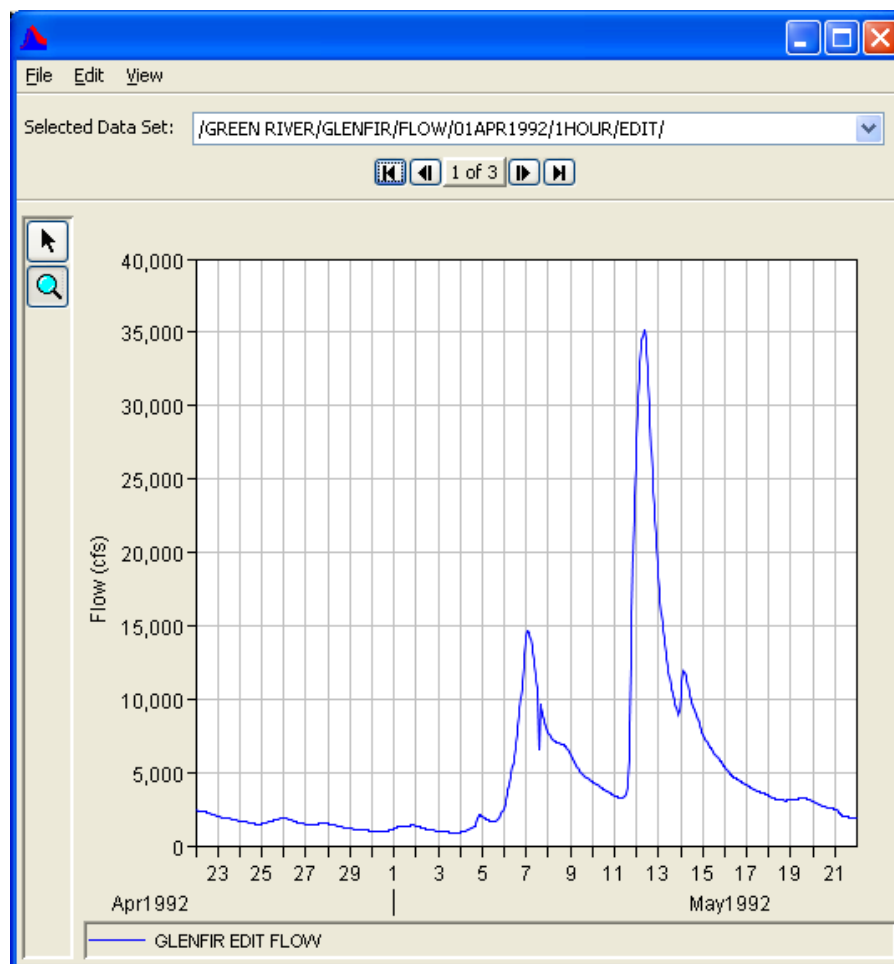


Figure 2.28 Individual Data Set Plot

2.9.4 Tabulate Groups

To tabulate a group, from the **Groups** menu, point to **Tabulate**, select the name of the group. A tabulate window will appear tabulating all the records contained in the group.

2.9.5 Math Groups

You can open the **Math Functions Editor** for a particular group of pathnames (data set) to perform math operations on the data sets within the group. For more detailed information on the **Math Functions Editor**, see Chapter 7. To use the **Math Functions Editor**, from the **Groups** menu, point to **Math**, select the name of the group. The **Math Functions Editor** will open with the group's pathnames populating the **Selected Data Set** list.

2.9.6 Manage Groups

Groups can be edited in the **Manage Groups Editor** (Figure 2.29). In the **Manage Groups Editor** you can delete groups, add pathnames to a group, change the order of a group's pathnames, remove pathnames, and rename groups. To access this editor, from the **Groups** menu, click **Manage**, the **Manage Groups Editor** will open.

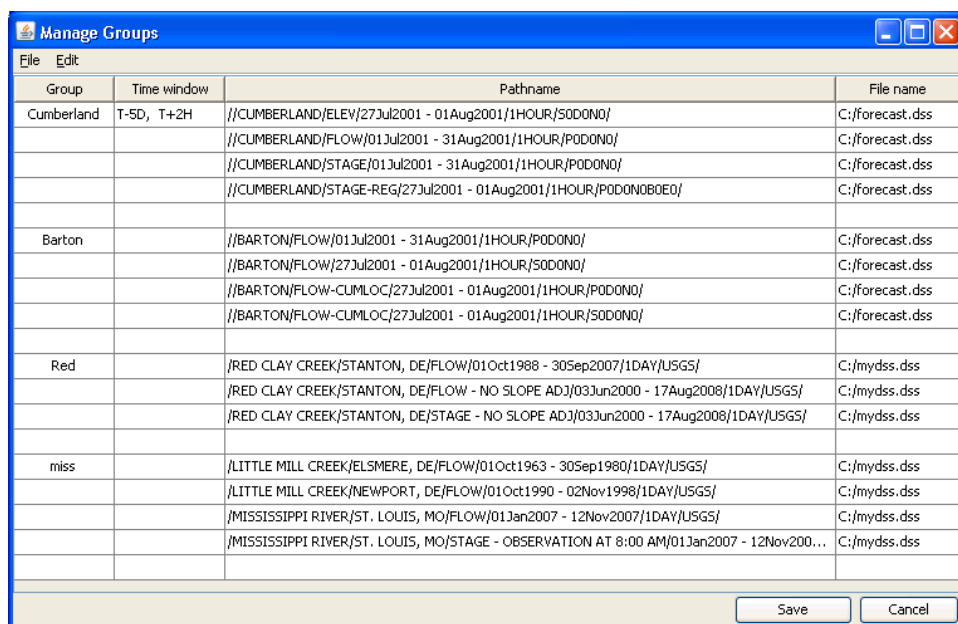


Figure 2.29 Manage Groups Editor

2.10 Data Entry

The **Data Entry** menu provides tools to add data to HEC-DSS files. Commands available through this menu allow you to manually create and add time series, paired and text data, and **Import** or **Export** data sets to and from an HEC-DSS file.

2.11 Utilities

The **Edit** menu provides a means for renaming, deleting, duplicating and copying data sets. Data sets that have been deleted before the HEC-DSS file is squeezed can be recovered from the **Un-delete** dialog in the **Edit** menu. Two HEC-DSS files can be merged into one using the **Merge** feature.

The **Tools** menu facilitates additional tools to help manipulate and manage the data contained in HEC-DSS files. These tools include: **Math Functions**, **Data and File Comparing**, **Search**, **Integrity Check**, and

Scripting. You can also remove excess disk space and optimize the file with **File Squeeze**.

The **Advanced** menu provides access to the traditional HEC-DSS catalogs. From here you can generate, view, and print an abbreviated catalog, a condensed catalog or a complete catalog. You can also view the output log, reset the program defaults, and set HEC-DSS options, as well as several internal tools.

2.12 Custom and Scripting Menus

Menus can be added to HEC-DSSVue's main menu for plug-ins and scripting. The **Script Editor** has a checkbox to activate the **Script** menu and add the script you are editing to that menu. This is a convenient way to access a large number of scripts that are used frequently.

If you have several customized operations that are preformed through plug-ins, you can have those functions show up on a menu that you name.

2.13 Plug-Ins

HEC-DSSVue has the capability of accepting Java jar plug-ins. A plug-in is essentially compiled Java code that has been written to extend the capability of HEC-DSSVue. It is similar to a script, but can be more powerful and more customizable. For example, a plug-in might retrieve data, decode it and store it into a HEC-DSS file. Another use might be to perform sophisticated math functions on data selected from the main screen.

Plug-ins are added by placing the jar plug-in file in the HecDssVue/*Plugins* directory. When HEC-DSSVue is executed, it searches this directory for available plug-ins and loads them into the program. Most plug-ins will add a button to the main toolbar, adjacent to any script buttons. To remove a plug-in, simply remove its jar file from the *Plugins* directory.