

DATA DEFINITION

Data Definition Window

Opening the Data Definition Window

Double-click on the **Data** folder in the **Project** window or click the **Data** button.



A Data window similar to the one shown below will appear.

Run	Pull Back	Hook	Peg	Distance	Distance	Distance
1	440	1	1			
2	440	1	4			
3	440	5	1			
4	440	5	4			
5	490	1	1			
6	490	1	4			
7	490	5	1			
8	490	5	4			

Figure 4-1

The data entry box for the first run and the first response will be bolded.

Data File Menu Commands

The Data **File** menu offers the following commands:

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- Save** Saves all data for an open project. Use this command to save the data in the active project to its current name and directory.
- Print** Prints the data sheet. Use this command to print a copy of the data. DOE Wisdom displays the **Print** screen. This screen allows you to select the printer, printer properties, print range, and number of copies. When all selections have been made, choose **OK**. The data sheet will be printed.
- Print Preview** Displays the document exactly as it will look when printed. With the document displayed you can view each of the pages of the document. If you wish to print the document, select the “Print” button. To close without printing the document, select the “Close” button.
- Print Setup** Provides setup options for printing. DOE Wisdom displays the **Page Setup** screen. This screen allows you to select the paper size, paper source, portrait or landscape mode, and margin specifications. When all selections have been made, choose **OK**.
- Properties** Displays the properties of the data entry sheet. The Data Properties provides you with the ability to set default values for the display of data. Changing the properties only affects the default values for any new data windows that are created. When properties is selected, the following window appears.

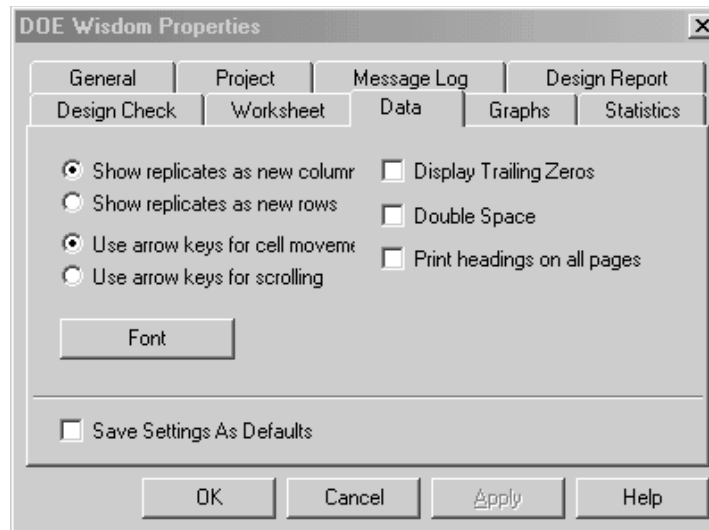


Figure 4-2

Exit Exits the data window.

Data Edit Menu Commands

The Data **Edit** menu offers the following commands:

Copy Copies the data onto the Clipboard. This allows you to easily copy the data to other window programs.

Paste Pastes data from other window programs into the DOE Wisdom data window.

Data Import Menu Commands

The Data **Import** menu offers the following commands:

ASCII File Imports data from an ASCII file into the selected area of the DOE Wisdom data window.

Data Preference Menu Commands

The Data **Preferences** menu offers the following commands:

Font Changes the font attributes of the current data entry sheet. Font, Font Style, and Font Size may be defined.

Data View Menu Commands

The Data **View** menu offers the following commands:

Toolbar Shows or hides the toolbar. The toolbar includes buttons for some of the most common data entry commands such as Save, Print, Print Preview, Copy, Paste, Font, Options, Replicates as Columns and Replicates as Rows.

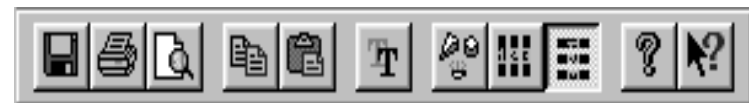


Figure 4-3

Status Bar Shows or hides the Status Bar. The Status Bar describes the action to be executed by the selected menu item or depressed toolbar button.

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Options	Displays the data options page which allows you to tailor the report to your needs.
Replicates as	Columns Displays each response replicate in a column. The data entry screen will list each run only once and the replicates will appear as separate columns next to each run. This allows for quick entry of replicate data. Rows Displays each response replicate in a row. The data screen will list each replicate run as a separate row.
Refresh	Refreshes the display. If part of a cell is not visible after entering a new value, selecting this command will cause the screen to be redrawn so that all the data fits into the columns properly.

Data Help Menu Commands

The data **Help** menu offers the following commands:

Data Help	This allows the user to display specific data entry help topics.
Help Topics	This allows the user to view Contents, Index, and Find help features.

Data Entry

When you first enter the Data window, an insertion point (flashing vertical bar) marks the data entry cell for the first run and the first response. Type in the response value for that run. Press **Enter** to move the insertion point to the next cell. DOE Wisdom displays the response value to six decimal places. If you do not wish to see the trailing zeros on the data entry screen, deselect **Trailing Zeros** from the **Options** toolbar button.

The numeric keypad may be used to enter data. You can also move the mouse pointer to where you want the insertion point to appear, click once, and then start entering data. The tab key also allows you to move throughout the spreadsheet.

If the target value for a factor was not obtained during experimentation, DOE Wisdom allows you to change the value of the factor. This is **ONLY** for documentation purposes and the new factor values will **NOT** be used during analysis.

NOTE: You can enter the exact values in a "User defined" design and they will be used during analysis.

If you make a mistake while entering data, you can correct it by using one of the following methods:

Press Backspace to delete the character to the left of the insertion point.

Press Del to delete the character to the right of the insertion point.

Importing Data Files

Importing ASCII Files

Import is listed on the menu bar of the Data Entry Screen. If you wish to import an ASCII file, select **ASCII File** from the pull-down menu. The Import ASCII File Screen will appear as shown in Figure 4-4.

The screenshot shows a dialog box titled "Data Import ASCII File". It features several input fields and buttons. At the top, there is an "Import File:" field with a "Browse" button. Below it is a "Delimiters:" field containing "<tab>" and an "Add Tab" button. A "Read" button is located to the left of the "# Columns: 0" and "# Rows: 0" labels. The lower portion of the dialog is organized into two columns, "First" and "Last". Under "First", there are four spin boxes for "From Column(s)", "To Column(s)", "From Row(s)", and "To Row(s)". Under "Last", there are two empty spin boxes corresponding to "From Column(s)" and "From Row(s)". At the bottom, there are three buttons: "Import", "Quit", and "Help".

Figure 4-4

Type in the complete path name of the file you wish to import. Click on the **Read** button. The "# of columns" and "# of rows" for that particular file will be displayed. Enter any special delimiters and click on the **Add Tab** button.

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Using the arrow keys, define “from” what columns of the ASCII file you wish to export the data. Using the arrow keys, define “to” what columns of the data entry screen you wish to import the data.

Using the arrow keys, define “from” what rows of the ASCII file you wish to export the data. Using the arrow keys, define “to” what rows of the data entry screen you wish to import the data. Click on the **Import** button and the data from the ASCII file will now appear on the data entry screen.

Example of Importing an ASCII file

Suppose you wish to import data from the file jay.txt shown in Table 4-1.

4	7	9	100
12	15	18	34
22	14	16	23
22	55	87	98
87	99	86	54
76	23	37	94
77	66	55	44
99	88	55	33

Let’s import some of the data from jay.txt into the data entry screen shown in Figure 4-5.

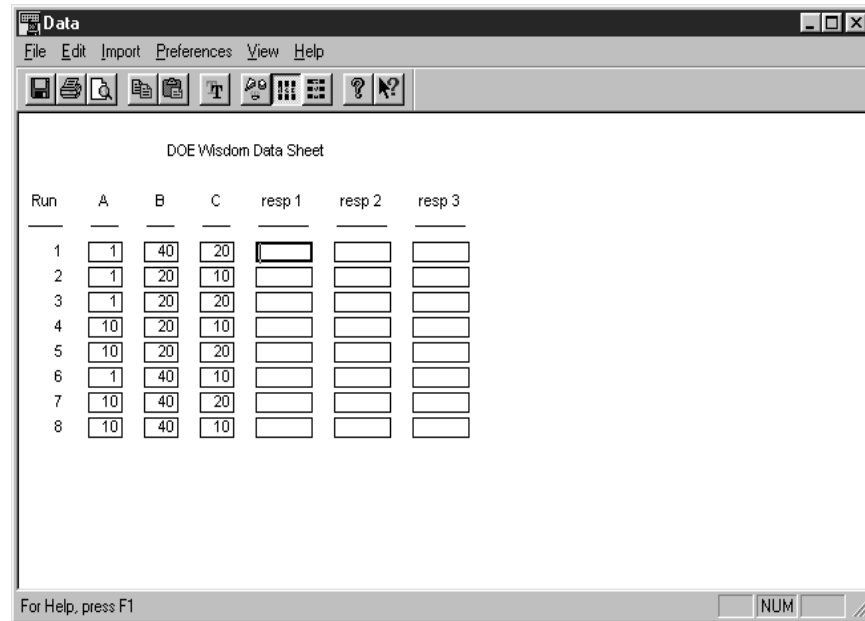


Figure 4-5

This particular experiment has 3 responses (columns for data) and 8 runs (rows for data). Suppose we want to import data “from” column 1-3 and rows 1-8 of jay.txt. We want to import the data into resp 1, resp 2, and resp 3 (columns 1-3) of our experiment.

The complete path for jay.txt is `c:\windows\jay.txt`. Enter the complete file name in the **Import File** section. Click on the **Read** button. Use the arrow keys to select the appropriate columns/rows. The Import ASCII File window will now appear as shown in Figure 4-6.

Data Import ASCII File

Import File: c:\windows\jay.txt

Delimiters: <tab>

Columns: 4 # Rows: 8

	First	Last
From Column(s):	1	3
To Column(s):	1	3
From Row(s):	1	8
To Row(s):	1	8

Figure 4-6

Click on the **Import** button. The data will now appear in the data entry screen as shown in Figure 4-7.

Run	A	B	C	resp 1	resp 2	resp 3
1	1	40	20	7	9	
2	1	20	10	12	15	18
3	1	20	20	22	14	16
4	10	20	10	22	55	87
5	10	20	20	87	99	86
6	1	40	10	76	23	37
7	10	40	20	77	66	55
8	10	40	10	99	88	55

Figure 4-7

Partial data from a column/row of an ASCII file can also be entered by selecting the appropriate **First** and **Last** columns on the import ASCII File screen.

Importing Data from Excel

Link the appropriate Excel document to Wisdom. This is done by clicking on the External Document Folder in the Wisdom Project window. Select **File/Open**. Point to the appropriate Excel file and then click Open. The Excel window will now appear. Select **File/Save Link** to link this document directly to Wisdom.

NOTE: For more information regarding linking Excel files directly to Wisdom, see Chapter 1 of this User's Guide.

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Once an Excel file is linked to Wisdom, a **Transfer** menu item appears on the Excel menu bar. See Figure 4-8.

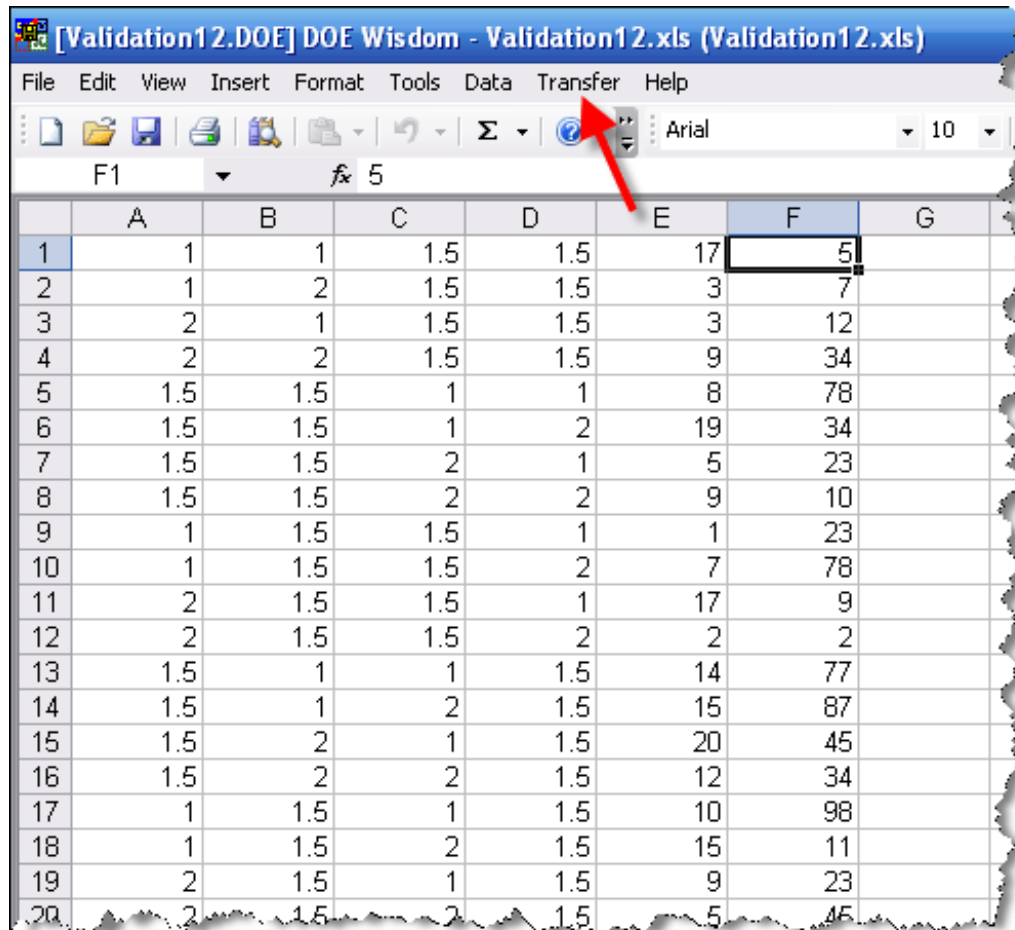


Figure 4-8

The Transfer pull-down menu allows you to transfer Excel data to the DOE Wisdom Worksheet (User Defined designs only) or to the DOE Wisdom data entry sheet. Select the appropriate Excel cells. Select Transfer/To Project Data. This copies all the selected data directly into the Wisdom data sheet. If the Wisdom data sheet was not previously opened, it will be opened and the data pasted at the first data cell. If the data sheet is already opened, the sheet will be activated and data pasted starting at the cell currently selected.

Exporting Data

To export data from DOE Wisdom to other applications, you can either select the **Copy** command from the **Edit** menu or click the left mouse button and hold it down while the mouse pointer is on the data entry sheet but not within a cell. If the **Copy** command is used, select the **Paste** command from the other application. If drag and drop is used, drag the cells to the second application and release the mouse button.

Entering Replicate Data

If you have several replicates of each run, select **Replicates As** from the **View** pull-down menu. Then select **New Columns**. The Data Entry screen will then list each run only once and the replicates will appear as separate columns next to each run. This allows for quick entry of replicate data.