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MSB Home

Minitab Guide

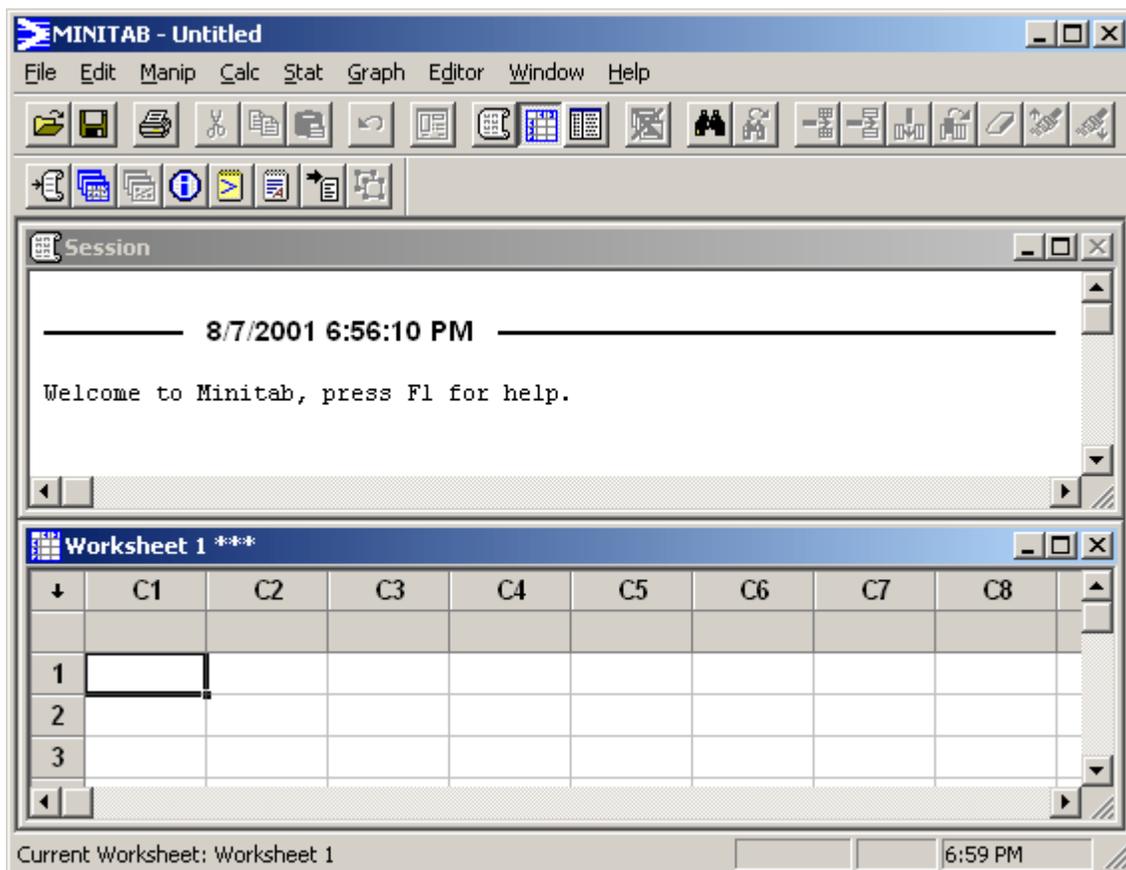
MINITAB™ Release 13 is an all-in-one statistical and graphical analysis software package. Trusted by quality professionals worldwide, MINITAB is known for unsurpassed ease-of-use, reliability, and a comprehensive collection of methods. Backed by exceptional technical support and customer service, MINITAB is the ideal solution for your data analysis needs.

For a detailed user guide, follow the link below:

[MINITAB Tutorial](#)

Opening Minitab from MSBTC

To Open Minitab from the Windows desktop, double click on the MSB Network Applications icon, and then double click on the Minitab icon. The Program will open up, and this is what you'll see.



The Session Window

This window fills up the top half of the Minitab screen. It allows you to type in commands to manipulate the

data, as well as displays any non-graph output you may have. To type in commands, you need to get an MTB> prompt by clicking the **Editor** pull down menu and then selecting **Enable Command Language**. The session window must be highlighted to do this.

Information that comes out of the session window can be saved as a text file. You can open it in any word processor and choose the parts that you want to print, or you can simply cut and paste from the session window into a word processor.

The Data Window

The data window looks much like a spreadsheet, such as Excel, but its only function is to enter and store data. To enter data, highlight the data window by clicking on it, click on the cell you wish to input data, and enter it. If the data is numerical, the top of the column will read "C1." If it is text, it will read "C1-T." Statistical manipulation cannot be performed on non-numeric data, so if the column is text when it should be numeric, go to the **Manip** pull down menu, select **Change Data Type** and select **Text to Numeric, Numeric to Text**, or whatever you need. The first row is for titles only, rows beginning with 1 are the beginning of your data.

You can also import data from a file into the data window. Minitab files are worksheets with an .MTW extension. Minitab can also get data from data files (.DAT) or Excel worksheets (.XLS). To open a file, go to the **File** pull down menu and select **Open Worksheet**.

Basic Statistics

Most statistics functions are found under the **Stat** pull down menu. **Basic Statistics to Descriptive Statistics** will give you this:

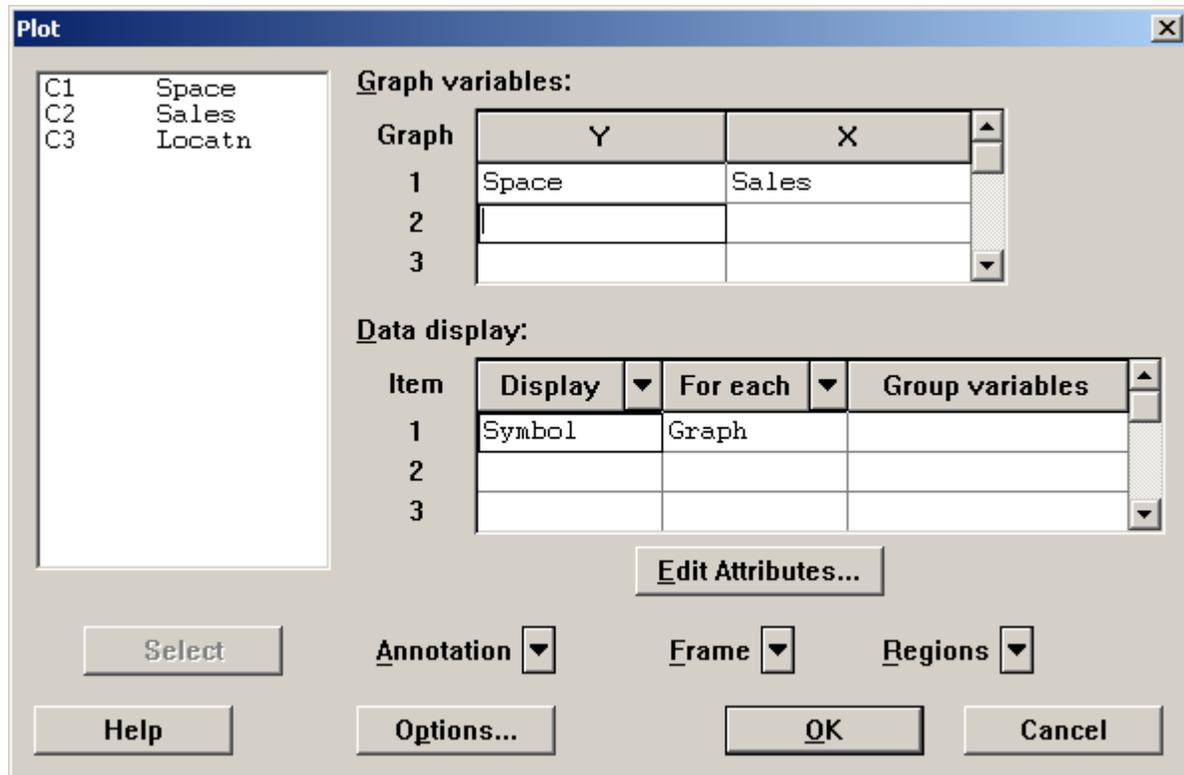
Descriptive Statistics: Space

Variable	N	Mean	Median	TrMean	StDev	SE Mean
Space	12	12.50	12.50	12.50	5.84	1.69

Variable	Minimum	Maximum	Q1	Q3
Space	5.00	20.00	6.25	18.75

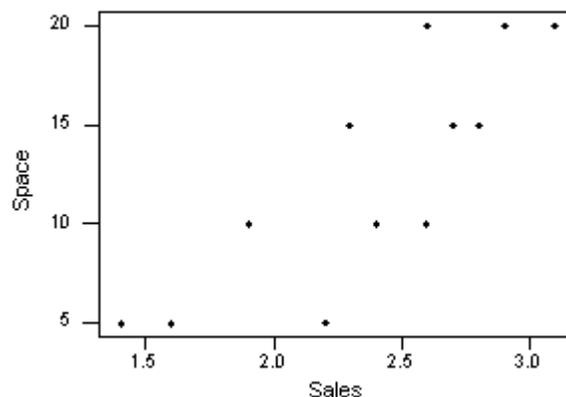
Doing a Scatter Plot

Once your data is entered into the data window, to do a scatter plot choose **Graph** and "Plot"



The column names "Space", "Sales" and "Locatn" appear in the box to the left. You can put your cursor in the Graph Variable Y and X boxes and double click the needed data into their places in the plot. Click **OK**.

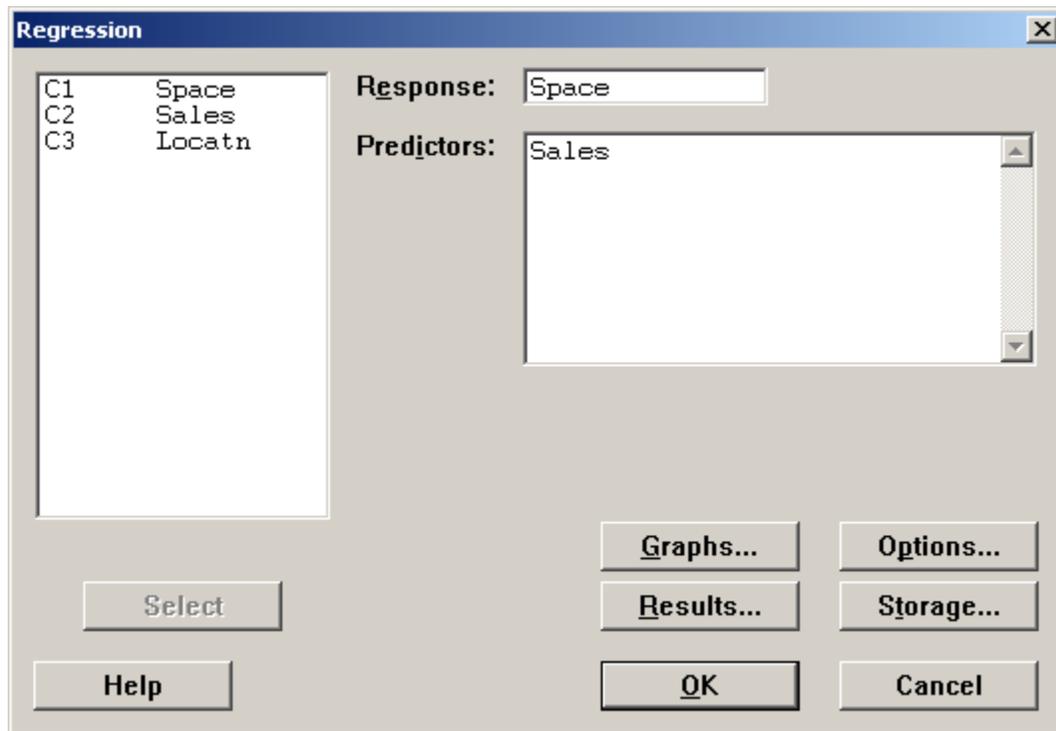
Your Scatter Plot will look like this:



You can easily cut and paste graphs from Minitab into Word. Go to **Edit** and **Copy Graph**. Then go into word and go to **Edit** and **Paste**. Your graph will appear as a picture for you to place as you wish. This is much neater than printing graphs directly from Minitab, for then you have one graph per page.

Doing Regression

To do regression analysis, go to the **Stat** pull down menu, choose **Regression** and **Regression** again.



Again, your data appears in the box on the left. You will see this is standard for most functions. Choose your Response (Y) variable and as many Predictors (X) as you like.

To see pertinent graphs, click on **Graphs...** It will allow you to choose up to four graphs to print out with your regression output: Histogram of Residuals, Normal Plot of Residuals, Residuals vs. Fits or Residuals vs. Normal Order.

To save regression data in a column, choose **Storage...** It will allow you to choose data generated by the regression, such as residuals or coefficients, in a column.

Your regression output in the Session window will look like this:

Regression Analysis: Space versus Sales

The regression equation is
Space = - 9.45 + 9.24 Sales

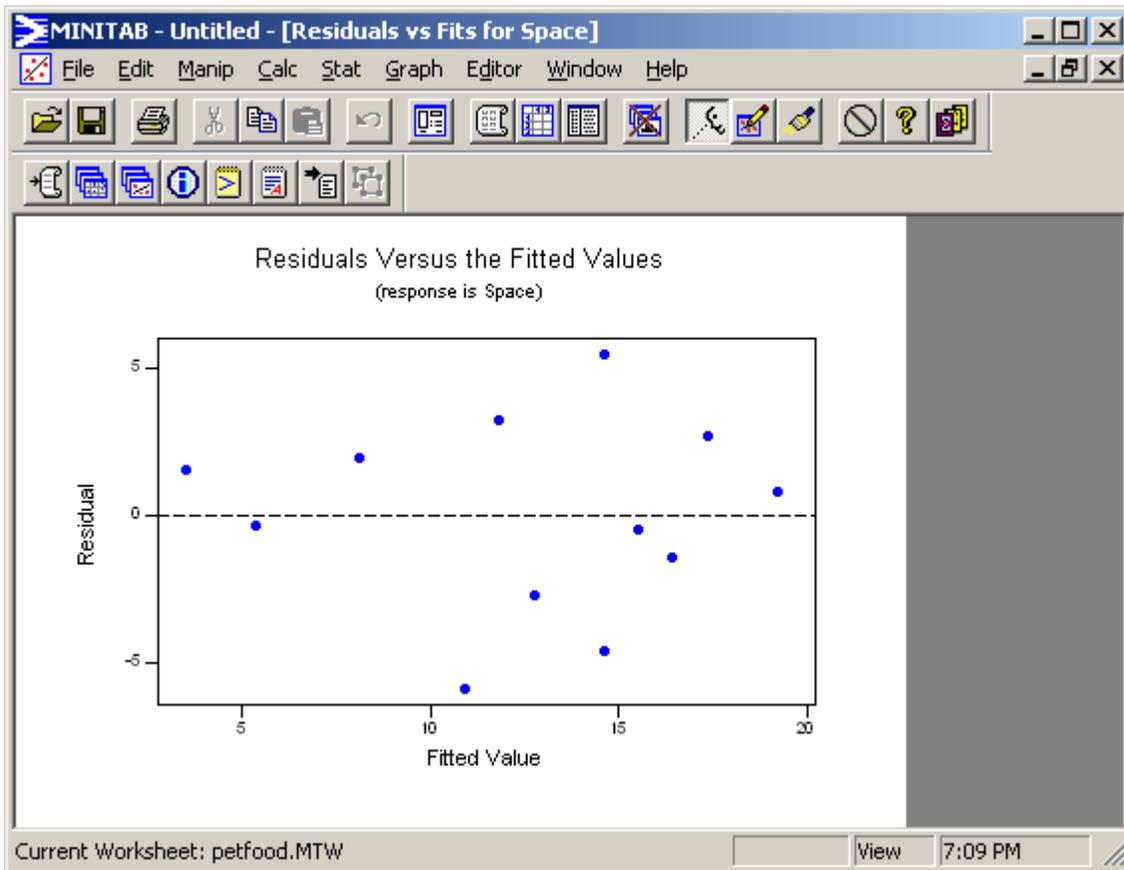
Predictor	Coef	SE Coef	T	P
Constant	-9.450	4.822	-1.96	0.078
Sales	9.242	1.987	4.65	0.001

S = 3.443 R-Sq = 68.4% R-Sq(adj) = 65.2%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	1	256.47	256.47	21.64	0.001
Residual Error	10	118.53	11.85		
Total	11	375.00			

If you chose regression graphs, they will pop up on the screen like this:



Navigating

If you are creating graphs and want to hide them until a future date, just click on the minimization button on the top of the graph box. If you need to get to it later, click on the **Window** pull down menu. All the graphs you have done will be listed at the bottom. Highlight the one you want and it will reappear.

Closing Minitab

To end your session, remember to save your worksheet as well as your session window. Go to **File** and **Exit**. If you have been saving things to a floppy disk, keep the disk in until Minitab is fully closed down, otherwise you risk losing some information.