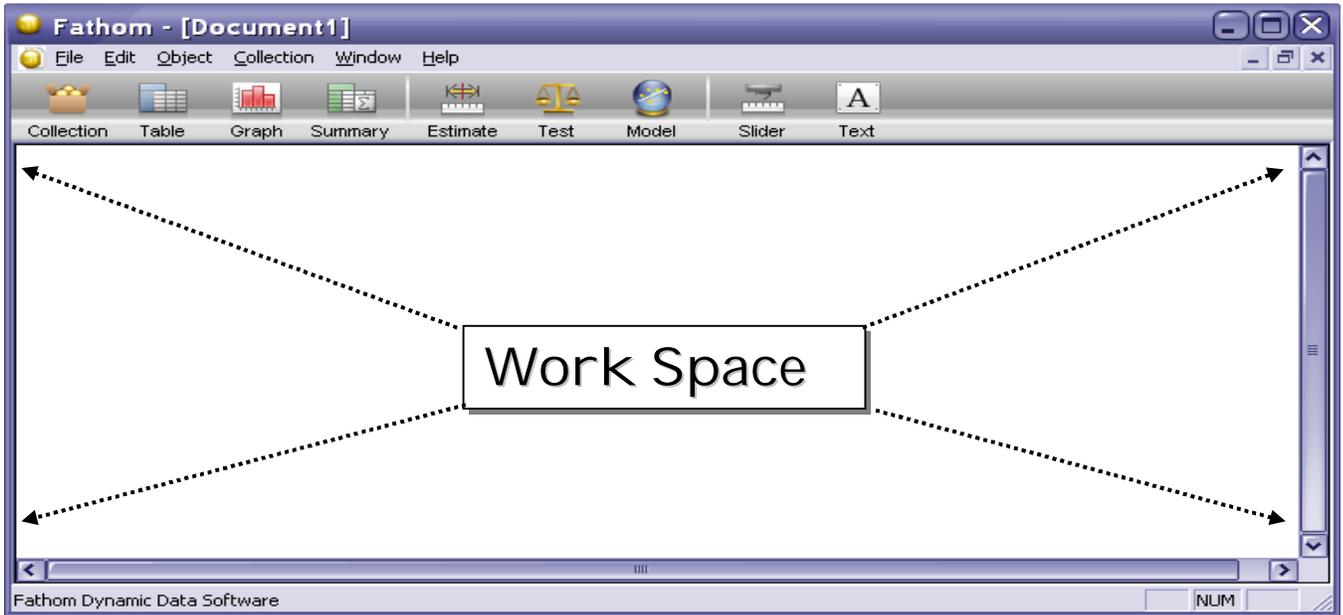


- o Start Fathom.

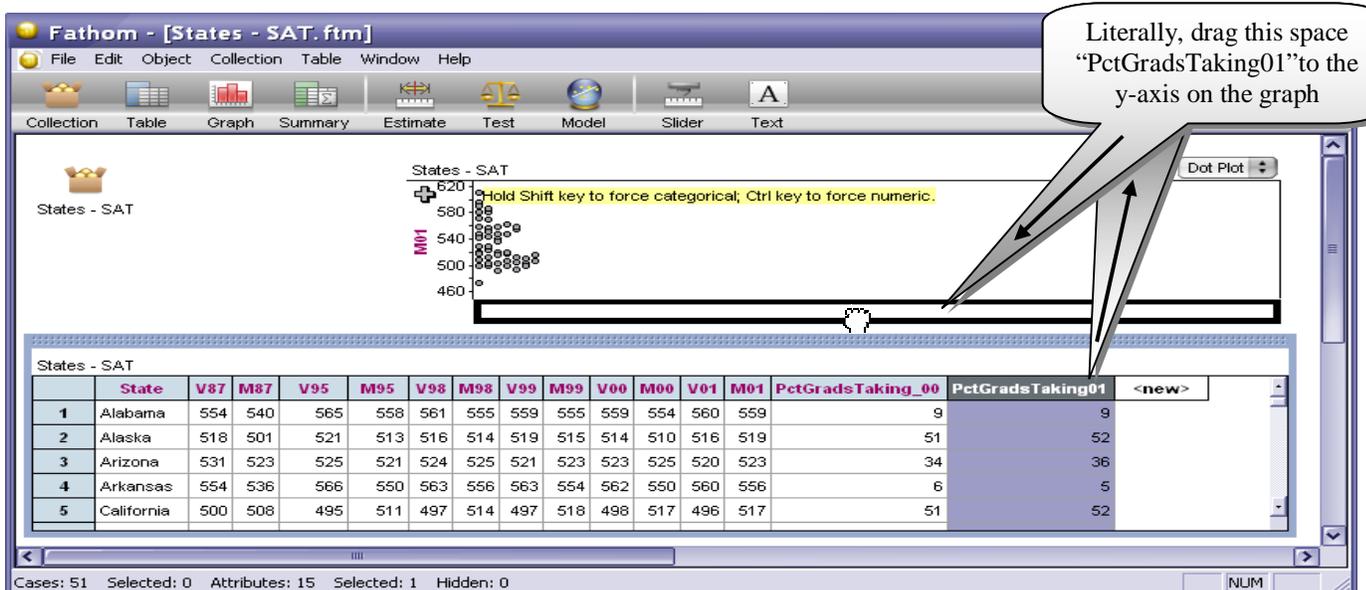
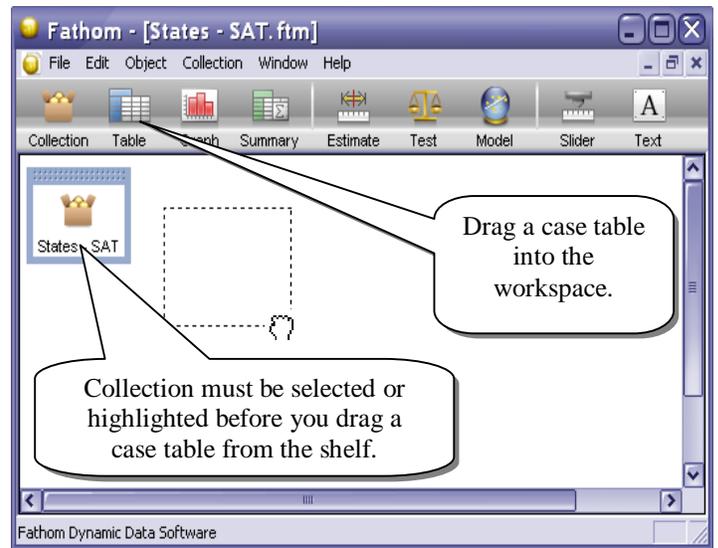


- o Next, open one of the provided data sets that you find interesting. For this example "States-SAT.ftm" was selected and can be found in the folder in which Fathom2 was installed.

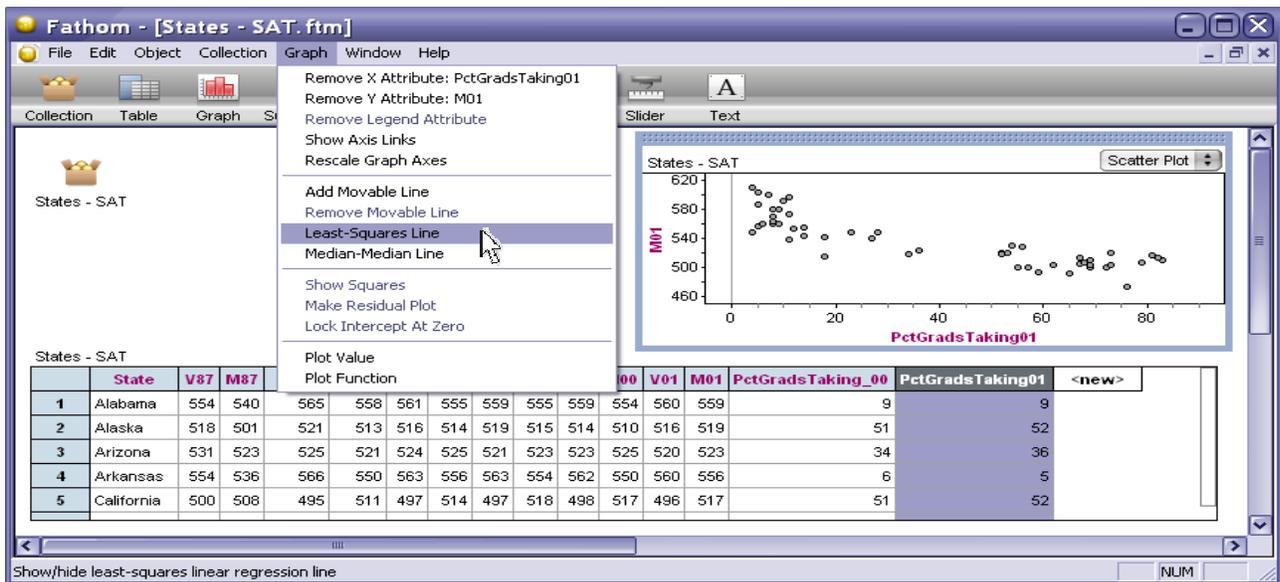
(Fathom2 ► Sample Documents ► Social Science ► United States ► States)

While the collection of data is highlighted drag a **Case Table**, , down from the shelf into the workspace.

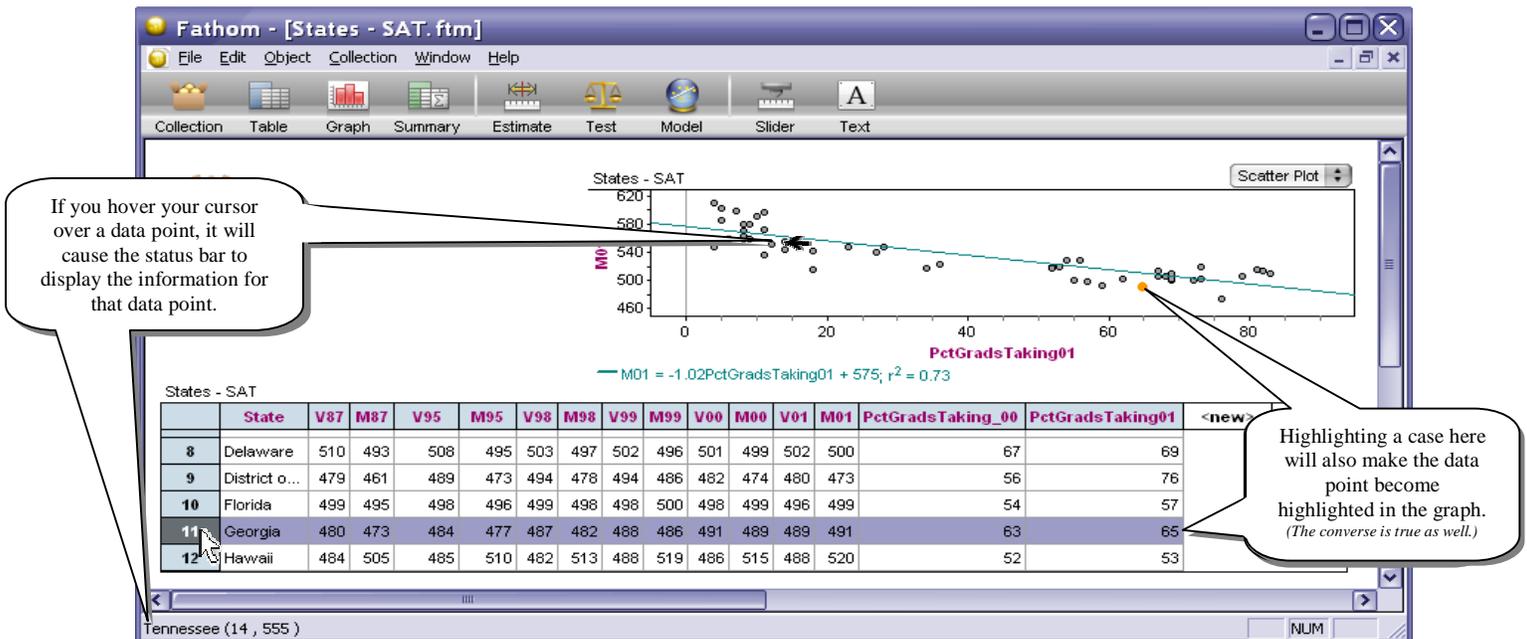
- o Resize the **Case Table** so that the data can be more clearly seen. Drag a graph from the shelf into the workspace shown below. Then, drag the title "M01" from the case table to the y-axis on the graph. Next, drag the "PctGradsTaking01" column title from the **Case Table** to the x-axis on the graph.



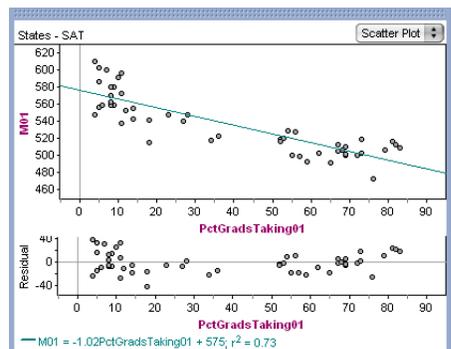
- Notice that as the graph is selected, the menu's at the top change. While the graph of the scatter plot is selected, select **Least Squares Line** from the **Graph** menu at the top. What does this line suggest? What does this suggest about your state's Math SAT scores?



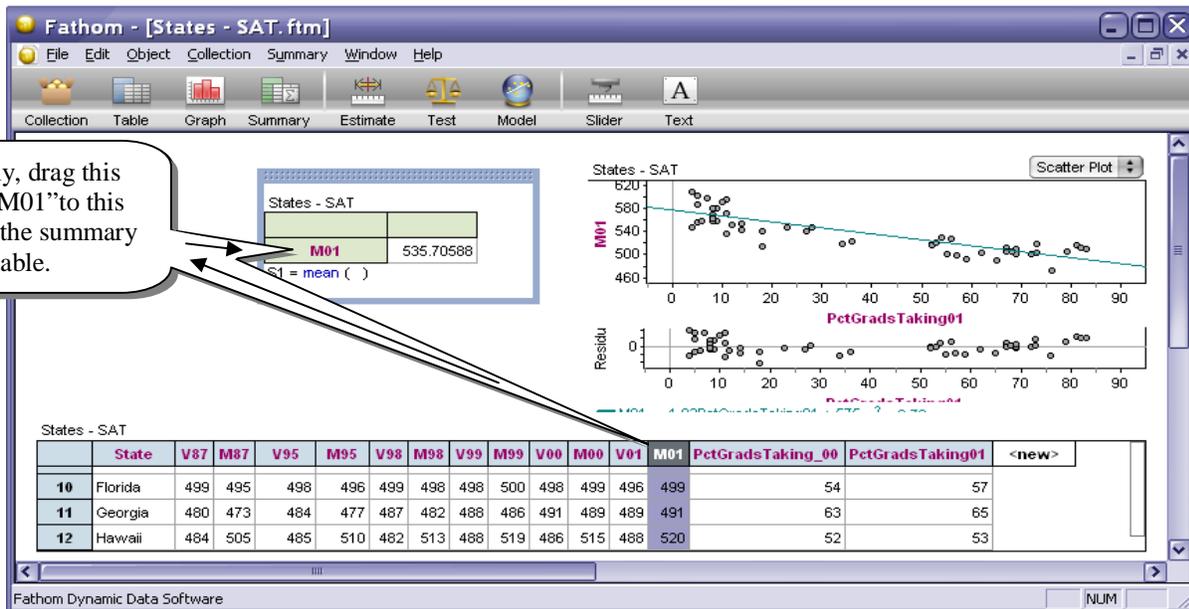
- Scroll down the **Case Table** until you find your state and then, click on the number to the left of the state to highlight the state. You should notice that a data point in the graph becomes red to denote where that state is on the graph. Also as the mouse cursor hovers above a particular data point the specific information for that state will be given in the status bar at the bottom of the window.



- With the graph selected, from the **Graph** menu select **Make Residual Plot**. A small residual plot will show directly below the scatter plot showing the vertical distance each data point is away from the regression line.



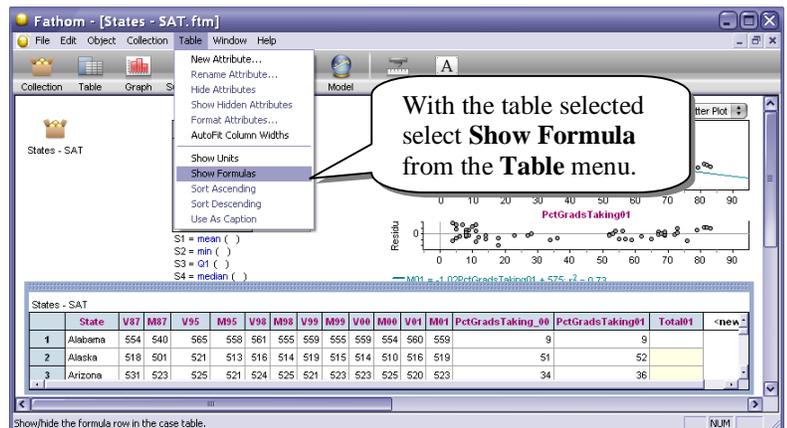
- Drag a Summary Table, , from the shelf to the workspace. Then, drag a column title like “M01” from the case table to the summary table. Finally with the summary table selected, under the Summary menu select “Add Basic Statistics”, as shown below.



- While the summary table is highlighted, try experimenting by selecting **Add Basic Statistics** or **Add Five-Number Summary** under the **Summary** menu.

Possible Extensions:

- It might be interesting to investigate the combined SAT score (Verbal +Math). Click on the **<new>** column title in the **Case Table** and type in the name “Total01”. With the Case Table still selected, select **Show Formulas** under the **Table** menu. This will create a “formula” row just above row 1 in the Case Table.



- Double Click in the formula cell under the newly created column “Total01”. This will result in a Formula Calculator window appearing. Click the  next to Attributes. Find the attribute “M01” and double click. Then, click on the  button on the calculator. Next, find the attribute “V01” and double click on it. Finally, press .

- Try experimenting with graphs and summary tables with this new data element.

