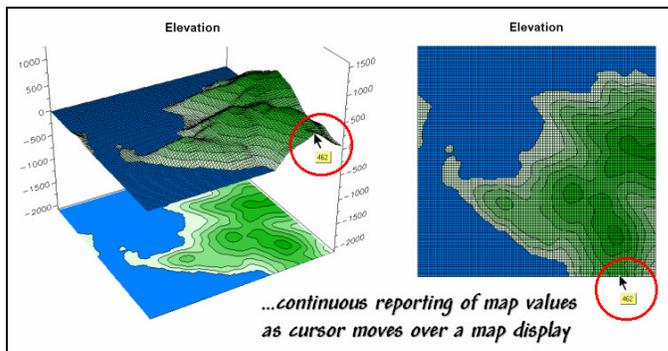


Applying MapCalc Map Analysis Software

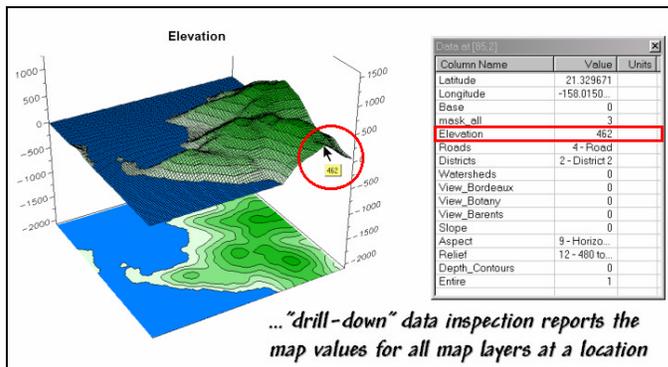
Data Inspection and Charting Features: Mapped data is just that—organized sets of numerical values (data). Effective links between map displays and map data are critical in understanding spatial patterns. Summary tables and charts provide further insight.

[<click here>](#) for a printer friendly version (.pdf)

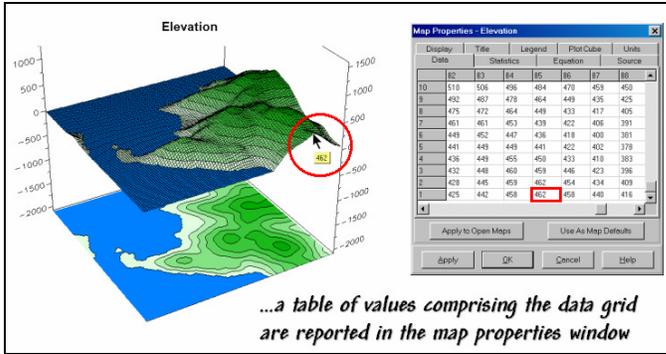
Data Inspection. Links between map displays and the underlying grid data is important in visualizing spatial patterns within and among maps.



By moving the cursor over a map, a tracking window continuously updates the value for each location.

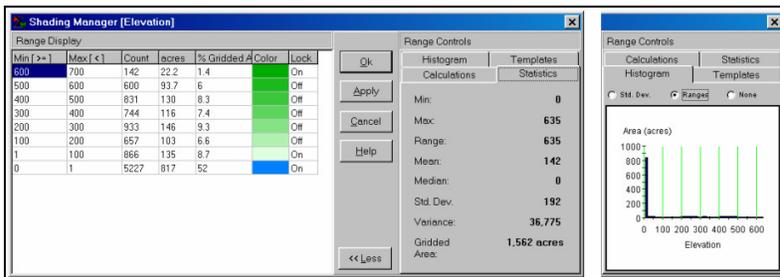


When the **Data Inspection** tool is activated the map values for all map layers in the database are continuously updated in a window as the cursor is moved over a map.

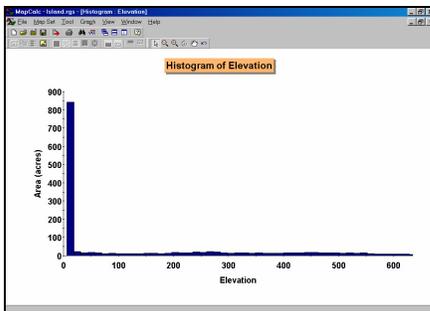


The values defining a map layer are listed in tabular form under the “Data” tab in the *Map Properties* window. Note that the 462-foot elevation point in the example is located in the data matrix at column 85, row 1.

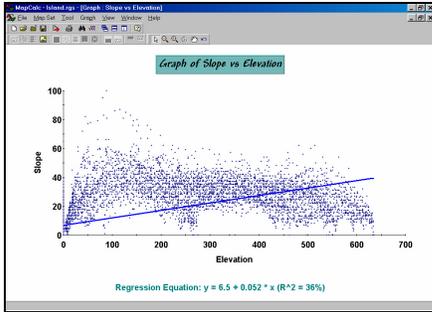
Data Summary and Charting. Summary statistics and plots of map data are helpful in generalizing data characteristics.



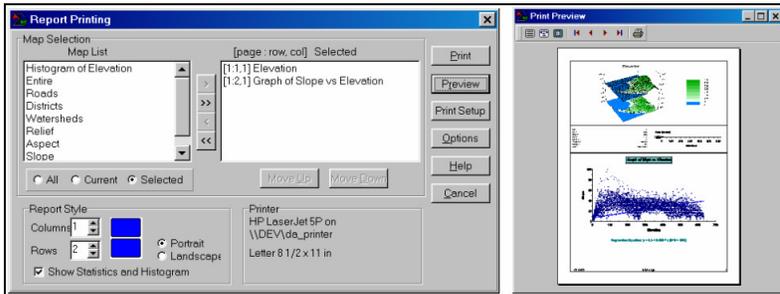
Basic statistics and a histogram of the data comprising a map are available with the *Shading Manager* for quick reference when specifying contour intervals. The vertical lines in the histogram show the data intervals for the current map display assignments. Alternatively, the vertical lines can be set to reflect the standard deviation intervals.



Using the *Histogram* charting feature can generate a higher quality plot. The plot isn't very interesting because a little over half of the map area is ocean hence the big spike at 0 elevation dominates the information on other elevation levels.



The **Scatterplot** charting feature shows the relationship between two maps. Each dot in the plot represents the values on both maps, termed “joint condition,” for a specific map location. The Regression Equation quantifies the data pattern and the R-Squared statistic indicates the strength of the relationship.



The **Report Printing** tool provides a quick and easy way to generate hardcopy printouts of maps and charts. In this example, a 3-D display of Elevation is combined with basics statistics and a scatterplot of the Elevation and Slope maps.

Summary. MapCalc has several features for inspecting and charting the data underlying the display of a map. Use of these tools is as easy as “point ‘n click.”