

Map by State

Summary

The *Map by State* procedure creates a plot of the United States on which each state and the District of Columbia are color-coded according to the value of a selected attribute or variable. A table is also created summarizing the number of states falling in each group. If a weighting factor is specified, the sum of the weights in each group is also displayed.

Sample StatFolio: *usmap.sgp*

Sample Data:

The file *usmap.sgd* contains 4 columns that may be used to create a coded map of the United States. The first 10 rows of that file are shown below.

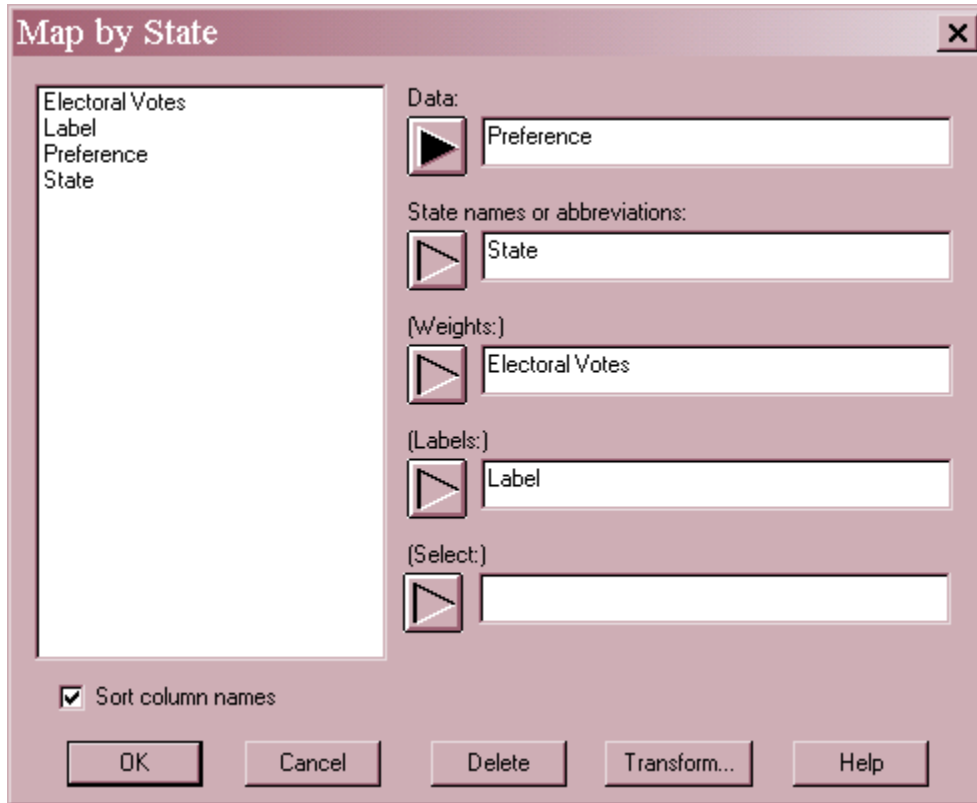
State	Preference	Electoral Votes	Label
Alabama	1	9	Solid Bush
Alaska	1	3	Close Bush
Arizona	3	10	Really Close Bush
Arkansas	3	6	Really Close Kerry
California	6	55	Close Kerry
Colorado	3	9	Solid Kerry
Connecticut	6	7	
Delaware	6	3	
Florida	4	27	
Georgia	2	15	

The file contains 51 rows, one row for each of the 50 states and an additional row for the District of Columbia. The *Preference* column contains a number between 1 and 6 representing the results of a poll taken several months prior to the 2004 presidential election. The *Label* column defines the meaning of the *Preference* codes:

- 1 = poll shows solid support for George Bush
- 2 = poll shows moderate support for George Bush
- 3 = poll shows state leaning toward George Bush by a slight margin
- 4 = poll shows state leaning toward John Kerry by a slight margin
- 5 = poll shows moderate support for John Kerry
- 6 = poll shows solid support for John Kerry

The *Electoral Votes* column shows how many votes the state has in the electoral college used to select the next president.

Data Input



- **Data:** column containing the attribute or variable upon which the color coding will be based.
- **State names or abbreviations:** column containing the state names or 2-letter abbreviations. The entries may be in any order but must match exactly one of the columns shown in the table below. If desired, copy a column from that table and paste it into a new datasheet, or copy the State column from the *usmap.sgd* file.
- **Weights:** column containing optional weights to be summed across the states in each category.
- **Labels:** column containing labels to be used for each category. If not specified, labels are generated based on the information in the *Data* column.

State Names and Abbreviations

Alabama	AL
Alaska	AK
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Florida	FL
Georgia	GA
Hawaii	HI
Idaho	ID

Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY

Analysis Summary

The top section of the *Analysis Summary* displays a tabulation of the *Data* variable:

<u>Map by State - Preference</u>		
Data variable: Preference		
Frequency Tabulation		
<i>Preference</i>	<i>Number of States</i>	<i>Electoral Votes</i>
Solid Bush	16	118.0
Close Bush	3	39.0
Really Close Bush	6	54.0
Really Close Kerry	7	84.0
Close Kerry	6	71.0
Solid Kerry	13	172.0

The value of the variable is divided into categories as follows:

- If the data column is character, then each unique entry in the column defines a category.
- If the data column is numeric and consists of only integer values within a narrow range, then each integer between the smallest and largest value defines a category.
- If the data column is numeric and contains non-integer values or integer values over a wide range, then a small number of categories are formed covering the range of the data.

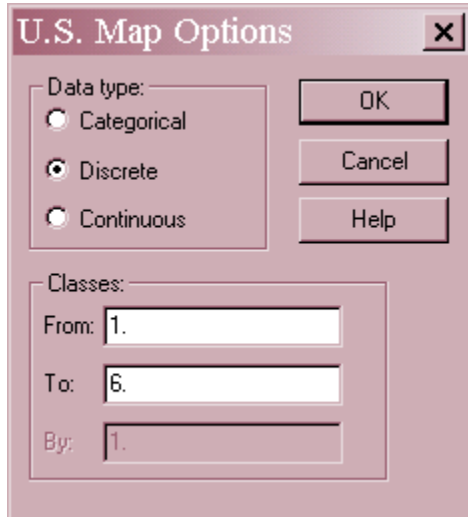
For example, the *Preference* column in the sample data file contains integers between 1 and 6, so categories were defined for the values 1, 2, 3, 4, 5, and 6. You can change the manner in which the categories are defined through the *Analysis Options* dialog box.

If an entry was made in the *Labels* field on the data input dialog box, then the text in the *Labels* column is used to label each category in the table. If not, the actual values in the *Data* column are displayed. Normally, categories are listed in numerical or alphabetical order. If you are uncertain of the proper order for the *Labels* column, first run the procedure without specifying labels and insert the labels into the data input dialog box later.

The second half of the output lists the input data by state. A small portion of this output is shown below:

Data Table	
<i>State</i>	<i>Preference</i>
Alabama	Solid Bush
Alaska	Solid Bush
Arizona	Really Close Bush
Arkansas	Really Close Bush
California	Solid Kerry
Colorado	Really Close Bush
Connecticut	Solid Kerry
Delaware	Solid Kerry
District of Columbia	Solid Kerry
Florida	Really Close Kerry
Georgia	Close Bush

Analysis Options

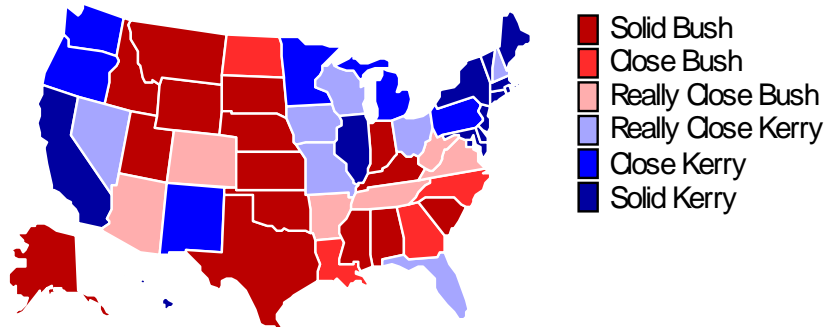


- **Data type:** defines how the data are grouped.
 - **Categorical** – each unique value in the *Data* column defines a category
 - **Discrete** – each integer value between *From* and *To* defines a category.
 - **Continuous** – categories consist of a range of values between *From* and *To*, where the width of each category is defined by the value in the *By* field.

U. S. Map

The U. S. Map pane shows each state and the District of Columbia colored according to the category it falls in.

Preference



To change the colors of the categories, select the *Fills* tab on the *Graphics Options* dialog box.