

## SPMAP and SHP2DTA

*spmap* is a spatial analysis tool that graphs data onto maps. To use, you must download both packages: *spmap* and *shp2dta*

### Search and install packages

---

ssc install *spmap* or

netsearch *spmap*

*spmap* from <http://fmwww.bc.edu/RePEc/bocode/s>

'SPMAP': module to visualize spatial data / *spmap* is aimed at visualizing several kinds of spatial data, and / is particularly suited for drawing thematic maps and displaying / the results of spatial data analyses.

ssc install *shp2dta* or

netsearch *shp2dta*

*shp2dta* from <http://fmwww.bc.edu/RePEc/bocode/s>

'SHP2DTA': module to converts shape boundary files to Stata datasets / *shp2dta* reads a shape (.shp) and dbase (.dbf) file from disk and / converts them into Stata datasets. The shape and dbase files / must have the same name and be saved in the same directory.

One online source suggested installing a third package called *mif2dta* in order to convert MapInfo Interchange Format (mif) datafiles.

### A bit of background

---

Most data for spatial analysis comes in ESRI format (stands for Environmental Systems Research Institute, Inc.) commonly used in GIS analysis. The *shp2dta* package translates the ESRI formatted data into Stata format.

You can download map datafiles of the US from the Census Bureau

(<https://www.census.gov/geo/maps-data/data/tiger.html>) and use the *shp2dta* command to convert to Stata format.

### Basic Syntax

---

for *shp2dta*

*shp2dta* using *shpfilename*, database(filename) coordinates(filename) [options]

where *shpfilename* is the name of the file containing the map data;

database and coordinates are files Stata creates to store the map data.

The database file will get merged with your statistical data; the coordinates file plots the boundaries of the map.

for *spmap*

*spmap* [attribute] [if] [in] using basemap [,basemap\_options]

where attribute is the name of the variable in your dataset that will be graphed;

basemap is the name of the coordinates file that Stata created.

### Help with *spmap* and *shp2dta*

---

[http://www.stata.com/meeting/italy12/abstracts/materials/it12\\_pisati.pdf](http://www.stata.com/meeting/italy12/abstracts/materials/it12_pisati.pdf)

Presentation written by the author of *spmap* that provides details and examples of all that *spmap* can do, along with the underlying mathematical concepts.