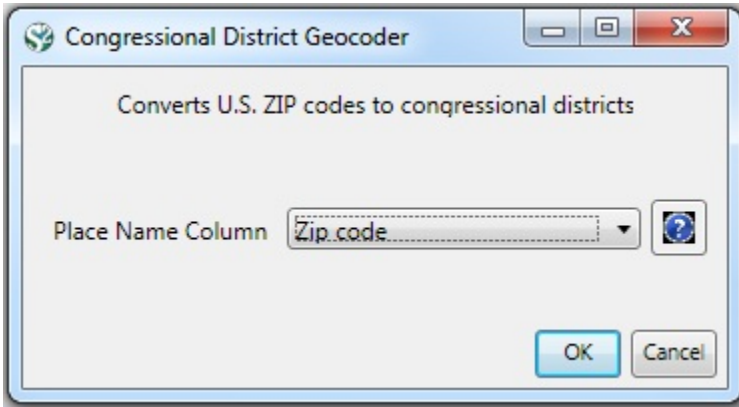


## 5.3.2 Congressional District Geocoder

zip code.csv	
Region(s):	United States
Analysis Type(s):	Geospatial Analysis

To visualize Congressional Districts you must first extract that data from a dataset containing either ZIP codes or addresses. You can download the Congressional District Geocoder plugin [here](#). You can load any file that contains 9-digit U.S. ZIP codes to be geocoded. A sample file can be loaded by using 'File > Load' and following this path: '[yoursic2directory/sampledata/geo/zipcode.csv](#)' (if the file is not in the sample data directory it can be downloaded from [2.5 Sample Datasets](#)). Load the file in Standard csv format. Then select the file in the data manager and use 'Analysis > Geospatial > Congressional District Geocoder' with the following parameters:



5-digits ZIP codes with multiple congressional districts, empty entries and invalid ZIP codes that failed to be geocoded will list in warning messages on the console. The output table contains all columns of the input table with three additional columns appended: Congressional district, latitude, and longitude. To view the output table save the file using 'File > Save...' and selecting the desired save location (to view the file in Excel save it as a csv file). Once the file has been saved it can be viewed with your choice of program. Below the file has been opened as a [csv file](#):

	A	B	C	D
1	Zip code	Congressional District	Latitude	Longitude
2	90095	CA-30	34.0735035	-118.6645815
3	4672	ME-02	45.818717	-69.0290345
4	232980568	VA-03	37.270472	-77.0699835

Before you can visualize this data you will need to edit the csv file (shown above). It will be easiest to edit the file with Excel. First save the file from the data manager in Sci2 to a desired location. Open the file with Excel and add a column titled "Circle size". The value you chose does not matter, but it should be consistent across congressional districts. (Note: the smaller the value the more precise the visualization will be with regard to Congressional District.) Below 0.5 was chosen for circle size:

	A	B	C	D	E
1	Zip code	Congressional District	Latitude	Longitude	Circle size
2	90095	CA-30	34.0735035	-118.6645815	0.5
3	4672	ME-02	45.818717	-69.0290345	0.5
4	232980568	VA-03	37.270472	-77.0699835	0.5

Once the csv file has been edited, reload it into Sci2. To visualize the newly loaded dataset, select the file in the data manager. Then select *Visualization > Geospatial > Proportional Symbol Map* and use the following parameters:

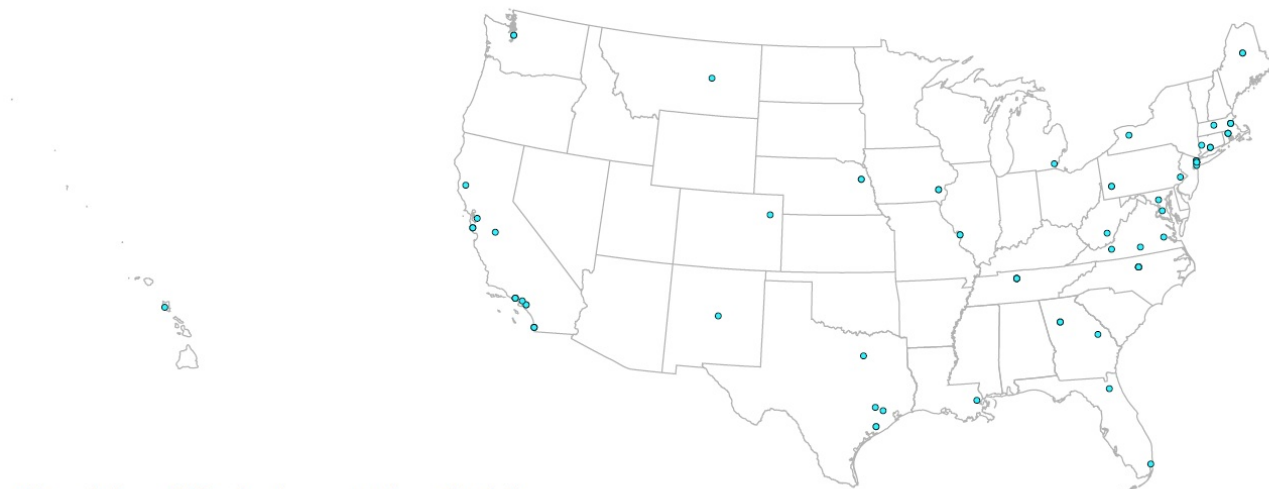
Geo Maps (circles)

Creates a map with circle annotations. Circles are positioned, sized

Map	US States	?
Author Name		?
Latitude	Latitude	?
Longitude	Longitude	?
Size Circles By	Circle size	?
Size Scaling	Linear	?
Color Circle Exteriors By	None (no outer color)	?
Exterior Color Scaling	Linear	?
Exterior Color Range	Yellow to Blue	?
Color Circle Interiors By	Circle size	?
Interior Color Scaling	Linear	?
Interior Color Range	Blue to Red	?

OK Cancel

Note: to color the interior of the circles you must select a value for the "Color Circle Interior By" tab. Here Circle size was selected. This value is arbitrary, but it's consistency results in consistent coloring for the final visualization:



## Geo Map (Circle Annotation Style)

Albers Equal-Area Conic Projection

Mar 11, 2011 | 09:50:05 AM