**Bigeo HOW TO’s**

**Set Up**

Setting up the requirements. It is advisable to create your own virtual environments. With in that env, install the dependencies.

*pip install fiona*

*pip install shapely*

**Reprojecting All files in a directory**

Reprojecting all shapefiles on a given directory.

Syntax:

>>>python “/path\_to/bigeo.py” projector –indir “/path\_to/input\_dir” outdir “/path\_to/output\_dir” --crs “crs\_to\_use”

Example:

>>>python “bigeo.py” projector –indir “/home/com/Documents/oldshp” --outdir “/home/com/Documents/newshp” --crs “'EPSG:4326'”

**Bounding Box**

Creates a bounding box of a polygon.

Bounding boxes will have the attributes of their respective pylogons.

Syntax:

>>>python “/path\_to/bigeo.py” boundingbox –srcfile “/path\_to/polygon.shp” --outfile “/path\_to/output.shp”

Example:

>>>python “bigeo.py” boundingbox –srcfile “countries\_polygon.shp” --outfile “bound\_countries.shp”

**Centroids**

Creates a point on the center of a polygon.

Points will have the attributes of their respective pylogons.

Syntax:

>>>python “/path\_to/bigeo.py” centroid –srcfile “/path\_to/polygon.shp” --outfile “/path\_to/centroid.shp”

Example:

>>>python “bigeo.py” boundingbox –srcfile “countries\_polygon.shp” --outfile “bound\_countries.shp”

**Representative Point**

Creates a point guaranteed to be within a polygon.

Syntax:

>>>python “/path\_to/bigeo.py” centroid –srcfile “/path\_to/polygon.shp” --outfile “/path\_to/reppoint.shp”

Example:

>>>python “bigeo.py” boundingbox –srcfile “countries\_polygon.shp” --outfile “rep\_point\_countries.shp”

**OpenWeather**

For requesting weather data from open weather and creates a shapefile with that data on its location.

IMPORTANT: This requires api key from openweather. Please register for a free account.

Syntax:

>>>python “/path\_to/bigeo.py” openweather --path\_ids\_file 'openweather\_id.txt' --ow\_api apikey --outfile 'wx.shp'

Example:

>>>python '/path\_to/bigeo.py' openweather --path\_ids\_file '/home/openweather\_id.txt' --ow\_api 462c34b833ed43434e97ca1e3f352a --outputshp '/home/output\_weather/wx.shp'