Python Mapping in Matplotlib Cartopy Color One Country

Asked 5 years, 8 months ago Active 1 year, 8 months ago Viewed 10k times

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I have plotted a map of the world using matplotlib Cartopy. Now I want to select a specific country in the map in this case the United States and change the color. I think this is possible but not sure? I also, don't know how to filter the data for a 'country name' or other data that might be contained in the file.

```
import matplotlib.pyplot as plt
import cartopy
ax = plt.axes(projection=cartopy.crs.PlateCarree())
ax.add_feature(cartopy.feature.LAND)
ax.add_feature(cartopy.feature.OCEAN)
ax.add_feature(cartopy.feature.COASTLINE)
ax.add_feature(cartopy.feature.BORDERS, linestyle='-', alpha=.5)
ax.add_feature(cartopy.feature.LAKES, alpha=0.95)
#ax.add_feature(cartopy.feature.RIVERS)
ax.set_extent([-150, 60, -25, 60])
```

All I want is two colors one for the United States and one color for all other countries. Thanks for the help since I'm new to mapping via python.

python matplotlib cartopy

edited Mar 4 '14 at 12:06
pelson
105 4

asked Mar 1 '14 at 15:33
user3055920
153 1 1 4

You have to use the [cartopy shapereader](#) and play a bit with records and geometries:

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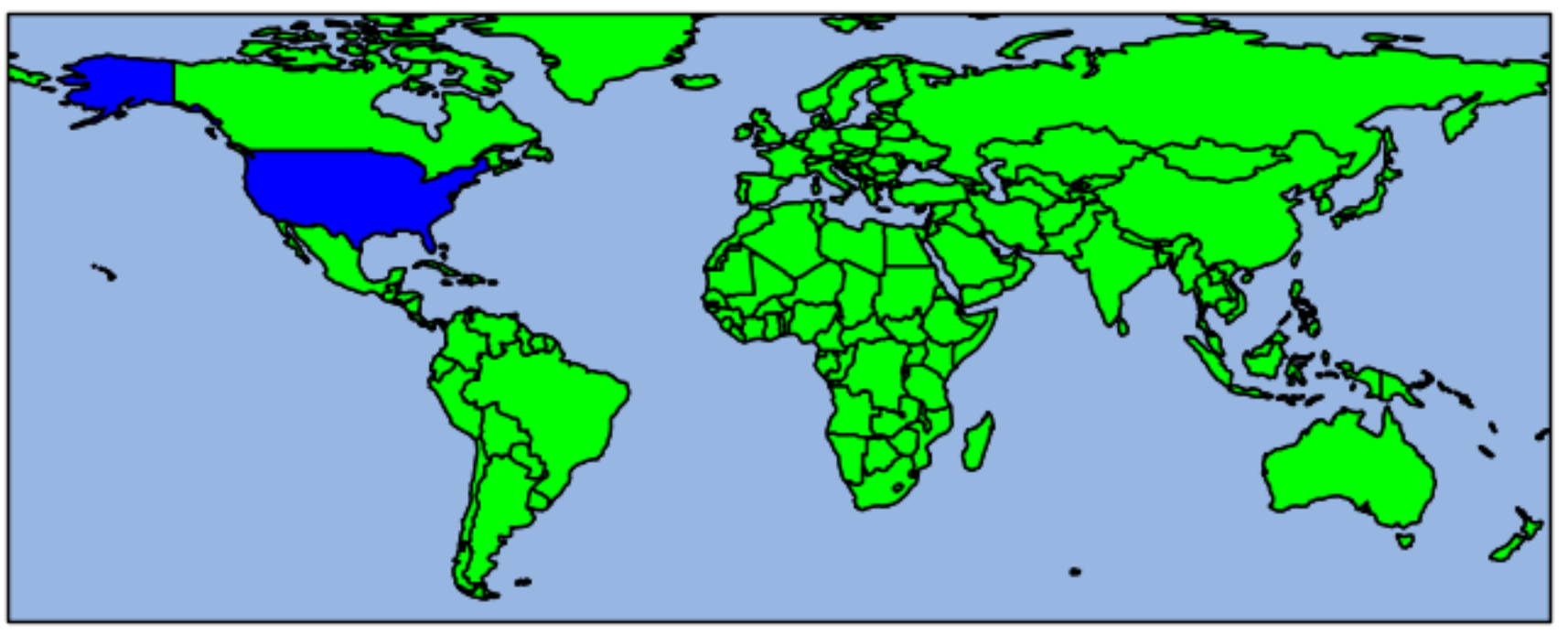
```
import matplotlib.pyplot as plt
import cartopy
import cartopy.io.shapereader as shpreader
import cartopy.crs as ccrs

ax = plt.axes(projection=ccrs.PlateCarree())
#ax.add_feature(cartopy.feature.LAND)
ax.add_feature(cartopy.feature.OCEAN)
#ax.add_feature(cartopy.feature.COASTLINE)
#ax.add_feature(cartopy.feature.BORDERS, linestyle='-', alpha=.5)
#ax.add_feature(cartopy.feature.LAKES, alpha=0.95)
#ax.add_feature(cartopy.feature.RIVERS)
ax.set_extent([-150, 60, -25, 60])

shpfilename = shpreader.natural_earth(resolution='110m',
                                      category='cultural',
                                      name='admin_0_countries')
reader = shpreader.Reader(shpfilename)
countries = reader.records()

for country in countries:
    if country.attributes['adm0_a3'] == 'USA':
        ax.add_geometries(country.geometry, ccrs.PlateCarree(),
                          facecolor=(0, 0, 1),
                          label=country.attributes['adm0_a3'])
    else:
        ax.add_geometries(country.geometry, ccrs.PlateCarree(),
                          facecolor=(0, 1, 0),
                          label=country.attributes['adm0_a3'])

plt.show()
```

Note: the facecolors are the RGB values divided by 255.



edited Mar 4 '14 at 10:53

answered Mar 4 '14 at 10:41

Antonio Falciano

11.3k 2 23 56

great! Looks perfect way to do what I want. – user3055920 Mar 4 '14 at 11:21

I also, have this question in Stack Overflow. If you want to answer it there too I will check your answer. – user3055920 Mar 4 '14 at 18:36

I think it's better to avoid redundancy. If you like you can link this Q/A there. – Antonio Falciano Mar 5 '14 at 11:22

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If you are thinking about using this tag then perhaps reconsider whether your question would be better posted to Stack Overflow because "matplotlib is a python 2D plotting library" rather than GIS software. View tag