

Geographical plot - Leonardo Vazquez

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1 GEOGRAPHICAL PLOT

```
[1]: import numpy as np
import pandas as pd
import folium as fo
%matplotlib inline
```

1.1 VOLCANOS PLOT

```
[2]: map1 = fo.Map()
```

```
[3]: volcano = pd.read_csv("239.volcano.csv")
lat_vol = list(volcano["Latitude"])
lon_vol = list(volcano["Longitude"])
name_vol = list(volcano["Name"])
vol = fo.FeatureGroup(name="Volcanos")
```

```
[4]: for lat,lon,name in zip(lat_vol, lon_vol,name_vol):
    vol.add_child(fo.Marker(location=[lat, lon], popup = name, icon = fo.
↳Icon(color="red")))
```

```
[5]: map1.add_child(vol)
```

```
[5]: <folium.folium.Map at 0x7f4af87b1250>
```



1.2 POPULATION PLOT

```
[6]: map2 = fo.Map()
```

```
[7]: popu = pd.read_csv("241.us+cities+pop.csv")
```

```
[8]: popu = popu.head(n=50)
```

```
[9]: lat_pop = list(popu['lat'])
lon_pop = list(popu['lon'])
name_pop = list(popu['name'])
pop_pop = list(popu['pop'])
populations = fo.FeatureGroup(name="Populations")
```

```
[10]: def mar(popu):
    if popu>1000000:
        return "red"
    elif popu>800000 and popu<=1000000:
        return "blue"
    else:
        return "green"
```

```
[11]: for lat, lon, name, pop in zip(lat_pop, lon_pop, name_pop, pop_pop):
```

```
populations.add_child(fo.Marker(location = [lat,lon], popup = [pop,name],  
↪icon = fo.Icon(mar(pop))))
```

```
[12]: map2.add_child(populations)
```

```
[12]: <folium.folium.Map at 0x7f4ac5f65310>
```

