# Map Plotting on HTML

In this app I have plotted markers in word map where volcanoes has been erupted or chances of erupting is high.   
  
Libraries used

* **Folium** - Folium is a Python library used for visualizing geospatial data. It is easy to use and yet a powerful library. Folium is a Python wrapper for Leaflet. js which is a leading open-source JavaScript library for plotting interactive maps. It has the power of Leaflet.
* **Pandas**  - reading csv , merging latitudes and longitudes for plotting .

## Converting Data from csv to useful list .

data=pd.read\_csv("Volcanoes.csv")

lat=list(data["LAT"])

lon=list(data["LON"])

elev=list(data["ELEV"])

## Assigning Colours as per elevation

## def color\_producer(elev):

if elev < 1000:

return 'green'

elif elev > 1000 and elev < 3000:

return 'orange'

else:

return 'red'

## Code

# Creating folium Map Variable and assigning start point with soom details and tiles type

map=folium.Map(location=[41.3125,-118.266],zoom\_start=6,tiles="Stamen Terrain")

#Creating Groups

fgv=folium.FeatureGroup(name="Volcanoes")

#Looping for mapping data

for lt,ln,el in zip(lat,lon,elev):

fgv.add\_child(folium.CircleMarker(location=[lt,ln], popup=str(el)+" m",fill\_color=color\_producer(el),fill\_opacity=0.7))

fgp=folium.FeatureGroup(name="Population")

fgp.add\_child(folium.GeoJson(data=open('world.json','r',encoding='utf-8-sig').read(),

style\_function=lambda x:{'fillColor':'green' if x['properties']['POP2005']<20000000

else 'orange' if 20000000<= x['properties']['POP2005'] <=30000000 else 'red' }))

#actual ploting on the map

map.add\_child(fgv)

map.add\_child(fgp)

map.add\_child(folium.LayerControl())

#saving into and html file .

map.save("Map1.html")

Output.

