```
from mpl toolkits.basemap import Basemap
import numpy as np import
matplotlib.pyplot as plt
# Set iPython to display visualization inline
import pylab import pandas as pd
%matplotlib inline
df = pd.read_csv("path/detector_lane_inventory.tsv",
na_values=['-'],
                             sep = '\t'
min_long = min(df['longitude'])
max_long = max(df['longitude'])
min_lat = min(df['latitude']) max_lat =
max(df['latitude']) mean long =
np.mean(df['longitude']) mean_lat =
np.mean(df['latitude']) min_long =
min long - 0.10 max long = max long
+ 0.10 min_lat = min_lat - 0.10
max_lat = max_lat + 0.10
# Create a figure of size (i.e. pretty big)
fig = plt.figure(figsize=(20,10))
# Create a map, using the Gall-Peters projection,
map = Basemap(projection='mill',
       # with low resolution,
resolution = 'h',
       # And threshold 100000
area_thresh = 100000.0,
Centered at mean
epsg=4269,
       Ilcrnrlon=min long, Ilcrnrlat=min lat,
urcrnrlon=max long, urcrnrlat=max lat,
       lat_0=mean_lat, lon_0=mean_long)
# Draw the coastlines on the map
#map.drawcoastlines()
# Draw country borders on the map
#map.drawcountries()
```

Fill the land with grey #map.fillcontinents(color = '#888888')

Draw the map boundaries #map.drawmapboundary(fill_color='#f4f4f4')

Define our longitude and latitude points

We have to use .values because of a wierd bug when passing pandas data # to basemap.

x,y = map(df['longitude'].values, df['latitude'].values)

Plot them using round markers of size 6 map.plot(x,
y, 'ro', markersize=6)
#map.shadedrelief() map.drawcountries()
map.drawcoastlines()

Show the map map.arcgisimage(service='ESRI_StreetMap_World_2D', verbose=True) plt.show()

