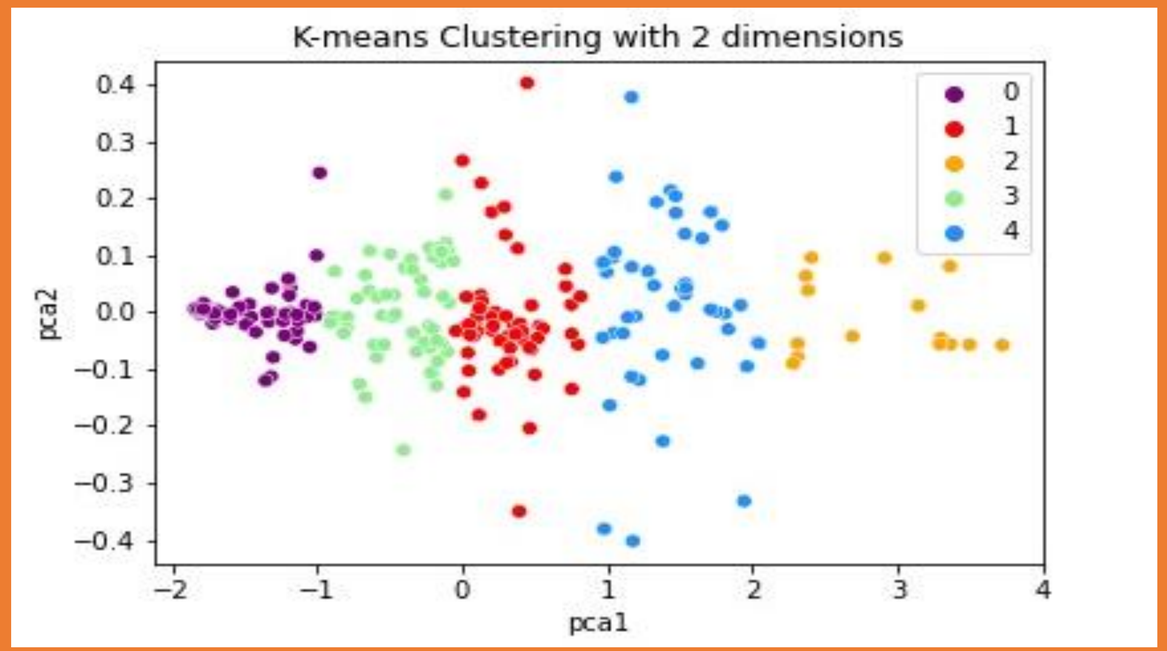
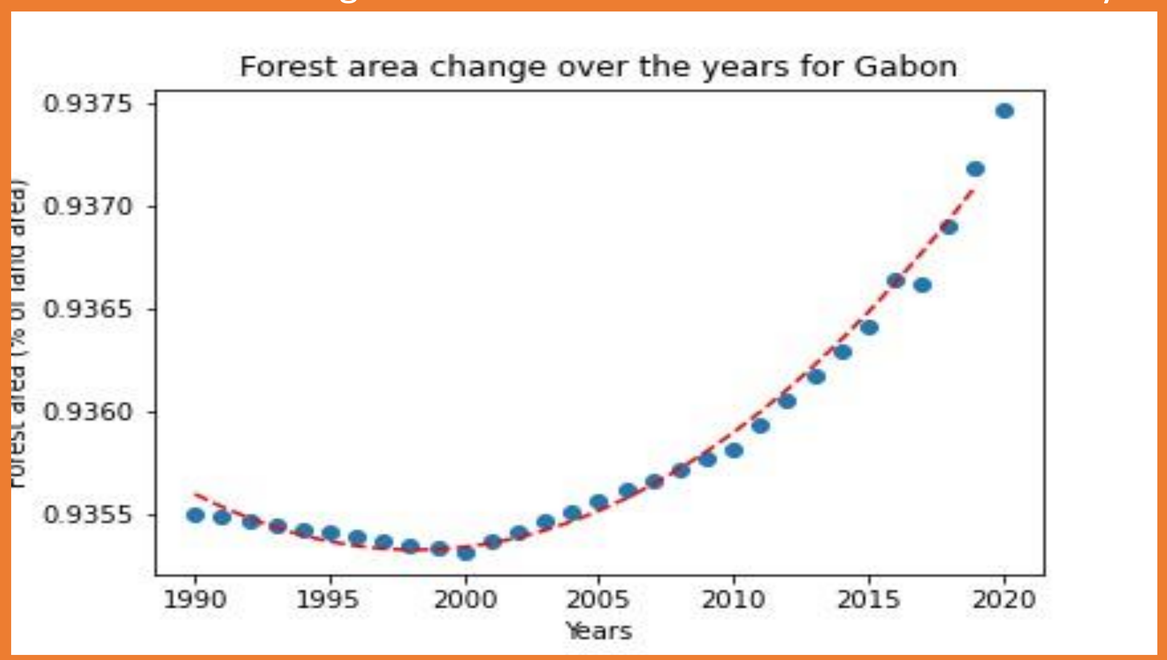
Analysis of Forest Area Change over the Period 1990-2020

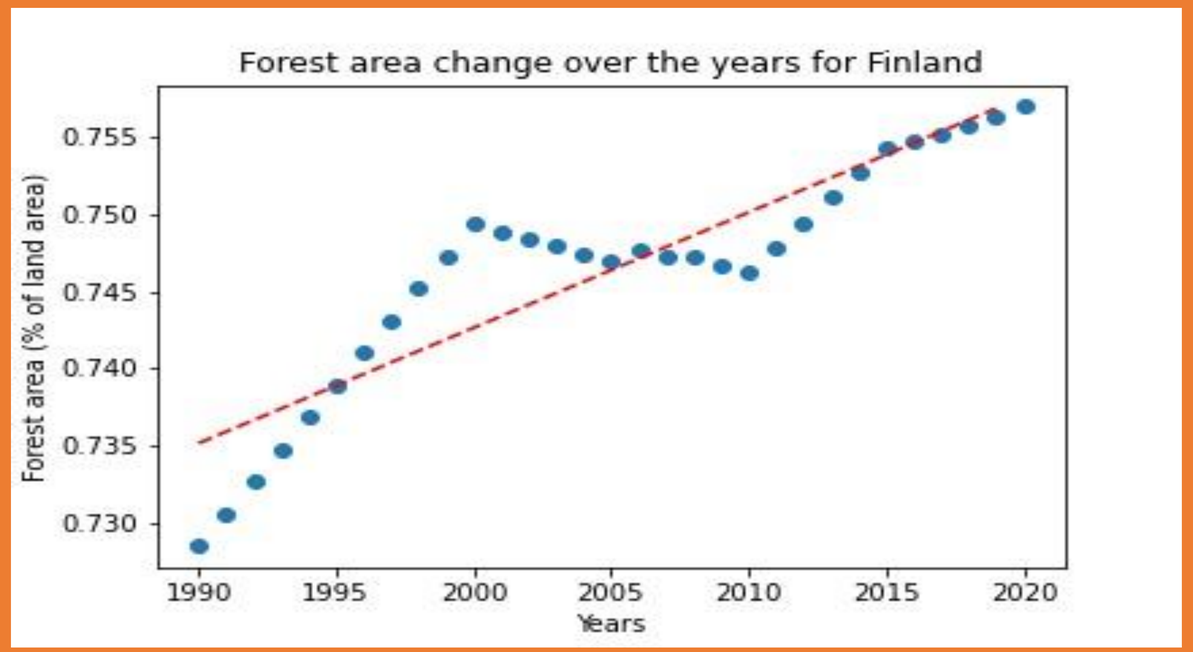
Clustering countries using k-means clustering into 5 clusters. A few countries from one of the cluster are then selected and an appropriate fit function is applied to each country. PCA is used to reduce the dimensionality of the data in order to plot the data.



The forest area change for Gabon over the years 1990-2020 is shown with a polynomial fit function applied to it. As we can see there is first a decrease and then a gradual increase in forest area land over the years



The differences between each country lies in either increasing or decreasing of forest area. Gaon and American Samoa has nearly perfect fit functions for their scatter plots, however, for Finland there is a very different scatter plot. The forest area change for Finland over the years 1990-2020 is shown with a linear fit function applied to it. As we can see there is an increase in forest area land



The forest area change for American Samoa over the years 1990-2020 is shown with a polynomial fit function applied to it. As we can see there is a decrease in forest area land over the years.