

Udacity NAND

Project One

Explore Weather Trends

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**Udacity-Data-Analyst-Nanodegree**

**Exploring Weather Trends Project**

The aim of the project is to analyze and visualize the local and global temperature data. I have considered “Raleigh NC” as my local city and compared it with overall global temperature trends. This report focuses on providing five interesting insights/observations about the change in temperature trends. The trends about the weather data (local and global) has been visualized using Excel, where SQL query is used to extract the data from Udacity website.

**Introduction**

The change in weather trend has always been an interesting topic among scientist, politicians, environmentalists, and others. The goal of the project is to compare and analyze the similarities and dissimilarities between the local (where Udacity course student lives) and global temperature data. The observations can be drawn by visualizing the temperature data. The report consists of following sections: I. Data extraction from database, II. Data manipulation methods and tools, III. Data visualization, IV. Data interpretation. For this report I have chosen “Raleigh NC” as the (local city) variable.

**Data Interpretation**

There following observations were drawn after analyzing the data from line charts:

(1) That Raleigh NC is hotter on average compared to global average temperature trend and the difference is consistent over time.

(2) Global and Raleigh NC average temperatures have seen a consistent incremental change around the starting of 1900, before that there was fluctuations in average temperature.

(3) The overall trend shows increase in temperature in both global and local level. This means world is getting hotter. This trend is consistent over the last one hundred years.

(4) The upward trend after analyzing the last century data shows that it could be because of the industrialization or heavy use of fossil fuel.

(5) There is a significant increase in temperature can be observed in global data.