Sabrina Burka

INFO 474

Final Project Overview

**Project Overview**

For this visualization, I created a chart representing the average precipitation across various cities worldwide.

To start, I processed the data by creating a Python script which parsed the dates and calculated the average precipitation for each month in each city. I then aggregated all these .csv files into one file, precip.csv, which contains data about the city, city name, and average precipitation for each month. The original data spans July-June, but I reformatted it to cover January-December for easier comprehensibility.

I added novelty in the form of shaping my data into raindrops to emulate the precipitation, for the viewer's enjoyment. I carefully chose a cool-toned colour scheme, also consistent with the rain theme, but made sure to use different enough colours that different cities are distinguishable.

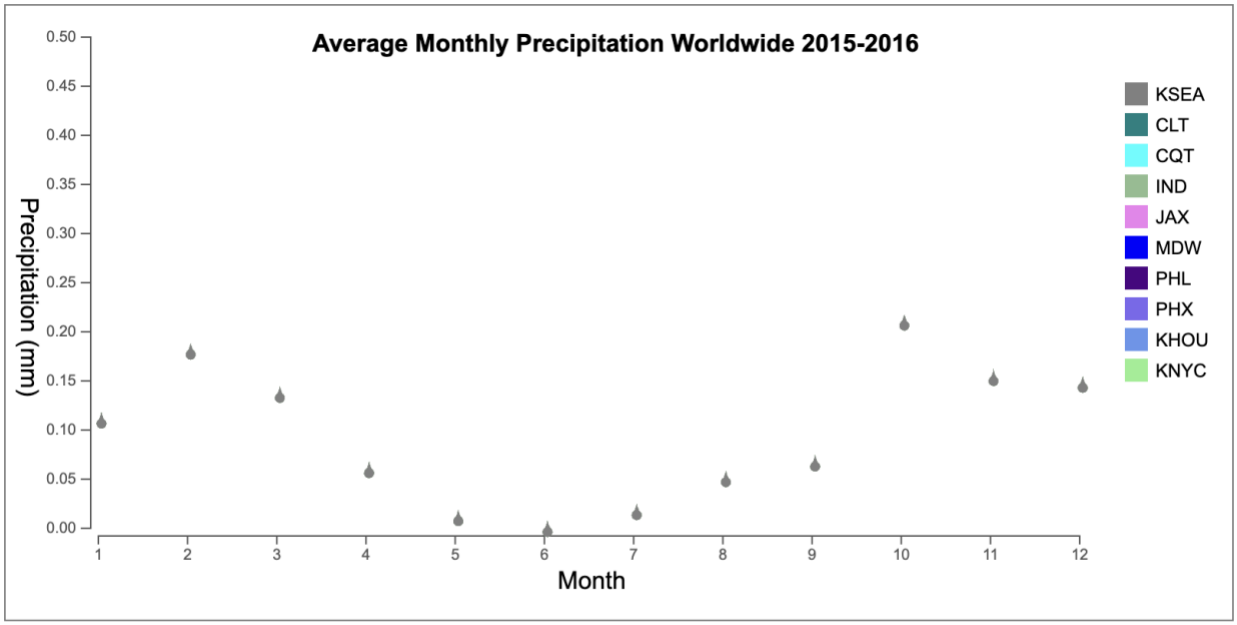
**User Tasks Supported**

- Identify precipitation trends worldwide
- Compare precipitation between cities

- Identify outliers
- Predict precipitation levels in a given city during a specific month
- Identify desert areas with very low total annual rainfall

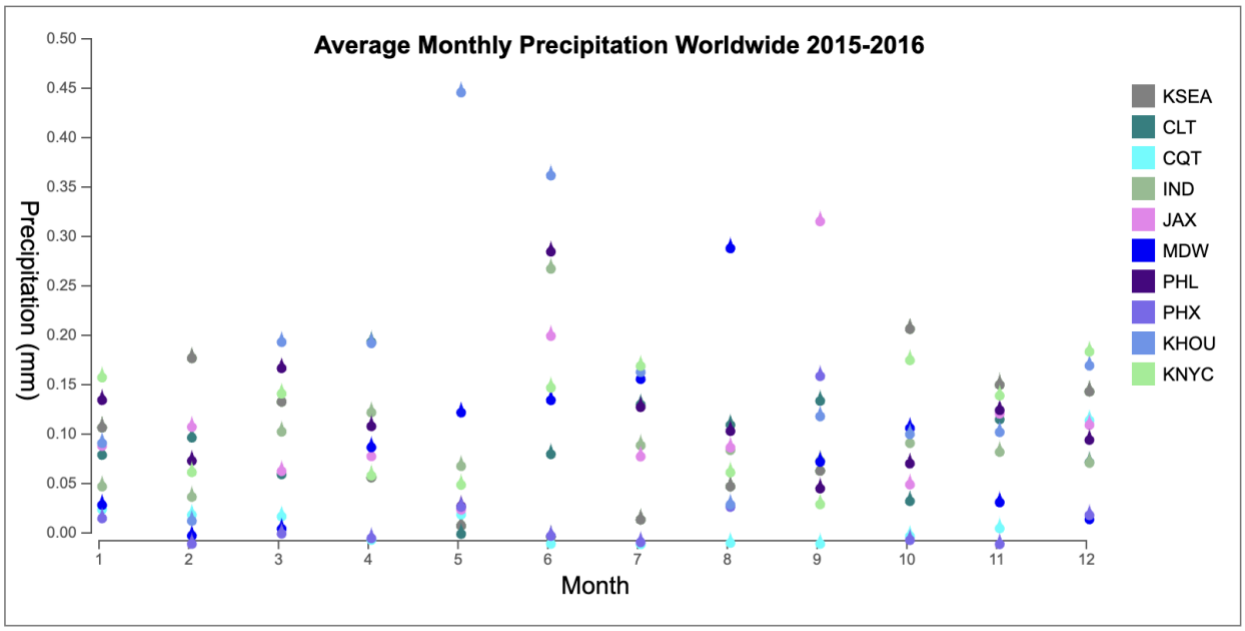
**Design Overview**

This design allows viewers to dynamically view precipitation trends based on data scraped from Wunderground. Each raindrop represents the average rainfall recorded over all days of that month in that city. The legend on the right displays the colour coding for each specific city. At the bottom is a drop-down menu through which users can filter by city to get an isolated view of that particular location. This way, users can more clearly see rainfall trends within certain locations and gain useful insight. For instance, despite Seattle's reputation for being extremely rainy, it actually has less rain than New York in many months! See figures below for images of the view.




Select a city to view its precipitation trends individually, or "All Cities" to view all precipitation trends.

Filter by City: KSEA




Select a city to view its precipitation trends individually, or "All Cities" to view all precipitation trends.

Filter by City: All Cities