# SurfsUp Project

## Overview:

The purpose of this project is to analyze data from W. Avy on a weather dataset that he has from the island of Oahu. The weather conditions data will then be stored in an SQLite database. The goal is to use this data to determine if the weather in the area will be a suitable location to open a Surf n’ Shake shop. If Oahu does well, then other location could be a viable location for another business location.

## Results: Three Key Differences

1. The average temperature for both months are only off by four degrees. June’s average temperature is 75 degrees and December’s average temperature is 71 degrees.

2. The minimum and maximum temperature also do not fluctuate by a significant amount. While the minimum for June and December has an eight-degree difference, the maximum only fluctuates by two degrees.

3. Between the two months the temperatures stay within the same range and do not vary significantly.

## June Temperatures

<img width="156" alt="June Temp" src="https://user-images.githubusercontent.com/99099706/166128461-6b27e754-c59c-4b76-8699-cc63566504d2.png">

## December Temperatures

<img width="197" alt="December Temp" src="https://user-images.githubusercontent.com/99099706/166128491-71995679-0fbc-4ee3-8686-3e6a1e4427c7.png">

## June Precipitation and Temperatures

<img width="284" alt="June\_prcp\_temp" src="https://user-images.githubusercontent.com/99099706/166128476-ecab923f-7a30-46aa-a850-7838bd356328.png">

## December Precipitation and Temperatures

<img width="326" alt="December\_prcp\_temp" src="https://user-images.githubusercontent.com/99099706/166128511-89f99cfc-3e21-449b-947c-6dc8a5fd61a4.png">

## Precipitation Histogram

<img width="438" alt="Precipitation Histogram" src="https://user-images.githubusercontent.com/99099706/166128448-4e75533e-7a55-4d63-814b-1be707494e7a.png">

## Precipitation Plot

<img width="457" alt="Precipitation Plot" src="https://user-images.githubusercontent.com/99099706/166124321-e238cf29-8d40-4e57-b3ae-5fbc136849ca.png">

## Precipitation Statistics

<img width="174" alt="Precipitation Statistics" src="https://user-images.githubusercontent.com/99099706/166128536-4c013bb5-9ddf-4394-baa9-3d4a483e01c8.png">

## Summary:

This analysis shows that the temperature in Oahu does not fluctuate significantly throughout the year and the chance of continuous rainfall is low. To dig more into the data, two additional queries were run for both June and December. W Avy. mentioned a previous business venture that ended up failing due to extreme precipitation. June’s average precipitation for the month was 14% and December’ was 21%. Data for both the temperature and precipitation in Oahu indicate that it has the potential to be a positive business venture.