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Data Analytics Boot Camp

API – Homework

Trend Analysis

Trend 1: Cities near the equator exhibit higher temperatures

Analysis: With temperatures being higher near the equator it could be caused by higher exposure to the sun on a per day basis. Also given the slant of the earth, at the equator it is more directly pointed towards the sun compared to at the poles it is at a much sharper slant.

Trend 2: Humidity clusters around the equator demonstrating higher moisture content

Analysis: Since warm air maintains and holds moisture, this evidence supports that the locations closer to the equator, which on average are hotter, would present more humidity. Also regions closer to the equator display less changes in seasons and overall have a longer exposure to the sun, which all contribute to the climate being humid.

Trend 3: Wind speeds increased generally in higher positive latitudes.

Wind speeds can be a result of many factors but one of the biggest is pressure gradient. At higher latitudes the dense air sinks from the upper levels of the atmosphere which causes atmospheric “flows” and creating high pressure areas at the poles.