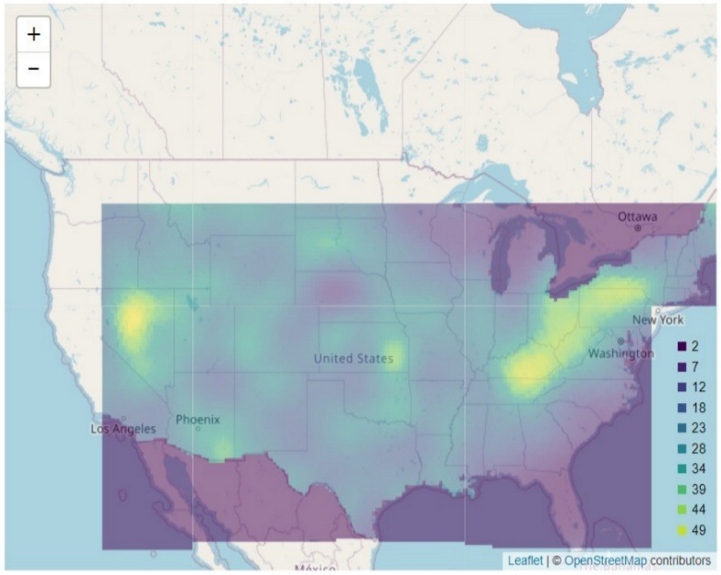
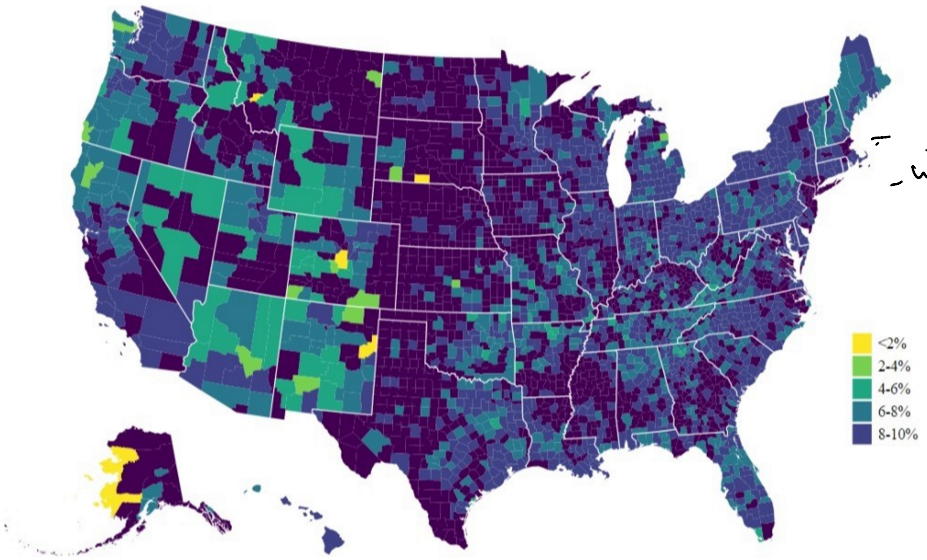
Lithium in drinking water (micrograms/Liter)



Suicide % per 100k by County



Hypothesis: There is a correlation between the concentration of lithium in drinking water and the rate of suicide in that location.

Summation: Using data from USGS about lithium concentration in groundwater I plotted the rastor files against a projection of the United States using OpenStreetMaps. I then queried the CDC's database for a county level suicide death rate per hundred thousand people and plotted that by its individual county. The darkest purple are missing data sets. From there I colored the two maps so that high lithium concentrations and low suicide rates were highlighted on either map. The data is not very complete ,but it does look like a small correlation. This hypothesis was based on a paper published in the National Library of Medicine in 2011. Their conclusion was that there was strong correlation between high lithium concentration and low suicide rates. My data wasn't as strong due to the missing amount of suicide rates, though some areas do line up.

Sources:

Lithium Concentration

CDC suicide statistics

Further Reading and inspiration on this topic