Weekly Log #4

I just wrapped up the code to run all the processing. I now have a working web app that correctly inputs distance decay coefficient and hexbin sizes and outputs a linear regression hexbin. I stumbled for the longest time with turf.collect because my census tract geojson was a MultiPolygon and not a Polygon. QGIS created that geoJson. After I recognized that the geoJson needed to be converted from MultiPolygon to Polygon, I ran my spatial analysis and the code worked beautifully.

This week’s learning has been focused on displaying appropriate breaks for quantifying the attributes. I played with using quantiles to visually categorize the data, and that ends up not looking best. After using quantiles, I also tried visualizing the cancer rates and nitrate concentrations by calculating the standard deviation and using standard deviations for calculation. I also did not like the way that looked. Past and current students are using ckmeans, which is an improvement over both natural jenks and the old kmeans formulae. I ended up using ckmeans for my clustering as well. I think that I will continue to try to find an alternate solution for categorizing the data.

While my map works, I have a few visual features I want to update. I am styling the page to be visually appealing. As a migraine sufferer, I try to turn down the brightness on all my end products to prevent unnecessary eye strain. I have a fairly dark color theme at the moment, and I may try to create a light-themed variant for those that are inclined to use that. My layers’ legends do not disappear as I add and remove layers from the map. I would like to fix that before I submit the final project. I also want to create an option for the user to save their analysis to geoJson for their own use.

I’m glad that I wrapped up the majority of the coding this week. The remaining tasks are not terribly difficult. I realize my code is bulky and I have a lot of room for making it more efficient. I have an intent to try and reduce the script size by combining a few functions.