1* = Uniform marks are used + encoded by category to make pre-processing easier for the viewer.

= Marks are encoded w/ color blind friendly palette

= Main marks used were points and area.

- Home

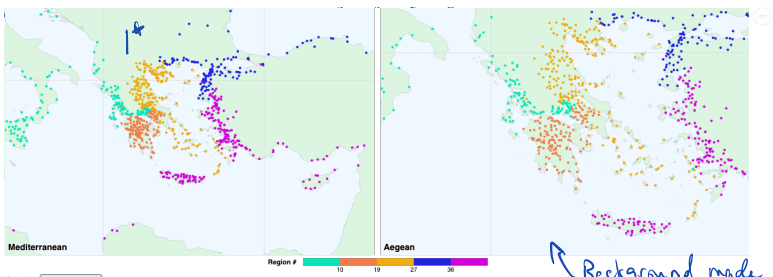
Homework #3

Historians recognize the importance of staseis, however, multiple theories persist regarding the cause of these violent conflicts. The reasons for staseis range from interstate conflict, economic or social inequality, and economic gain. Given the dataset presented, how can we evaluate the temporal or spatial frequency of staseis given the historical record of these violent events?

Hypotheses:

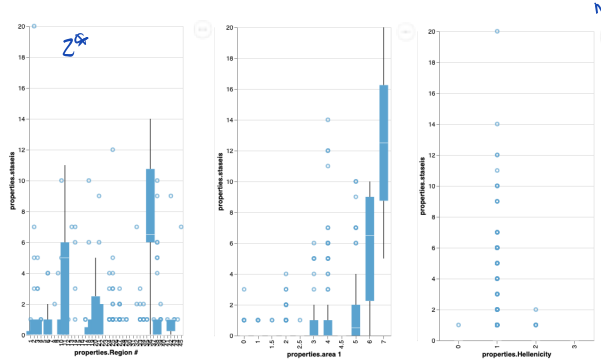
H1: I hypothesize the number of stasesis events is related to both interstate conflict, as well as conflict within the polis itself.

To evaluate this hypothesis I look at the number of staseis events given interstate variables region number and total area controlled by a polis. I compare these results to variables I think describe staseis within the polis (hellenicity and democracy).



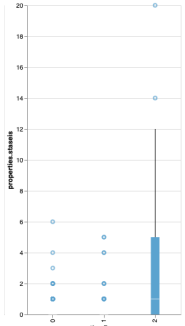
ColorAs Region #

Background made more transparent and lighter hues to convey "more white space" but still maintain the expected colors for land + H2O = data rich w/ spatial relationships.



2* Main scale type is ordinal and quantified using median + Percentiles visualized as side-by-side box plots.

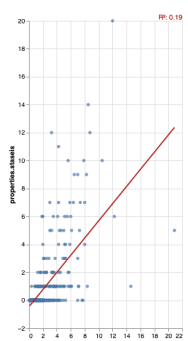
Instead of 4 I would like 1 controlled by a pull down menu. Outlining and highlighting when hovering would complete the box plot visual.



Side-by-side box plots show the distribution of staseis events given a particular region, total area controlled, hellenicity, and democracy. Hover over a box to see summary statistics appropriate for categorical variables. Note not all factors have enough data to display, and this is a good way to visualize how meaningful a given variable might be.

For example, hellenicity has little relationship with staseis. We know how "greek" the Greeks were based on their recorded history. Staseis frequency based on how "Greek" the population was may not be an appropriate measure due confounding variables that contribute to one's "Greekness" such as polisity. A more appropriate measure of staseis frequency within a polis is democracy, as democracy tends to rise as a common solution to inter-polis staseis. As such, we would expect a higher number of staseis events to be associated with regime history centered on democracy.

We see a relationship between the number of staseis events given the polis region and the total area controlled by a polis. While the number of staseis varies by region, we do see staseis frequency increase as the total area controlled by a polis increases.



* This visualization is incomplete. Should have a pull down for variables and a pull down for data transformations.

Line marks would be useful if I could transform the data.

Least square regression line is plotted to reproduce Dr. Arcenas's results (staseis vs prom 1). His R squared value of 0.8626 is very different from my results (0.19). Dr. Arcenas must have done a log transform because the original data violated the assumptions required for least squares linear regression.