For Fire Disturbance Areas Data, we wanted to make it a factor into our suitability model. However, since we decided that we focus on Southern Ontario because our soil data only has coverage of Southern Ontario and most of the fire disturbance areas occurred in Northern Ontario, it is fire is still a crucial factor to consider for reforestation. Trees take 20-30 years to mature (talk about how long it takes for red maple trees and the species ur talkin bout GIVE EXAMPLES!!!) and for these planted trees to soon die in short period of time due to being planted in areas that are highly prone to forest fires is a unethical and imprudent waste of money, effort and resources.

To examine the which areas are highly prone to forest fires.

I first have to observe the spatial distribution of the Fire Disturbances Areas Data by creating a standard deviational ellipse, mean center and a median center. I used the Spatial Statistics toolbox to make both unweighted version and weighted versions of these spatial statistics. To create the weighted version of these spatial statistics, I used the area of the Fire Disturbance area polygons as the weights.

Next, with the help of Professor Brauen, we found all distinct fire disturbance polygons and got rid of the duplicate intersected polygons using a combination of overlay tools such as, union, intersect, and spatial join and also merge tool and Multipart to singlepart tool.