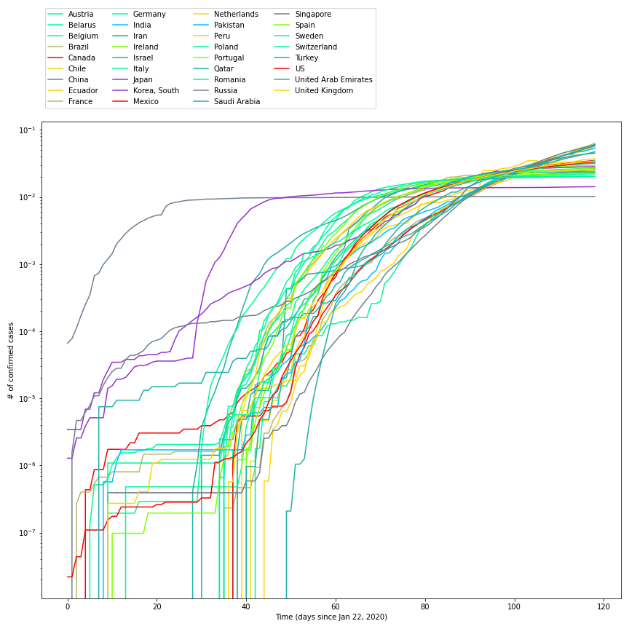
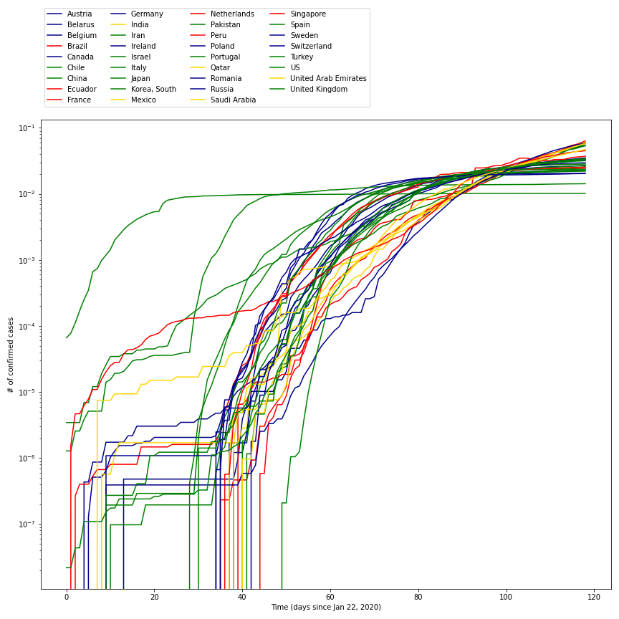
Final Project Option 1

For the final project, I start by performing some visualizations on the global confirmed cases data. I want to see that if there are some trends that I can find by grouping countries based on different traits.



The plot on the left is made by grouping countries based on their latitude, with brighter colors representing countries that are closer to the equator. I want to test if countries with warmer climate have lower growth rate for confirmed cases. Since the data is normalized, we the rate of change of the cases is directly reflected by the slope of the plots. However, the plot shows no correlation between latitude and growth rate as trajectories marked by bright colors show no distinctive pattern compared with others.

The plot on the right is made by grouping countries based on their longitude. Countries with similar longitudes have similar color. The assumption is that similar longitude indicates that the countries are on the same continent, which suggests that they have similar culture and political system. The result shows that counties in Asia like China, Korea, Japan, and Singapore, have lower growth rate. It could suggest that the emphasis on individual freedom in Western countries hinders their efforts in combating the pandemic.