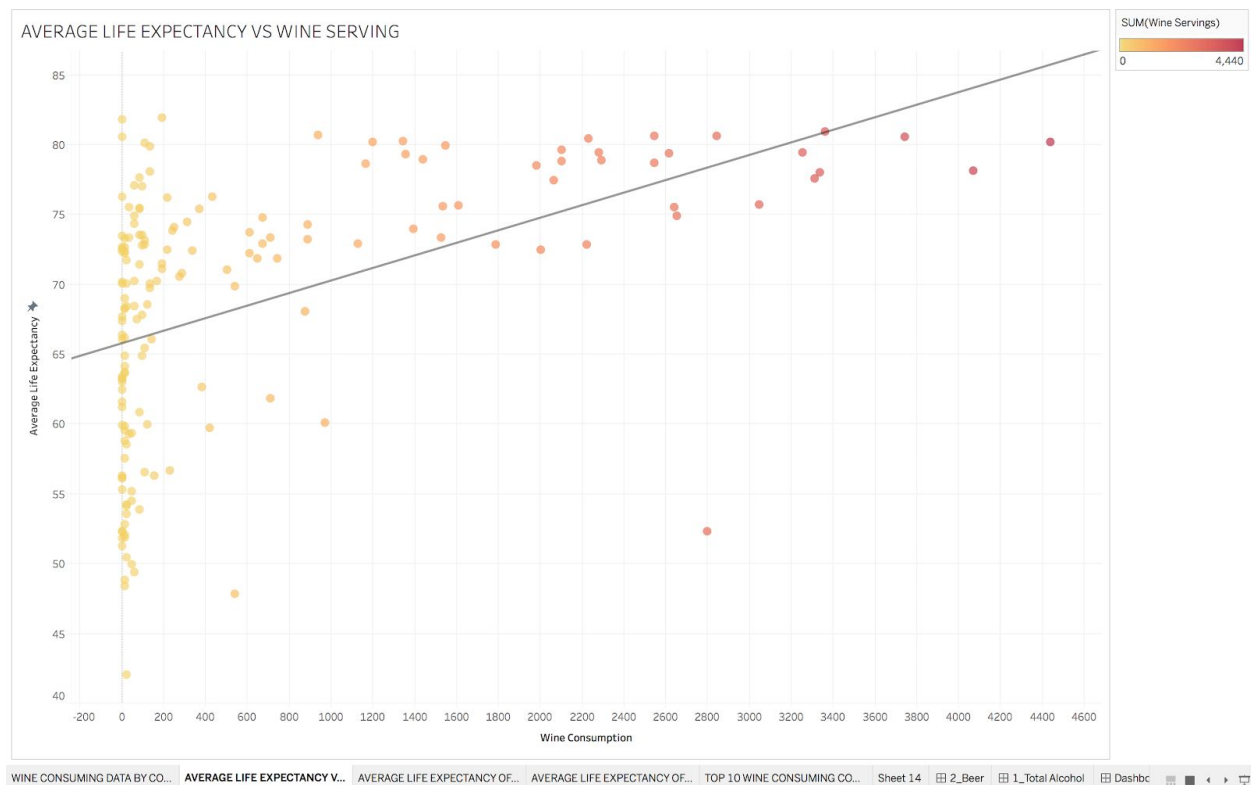
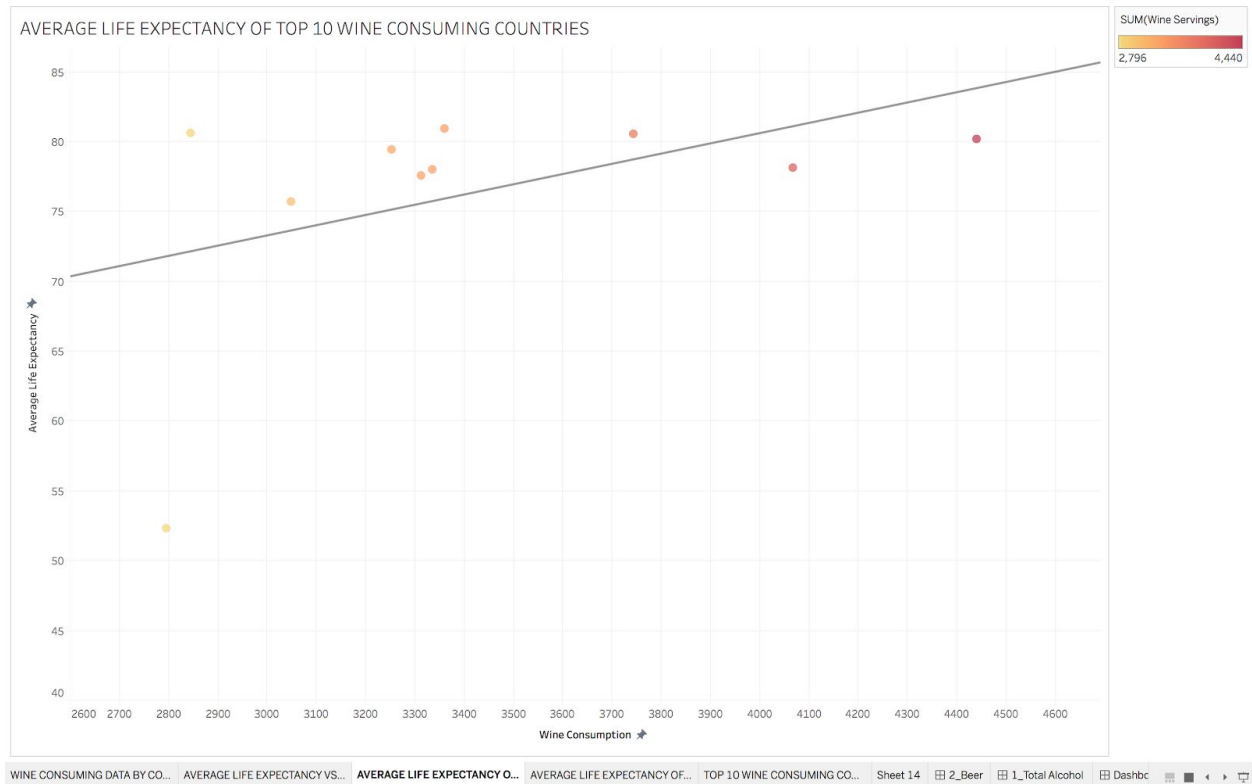


My initial question: ***how does wine affect people's life expectancy?***

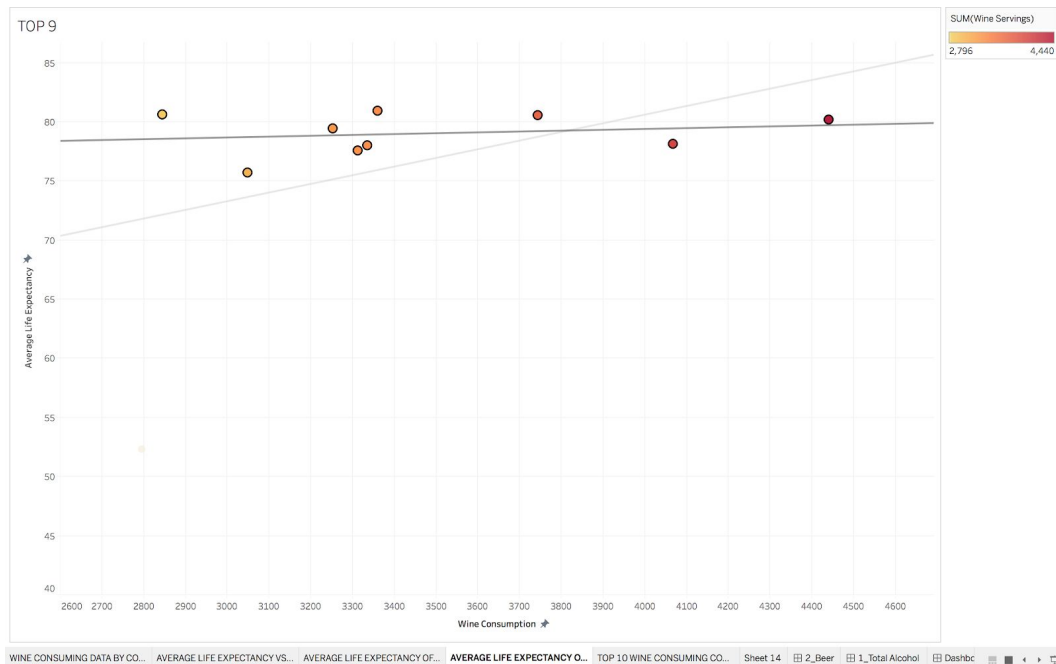
It is said that wine is good for health, so I thought it would be nice if we could test the saying to see if it's true or not. The original data (alcohol consumption and life expectancy) were found on a website called *data.world* and was formatted nicely in csv. To get a general look of the data, I created a scatterplot with the amount of wine consumed on the x-axis and life expectancy on the y-axis.



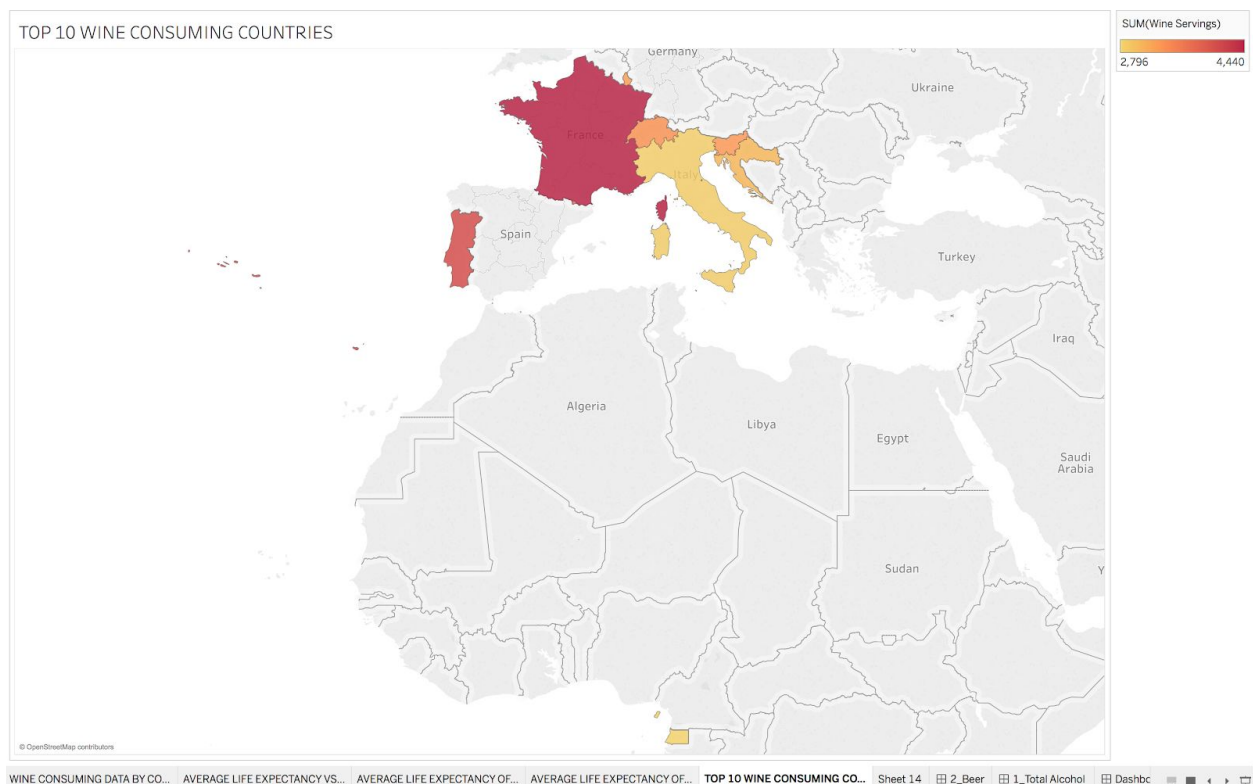
Apparently there is a positive relationship. However, this graph may not be trustworthy because there are a lot of counties with nearly zero amount of wine consumption. In order to see if there is really a positive relationship, I made another scatterplot with only the top ten countries with highest wine consumption.



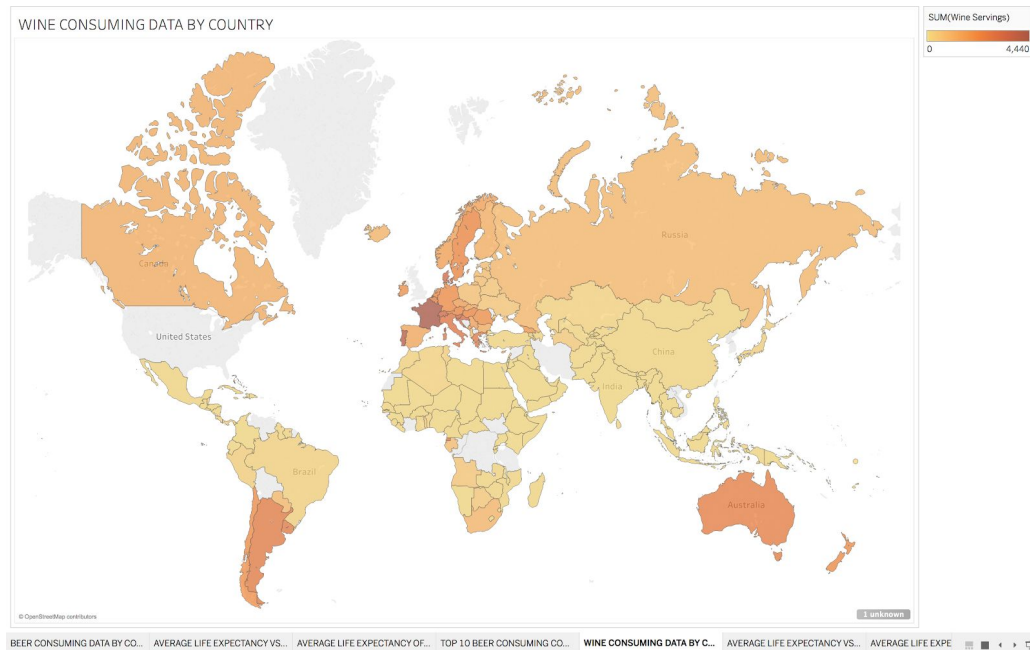
There is still a positive trend. However, it seems like this positive trend is caused by the outlier in the lower left corner of the graph. Therefore, I removed that point from the graph, and get the following:



This time, the line is fairly straight, showing that there's almost no relationship between the amount of wine consumed and life expectancy. Also, interestingly, all those nine points indicate long life expectancy, while the outlier (still on the graph but very transparent now) indicates an extremely short life expectancy (52.33 years). It is impossible that this huge difference is caused by the difference amount of wine that people of the countries consume, so I created another graph to show where the ten countries are.



As shown on the map, of these ten countries, nine of them are in Europe, while the outlier, Equatorial Guinea is in Africa. Moreover, worldwide, most of the countries that consume more wine are also better-off economically.



Therefore, back to the positive relationship shown in the beginning, it is hard to tell whether the long life expectancy is caused by wine or simply because those countries are more wealthy and could afford to buy more wine.