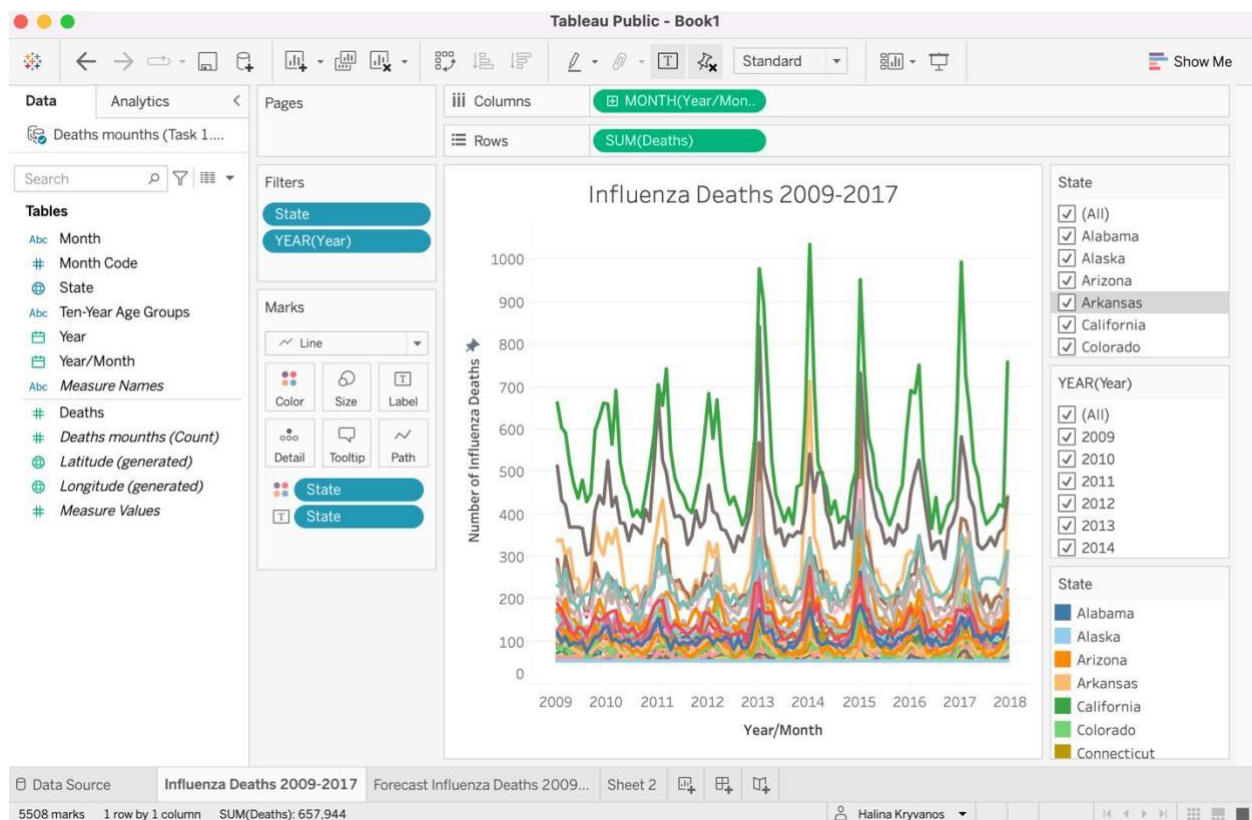


2.4 Temporal Visualizations & Forecasting

1. Create a line chart of influenza deaths.
2. Decide if the x-axis will be in years or months.
I created two charts for example with years and months
3. Determine which variable shows counts and place this on the y-axis.
4. Make geographic state the category of data by using colors.
5. Take a screenshot of your visual, including any legends, and include it in a new Word document.

Link:

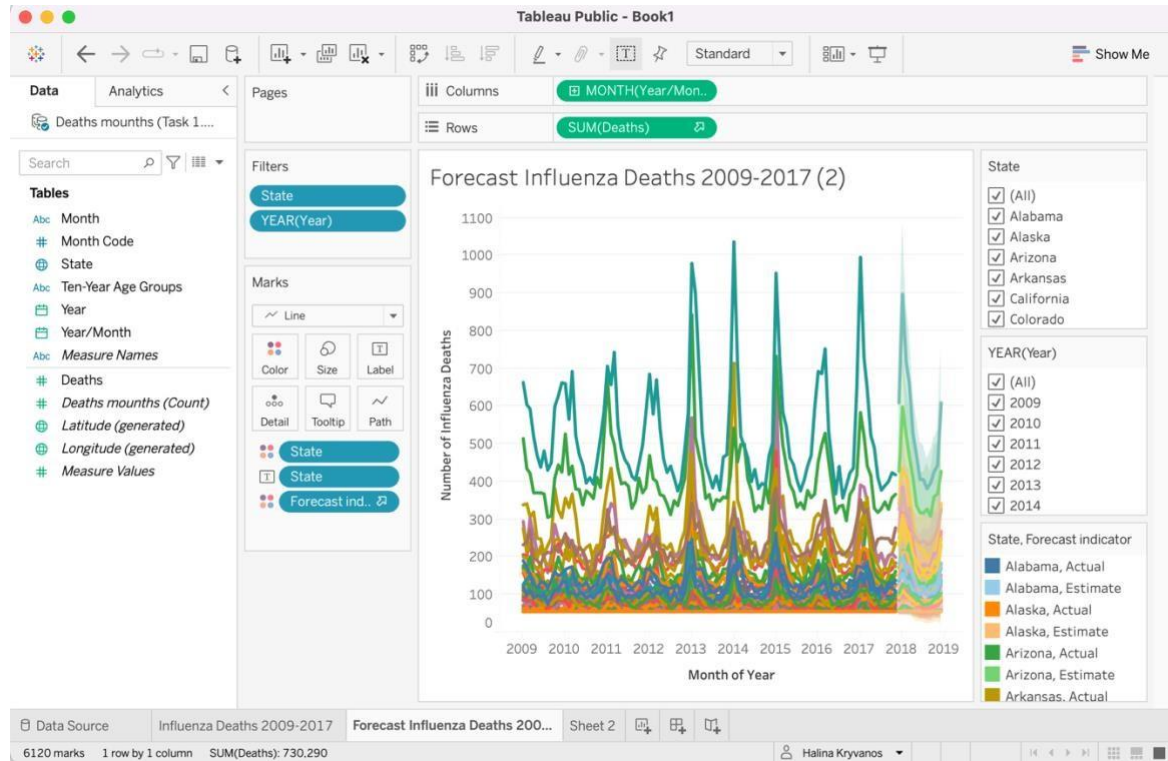
https://public.tableau.com/views/PreparingInfluenzaSeason_16604201832430/ForecastMonthlyInfluenzadeathsgroup?:language=en-GB&:display_count=n&:origin=viz_share_link



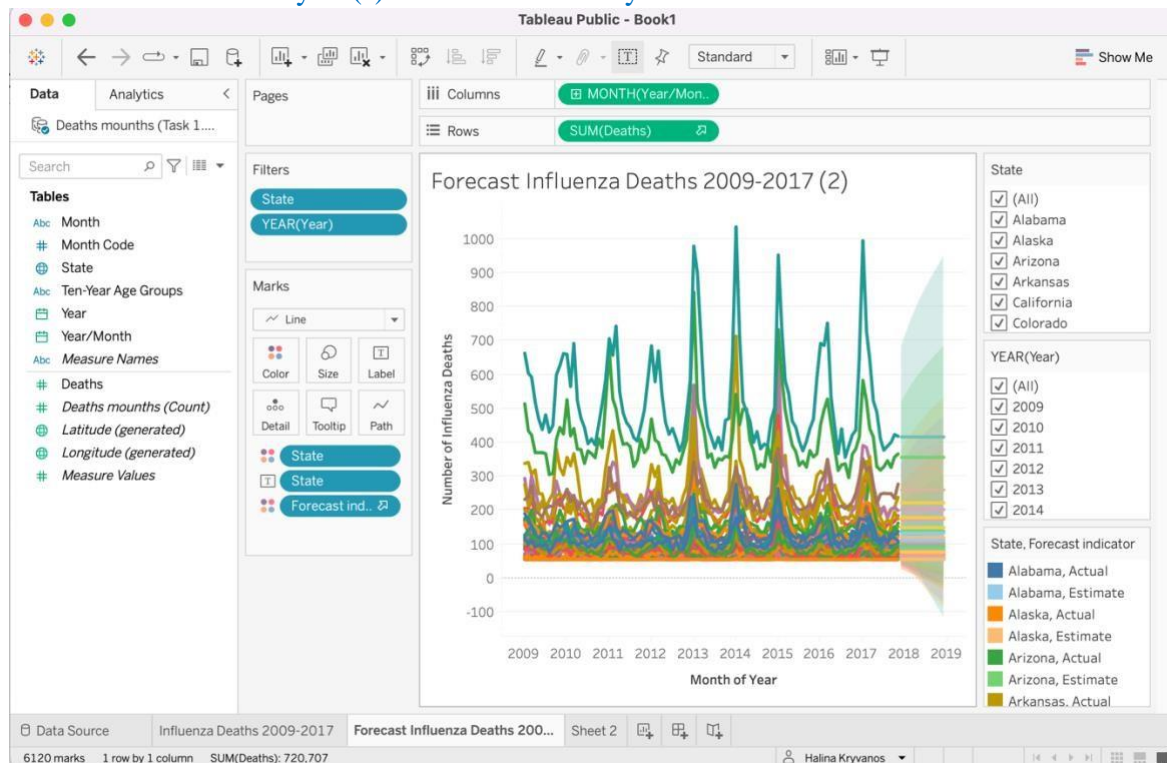
6. Create a forecast for future month(s) or year(s).
7. Turn on and off seasonality and observe how this affects your charts.

8. Take a screenshot of your chart with and without seasonality and include these screenshots in your Word document.

The forecast for future year(s) with seasonality



The forecast for future year(s) without seasonality



Note: The forecast without seasonality results in straight line, which ignores the seasonal variability

Visualization checklists

Text

- Are the title and text descriptive enough? (i.e., do you understand what the visualization is trying to convey just by looking at the title and text?): **Yes, the title is descriptive enough.**
- Are there text labels? **The graphs axes are labelled.** For examples years on the x axis and number of **influenza death in the y axis.**
- Does the text portray any redundant information that could be gotten rid of? **No redundant information to get rid of.**
- Do colours, shapes, and size scales come with legends? **There are legends for the colours in the line charts.**

Colour

- What does the colour scheme signify? **The colour schemes show's the different states.**
- Are there more than five colours? There are more than five coulurs. **Yes.**
- Does the colour scheme make sense? Are colours analogous, complementary, monochromatic, or intuitive? **The colour scheme was clear because there are legends.**

- If colour is used to draw attention to important information, is the darkest colour representing the most important information? **No dark colour used. Different colours are used to show the different states.**

Other

- Are different sizes used? If so, is there meaning behind the sizes? **Different sizes are not used.**
- Are there groupings in the data that can be portrayed through colour, size, or position? **No groupings portrayed through size.**
- Is there (enough) whitespace? **Enough space to understand the text.**
- Is the visualization accessible? **Visualization is not readable for some states with small number of influenza death.**
- Does the visualization teach you something? **Visualization shows some findings, particularly states with high death rates, it shows clearly the trend /time series over time. For states with small numbers of deaths it is difficult to see the trend overtime.**

Yes, the influenza death for all state is indeed seasonal. It starts to raise drastically in September and reaches its peak in January. The eastern states have the highest death cases compared to the other states. However, over the period of 2009-2017, it is observed that the highest influenza death cases are recorded in the year 2013 and 2015.

