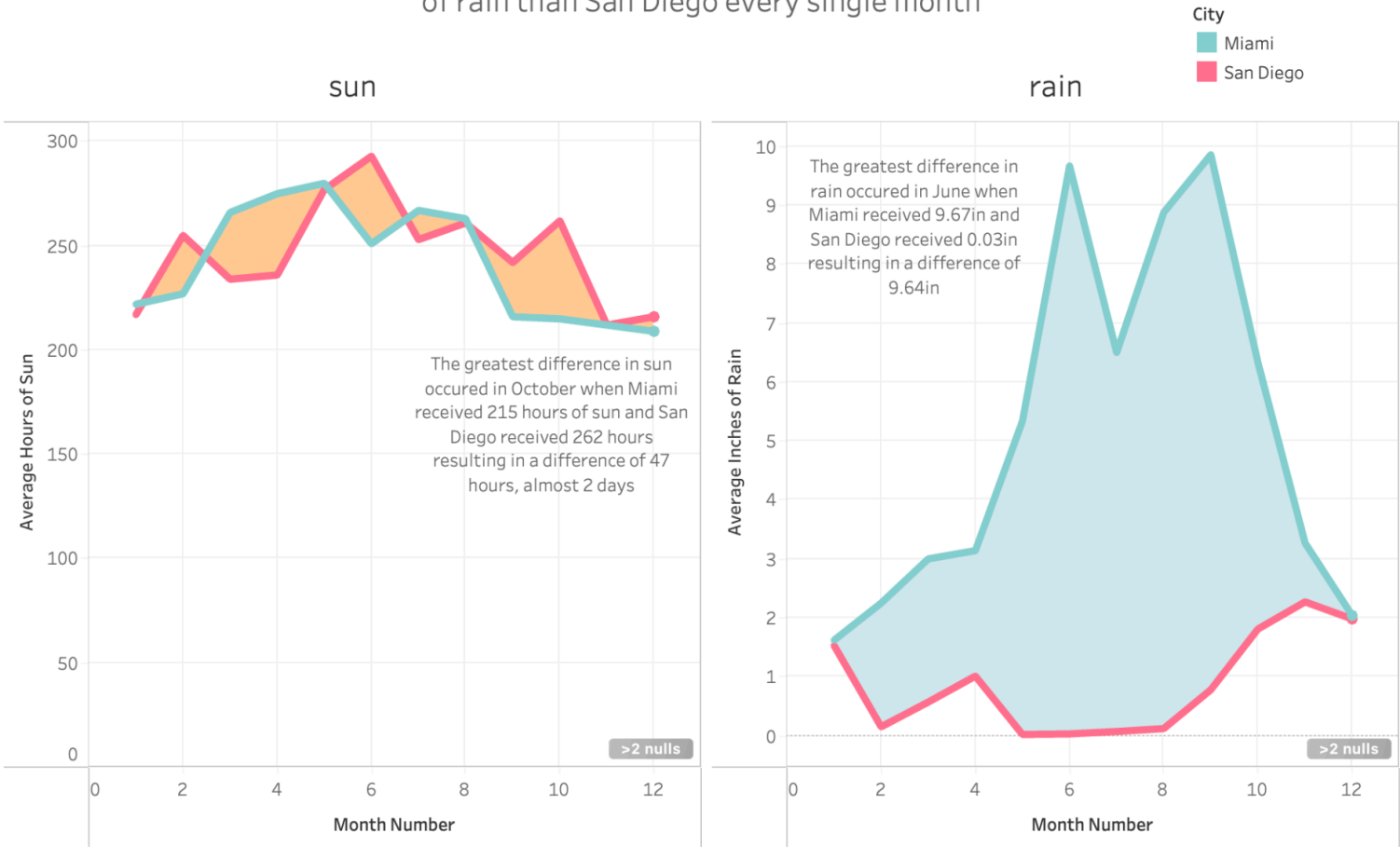# Where Should I Go On Vacation? Sunny San Diego or Rainy Miami

While San Diego and Miami share similar hours of sun throughout the year, Miami receives more inches of rain than San Diego every single month

City
- Miami
- San Diego

sun

The greatest difference in sun occured in October when Miami received 215 hours of sun and San Diego received 262 hours resulting in a difference of 47 hours, almost 2 days

Average Hours of Sun

Month Number

>2 nulls

rain

The greatest difference in rain occured in June when Miami received 9.67in and San Diego received 0.03in resulting in a difference of 9.64in

Average Inches of Rain

Month Number

>2 nulls

Write-Up

The question that I wanted to answer with this visualization was where I should go on vacation. As someone from the midwest, I grew up spending my spring breaks in either California or Florida, places where we could get a break from the harsh elements of the north. This is why I chose to single out these two cities because in my mind they have similar climates. What I discovered made sense upon reflection, but I didn't think that the difference would be as extreme initially. I thought that it would be helpful to display differences by month because it could help those considering when to travel make a decision. If they were planning a vacation in January when there is little difference between sun and rain for Miami and San Diego then a decision would be harder, but if they were looking to travel in March when Miami receives a lot of rain and San Diego receives more hours of sunshine, the decision would be easier to make.

I chose to use a line chart because it is easy to see which city receives more of a certain element each month. It is perceptual work because both line charts are positioned on a common scale. I chose to make two charts and place them side by side because hours of sun and inches of rain fall on very different scales and I didn't want the reader to be confused when interpreting each. To tell Miami and San Diego apart I gave them each a very distinct color because color is pre-attentive. San Diego is hot pink and Miami is turquoise. The reader should be able to easily tell apart these colors and recognize which city each color belongs to. I decided to color the difference between them so that it would stand out more from the white background and be recognized as part of the foreground. I made the difference in hours of sun orange because orange is a color commonly associated with the sun and the difference in inches of rain blue because blue is a color commonly associated with rain. I made these colors lighter in hue so that the lines would still stand out. I made the color palette neon and light colors because those colors remind me of taking a warm beach vacation.

I had to do some research when developing this chart because I had never shaded in between the lines of a line chart before. I had to create the line chart then create multiple calculated fields so that there was an index that started at 1 and increased by 1 at each value mapping out a path across the lines. From there I had to create a polygon chart that was the shape between the lines then add the lines back on top. I did this for both sunshine and rain then put both charts side by side in a Tableau dashboard. I added one annotation to each graph that noted the largest difference between the two cities. I added these annotations to help the viewer interpret each plot correctly. It also helps them understand the differences if they appear to be large on the chart and brings them back to the scale. The main takeaway that I want viewers of this chart to have is that Miami and San Diego don't differ that much in sunshine amounts but vary heavily in rain amounts.