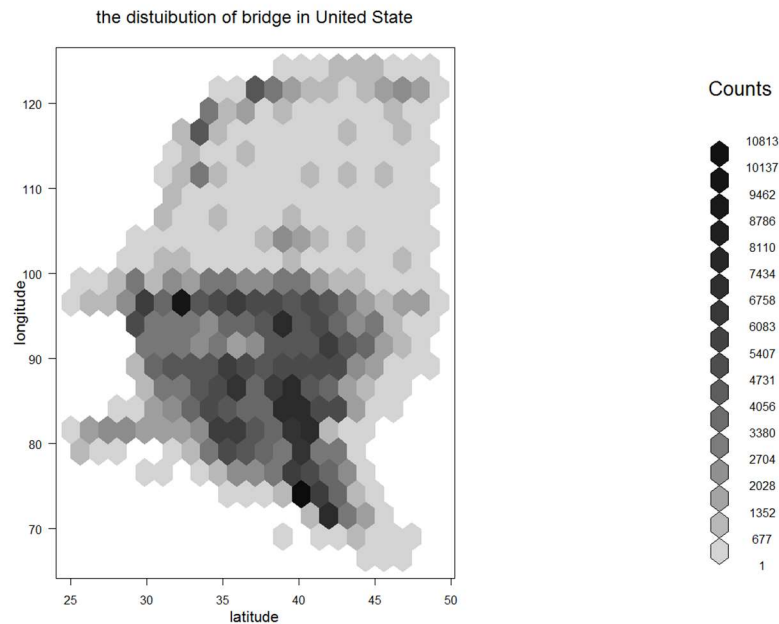
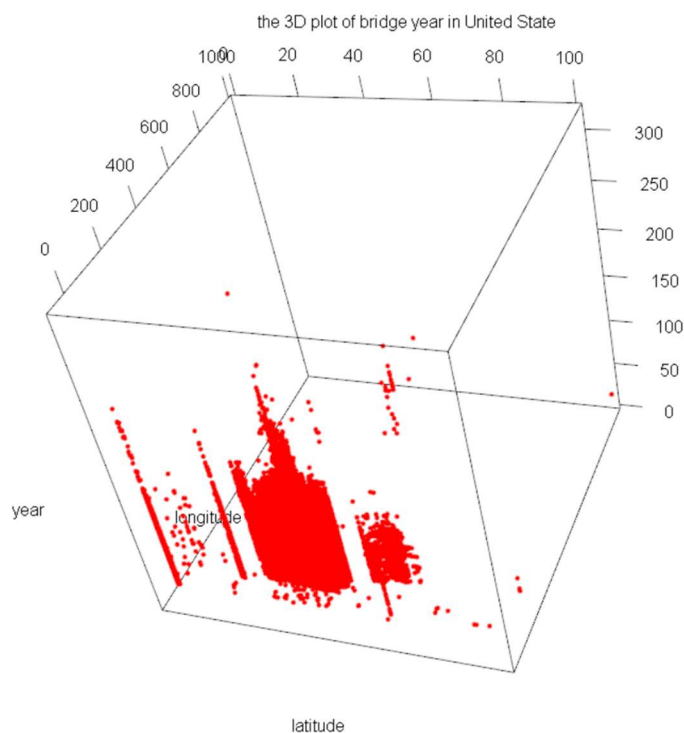


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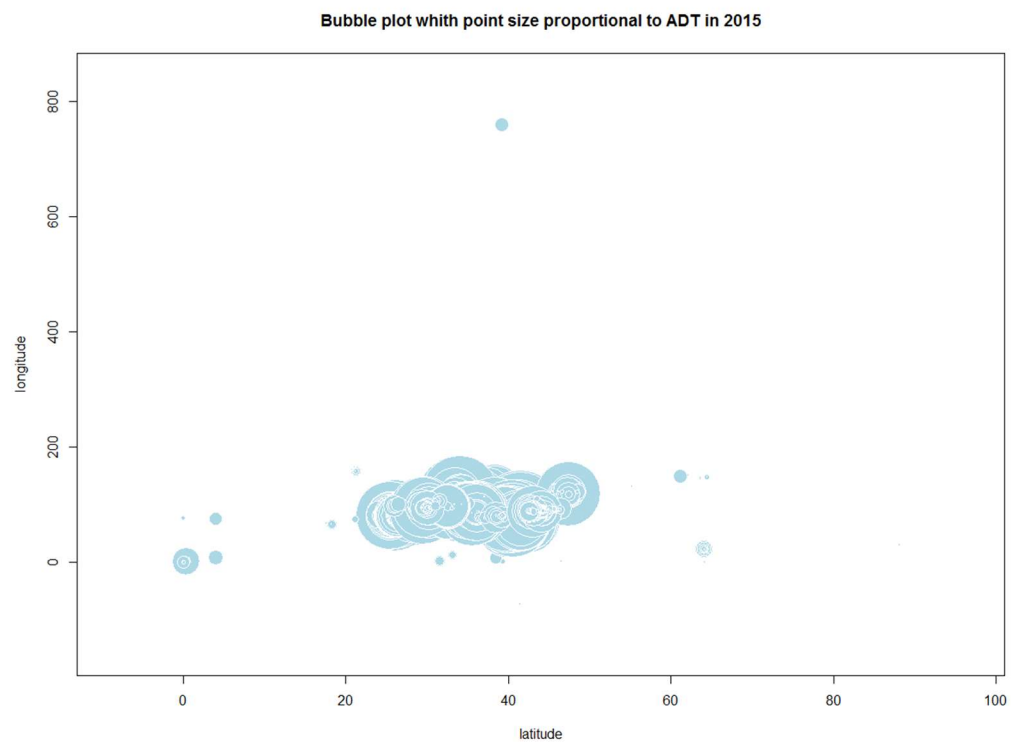
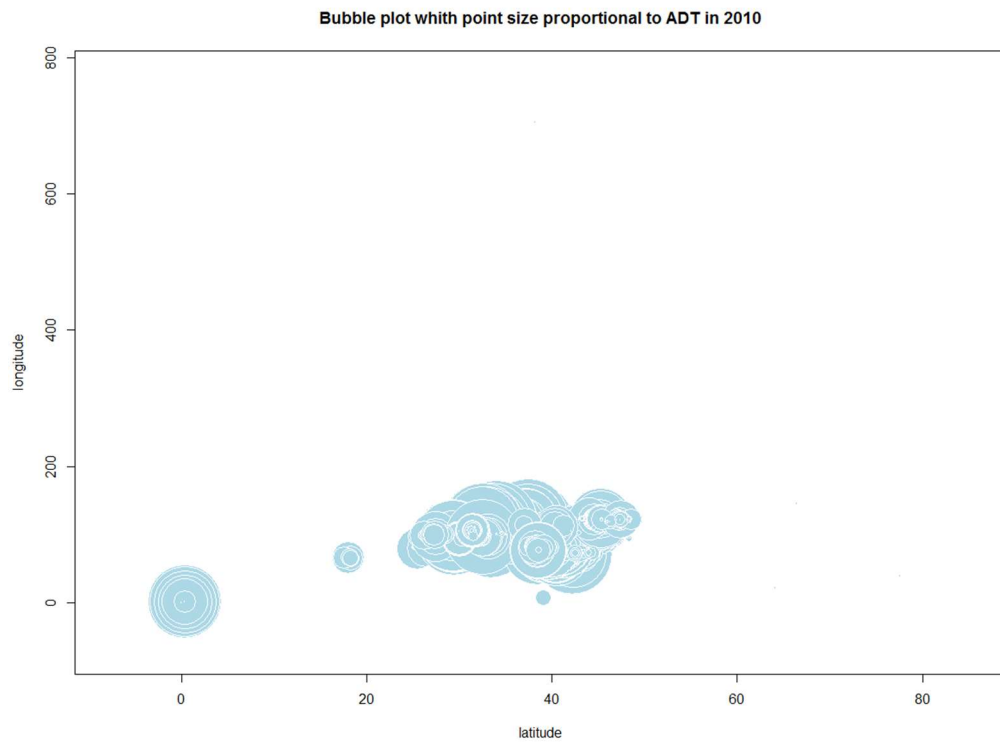
According to the data frame, I draw a scatterplot colored by the number of the bridge in United State. The range of latitude is from 25 to 50, the range of longitude is from 50 to 100, which covers the United State. From the plot we can see the south area of America build more bridge, especially for the mid part.



The 3D plot below describes the bridge distribution on geometry and its year. Every red point represents one bridge. The Z axis is the age of the bridge. We can see there are thousands of bridges build before 100 years in south of America, but the area in north America didn't establish enough bridges until several decades.



These two plots compare the difference of the average daily traffic (ADT) in 2010 and 2015. There is a significant change on the lower left corner. The number of average daily traffic in that place decrease dramatically, which means that place might suffer from the economy depression or population movement.



In the last plot, I am trying to explore some relationship between the variables. The blue color indicates the positive between two variables, while the pink one implies the opposite. The pie plots on the upper triangle explain how much the correlation between the variables. We can find that the condition on deck and superstructure condition are highly correlative since they are some part of the physical information of the bridge. The ADT has positive correlation with latitude while the opposite with longitude which is interesting.

