

Treemap

Use to compare values of continuous variables across different categories.

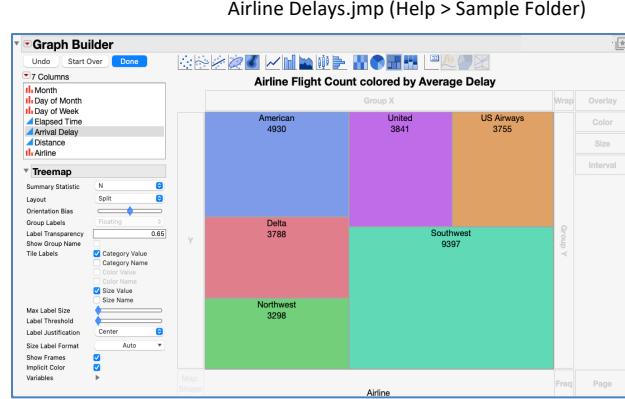
Treemap – 1 variable

1. Select **Graph > Graph Builder**.
2. Place a categorical variable in the **center zone**.
3. Select the **Treemap icon** in the graph palette.

- The graph displays a set of boxes – one for each value of the categorial variable. Each box is sized proportionally to the overall total. In these data, there are 29,009 delayed flights. 9,397 of these are from Southwest airlines.

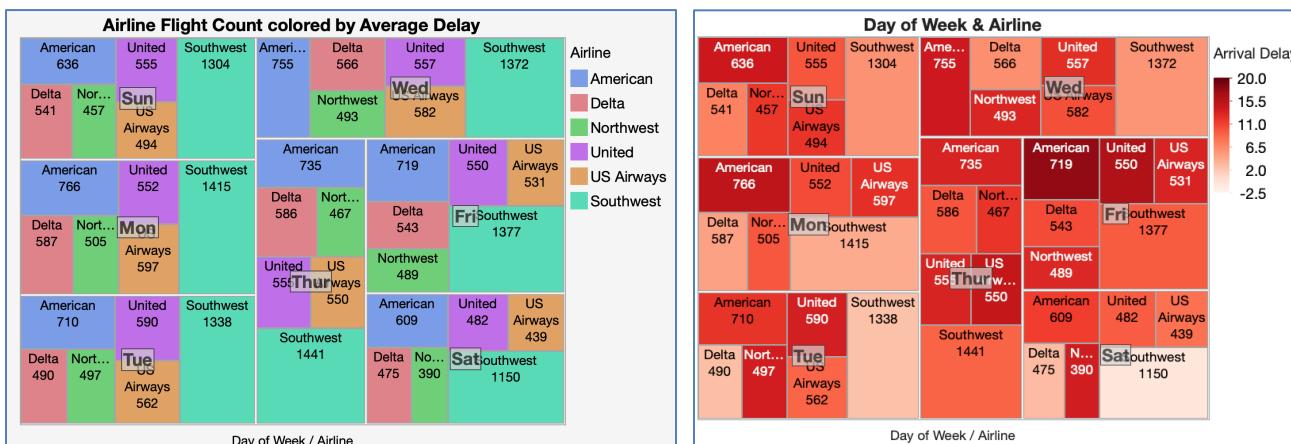
The size of the box for Southwest is $9,397/29,009 = 32\%$ the size of the total area.

- At this stage, the colors of the boxes have no meaning beyond creating an easy way to see each category.



Treemap – 2 or more variables

- Additional variables can be incorporated by placing them on the **X axis**, **Group X**, **Group Y**, and/or **Wrap zone**.
- The graph on the left placed 'Day of Week' on the **X axis** outside of 'Airline'. 'Airline' was also placed in the **Color zone** so that the color of each airline is consistent across each day. The size of the region for each day represents the number of delayed flights for each day proportional to the total number of delayed flights. Within each day, the boxes are sized proportionally to the number of delays for each airline.
- The graph on the right is using 'Arrival Delay' in the **Color zone**. In addition to being able to compare the number of delays across 'Airline' and 'Day of Week', the average length of the delays can be examined. For example, here we see that though Southwest airlines has the most delays for each of the days (i.e., largest box size), the average length of time of the delays is the lowest (i.e., lightest color).



Visit **Discovering JMP > Visualize Your Data** and **Essential Graphing in JMP Help** to learn more about methods of graphically exploring data.