

# STAT 231: R Q & A Discussion Forum

Sean, Tamer, Chris

Sept. 3, 2020

## Q11. [Insert the question you're answering here]

Include your answer and explanation here. You can intersperse text with code in your explanation.

What are the differences between `facet_grid()` and `facet_wrap()`? Can a quantitative variable be used within either of these facet functions?

SOLUTION: `Facet_wrap(~variable)` will return a symmetrical matrix of plots for the number of levels of variable, while `facet_grid(. ~variable)` will return facets equal to the levels of variable distributed horizontally. An example of this can be seen below.

If a quantitative variable is being faceted, it will be converted to a categorical variable, and the plot will contain a facet for each distinct value.

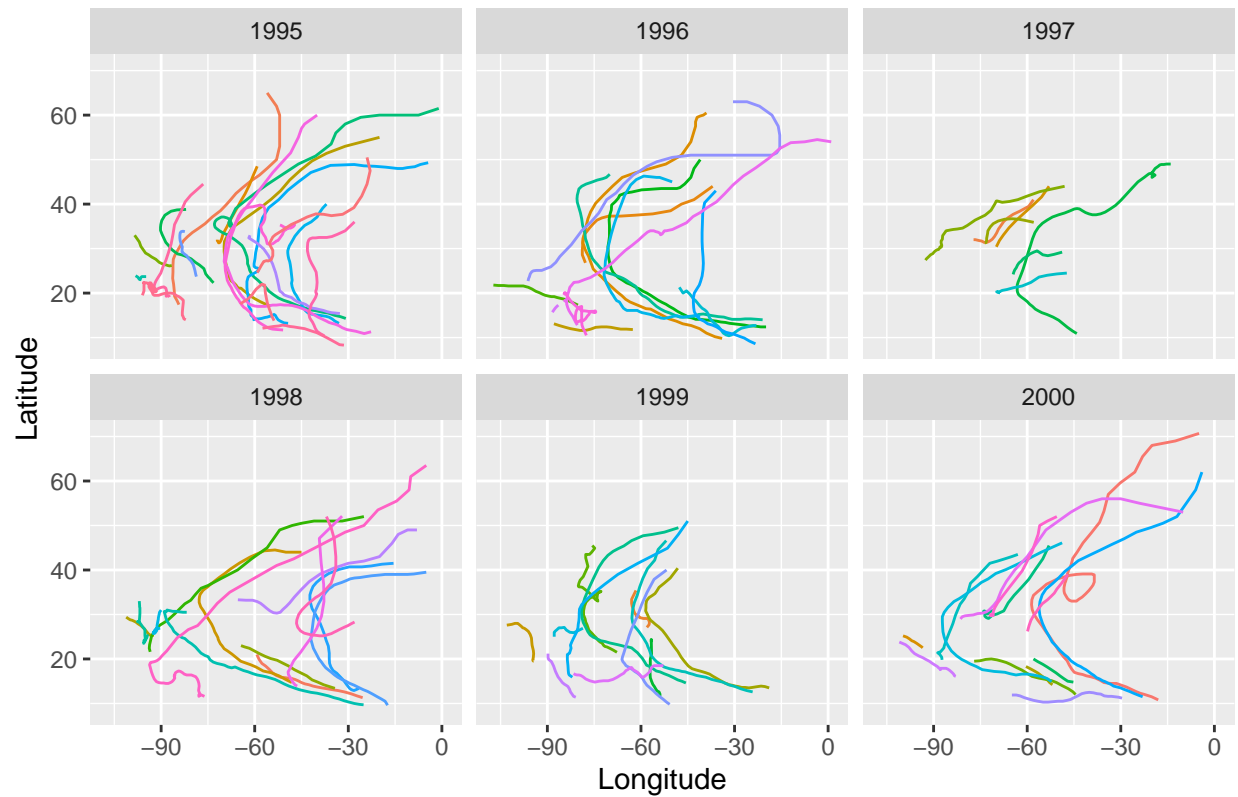
[http://www.cookbook-r.com/Graphs/Facets\\_\(ggplot2\)/](http://www.cookbook-r.com/Graphs/Facets_(ggplot2)/)

[https://stackoverflow.com/questions/20457905/whats-the-difference-between-facet-wrap-and-facet-grid-in-ggplot2#:text=facet\\_wrap\(variable\)%20will%20return,levels%20of%20variable%20distributed%20vertically](https://stackoverflow.com/questions/20457905/whats-the-difference-between-facet-wrap-and-facet-grid-in-ggplot2#:text=facet_wrap(variable)%20will%20return,levels%20of%20variable%20distributed%20vertically)

```
library(nasaweather)

#Using Facet Wrap
ggplot(storms, aes(x = long, y = lat)) +
  geom_path(aes(color = name)) +
  facet_wrap(~year) +
  scale_color_discrete(guide="none") +
  labs(x = "Longitude", y = "Latitude") +
  ggtitle("Tropical Storm Paths From 1995-2000 Using Facet Wrap")
```

## Tropical Storm Paths From 1995–2000 Using Facet Wrap



```
#Using Facet Grid  
ggplot(storms, aes(x = long, y = lat)) +  
  geom_path(aes(color = name)) +  
  facet_grid(~year) +  
  scale_color_discrete(guide="none") +  
  labs(x = "Longitude", y = "Latitude") +  
  ggtitle("Tropical Storm Paths From 1995–2000 Using Facet Grid")
```

Tropical Storm Paths From 1995–2000 Using Facet Grid

