

- Our team GitHub URL  
<https://github.com/615-Team-3/Mapping>
  - Review team GitHub URL  
<https://github.com/Ruxinliu97/Mapping--Team6>
  - Does the code run?  
Yes
  - How many maps are produced?  
2
  - Comparison to Hurricane Exposure maps
- | Map   | M1 | M2 | M3 | M4 |
|-------|----|----|----|----|
| Score | 9  | 10 | 0  | 0  |
- Did your team include new code in your review?  
Yes

The code of team 6 run and produce the outcome as submitted. There are 2 maps produced by their code and these 2 maps basically equivalent to the ones from the Hurricane Exposure package in terms of function. The code is clear with sufficient commentary for future maintenance.

I think they have a clear idea of mapping. The data is processed in advance, so it is convenient when drawing maps. As for the potential improvement, map of Floyd-1999 is not very centered, we can highlight the main information by adding restrictions to the axis. What's more, when preparing the data, using "breaks=seq(0,200,25)" instead of "breaks=c(0, 25, 50, 75, 100, 125, 150, 175, 200, 225)" can make the code look clearer, but it's not a big deal (just a small suggest).

Code in red is what we added and we have tested it:

```
ggplot() +
  geom_polygon(data = Floyd_rain, aes(x = long, y = lat, group = group, fill = `Rainfall (mm)`), color =
"grey", size = 0.2, alpha = 1.6) +
  geom_polygon(data = state_floyd, aes(x = long, y = lat, group = group), color="black", fill="white",
size = 0.2, alpha = 0.3) +
  geom_path(aes(x = Floyd_hurr$longitude, y = Floyd_hurr$latitude), color = "red") +
  scale_fill_brewer(palette = "Blues") +
  ggtitle("Floyd-1999") +
  # Center the title
  theme(plot.title = element_text(hjust = 0.5)) +
  xlim(min(Floyd_rain$long),max(Floyd_rain$long)) +
  ylim(min(Floyd_rain$lat),max(Floyd_rain$lat))
```

```
Floyd_rain <- Floyd_rain %>%
  mutate(`Rainfall (mm)` = cut(Floyd_rain$precip,
                               breaks=seq(0,200,25),
                               include.lowest = TRUE))
Floyd_rain <- na.omit(Floyd_rain)
```