Mapping Review Report

Group 3

- 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.

We think they have a clear idea of mapping. The data is processed in advance, so it is convenient when drawing maps. One small problem is that package ggplot2 is belong to package tidyverse. 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 looks clearer, but it's not a big deal (just a small suggestion).

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)
```