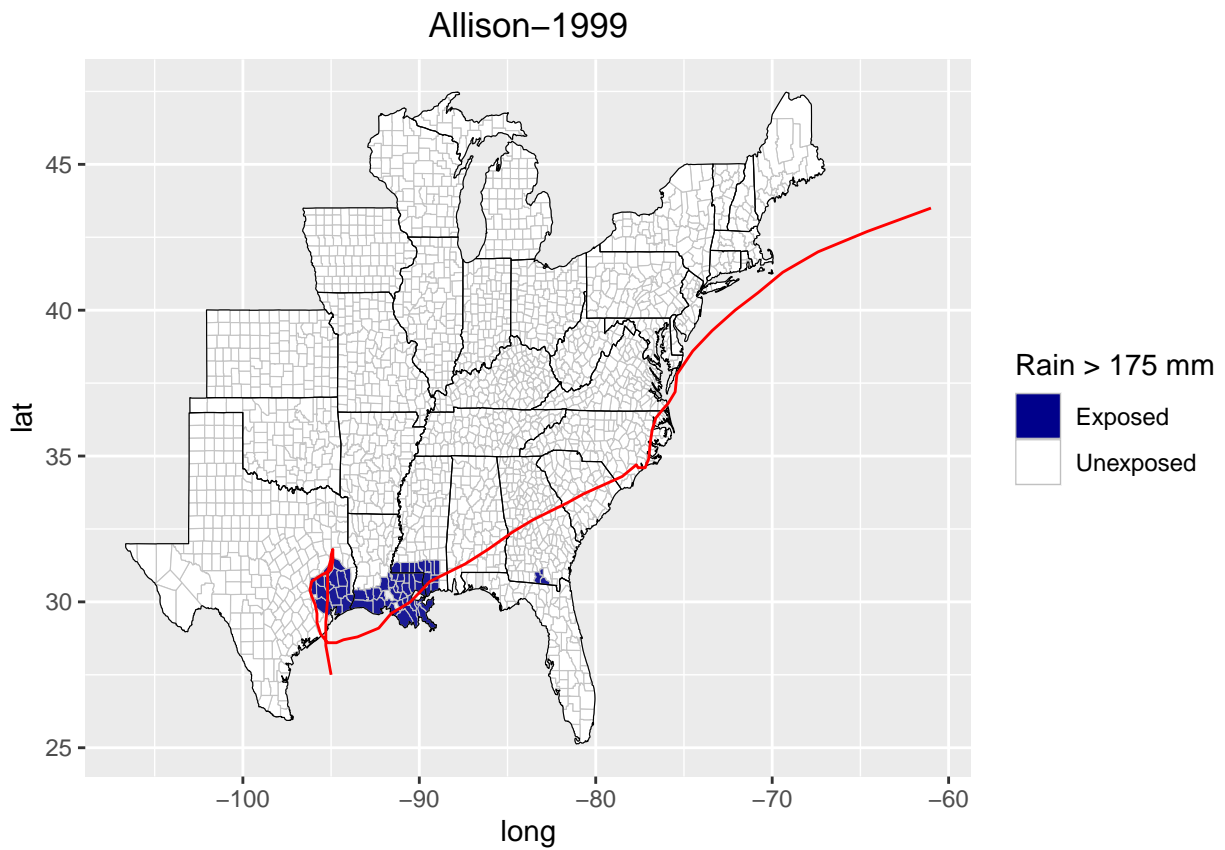# Mapping Assignment

Ruxin Liu

10/30/2020

Floyd-1999 map with ggplot2:
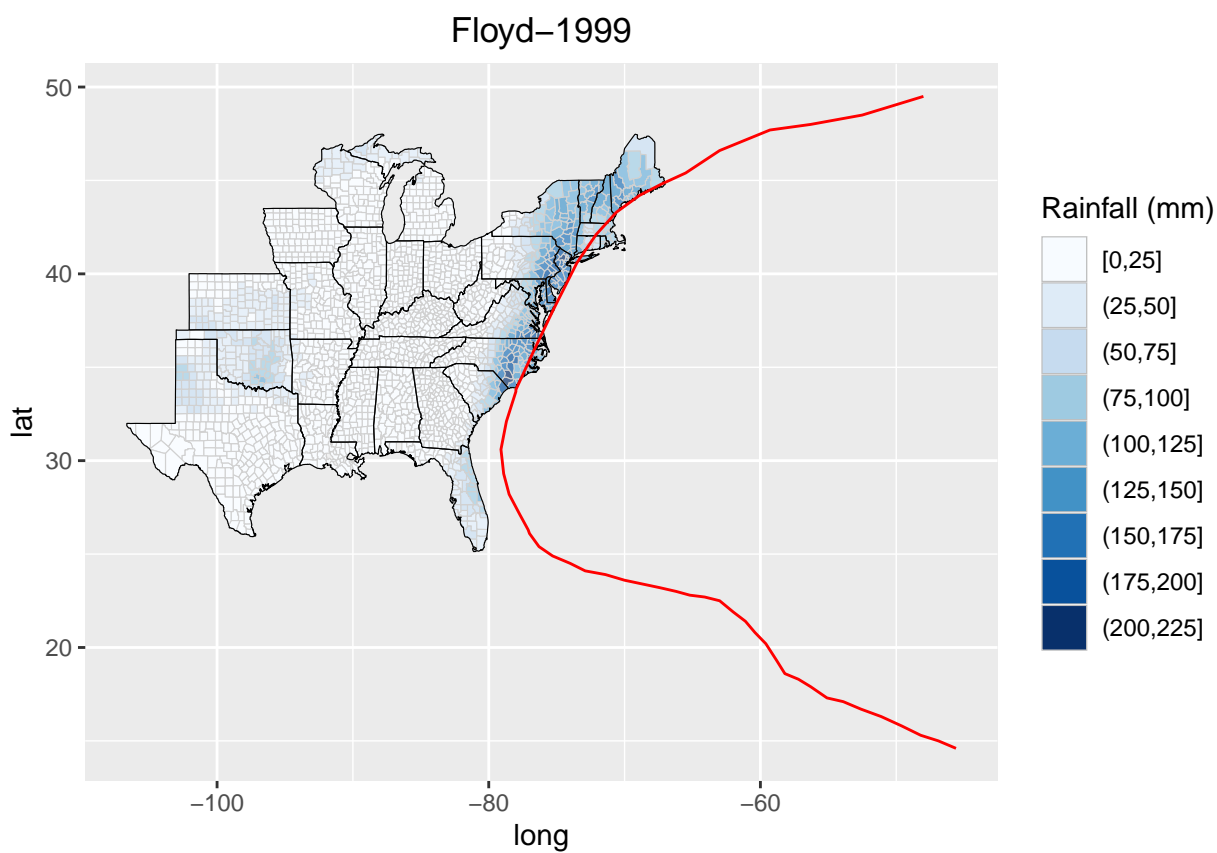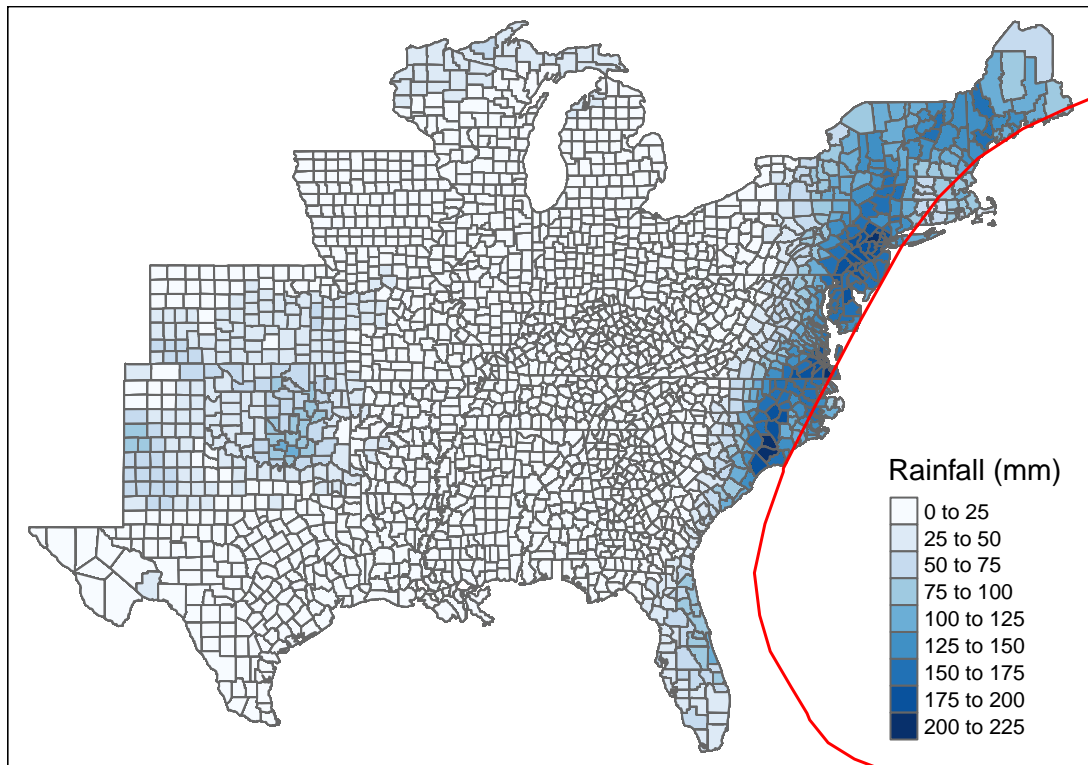
Allison-2001 with ggplot2:

Allison−1999

Floyd-1999 map with tmap:

```
## Linking to GEOS 3.8.1, GDAL 3.1.1, PROJ 6.3.1
```
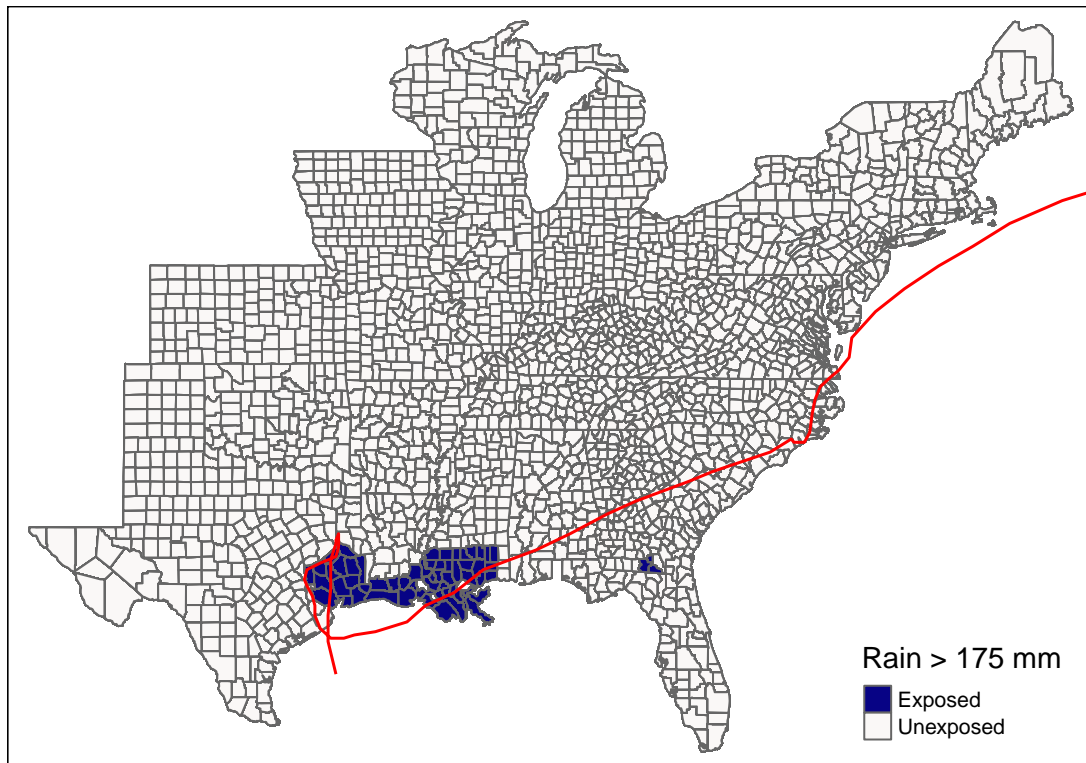
Floyd−1999

Allison-2001 with tmap:

```
## Warning: Currect projection of shape Allison_line unknown. Long-lat (WGS84) is
## assumed.
```

Allison–2001

Rain > 175 mm

Exposed
Unexposed

Reference:

1. Help and inspiration from other teams/classmates + MA615 class notes
2. Stack Overflow: https://stackoverflow.com/questions/27998952/how-to-create-spatialline-object
3. Stack Overflow: https://stackoverflow.com/questions/58645771/how-do-i-customize-my-color-range-for-my-tmap-plot-in-r
4. http://rstudio-pubs-static.s3.amazonaws.com/5312_98fc1aba2d5740dd849a5ab797cc2c8d.html
5. https://htmlcolorcodes.com/
6. Stack Overflow: https://stackoverflow.com/questions/46550752/create-a-colour-palette-for-tm-fill
7. Tennekes M (2018). "tmap: Thematic Maps in R." *Journal of Statistical Software*, *84*(6), 1-39. doi: 10.18637/jss.v084.i06 (URL: https://doi.org/10.18637/jss.v084.i06).
8. Wickham et al., (2019). Welcome to the tidyverse. Journal of Open Source Software, 4(43), 1686, https://doi.org/10.21105/joss.01686
9. Original S code by Richard A. Becker, Allan R. Wilks. R version by Ray Brownrigg. Enhancements by Thomas P Minka and Alex Deckmyn. (2018). maps: Draw Geographical Maps. R package version 3.3.0. https://CRAN.R-project.org/package=maps
10. Anderson B, Schumacher A, Crosson W, Al-Hamdan M, Yan M, Ferreri J, Chen Z, Quiring S, Guikema S (2020). *hurricaneexposuredata: Data Characterizing Exposure to Hurricanes in United States Counties.* R package version 0.1.0, <URL: https://github.com/geanders/hurricaneexposuredata>.
11. Stefan Milton Bache and Hadley Wickham (2014). magrittr: A Forward-Pipe Operator for R. R package version 1.5. https://CRAN.R-project.org/package=magrittr
12. Dirk Eddelbuettel with contributions by Carl Boettiger, Neal Fultz, Sebastian Gibb, Colin Gillespie, Jan Górecki, Matt Jones, Thomas Leeper, Steven Pav, Jan Schulz, Christoph Stepper, Felix G.M. Ernst and Patrick Schratz. (2020). drat: 'Drat' R Archive Template. R package version 0.1.8. https://CRAN.R-project.org/package=drat
13. RDocumentation https://www.rdocumentation.org/packages/base/versions/3.6.2/topics/cut