

# Viz 3 Advanced Plots

Hayden Ginman

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## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
#Step 1 - Load libraries into coding environment
```

```
library("dplyr")
```

```
##
```

```
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
```

```
##
```

```
## filter, lag
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
## intersect, setdiff, setequal, union
```

```
library("reshape2")
```

```
library("lubridate")
```

```
##
```

```
## Attaching package: 'lubridate'
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
## date, intersect, setdiff, union
```

```
library("ggplot2")
```

```
#Step 2 - Load cleaned UFO data into coding environment
```

```
# isolate the year in datetime column and make a new column called year
```

```
UFO <- read.csv("UFO Clean.csv")
```

```
UFO$year <- year(as.Date(UFO$datetime, format = "%m/%d/%Y"))
```

```
#Step 3 - Group states into regions
```

```
regions <- list(
```

```
  Northeast = c('me', 'nh', 'vt', 'ma', 'ri', 'ct', 'ny', 'pa', 'nj'),
```

```
  Midwest = c('nd', 'sd', 'ne', 'ks', 'mo', 'ia', 'mn', 'wi', 'il', 'in', 'oh', 'mi'),
```

```
South = c('tx', 'ok', 'ar', 'la', 'ky', 'tn', 'ms', 'al', 'wv', 'md', 'de', 'va', 'nc', 'sc', 'ga', 'fl')
West = c('id', 'mt', 'wy', 'nv', 'ut', 'co', 'az', 'nm', 'ak', 'wa', 'or', 'ca', 'hi')
)
```

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.