M4 Descriptive Statistic: Group Work

Pablo E. Gutiérrez-Fonseca

2024-03-07 18:51:22

In this assignment you will download the Mount Mansfield Snow Depth.xls data and describe the data set based on the instructions below.

#loading in the libraries we will use

```
library(tidyverse)
library(lessR)
library(readxl)
```

#importing our data

```
snowdata <- read_excel("MM Snow Depth.xlsx")
```

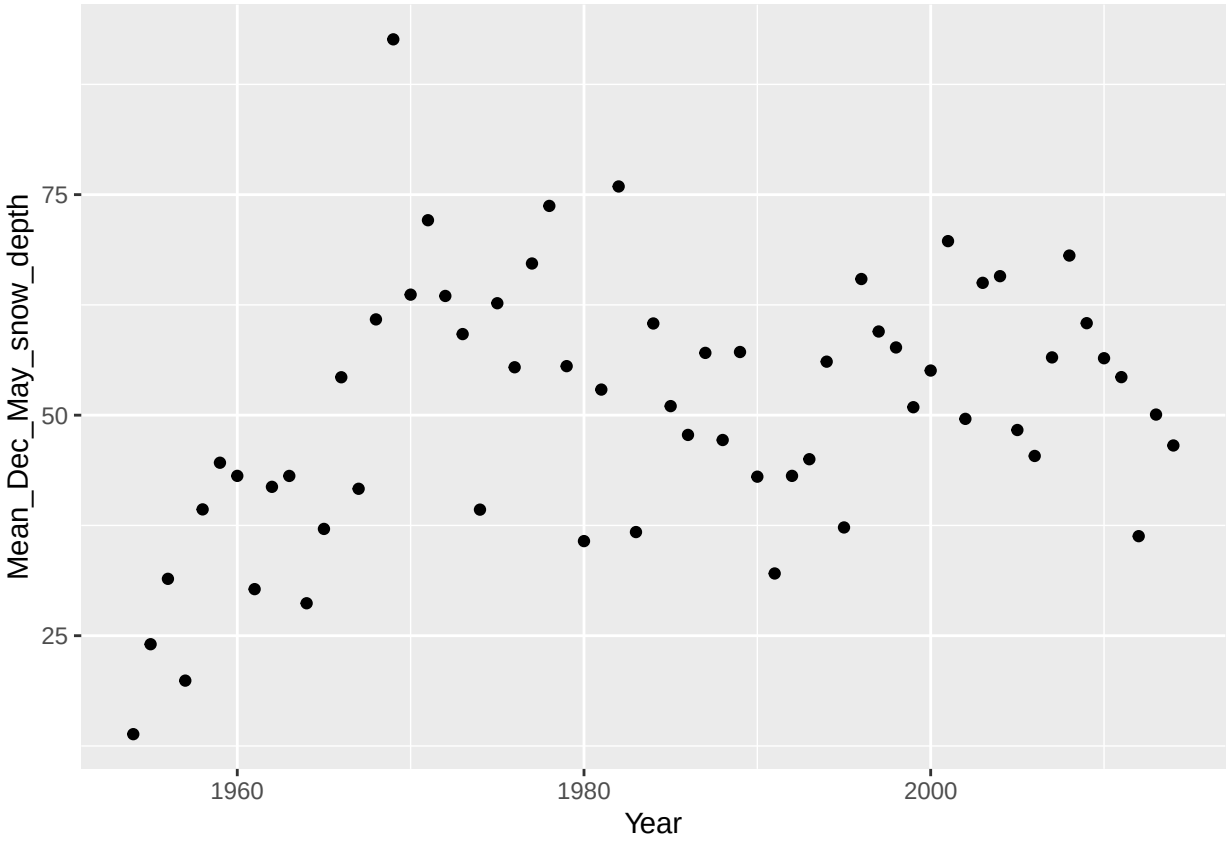
#this pivot function is from lessR

```
pivot(snowdata, c(mean, min,max,var,sd,skew,kurtosis), Mean_Dec_May_snow_depth)
```

```
##   n na   mean    min    max     var     sd   skew  kurt
##  61  0 50.796 13.839 92.603 210.481 14.508 -0.033 0.471
```

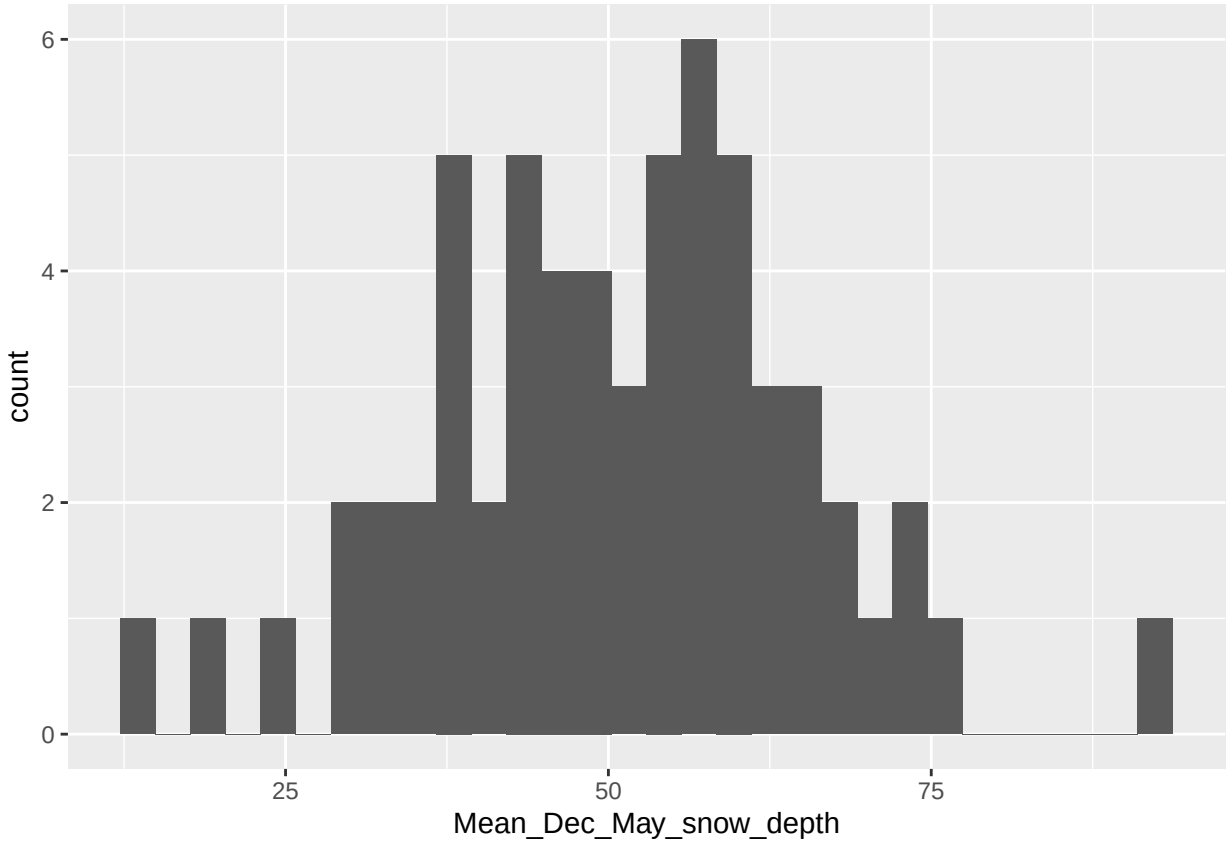
#these ggplot functions are from the tidyverse

```
ggplot(snowdata, aes(x=Year , y=Mean_Dec_May_snow_depth)) + geom_point()
```




```
ggplot(snowdata, aes(x=Mean_Dec_May_snow_depth)) + geom_histogram()
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



You will be graded on your ability to clearly, and succinctly describe the data including the following descriptive metrics and figures:

A table that includes key descriptive statistics for the snow depth response variable aggregated across all plots and species A histogram of the distribution of basal area values across all observations, and A figure that summarizes the trend in snow depth over time (plot years as X and depth as Y).

Create and upload a summary pdf document with:

the names of the group members who contributed directly to this assignment The descriptive statistics table described above in 1. The histogram described above in 2. The figure described above in 3. A brief summary of your conclusions about the normality of the data and any transformations that may be necessary before conducting inferential statistical analyses.

Good luck!