Problem-set_ Descriptive Statistics

Pablo E. Gutiérrez-Fonseca

2023-08-13

Using the dataset **Mean Snow Data** downloadable from the Brightspace folder, please answer the following questions. Make sure to round and report all answers to two decimal places. Avoid entering text in the Blackboard submission for numerical questions, and remember to include the sign for negative values. Good luck!

1. For the **Mean Snow Depth** dataset, calculate the mean and median using the respective commands in R."
2. For the same data set (**Mean Snow Depth**), calculate the **standard deviation** and **variance**
3. What is the **INTER-QUARTILE RANGE** for **Yearly Mean snow Depth**?
4. Using the Interquartile range technique, how many **OUTLIER** years are there in your **Yearly Mean Snow Depth Data**?
   To receive full credit for this question, include a screenshot of your procedure in RStudio.
5. Now, for the **Yearly Mean Snow Depth** column, calculate the **skewness, standard error of skewness (SES), kurtosis, standard error of kurtosis (SEK)**, and perform the **normality test with Shapiro-Wilk test**. Based on all of these parameters, determine if the Yearly Mean Snow Depth is normally distributed.