

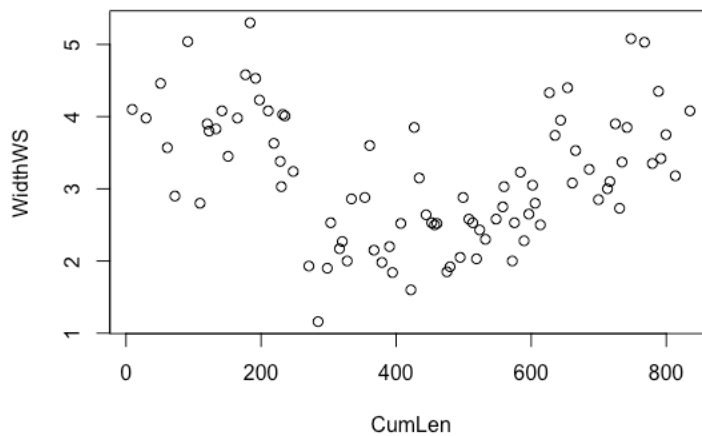
Exercise 3

1. The relationship between DepthWS and CumLen is positive, but is much weaker than the positive relationship between WidthWS and WidthBF.
2. There is a relatively strong negative relationship between elevation and annual precipitation, however there are some notable outliers. For example, there is one observation with elevation close to 2000 and pann close to 2000 as well.
3. Portland and Tillamook have a comparable elevation, but Tillamook has a much higher amount of annual precipitation. There is a wide range of pann among stations that share low elevations (between 0 and 200 or so). This may have something to do with being on the east or west side of the Cascades. There are also variations between nearby stations with similar elevations. The Bend and Redmond stations are very close together, and roughly comparable in terms of elevation, but Bend receives more precipitation.
4. WidthBF has a much greater range than WidthWS. WidthBF typically has higher values, and Width WS varies more between observations.
5. Section A has the highest median value for WidthWs while section B has the lowest. Section C has the highest standard deviation at 0.6572, and the highest variance at 0.426. Section B has more than twice the amount of observations as Section A or C. Based on the scatter plots, section B appears to have the lowest variance, which I verified using the `var()` function.
6. The strongest positive correlation is between pann and pjan. The strongest negative correlation is between elev and tann. The weakest positive correlation is between lat and

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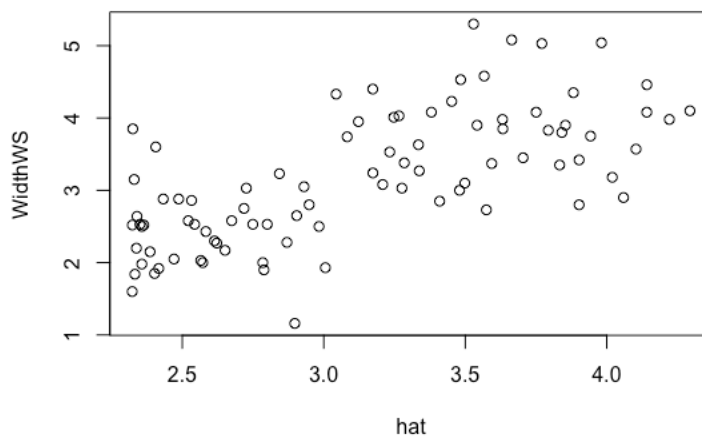
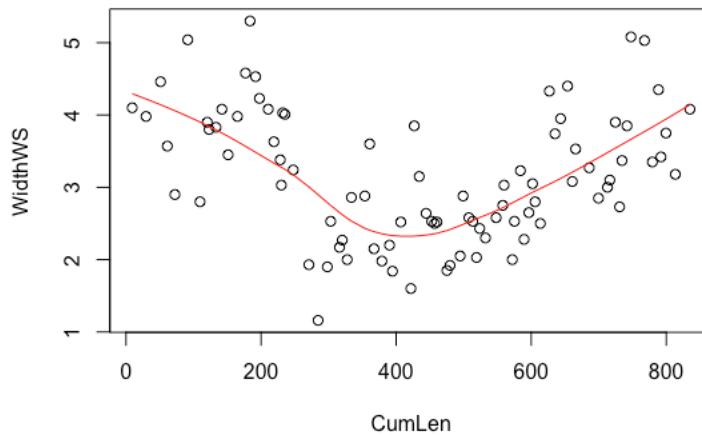
pjan, and the weakest negative correlation is between lat and tjan. It is much easier to make a subjective interpretation of the strong relationships than the weak ones.

7. The scatter plot shows that the relationship between WidthWS and CumLen appears to be a “trough”. There is a u-shape pattern, but there does not appear to be a significant correlation. The correlation coefficient is -0.095, which backs my inference that there is no strong correlation between WidthWS and CumLen.



8. There appears to be a strong positive relationship between WidthWS and hat. Comparatively, WidthWS and CumLen appear to have a very weak relationship. The correlation between WidthWS and hat is 0.68.

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The above scatter plot (and correlation coefficient of 0.68) between WidthWS and hat suggest that there is a very weak correlation between WidthWS and CumLen, since if there were a stronger positive or negative correlation between them, the correlation between WidthWS and hat would be closer to 1.0.