

Variability can be accounted for by running a bootstrap function on the regression. This provides us with an interval of variability within our data. Bootstrapping by combining the x and y vectors produces a safe interval, for this method does not make any assumptions on the regression. This ultimately produces a safe result not impacted by errors in the regression. This also is the reason why this method might become flawed. In the end, bootstrapping through residuals is a much better approach because it assumes that the shape of the regression is correct, but does not assume that the distribution of the residuals is. With NOAA, we can assume that the shape is correct and as a result, do not need to go with the safer option.