For this exercise, histograms and boxplots were used to look at the data distribution and trends for the 3 independent variables- temperature, humidity and pressure.

The temperature histogram shows a strong left skewed distribution. The IQR shows to be between 17 and 25 degrees Celsius which was surprising considering the variances in temperature in Louisiana. There were a few outliers on the low end which were dropped to try to improve the model.

Pressure on the hand showed a much more symmetric distribution. This is self-explanatory because we were looking at pressure readings for a specific location and would expect barometric pressure changes to be within a range. It did have a fair amount of outliers, most likely on days with storm systems in the area.

Humidity followed the same overall trend as temperature. Its distribution was also left skewed and its boxplot was similar as well with a few outliers at the lower end.

To look at the relationships between the variables themselves, the correlations were inspected. Temperature and humidity had a correlation of 0.34 whereas temperature and pressure had an inverse correlation of -0.57. Similarly, humidity and pressure had an inverse correlation of -0.44

It would be interesting to investigate the correlations between combinations of the variables. For e.g. the effect of temperature and humidity together on the spot prices. Though this was tried out in the model, it did not seem to have much of an impact in this case

Additionally, would like to add weather data from neighboring locations to add statistical heft to the model.