

Figure 1: Density plots with varying bandwidth

1 Kernel Density

The kernel density, as we vary the bandwidth, shows characteristic signatures depending on the bandwidth of choice. At the large bandwidth end, we see four peaks, with the central two peaks blurring together. At the small bandwidth end, there is a strong signal that shows up at about 15 degrees, perhaps signalling problems in our dataset.

2 Loess smoothing

For exploring loess smoothing, I used a few parameters for the smoothers and looked at a set of data from 1:20pm - 2:00pm over every available day. The result was that, across the board, the higher-order fit required a larger bandwidth for stability.

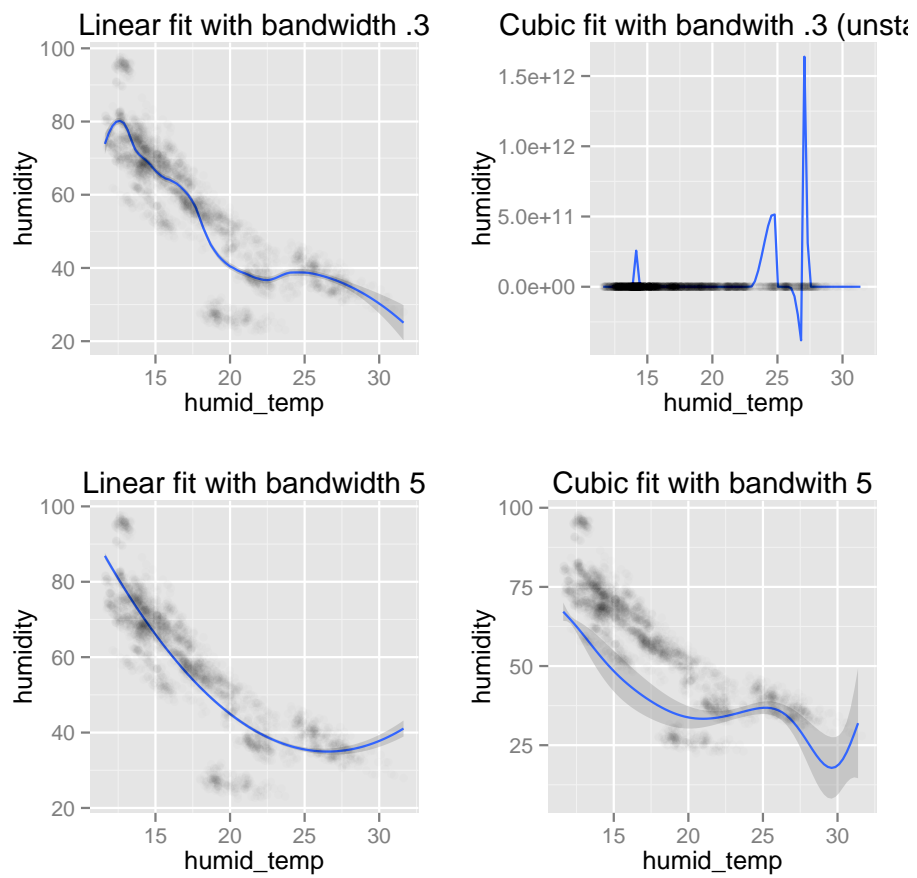


Figure 2: Analysis of humidity/temperature correlation across all days, 1:20pm-2:00pm