

## CAR CRASHES AND WEATHER: EXECUTIVE SUMMARY

- Goal is to understand the relationship between the weather conditions and the incidence of car accidents. Specifically we try to predict the number of crashes in a given a city, time of day, and weather conditions.
- We use the data set of Moosavi et al. available [here](#).
- The dataset is quite large with around 7.7 million records. We restrict our attention to the ten largest cities in the United States. The rationale is that weather conditions may have very different effects in different cities, so want to focus on those locations with large amounts of data.
- Our methods were various types of linear regressions; however, none of them beat the baseline model of averaging over the (city, hour) pairs.
- If we were to continue the project, we would consider tree based methods of which the baseline model can be viewed as a simple case.