

Figure 1: Number of corn crop quality observations per state

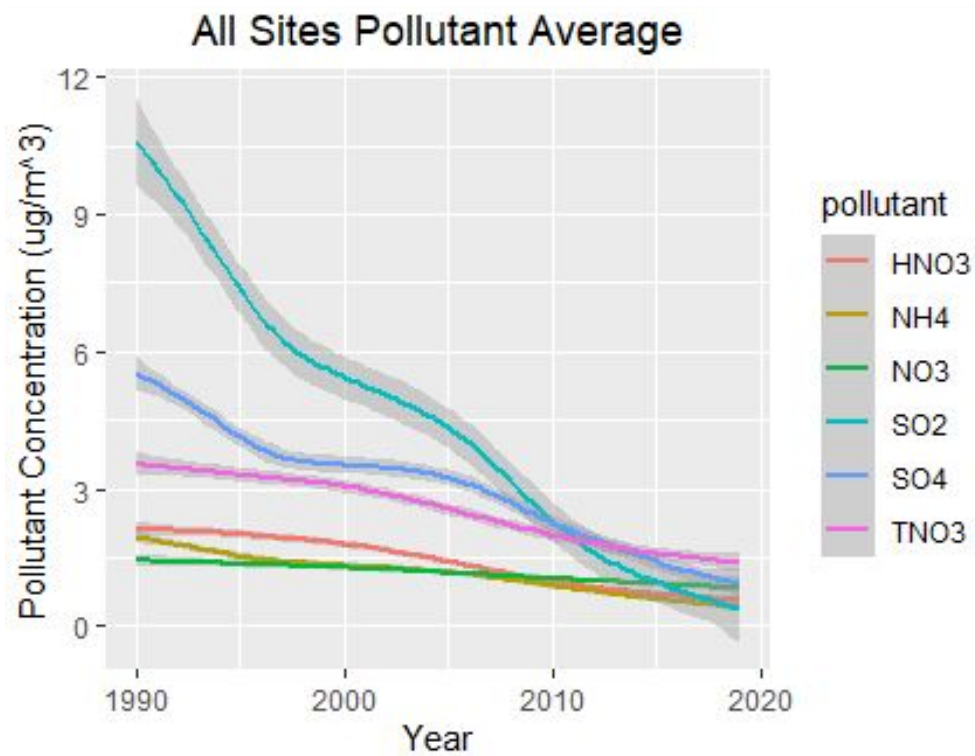


Figure 2: Overall pollutant concentrations in the U.S. since 1990

### Air pollutant concentrations in 2019 by site type

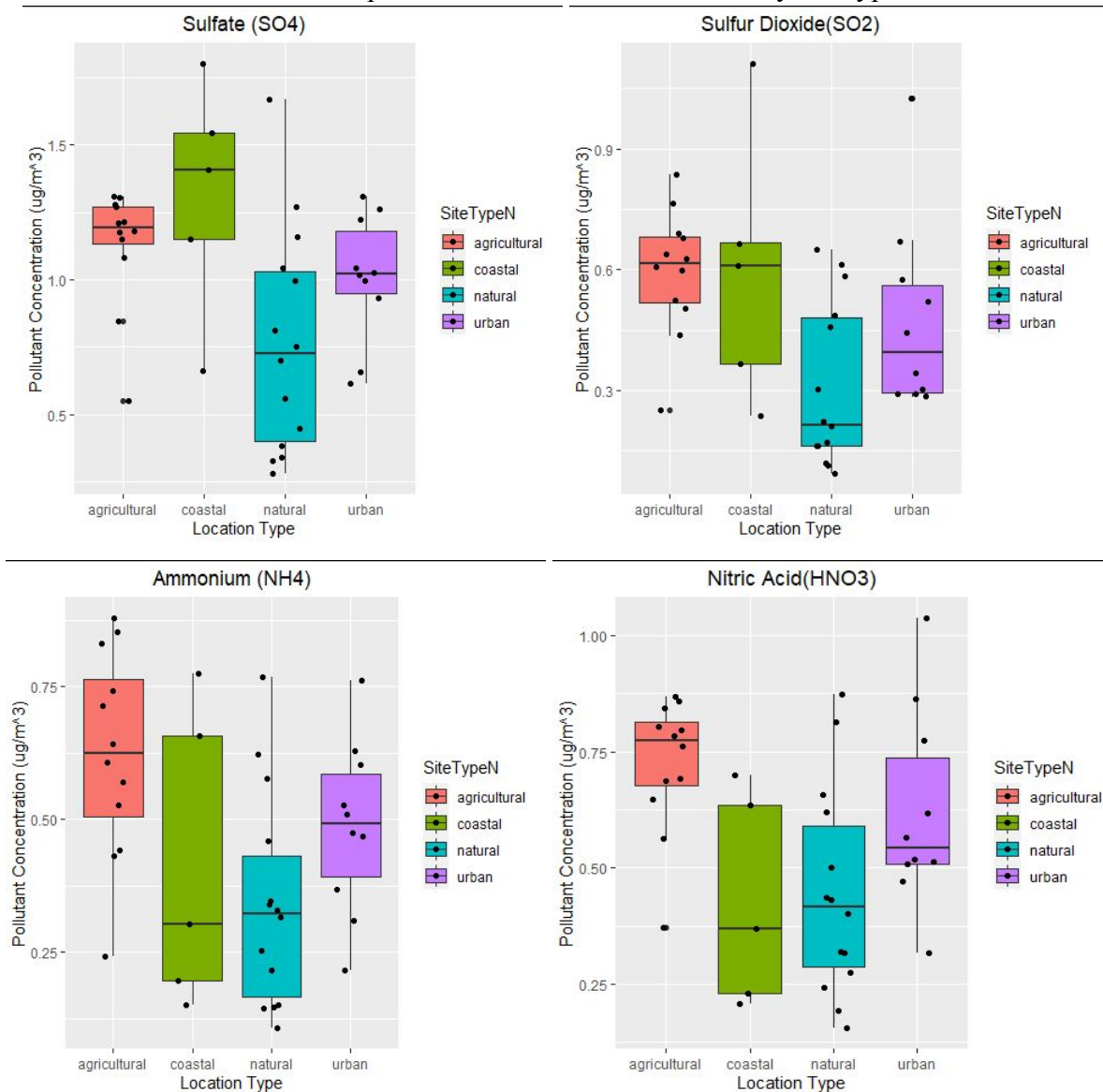


Figure 3: Pollutant concentrations by site classification in the U.S. in 2019

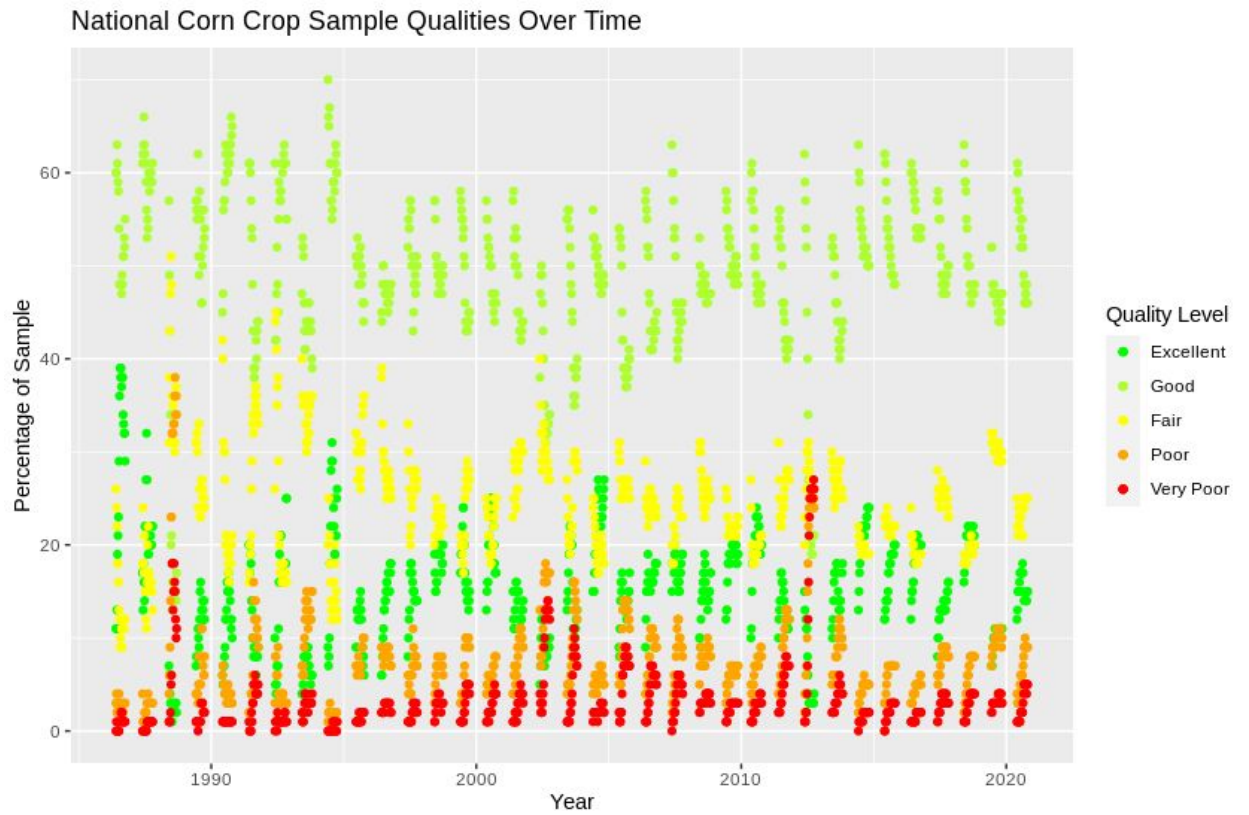


Figure 4: National corn crop sample qualities over time

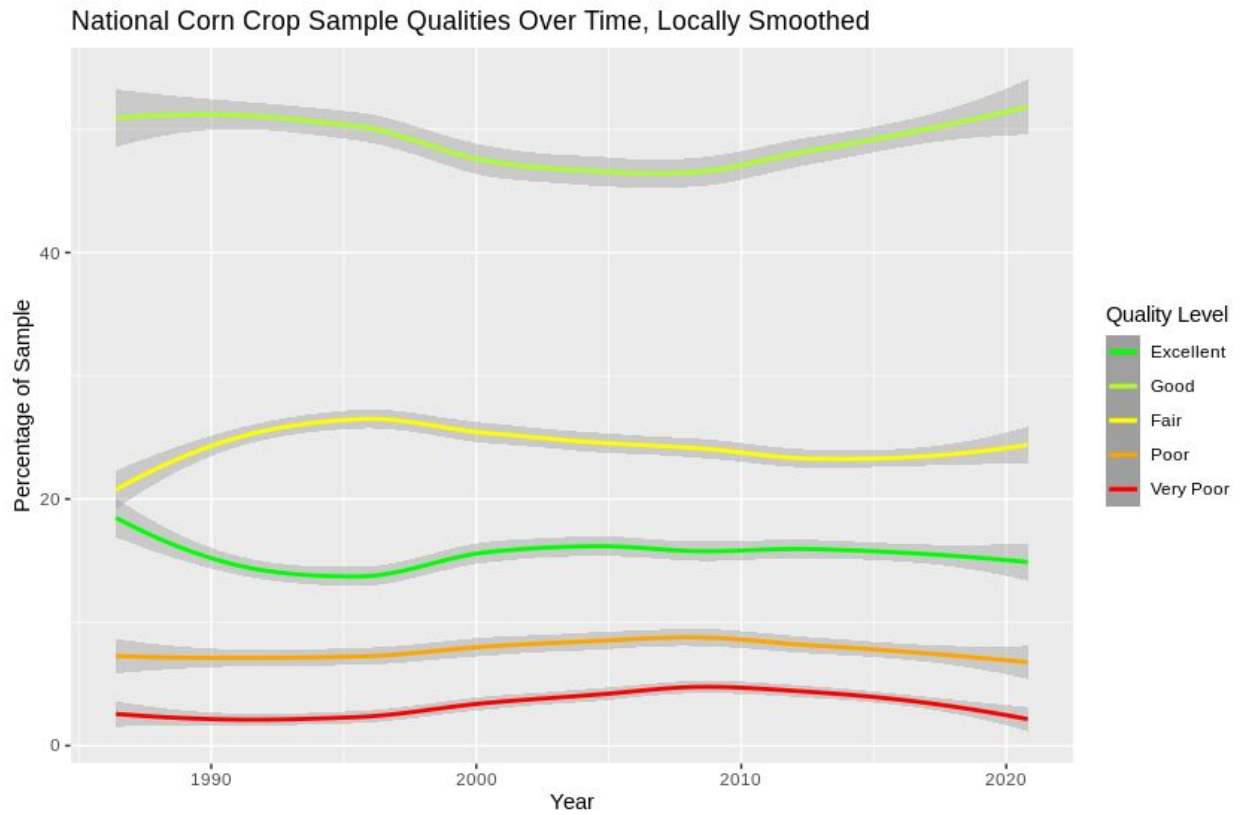


Figure 5: National corn crop sample qualities over time, locally smoothed

## Corn Crop Quality Level Correlations

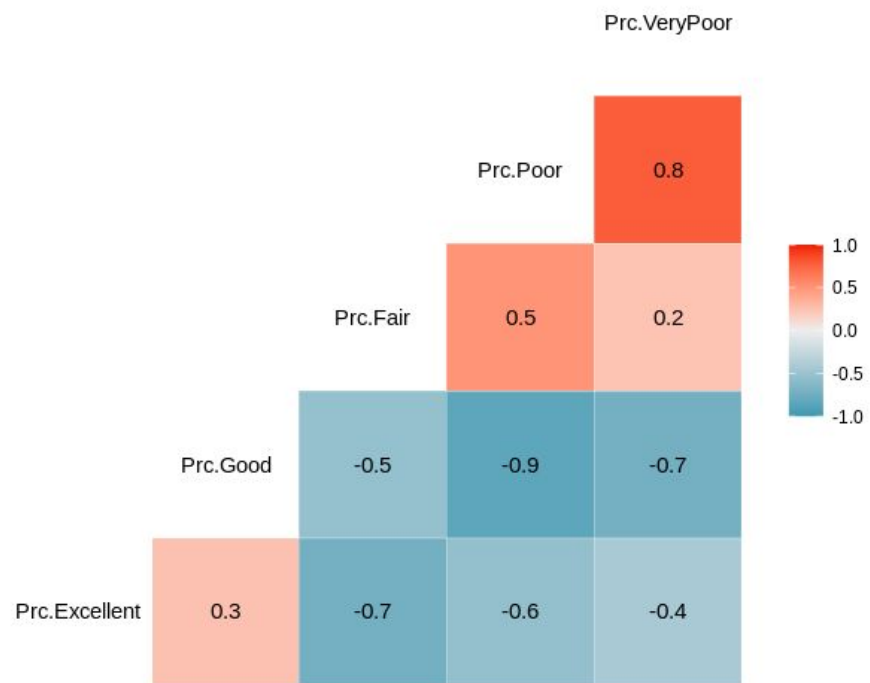


Figure 6: Corn crop quality level correlations

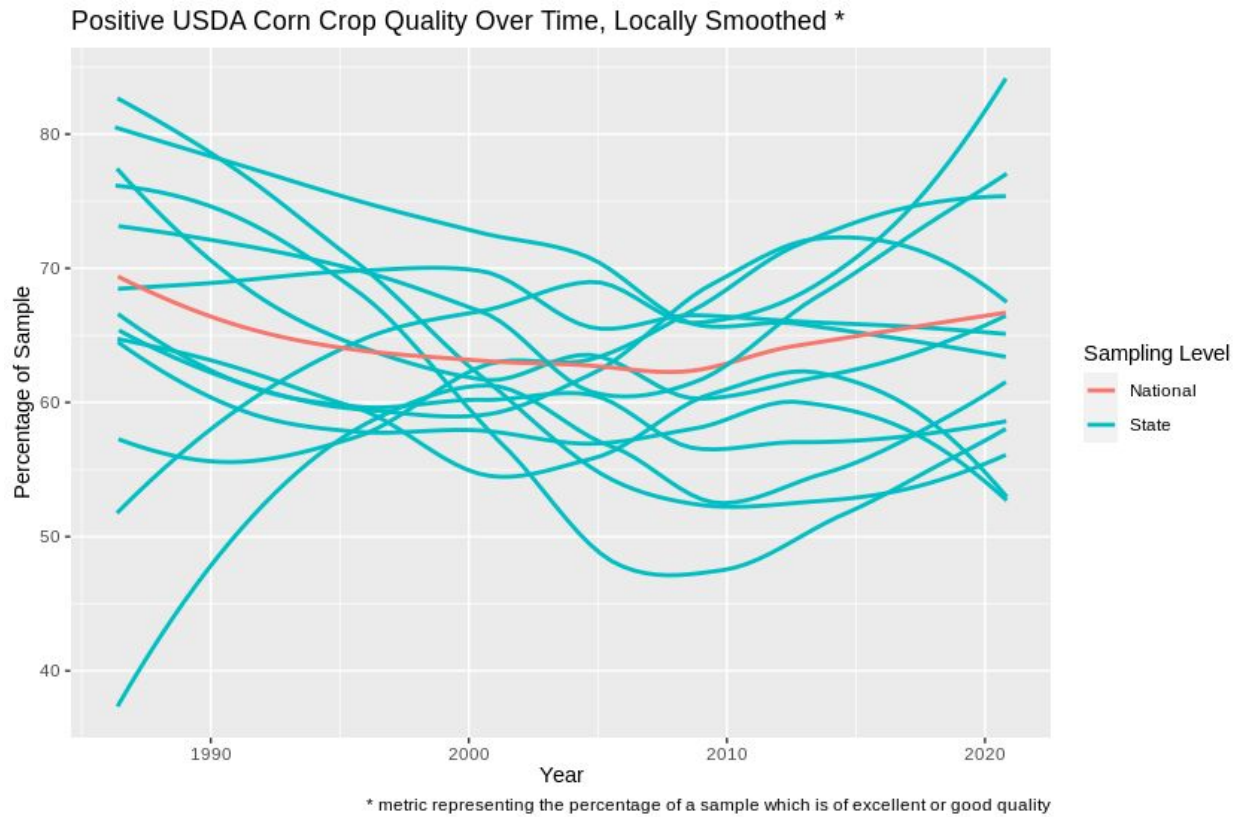


Figure 7: Positive USDA corn crop quality over time, locally smoothed

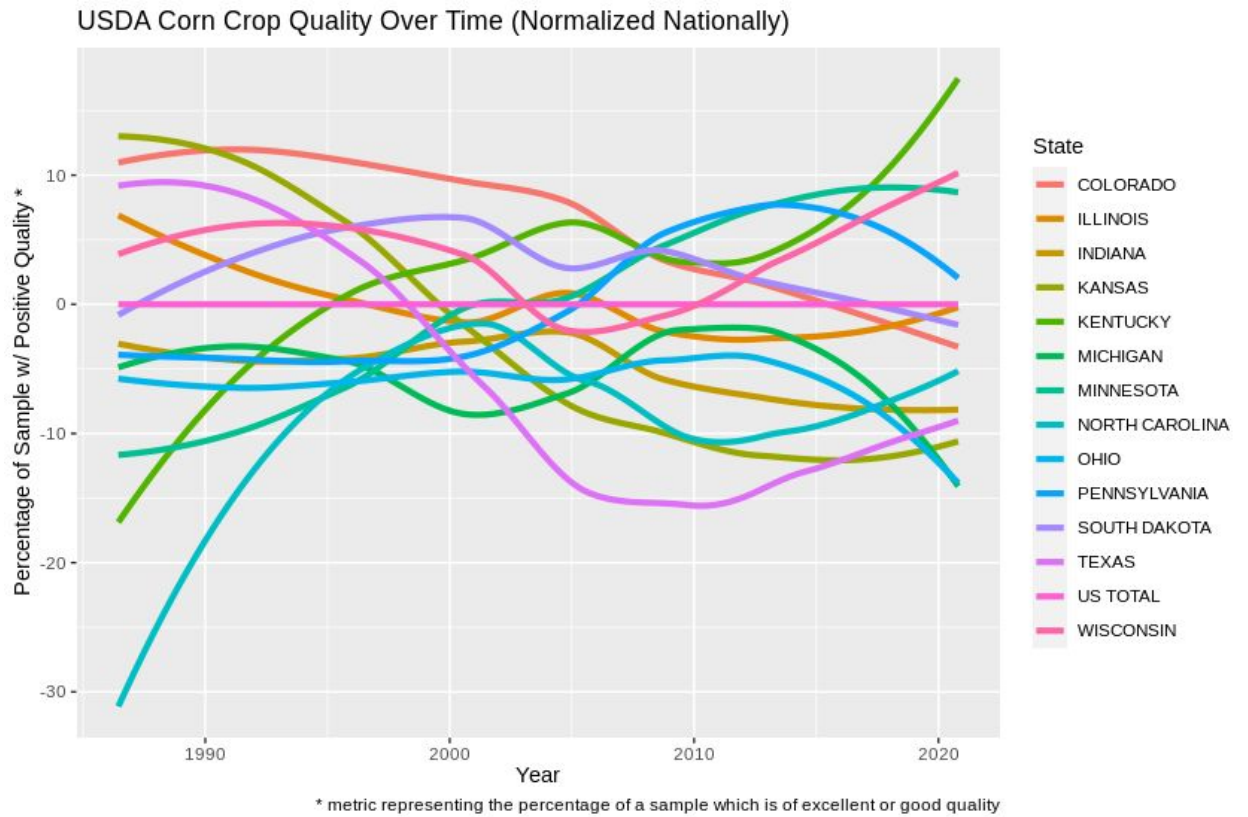


Figure 8: USDA corn crop quality over time (normalized nationally)

## Trace Gas and Corn Crop Quality Correlations

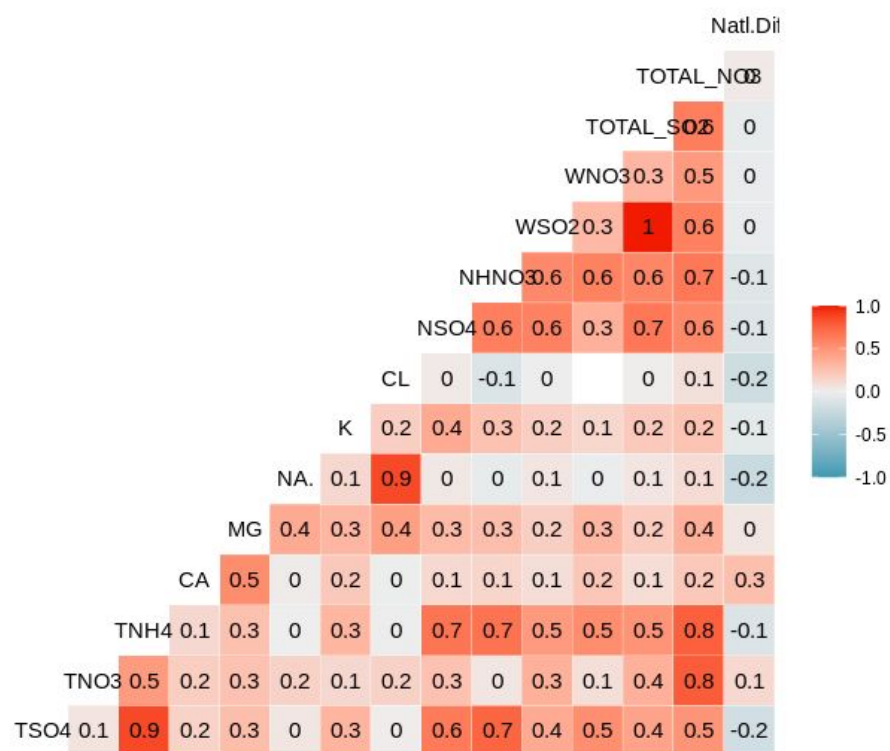


Figure 9: Trace gas and corn crop quality correlations



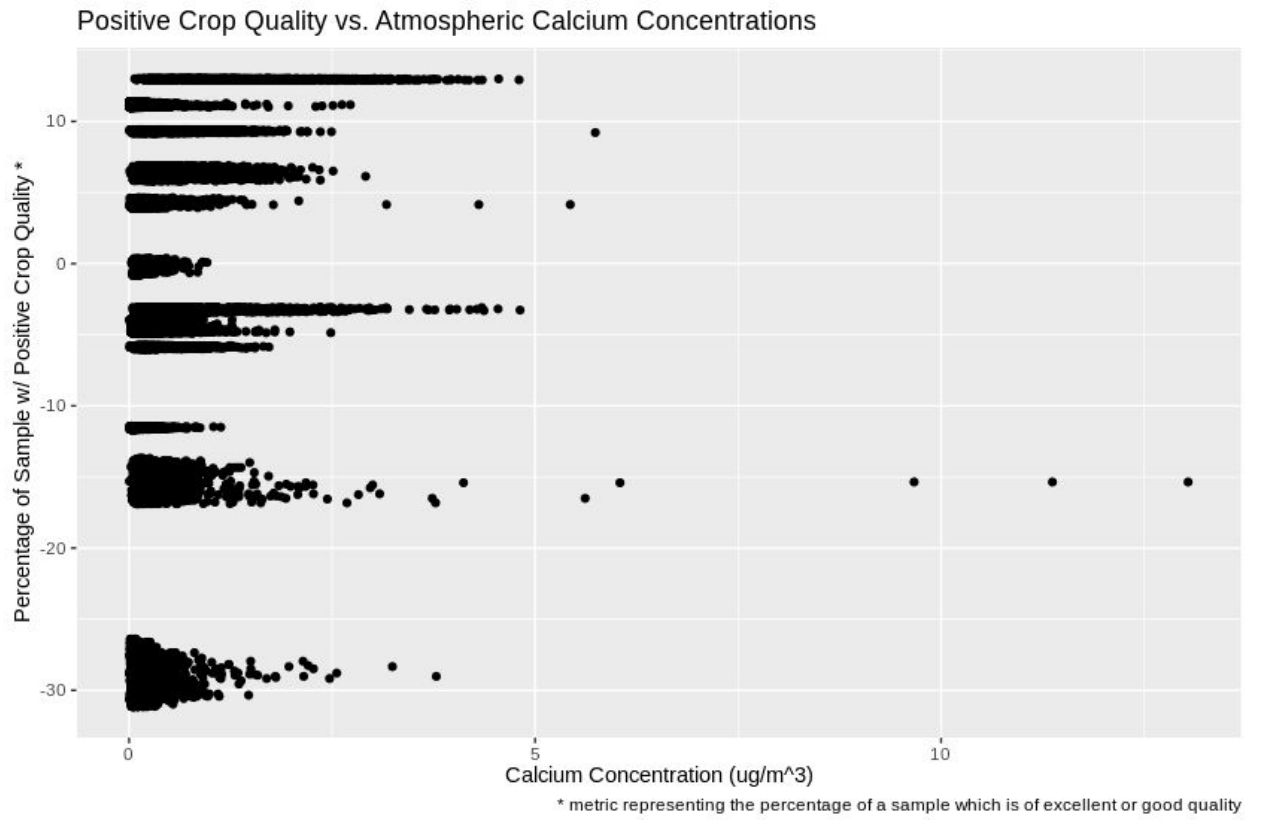


Figure 10: Positive crop quality vs. atmospheric calcium concentrations

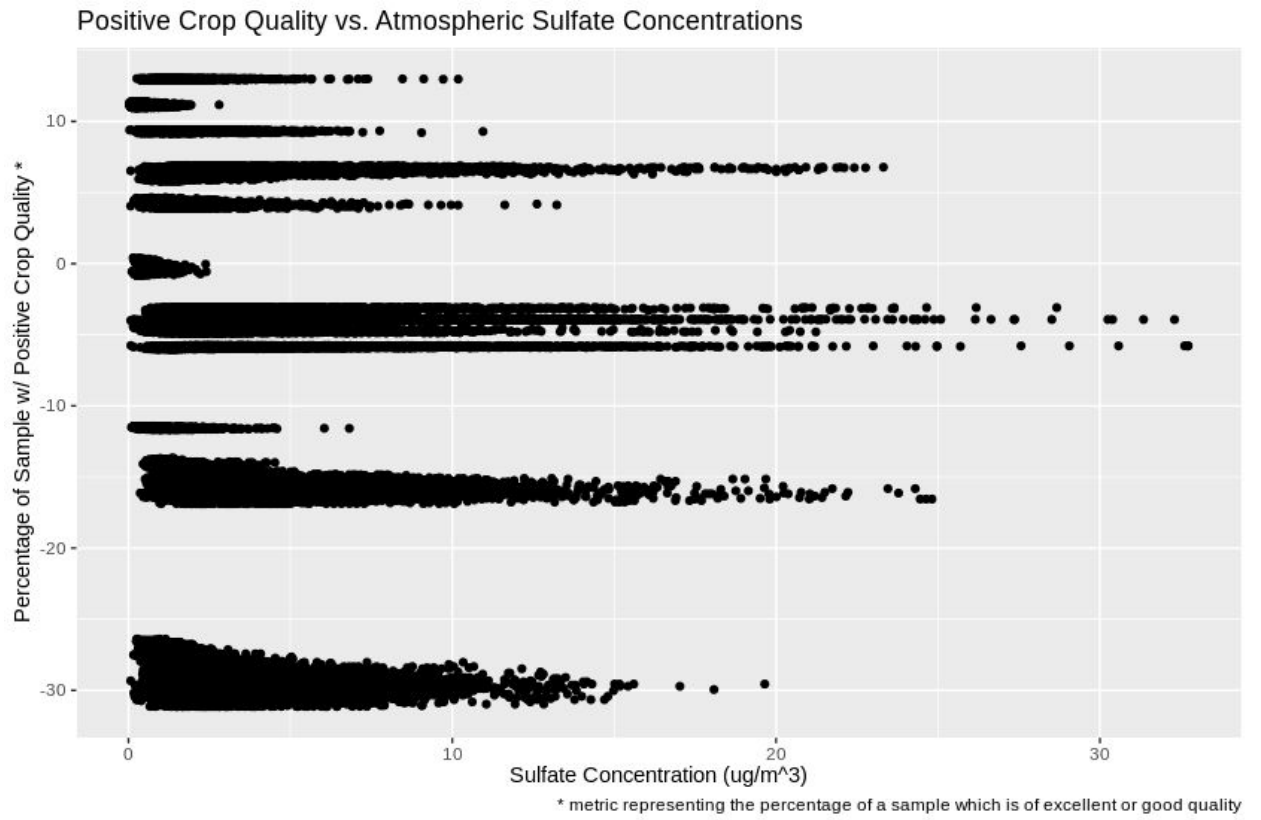


Figure 11: Positive crop quality vs. atmospheric sulfate concentrations

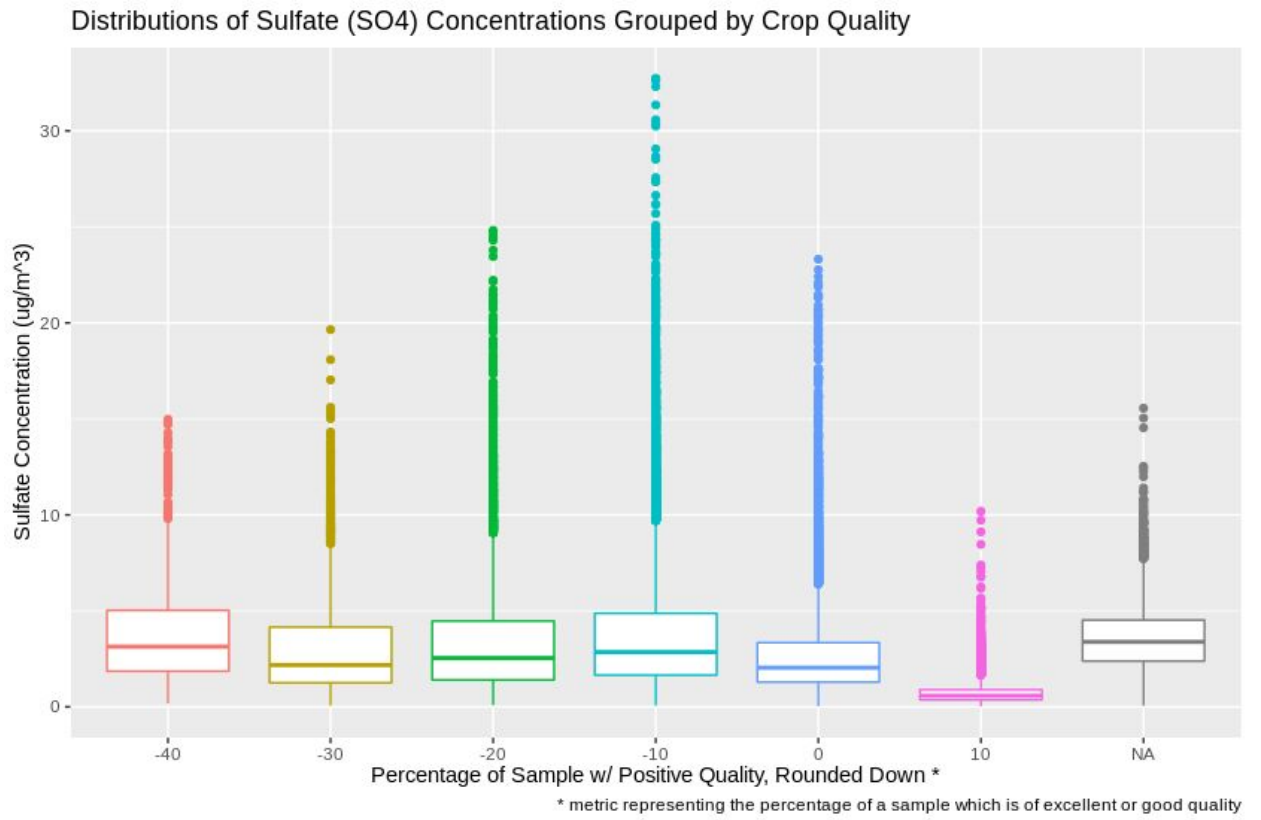


Figure 12: Distributions of sulfate (SO<sub>4</sub>) concentrations grouped by crop quality