

Logan Lasell

WEEK 3 ASSIGNMENT

In the text, *Assessment of Human Exposure to Ambient Particulate Matter*, I was interested to learn about PM sulfates, a pollutant with practically no residential sources. An important factor, given that the study of PM sulfates indicated a high correlation between personal PM sulfate exposure and PM10 ambient concentration. Another one of the more surprising outcomes was the significant difference of intercept values, $\mu\text{g}/\text{m}^3$, for PM10 exposure. With those corresponding values resulting in a measurement of $\sim 24 \mu\text{g}/\text{m}^3$ and $11 \mu\text{g}/\text{m}^3$ for PM10 in the Netherlands study when compared to the Tokyo Study, respectively. Although, the cleanliness of Japanese homes made sense as a possible reason for lower levels of PM10 exposure.

In *High-resolution mapping of on-road vehicle emissions with real-time traffic datasets based on big data*, it was fascinating to see the implementation of a real time traffic monitor. I think having the ability to track and visualize live traffic is pertinent for emission control, because it allows for accurate representation of overall traffic flow, including traffic delays causing increased emissions, emission changes due to peak hours or dead hours, and overall emission averages (daily, weekly, monthly, and yearly). All important data when looking to map on road vehicle emissions.