

## **Spatial Analysis of Air Quality Monitor Data in China, Japan, and South Korea**

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In 2015, Berkeley Earth published a widely-reported study concluding that air pollution contributes to 1.6 million deaths per year in China. This presentation will provide an update on that work with additional data for China and new analysis for South Korea and Japan. In China, two years of data from more than 1500 monitoring stations allows local trends to be estimated. Preliminary review indicates a trend towards improving air quality across most of China with decreasing emissions at most major population centers. Such improvements are consistent with tightening emissions standards and the decreasing usage of coal. In addition, new spatial analysis has been applied to ~900 monitoring sites in Japan and ~120 sites in South Korea. This new analysis provides information on air quality, pollutant source distributions, and implied mortality in these countries. Finally, boundary crossing fluxes in South Korea and Japan have been used to estimate the fraction of air pollution in Japan and South Korea that has been imported from sources in China.