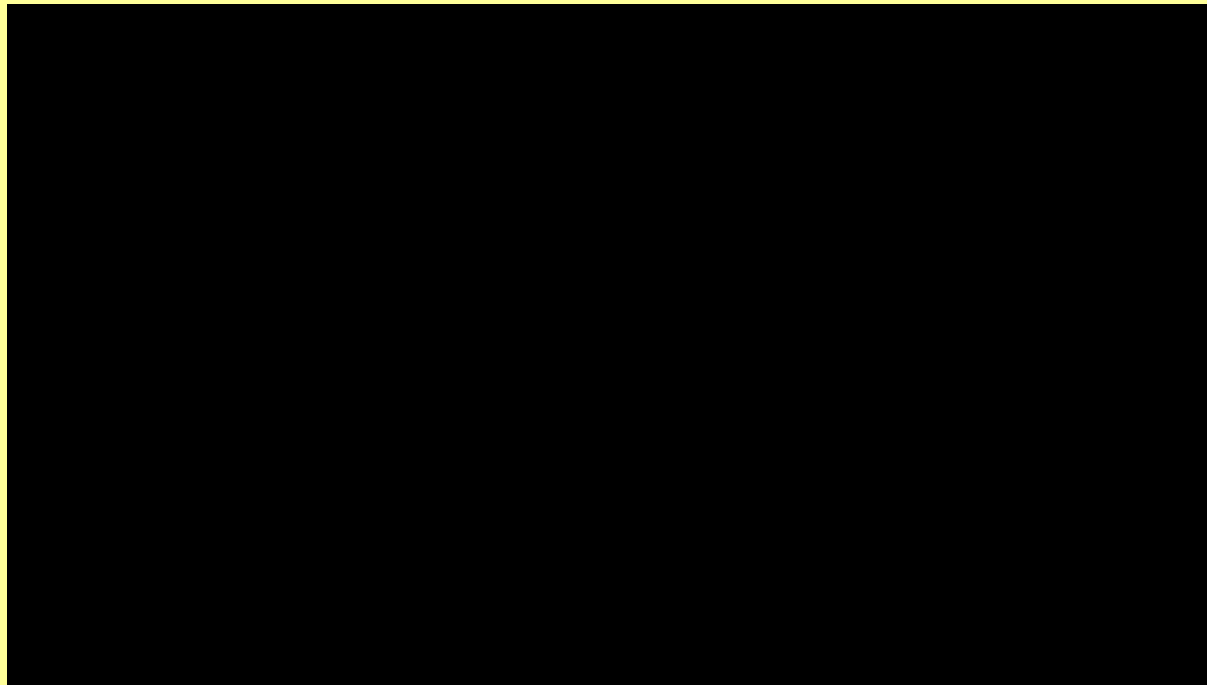


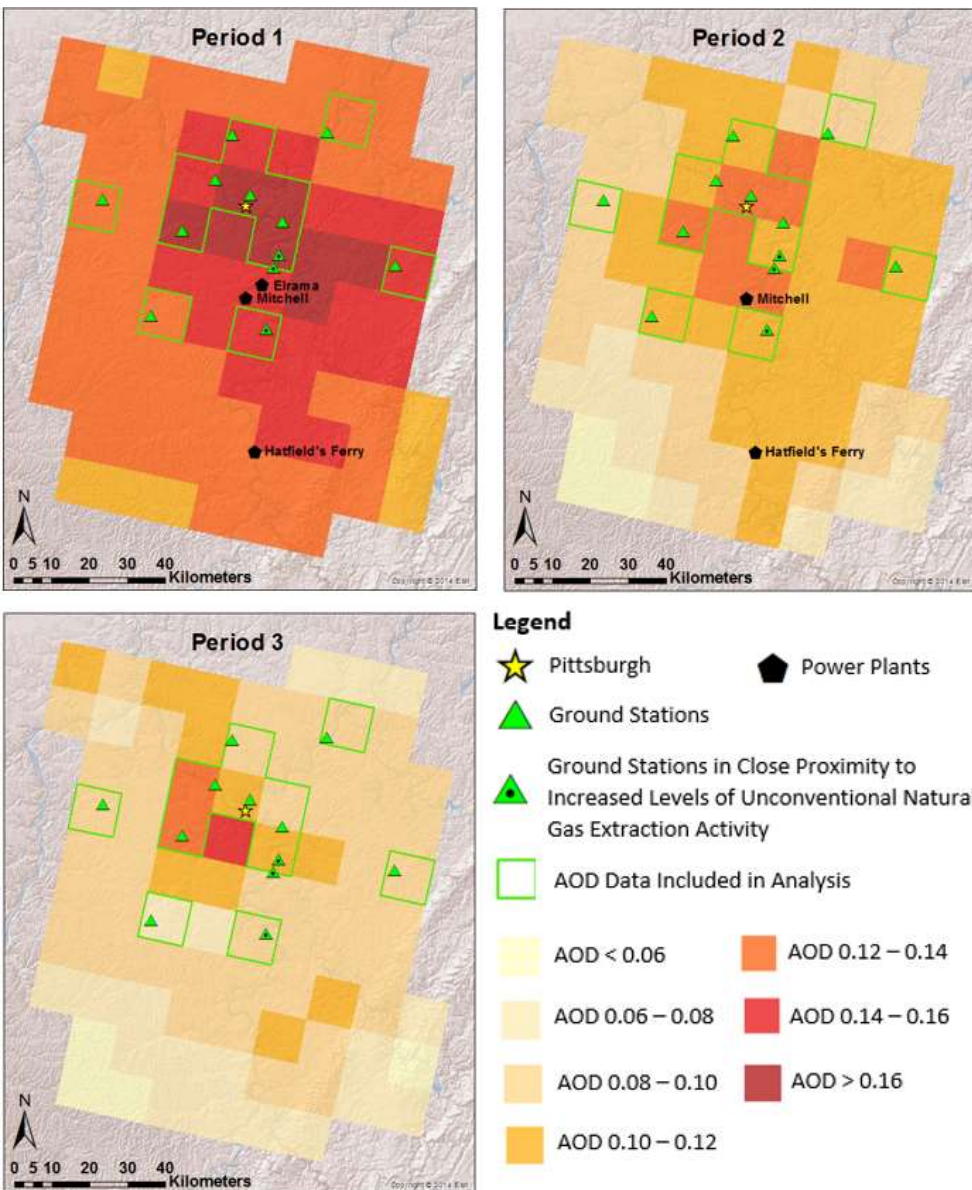
Community Data Analysis: Air Pollution

- Residents of southwestern Pennsylvania are concerned about air pollution, as well as water pollution, from hydraulic fracturing, or “fracking.”
- Primary fine particulate matter emissions related to fracking come from trucks and machinery using diesel fuel, as well as from compressor stations.
- In addition, VOCs and NO_x emissions from fracking are precursors to secondary fine particulate matter.

This short video shows the number of wells drilled for fracking in Pennsylvania from 2002 through 2014



Sources: <https://www.youtube.com/watch?v=g7rYPyiMpNA>
<http://www.fractracker.org/2015/11/time-sequence-map-pa-drilling/>



Map of Aerosol Optical Depth by Power Plant Closing Period

- Although a decrease in regional fine particulate matter was observed, it was not a dramatic reduction.
- While the coal-fired power plants were closing, fracking activities were on the rise.
- Air pollution from fracking might have lessened the air quality improvements that were expected from closing the power plants.

Source: Russell, M. C., J. H. Belle, and Y. Liu. 2016. "The Impact of Three Recent Coal-fired Power Plant Closings on Pittsburgh Air Quality: A Natural Experiment." *J Air Waste Manag Assoc.* doi: 10.1080/10962247.2016.1170738.

News post

Pittsburgh's air is at an all-time best, but still makes "most-polluted" list

By Elizabeth Lepro | PublicSource | April 20, 2016

News post

Residents' concerns prompted plans to expand DEP air quality monitoring near shale gas sites in Pennsylvania

By Natasha Khan | PublicSource | April 27, 2016