README

Ed Rogers 05/23/2015

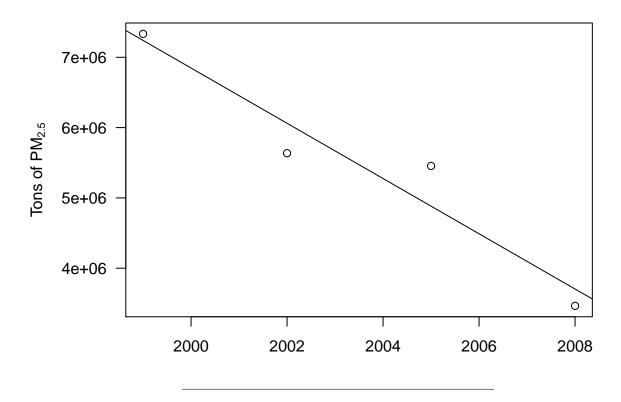
EPADataAnalysis

Course Project 2 for Exploratory Data Analysis

The 6 included scripts (plot1.R, plot2.R, etc.) generate plots to answer the six questions associated with Course Project 2 for the Exploratory Data Analysis course. Each script should be run in the directory in which the EPA National Emissions Inventory has been unzipped.

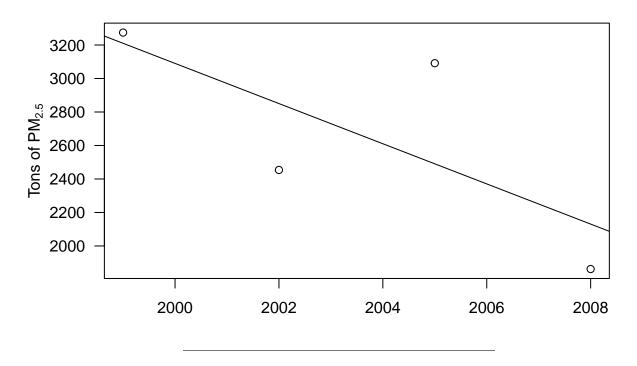
Question 1: Have total emissions from PM2.5 decreased in the United States from 1999 to 2008? Using the base plotting system, make a plot showing the total PM2.5 emission from all sources for each of the years 1999, 2002, 2005, and 2008.

United States Total PM_{2.5} Emissions by Year

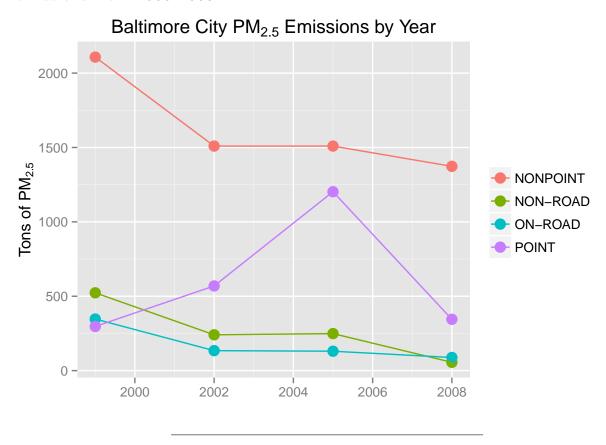


Question 2: Have total emissions from PM2.5 decreased in the Baltimore City, Maryland (fips == "24510") from 1999 to 2008?

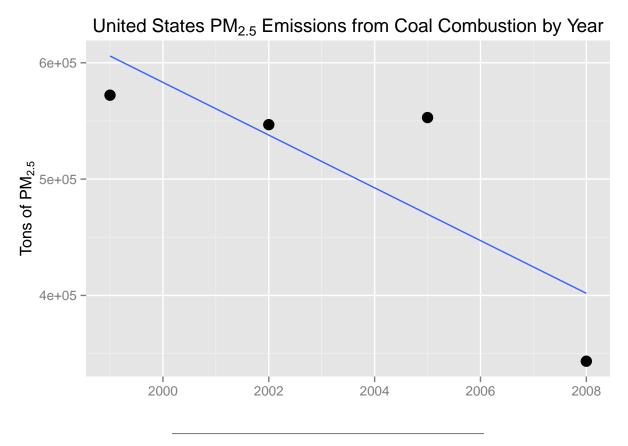
Baltimore City Total PM_{2.5} Emissions by Year



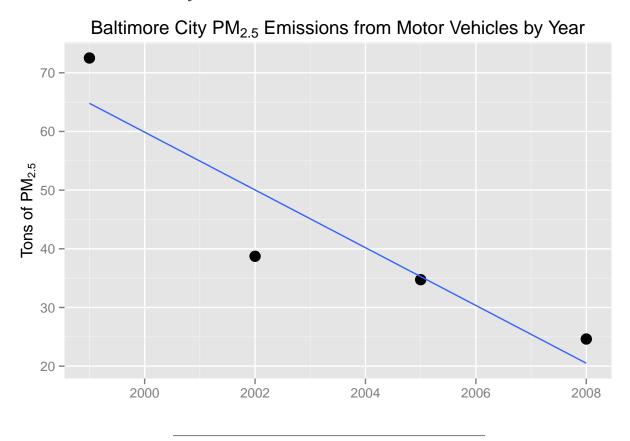
Question 3: Of the four types of sources indicated by the type (point, nonpoint, onroad, nonroad) variable, which of these four sources have seen decreases in emissions from 1999-2008 for Baltimore City? Which have seen increases in emissions from 1999-2008?



Question 4: Across the United States, how have emissions from coal combustion-related sources changed from 1999-2008?



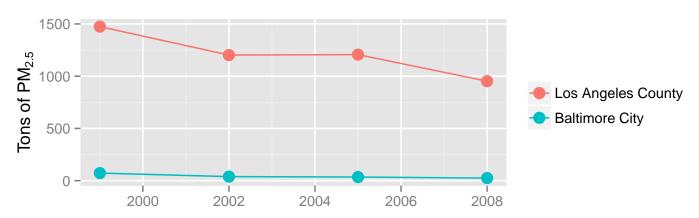
Question 5: How have emissions from motor vehicle sources changed from 1999-2008 in Baltimore City?



Question 6: Compare emissions from motor vehicle sources in Baltimore City with emissions from motor vehicle sources in Los Angeles County, California (fips == "06037"). Which city has seen greater changes over time in motor vehicle emissions?

PM_{2.5} Emissions from Motor Vehicles by Year

Total Yearly Emissions Between Cities



PM_{2.5} Emissions from Motor Vehicles by Year

Percentage of Emissions Relative to 1999 Measurements

