How to Get China Air Pollution Data

February 2021

Ground Monitoring Data

- Source: China Ministry of Ecology and Environment

- Resolution: monitor x hourly

- Coverage: national (~1,600 monitors across all 330+ prefecture level cities), 2013 – today

- Pollutants: $PM_{2.5}$, PM_{10}, O_3, NO_2, SO_2, CO

- This is the primary data we use to document air pollution trends. Real-time monitoring data are posted here (http://106.37.208.233:20035/), although historical data are not available on this website. Historical data going back to 2013 are available for purchase from a private non-enterprise http://data.epmap.org/ (青悦开放环境数据中心). We have purchased a copy of their data, and have no financial relationship with them otherwise. Our price quote was in the order of 100s of USD. Another version of the historical data (May 2014 onward) is provided by Xiaolei Wang free of charge (https://quotsoft.net/air/).

U.S. Embassy & Consulates Monitoring Data

- Source: U.S. Department of State Air Quality Monitoring Program

- Resolution: monitor x hourly

- Coverage: Beijing (2008 - 2017), Chengdu (2012 - 2017), Guangdong (2011 - 2017), Shanghai (2011 - 2017), Shenyang (2013 - 2017)

- Pollutants: $PM_{2.5}$

- We use this measurement in Appendix Figure A.3. "U.S. Embassy versus Government $PM_{2.5}$ Data". These data can be downloaded from http://stateair.net/ . Click the city of interest -> View Data -> Agree to the data use agreement.

Estimated $PM_{2.5}$ from Combining Satellite Data and Chemical Transport Modeling

- Source: Atmospheric Composition Analysis Group

- Resolution: 0.01° x 0.01° x yearly

- Coverage: national, 2000 – 2018

- Pollutants: $PM_{2.5}$

- We use this measurement in Appendix Figure A.4. "Trends in AOD and Satellite-Based $PM_{2.5}$". These data can be downloaded from https://sites.wustl.edu/acag/datasets/surface-pm2-5/#V4.CH.03