



Air Explorer

Your Access to Air Quality Visualization Tools

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Outline

- What is Air Explorer?
- Why was Air Explorer created?
- How was Air Explorer created?
- What are the benefits of Air Explorer?
- Let's Demo Air Explorer!



What is Air Explorer?

- Web Base Tools
 - maps, graphs, data tables
- Access AQS Data



Why was Air Explorer created?

- Develop tools for routine and exploratory analyses that provide relevant results
- Extend access to our partners in the health, science, and academic communities
- Bottom line, provide access to extremely relevant, high quality information



How was Air Explorer created?

- Build Dynamic Web Application
- Use Existing SAS Technology



What are the Products/Benefits of Air Explorer?

- Powerful analytical tools
- Interactive, portable results
- Exploratory analysis capabilities
- Relevant information
- Less time generating results
- More time interpreting & sharing results
- Broad access to tools
- Only need a Web browser



Demo Time!!

- <http://www.epa.gov/airexplorer>

The End

- Do you have questions, suggestions for new tools that would be a help to you, comments on how to improve existing tools? If so contact...
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Extra Slides

Introducing Air Explorer

U.S. Environmental Protection Agency

AIR Explorer

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Air Explorer is a collection of user-friendly visualization tools for air quality analysts. The tools generate maps, graphs, and data tables dynamically. Currently, the tools access ambient concentration data from EPA's [Air Quality System \(AQS\)](#). The source data for this site were retrieved from AQS on February 25, 2005 and will be updated monthly. This is a developmental site. Based on user feedback, we are continually improving the existing tools and developing new ones to meet your needs.

MAPS



Map One Day

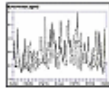
Generate a three-dimensional, interactive map of daily pollutant concentrations



Map Several Days

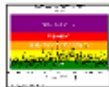
Generate an animated series of daily concentration maps for a specific time period

GRAPHS



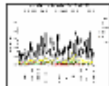
Plot Concentrations

Generate a time series plot for a specific location and time period



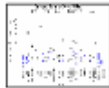
Plot AQI Values

Plot PM2.5 and Ozone AQI values for a specific location and time period



Plot Speciation Data

Plot daily PM2.5 speciation data for a specific location and time period



Plot Benzene Data

Generate a time series plot or download data for all monitoring sites for a specific state

DATA

Query Concentrations

View or download daily concentrations for a specific location and time period

Query Speciation Data

View or download daily PM2.5 speciation data for a specific location and time period

Query Benzene Data

View or download benzene data for a specific location

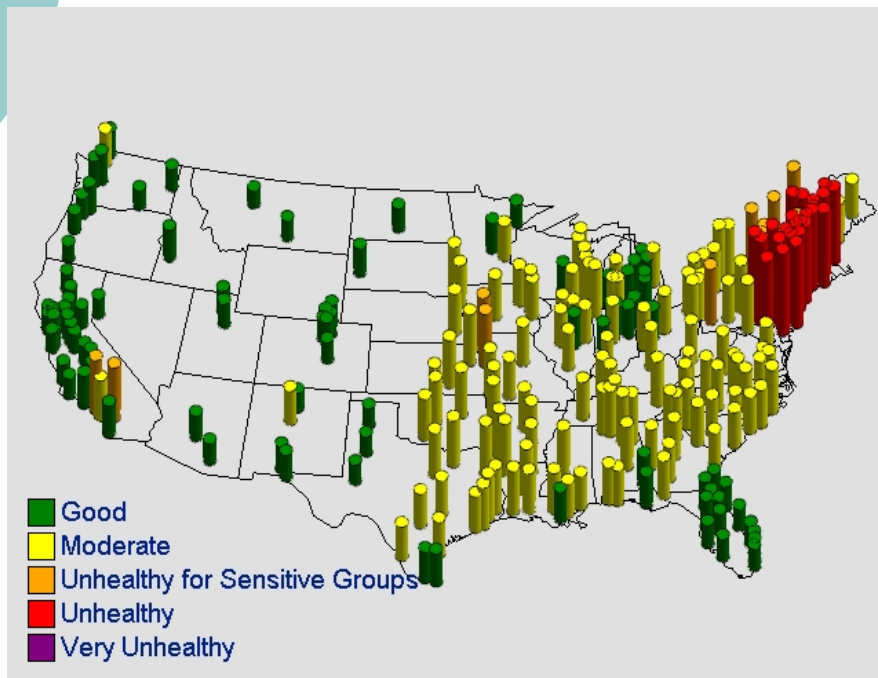
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Last updated on Thursday, March 10th, 2005
URL: <http://www.epa.gov/airexplorer/index.htm>

- Powerful Web-driven analytical tools
- Generates output dynamically
- Now available to air quality analysts everywhere

The Examples

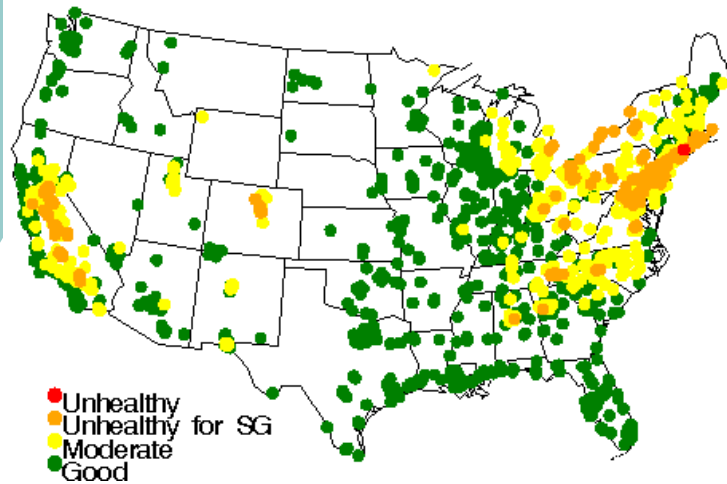
PM2.5 AQI Values by MSA on 07/07/2002



- You can map daily AQI levels for any pollutant, any day.
- Rotate, zoom, and other interactive features available

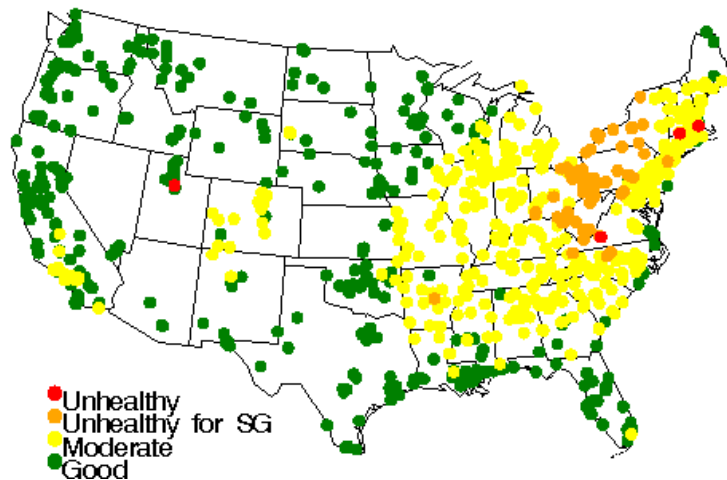
The Examples

Ozone AQI Levels – 07/01/2002



- You can view daily animations for multiple pollutants for any time period

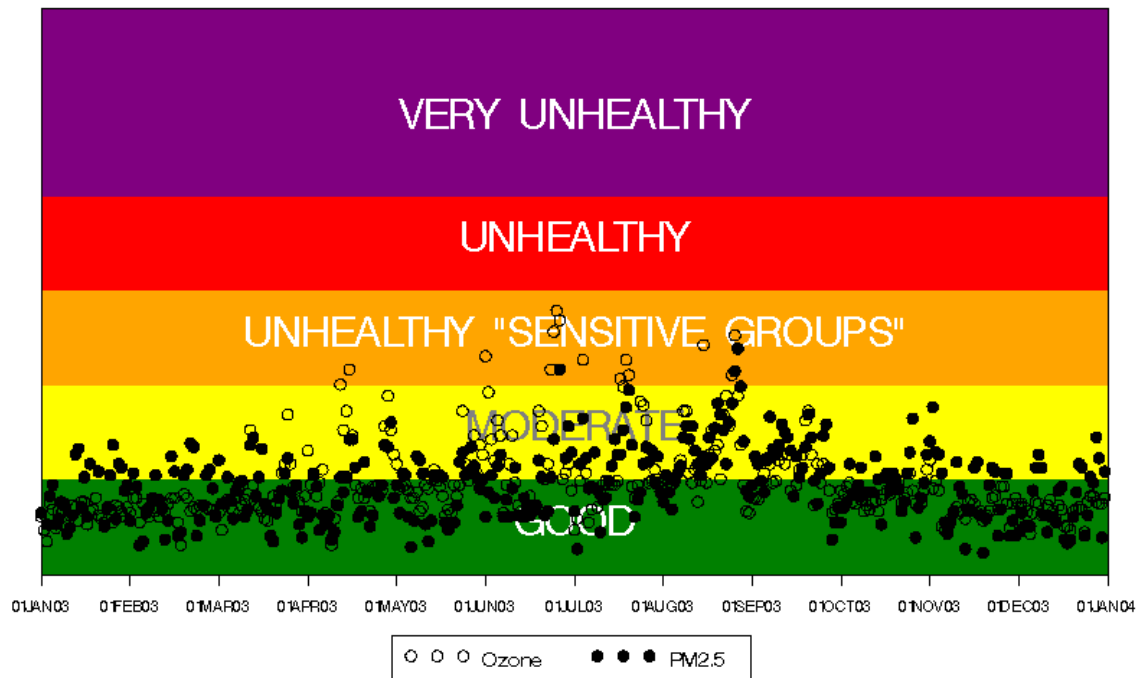
PM2.5 AQI Levels – 07/01/2002



The Examples

- You can plot daily PM2.5 and ozone AQI values for any city, any time period

Daily Ozone and PM2.5 AQI Values from 01/01/03 to 12/31/03
Knoxville, TN

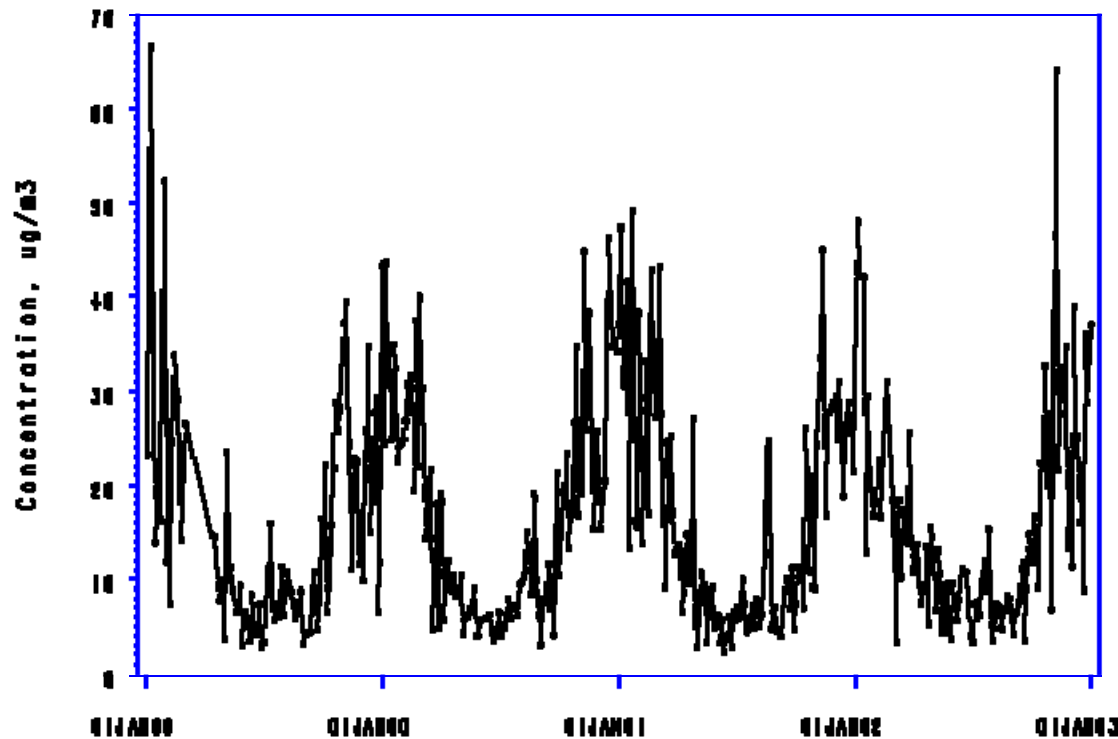


Source: EPA's Air Explorer (<http://www.epa.gov/airexplorer/>)
Generated on: 03JUN05

The Examples

Daily PM2.5 Concentrations from 01/01/99 to 12/31/03

STATE_NAME=MONTANA COUNTY_NAME=LINCOLN MSA_NAME=Not in a MSA SITE=500530018 POC=1



- You can plot daily concentrations for any city, any pollutant, any time period

Source: EPA's Air Explorer (<http://intranet.epa.gov/airexplorer/>)
Generated on: 200603

The Examples

DATE	SITE	POC	STATE_NAME	COUNTY_NAME	MSA	MSA_NAME	PM2.5 F
1/3/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	7.5
1/12/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	8.1
1/15/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	11
1/18/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	12.5
1/21/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	13.7
1/24/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	12.1
1/27/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	14.3
1/30/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	12.7
2/2/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	13.4
2/5/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	7.1
2/8/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	11
2/11/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	11.1
2/14/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	18
2/17/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	10.7
2/20/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	19.8
2/23/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	6.4
2/26/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	19.2
3/1/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	10.5
3/4/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	14.4
3/7/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	10.7
3/10/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	10.3
3/13/2003	130890002	5	GEORGIA	DE KALB	520	Atlanta,GA	18.8

- You can download daily concentrations for any city, any pollutant, any time period