

US EPA ARCHIVE DOCUMENT



Multi-pollutant Data Access / Analysis Systems

David Mintz

OAQPS Air Quality Analysis Group

June 5, 2008

Accessing data is a lot like riding a roller coaster



- There is great anticipation at the beginning
- The middle can be a little scary
- If you don't throw up, the end is quite rewarding!

What we'll cover in <10 minutes

- Visit the amusement park of air data systems
 - Focus on locally managed federal data systems
 - Which “rides” are right for you?
 - Get on a couple of short ones approved for a general audience
-

Before we enter...

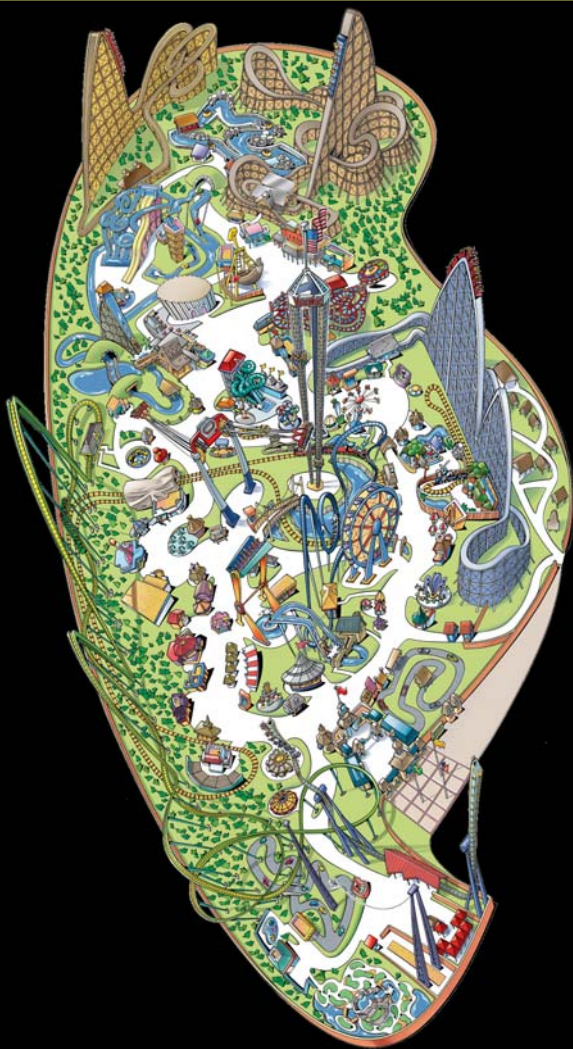
who are you / what do you need?

- Wide range of data users
 - Health Researchers – Data Analysts – Application Developers – Communication Specialists – Policy Analysts
 - Needs differ - complex to simple
 - Values differ - timeliness vs. quality assurance
 - Knowing who you are and what you need going in is the key to having a successful adventure
-

Air Data Systems – The Map

- EPA's most comprehensive inventory of locally managed federal air data systems is at

<http://www.epa.gov/oar/airpolldata.html>



Air Quality Data Systems for General Public

Keep hands, arms and legs inside ride at all times.
Ride only if you are able to fit comfortably in the restraint system.
Watch your step while entering and exiting the ride.
You must be able to sit upright and support yourself.

System	Level of Detail			Time	Substances						Output Types	
	R a w	D a i l y	A n n u a l		Ozone + PM2.5	Other Criteria	Tox ics	PM2.5 Adj. Spec	PM2.5 Unadj. Spec	Ot her	Tables/ Charts	Ma ps
AirCompare		•	•	2000 – 2007	•	•					•	•
AirData			•	1996 - 2007	•	•					•	•
AirNow	•	•		1999 – Present	•	○					•	•

A full circle indicates the system has this information or feature and an empty circle indicates it has some of the listed information.

Air Quality Data Systems for Technical Users

This attraction is not recommended for guests with:
 Back or neck condition
 Recent surgery or illness
 Heart or blood pressure condition

System	Level of Detail			Time	Substances						Output Types	
	R a w	D a i l y	A n n u a l		Ozone + PM2.5	Other Criteria	Tox ics	PM2.5 Adj. Spec	PM2.5 Unadj. Spec	Ot her	Tables/ Charts	Ma ps
AirTrends			•	Time range of most detailed data 1990 – 2007	•	•	•				•	•
AQS	•	•	•	1994 – Present	•	•	•		•	•	•	
CASTNET	•		•	1987 - 2006	○					•	•	
AirExplorer		•	•	1996 – 2007	•	•	○	•	•		•	•

A full circle indicates the system has this information or feature and an empty circle indicates it has some of the listed information.

Air Quality Data Systems for Researchers

This is a turbulent ride which spins passengers at high speeds. Riders will encounter rapid changes in speed, direction, and elevation. This ride requires full body control.

System	Level of Detail			Time	Substances						Output Types	
	R a w	Da ily	Ann ual		Ozone + PM2.5	Other Criteria	Tox ics	PM2.5 Adj. Spec	PM2.5 Unadj. Spec	Ot her	Tables/ Charts	Ma ps
AQS Data Page	•			Time range of most detailed data 1994 – 2007	•	•			•		•	
AQS Data Mart	•	•	•	1980 – Present	•	•	•		•	•	•	

Quick Reference Guide

- AQS: <http://www.epa.gov/ttn/airs/airsaqs/index.htm>
 - AirNow: <http://airnow.gov/>
 - AirNow Tech: <http://www.airnowtech.org/>
 - CASTNET: <http://www.epa.gov/castnet/>
 - AirData: <http://www.epa.gov/air/data/>
 - AirExplorer: <http://www.epa.gov/airexplorer/>
 - AirCompare: <http://www.epa.gov/aircompare/>
 - AQS Data Page:
<http://www.epa.gov/ttn/airs/airsaqs/detaildata/downloadaqsddata.htm>
 - Air Trends: <http://www.epa.gov/air/airtrends/>
 - AQS Data Mart: <http://www.epa.gov/ttn/airs/aqsdatamart/index.htm>
 - NATA: <http://www.epa.gov/ttn/atw/natamain>
 - Air Emissions: <http://www.epa.gov/air/emissions>
 - Ambient Toxics Data: <http://www.epa.gov/ttn/amtic/toxdatt.html>
-

Summary

- The world of Air Data Systems is not perfect and can be overwhelming.
 - There are a lot of good tools. Finding the right ones for you is important.
 - Ongoing community-wide effort to improve data sharing/access among existing systems and systems of the future
-

Contact Information



David Mintz

US EPA

Office of Air Quality Planning and Standards

919-541-5224

mintz.david@epa.gov

