

AIRNow-Tech

An interactive web-based data management and analysis tool supporting the AIRNow air quality notification and forecasting system



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Outline

- About AIRNow
- AIRNow-Tech
 - About
 - Features
 - Demonstration
 - Performing data queries
 - Site and monitor management
 - Navigator GIS
 - Customizable preferences and tools in *My Account*
- Resources and how to obtain an AIRNow-Tech account
- Questions, comments, and discussion

About AIRNow

Centralized national air quality network

- Launched in 1998
- Provides a common framework for acquiring and distributing air quality information

Diverse stakeholder community

- Federal, state, provincial, tribal, and local air agencies
- Scientific and health research organizations
- Media and public outreach groups

Products

- Real-time data maps and observations
- Forecasts
- Educational information and news stories



About AIRNow-Tech

- Interactive web-based data management and analysis tool
- Password protected
- Individual user accounts
- Submit and view data
- Data management functions, personalized tools, preferences, and services

The screenshot displays the AIRNow-Tech website interface. At the top, there is a navigation bar with links for Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources. The user is logged in as 'AIRNow Tech User' and has options for 'My Account' and 'Sign Out'.

News and Events

2007 National Air Quality Conference - Call for Speakers and Posters

The 2007 National Air Quality Conference, sponsored by the EPA, the State and Territorial Air Pollution Program Administrators, and the Association of Local Air Pollution Control Officials (STAPPA/ALAPCO), will be held February 11-14 in Orlando, Florida. Please visit the following website for more information on how you can be a part of the conference!

LINK:<http://www.epa.gov/airnow/2007conference/call-speakers2.html>

Posted October 4, 2006, 10:37 (PT)

Did you know? Tip 2

How can I tell if a monitor is reporting suspect data?

When an observation (OBS) file is received from an agency, each hourly measurement is compared against a set of QC criteria. These criteria help identify potentially erroneous measurements.

Measurements violating one or more QC criteria are flagged and then reviewed by an AIRNow operator, after which data is either validated or invalidated. Invalidated data are marked as erroneous in the AIRNow database and are assigned a value of -990. These measurements are neither used to calculate the AQI nor used to produce AIRNow maps or related information. In effect, the public is prevented from viewing what would otherwise be an incorrect indication of real-time air quality.

How can you tell if a monitor has reported data violating QC criteria? Sign up for and view the "Agency Daily" email. You can sign-up by visiting the My Account page in AIRNow-Tech. Questions? Please email the AIRNow DMC at airnowdmc@sonomatech.com.

Posted October 18, 2006, 12:25 (PT)

My Agency's Forecasts

Issue Date: 10/20/2006

City	Today	Tomorrow	Action Day
Atlanta	PM2.5	PM2.5	

My Agency's Realtime Observed

	Ozone	PM _{2.5}	PM ₁₀
Yesterday	36	86	47
Max Today	30	74	45
Current	30	21	45

My Agency's Polling Summary

Agency	Ozone	PM _{2.5}	PM ₁₀
GA1	10/20 16:00	10/20 16:00	10/20 15:00

Polling Summary

Color Legend

- Green = Current
- Yellow = 2 to 6 hrs old
- Red = over 6 hrs old
- Grey = Unknown status

October 20, 2006 17:43 (ET) (All times are in ET)

Agency	Ozone	PM _{2.5}	PM ₁₀
AB1	10/20 16:00	10/20 16:00	10/20 16:00
AC1			
AIR			
AL1	10/20 16:00		
AL2	10/20 16:00	10/20 16:00	10/20 16:00
AL3	10/20 16:00	10/20 16:00	
AL4	10/20 16:00	10/20 16:00	
AR1	10/20 16:00	10/20 16:00	
AZ1		10/20 16:00	
AZ2	10/20 16:00	10/20 16:00	10/20 16:00

AIRNow-Tech Features



- **Home** – Relevant news, events, and snapshot of agency status
- **Agencies** – Status of monitor data delivery by agency and parameter
- **Sites** – Monitor information, configuration, & status by site
- **Navigator (GIS)** – Monitor maps, current & historical air quality & meteorological data display, HYSPLIT trajectory tool, numerous supporting GIS layers
- **Data** – Hourly, daily, & historical monitoring data queries
- **Forecasts** – Forecast submittal, configuration, analysis tools, and configuration
- **Polling** – Summaries on data delivery times & completeness
- **Notifier** – AIRNow program e-mail list-serve
- **Resources** – General information for AIRNow program & the Data Management Center (DMC)
- **My Account** – Account management, customizable preferences, and tools

AIRNow-Tech Demonstrations

- Performing data queries
- Site and monitor management
- Navigator GIS
- Customizable preferences and tools in *My Account*

Performing data queries

The screenshot displays the AIRNOW TECH website interface. At the top, the logo is on the left, and the text 'Pre-defined Queries' is centered. To the right, there is a user greeting 'Welcome, AIRNow Tech User!' and links for 'My Account' and 'Sign Out'. A navigation bar below contains links for 'Home', 'Agencies', 'Sites', 'Navigator', 'Data', 'Forecasts', 'Polling', 'Notifier', and 'Resources', with 'Data' highlighted. Below the navigation bar, there are sub-links for 'Pre-defined Queries', 'Hourly Data', 'Data Summaries', and 'AQI History'. The main content area features a 'Select Monitoring Sites' dialog box. This dialog box includes several filter fields: Agency (Select Agency), Parameter (Select Parameter), EPA Region (Select Region), State (Select State), Status (Active), and AQS Code (All). It also has checkboxes for Map Domain, County, and MSA, each with a corresponding 'Select' dropdown. At the bottom of the dialog, there are buttons for 'Retrieve Sites', 'Reset Filters', and 'Reset Sites'. Below these buttons are two empty list boxes labeled 'Filtered Sites' and 'Selected Sites', with navigation arrows between them. At the bottom right of the dialog are 'OK' and 'Cancel' buttons. At the very bottom of the dialog is a 'Site List Name:' field with a 'Save' button. A red circle highlights the 'Site Selector' button in the background, with an arrow pointing to the dialog box.

Performing data queries

Select Monitoring Sites

Agency: Map Domain:

Parameter:

EPA Region:

State:

Status:

AQS Code:

Site List Name:

Performing data queries

Select Monitoring Sites

Agency:

Parameter:

EPA Region:

State:

Status:

AQS Code:

Map Domain:

County:

MSA:

Filtered Sites

Selected Sites

Site List Name:

Performing data queries

Select Monitoring Sites

Agency:

Parameter:

EPA Region:

State:

Status:

AQS Code:

Map Domain:

County:

MSA:

Filtered Sites

050350005 - MARION
050350006 - Clarkdale
050350007 - Earle
050970001 - ODEN
051010002 - DEER
051130003 - EAGLEMT



Selected Sites

Selected Sites list (empty)

Site List Name:

Performing data queries

Select Monitoring Sites

Agency:	AR1 - Arkansas Dept	Map Domain:	<input type="checkbox"/> Select Map
Parameter:	Select Parameter	County:	<input type="checkbox"/> Select County
EPA Region:	Select Region	MSA:	<input type="checkbox"/> Select MSA
State:	Select State		
Status:	Active		
AQS Code:	All		

Retrieve Sites

Reset Filters

Reset Sites

Filtered Sites

Selected Sites

	>>	050350005 - MARION
	>	050350006 - Clarkdale
	<	050350007 - Earle
	<<	050970001 - ODEN
		051010002 - DEER
		051130003 - EAGLEMT

OK

Cancel

Site List Name:

Save

Performing data queries

Select Monitoring Sites

Agency: Map Domain:

Parameter: County:

EPA Region: MSA:

State:

Status:

AQS Code:

Retrieve Sites

Reset Filters

Reset Sites

Filtered Sites

Selected Sites

<input type="text"/>	<input type="button" value=">>"/>	050350005 - MARION	<input type="button" value="↑"/>
	<input type="button" value=">"/>	050350006 - Clarkdale	<input type="button" value="⋮"/>
	<input type="button" value="<"/>	050350007 - Earle	<input type="button" value="↓"/>
	<input type="button" value="<<"/>	050970001 - ODEN	
		051010002 - DEER	
		051130003 - EAGLEMT	

OK

Cancel

Site List Name:

Performing data queries

AIRNOW TECH

Pre-defined Queries

Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

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[Pre-defined Queries](#) | [Hourly Data](#) | [Data Summaries](#) | [AQI History](#)

1) Choose sites:

2) Choose dates:

3) Choose query:

Performing data queries

AIRNOW TECH

Pre-defined Queries Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

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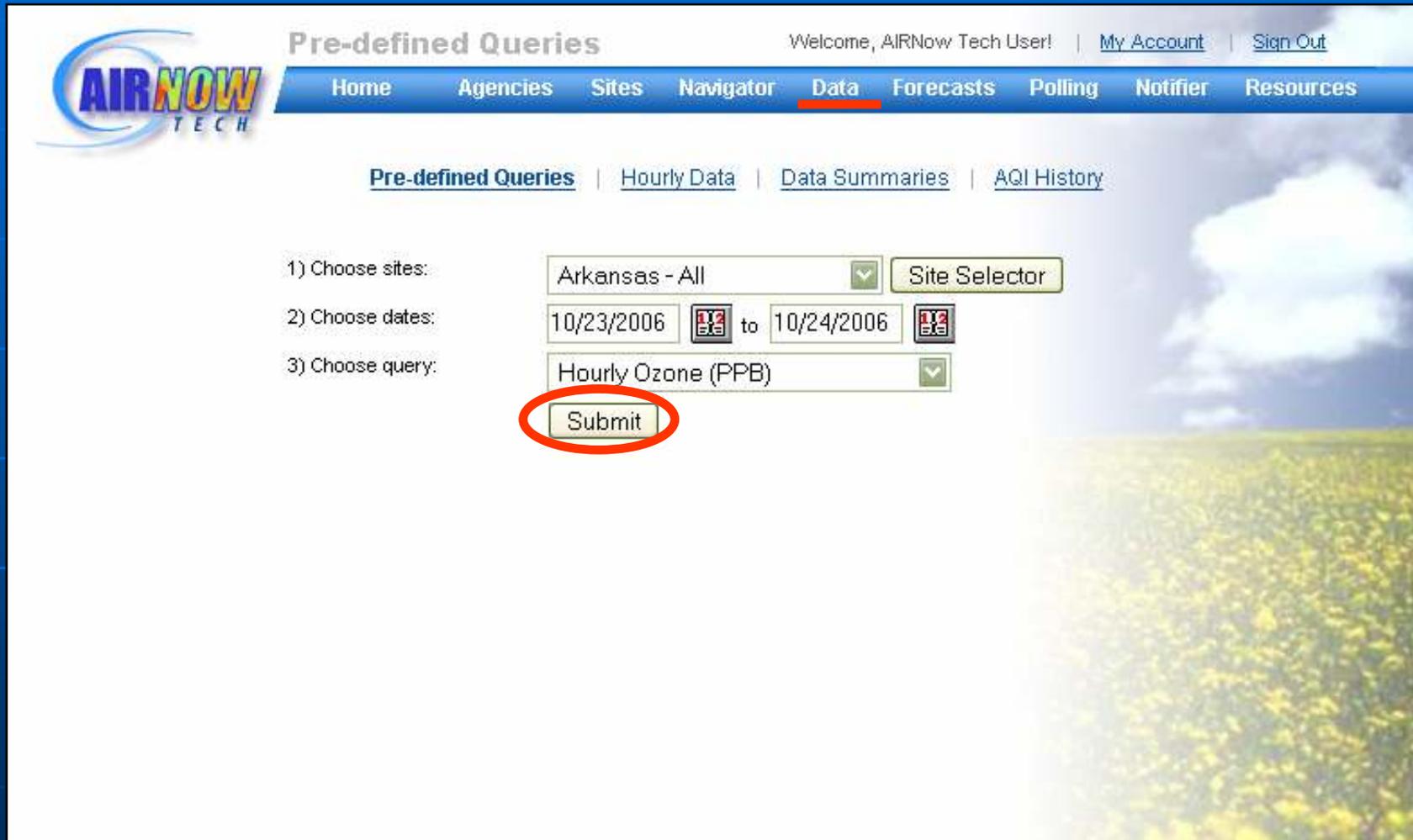
1) Choose sites:

2) Choose dates: to

3) Choose query:

- Choose a query
- Hourly Ozone (PPB)
- Hourly PM2.5 (ug/m3)
- Daily Max 1-hour Ozone (PPB)
- Daily Max 8-hour Ozone (PPB)
- Daily Max 8-hour Ozone (AQI)
- Daily Max 24-hour PM2.5 (ug/m3)
- Daily Max 24-hour PM2.5 (AQI)
- Daily Max 24-hour PM10 (ug/m3)
- Daily Max 24-hour PM10 (AQI)
- Ozone: Days Above 100 AQI
- PM2.5: Days Above 100 AQI

Performing data queries



AIRNOW TECH

Pre-defined Queries

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[Pre-defined Queries](#) | [Hourly Data](#) | [Data Summaries](#) | [AQI History](#)

1) Choose sites:

2) Choose dates: to

3) Choose query:

Performing data queries



Pre-defined Queries

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[Pre-defined Queries](#) | [Hourly Data](#) | [Data Summaries](#) | [AQI History](#)

1) Choose sites: Arkansas - All Site Selector

2) Choose dates: 10/23/2006 to 10/24/2006

3) Choose query: Hourly Ozone (PPB)

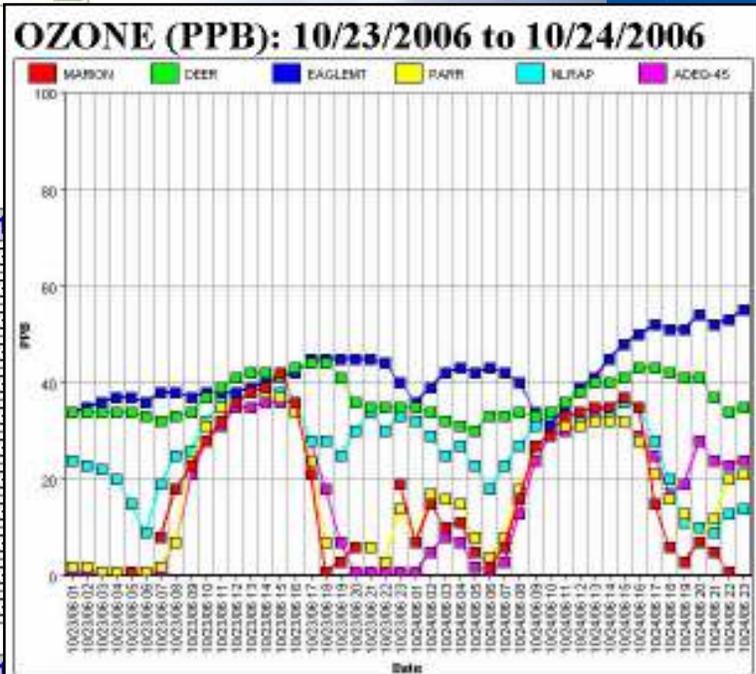
Submit

12 Records Returned - 6/11 sites contain data

Export Results to CSV
Graph (Flash)
Graph (jpg)

Agency	Site Name	AQS Code	Date	Hour (LST)											
				0	1	2	3	4	5	6	7	8	9	10	
AR1	DEER	051010002	10/23/2006	-980	34	34	34	34	34	33	32	33	34	37	
AR1	PARR	051190007	10/23/2006	-980	2	2	1	1	1	1	2	7	24	31	
AR1	NLRAP	051191002	10/23/2006	-980	24	23	22	20	15	9	19	25	26	32	
AR1	MARION	050350005	10/23/2006	-980	0	0	0	0	1	0	8	18	23	28	
AR1	ADEQ-45	051191005	10/23/2006	-980	1	1	1	1	1	1	1	7	21	28	
AR1	EAGLEMT	051130003	10/23/2006	-980	34	35	36	37	37	36	38	38	37	38	
AR1	DEER	051010002	10/24/2006	-980	35	34	32	31	30	33	33	34	33	34	
AR1	PARR	051190007	10/24/2006	-980	7	17	16	15	8	4	8	18	26	30	
AR1	NLRAP	051191002	10/24/2006	-980	32	29	25	27	23	18	23	27	31	33	
AR1	MARION	050350005	10/24/2006	-980	7	15	10	11	5	2	6	16	27	29	
AR1	ADEQ-45	051191005	10/24/2006	-980	1	5	8	7	2	1	3	13	24	29	
AR1	EAGLEMT	051130003	10/24/2006	-980	36	39	42	43	42	43	42	40	34	31	

Hour	0	1	2	3	4	5	6	7	8	9	10
Column Maximum	-999	36	39	42	43	42	43	42	40	37	38



Performing data queries

AIRNOW TECH

Data Queries Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

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[Pre-defined Queries](#) | [Hourly Data](#) | [Data Summaries](#) | [AQI History](#)

1) Choose site(s): Current Selection (11 sites)

2) Choose parameter: OZONE

3) Choose date(s): 10/23/2006 to 10/24/2006

4) Sort by: Site Name Date AQS Code Agency

5) Row summaries: Maximum Average Count

6) Column summaries:

Access to all parameters

Useful for analyzing diurnal trends and daily averages

Sorting and row/column summaries available

Performing data queries

Access to all parameters

Useful for daily maximum values and counts of specific values or AQI categories over a few weeks or months

Sorting and row/column summaries available

AIRNOW TECH Data Summaries

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1) Choose site(s):

2) Choose parameter:

3) Choose date(s): to

4) Choose metric:

Maximum value displayed as: AQI Number AQI Category ppb or $\mu\text{g}/\text{m}^3$

Count of: > = <

Count of AQI: Good Moderate USG Unhealthy Very Unh.

5) Group By: Day Month Period

6) Row summaries: Maximum Average Count

7) Column summaries:

Performing data queries



AQI History

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[Pre-defined Queries](#) | [Hourly Data](#) | [Data Summaries](#) | [AQI History](#)

1) Choose site(s):

2) Choose parameter:

3) Choose date range:

4) Choose metric:

5) Group by:

6) Aggregate by:

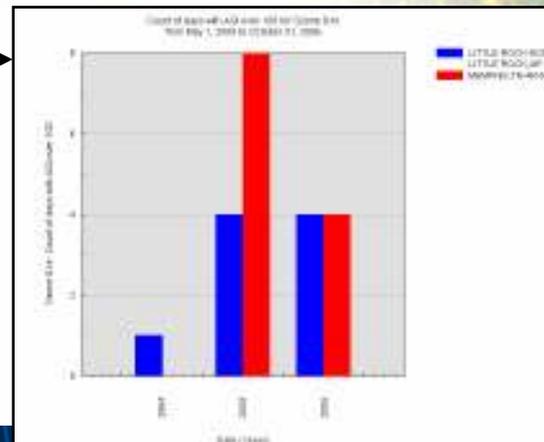
7) Sort by:

Graphs

Count of days with AQI over 100 for Ozone 8-hr
from May 1, 2004 to October 31, 2006

MSA Name	Date	Value	Data Status
LITTLE ROCK-NORTH LITTLE ROCK,AR	2004	1	Final
LITTLE ROCK-NORTH LITTLE ROCK,AR	2005	4	Preliminary
LITTLE ROCK-NORTH LITTLE ROCK,AR	2006	4	Preliminary
MEMPHIS,TN-AR-MS	2005	8	Preliminary
MEMPHIS,TN-AR-MS	2006	4	Preliminary

Fetches 5 records from database in 0 seconds.



Data for 1993 to present

Enhanced data grouping and graphing

Useful for multi-year analysis

Limited to daily maximum 1-hr and 8-hr ozone averages

Site and monitor management

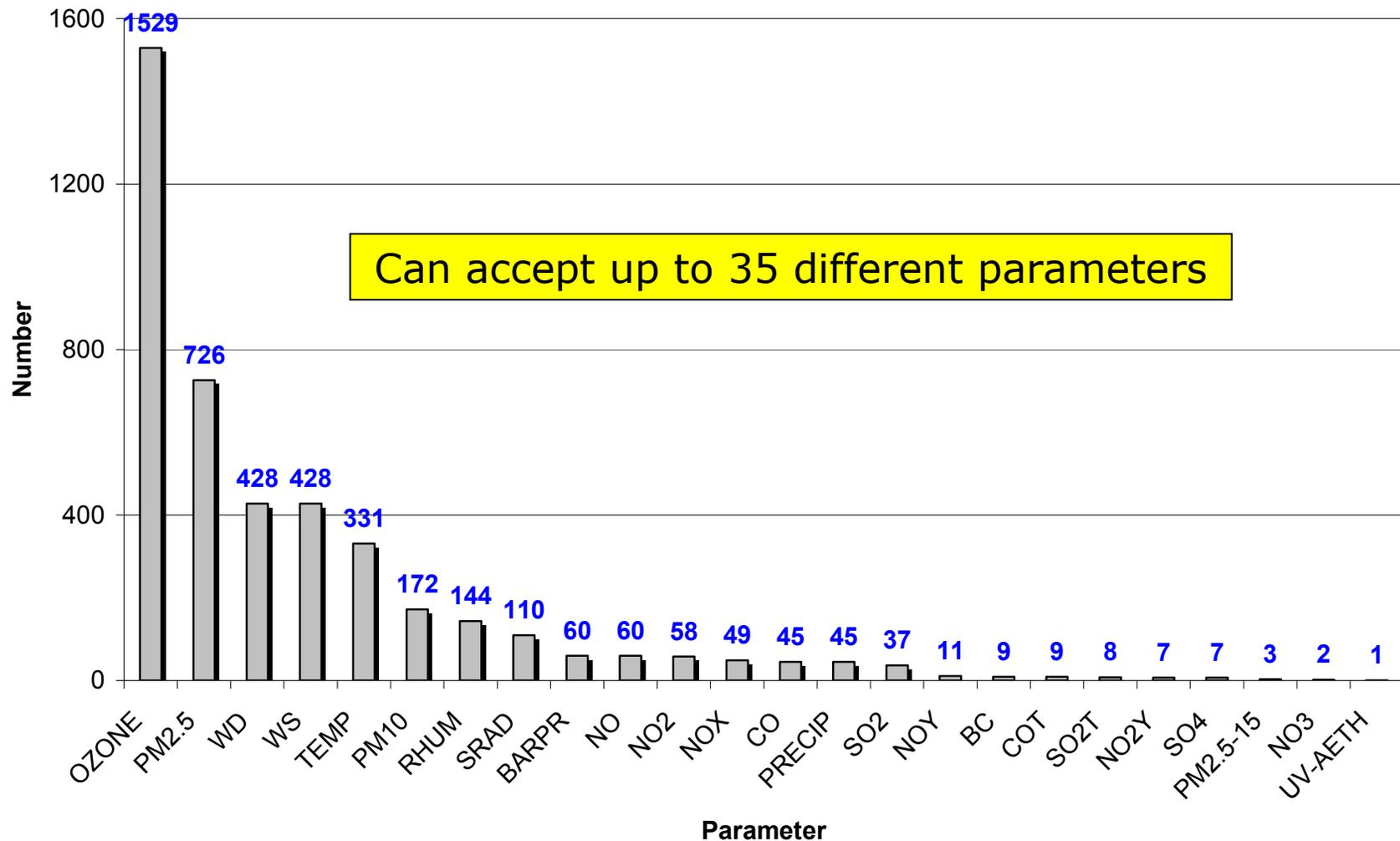
- Data delivered via AIRNow OBS file, specially formatted ASCII text
- Received hourly via ftp process
- Specify both air quality and meteorological parameters

```
1 BEGIN_FILE
2 FORMAT_VERSION,2
3 AGENCY,FL1
4 FILENAME,102316.FL1
5 DATA_VERSION,200610231612
6 TZONE,EST,5
7 BEGIN_GROUP
8 VARIABLE,OZONE
9 DATA_TYPE,POINT
10 MEASUREMENT_TYPE,SAMPLE
11 CHARACTERISTIC,OBSERVED
12 START_DTG,200610220000
13 END_DTG,200610222359
14 INTERVAL,60
15 START_REF,0
16 NUMSTEPS,24
17 AVG_TIME,60
18 UNITS,PPB
19 STATIONS,44
20 BEGIN_DATA
21 WINEGARD ,120950008,27,21,11,8,8,5,3,13,22,28,33,3
22 WINEGARD ,120950008, G, G, G,G,G,G,G, G, G, G, G,
23 WINPK ,120952002,32,28,25,21,13,17,16,15,21,29,
24 WINPK ,120952002, G, G, G, G, G, G, G, G, G, G,
25 JACKSON ,121152002,23,21,18,16,12,11,11,14,25,31,
26 JACKSON ,121152002, G, G, G, G, G, G, G, G, G, G,
27 LANTANA ,120990020,13,15,18,21,21,23,20,16,18,17,
28 LANTANA ,120990020, G, G, G, G, G, G, G, G, G, G,
29 LAURELOA ,120210004,18,16,8,4,3,4,4,7,19,29,31,32,
30 LAURELOA ,120210004, G, G,G,G,G,G,G,G, G, G, G, G,
31 PORTMANA ,120813002,9,9,15,12,9,8,6,8,18,27,37,39,
32 PORTMANA ,120813002,G,G, G, G,G,G,G,G, G, G, G, G,
33 BRAYPARK ,120814012,20,22,20,17,13,14,13,15,23,30,
34 BRAYPARK ,120814012, G, G, G, G, G, G, G, G, G, G,
35 39TH ST ,120814013,23,20,17,14,12,11,10,13,22,28,1
```

Site and monitor management

Number of Parameters Specified Across All Active Monitoring Sites in AIRNow

Date: 10/27/06



Site and monitor management

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[Agencies](#) » [Arkansas Dept. of Environmental Quality](#) » [Sites](#)

[Show All Agencies](#)

Color Legend

Green = Current Yellow = 2 to 6 hrs old

Red = over 6 hrs old Grey = Unknown status

Black = Needs Attention

[Parameter Reference](#)

ID	Agency	Active Sites	Ozone	PM _{2.5}	CO	NO ₂	PM ₁₀	SO ₂	NO	NO _x	NO _y	NO _{2_Y}	NO _{2_T}	NO ₃
AB1	Environment Canada - Alberta	27	Black	Black			Black							
AC1	Alabama-Coushatta Tribe of Texas	1	Yellow											
AIR	AIRSIS	7	Black	Black			Black							
AL1	Alabama Department of Environmental Management	16	Black											
AL2	Jefferson County Department of Health	10	Yellow	Yellow			Green							
AL3	Tennessee Valley Authority RSOE	5	Black	Black										
AL4	Huntsville Natural Resources and Environmental Management	1	Green	Green										
AR	Arkansas Dept. of Environmental Quality	11	Black	Yellow										
AZ1	Arizona Department of Environmental Quality	3	Black	Yellow										
AZ2	Maricopa County Air Quality Department	22	Black	Black			Yellow							
AZ3	Pima County Department of Environmental Quality	10	Green	Green			Green							
BC1	British Columbia Ministry of Water, Land and Air Protection	52	Yellow	Black			Black							
BC2	Greater Vancouver Regional District	7	Green	Green										
CA0	Imperial County Air Pollution Control District	5	Yellow		Yellow	Yellow	Yellow							
CA1	Sacramento Metro. AQMD	11	Black	Green	Black	Black	Black	Green	Black	Black				

[Arkansas Dept. of Environmental Quality](#)

Current agency delivery status is shown with color-coded boxes

Site and monitor management



Site Management

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Color Legend

Green = Current
 Red = Over 6 Hrs Old
 Black = Needs Information
 Yellow = 2 to 6 Hrs Old
 Grey = Unknown Status
 ✓ = Approved for Public

[Parameter Reference](#)

Site #	Site Name	Status	Ozone	PM _{2.5}	CO	NO ₂	PM ₁₀	SO ₂	NO	NO _x	NO _y	NO _{2_Y}	NO _{2_T}	NO ₃	SO ₄	SO _{2_T}	CO _T	EC	OC	BC	UV-AETH	Temp.	WS	WD
051191005	ADEQ-45	Active	✓	✓																				
050350006	Clarkdale	Active	✓																					
051010002	DEER	Active	✓																					
051130003	EAGLEMT	Active	✓																					
050350007	Earle	Active	✓																					
051390006	El Dorado	Active		✓																				
051430004	FAYETTEVILLE	Active		✓																				
050350005	MARION	Active	✓	✓																				
051191002	NLRAP	Active	✓																					
050970001	ODEN	Active	✓																					
051190007	PARR	Active	✓																					

Current parameter delivery status is shown with color-coded boxes

Site and monitor management

AIRNOW TECH Site Management

Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

Home Agencies Sites Navigator Data Forecasts Polling Notifier Resources

Agencies » Site List » Edit Sites

Easily toggle through your agencies sites by utilizing the drop down menu.

AQS Code*: 050350005

Site ID*: n/a

Site Name*: MARION

Agency ID: AR1

State: AR

County: CRITTEN

MSA: MEMPHI

GMT Offset*: 6

Status*: Active

Geo Type: n/a

Elevation: 0 ft. or 0 m.

Latitude*: 35 11 48 or 35.1967

Longitude*: -90 11 28 or -90.1911

Address: n/a

Pollutants Measured:
OZONE
PM2.5

Begin editing information by selecting the "Enable Editing" tab.

Site status can be set to either *Active* or *Inactive*. Data from both *Active* and *Inactive* sites undergo QC and can be queried using AIRNow Tech. However, only data from *Active* sites are used to produce maps and other AQI reporting products.

Enable Editing View QC Criteria

*Required

Site and monitor management



Site Management

Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

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[Agencies](#) » [Site List](#) » Edit Sites

AQS Code*:	<input type="text" value="050350005"/>	Status*:	<input type="text" value="Active"/>
Site ID*:	<input type="text" value="n/a"/>	Geo Type:	<input type="text" value="Select Type"/>
Site Name*:	<input type="text" value="MARION"/>	Elevation:	<input type="text" value="0"/> ft. or <input type="text" value="0"/> m.
Agency ID:	<input type="text" value="AR1"/>	Latitude*:	<input type="text" value="35"/> <input type="text" value="11"/> <input type="text" value="48"/> or <input type="text" value="35.1967"/>
State:	<input type="text" value="AR"/>	Longitude*:	<input type="text" value="-90"/> <input type="text" value="11"/> <input type="text" value="28"/> or <input type="text" value="-90.1911"/>
County:	<input type="text" value="CRITTENDEN"/>	Address:	<input type="text" value="n/a"/>
MSA:	<input type="text" value="MEMPHIS,TN-AR-MS"/>		
GMT Offset*:	<input type="text" value="6"/>		

*Required

[Add New Site](#)

Pollutants Measured:

[OZONE](#)

[PM2.5](#)

Add New Parameter

Site and monitor management

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[Agencies](#) > [Site List](#) > [Edit Sites](#)

AQS Code*: 050350005 Status*: Active
Site ID*: n/a Geo Type: Select Type
Site Name*: MARION Elevation: 0 ft. or 0 m.
Agency ID: AR1
State: AR Latitude*: 35 11 48 or 35.1967
County: CRITTENDEN Longitude*: -90 11 28 or -90.1911
MSA: MEMPHIS, TN-AR-MS Address: n/a
GMT Offset*: 6

[Add New Site](#)

Pollutants Measured:
[OZONE](#)
[PM2.5](#)

Add New Parameter
Select

*Required

Parameter Specification for [MARION](#)

[Site List](#) > [Edit Sites](#) [Back to Site Detail](#)

OZONE

Are data approved for public reporting?

Slope: 0.87168
Intercept: 0.000133

Add and edit information about a parameter measured at the site.



Site and monitor management

Quality Control (QC) criteria are set by hour to help with automated QC processes. Data are flagged as bad or suspect when violating one of these criteria.

Parameter:

OZONE 

Buddy Sites

No buddy sites selected.

Quality Control Criteria

[QC Descriptions](#)

Hour (LST)	Max Suspect	Max Severe	Rate Of Change	# of Buddy Sites	Buddy Average	# of Sticking Hours	Sticking Value	Minimum Drift
0000	110	189	60	3	50	5	40	-5
0100	110	189	60	3	50	5	40	-5
0200	110	189	60	3	50	5	40	-5
0300	100	168	60	3	50	5	40	-5
0400	100	168	60	3	50	5	40	-5
0500	100	168	60	3	50	5	40	-5
0600	100	168	60	3	50	5	40	-5
0700	100	168	60	3	50	5	40	-5
0800	100	168	60	3	50	5	40	-5
0900	100	168	60	3	50	5	40	-5
1000	100	168	60	3	50	5	40	-5
1100	140	210	60	3	50	5	40	-5

Navigator GIS

The screenshot displays the Navigator GIS web application interface. At the top, the AIRNOW TECH logo is on the left, and the word "Navigator" is centered. To the right of "Navigator" is the user greeting "Welcome, Neal Conatser!" followed by links for "My Account" and "Sign Out". A blue navigation bar contains the following menu items: Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources.

Below the navigation bar is a toolbar with icons for zooming in and out, panning, home, full screen, and other map controls. On the left side, there is a "Tools" panel with three tabs: "Tools", "Tool Options", and "Site Info". Under "Tools", there are three expandable folders: "Data Mode" (containing "Site Map" and "Hourly Data"), "Map Size" (containing "Small", "Medium", and "Large"), and "Default Map" (containing "Set as Default Map", "Clear Default Map", and "Go to Default Map").

The main area of the interface is a map of North America, showing a dense network of blue cross markers representing monitoring sites. A scale bar at the bottom left of the map indicates a distance of 923 miles.

On the right side, there is a "Filter Sites" panel with three tabs: "Options", "Layers", and "Legend". The "Options" tab is active, showing several filter criteria, each with a dropdown menu: "Parameter" (set to "All"), "Agency" (set to "All"), "Map Domain" (set to "All"), "Status" (set to "Active"), and "AQS Code" (set to "All"). Below these is a "Site Label" section with a dropdown menu set to "Site Name". At the bottom of the filter panel is a large "Apply Changes" button.

Navigator GIS

The screenshot displays the AIRNOW TECH Navigator GIS interface. At the top, the logo is on the left, and the text "Navigator" is in the center. To the right of "Navigator" are links for "Welcome, Neal Conatser!", "My Account", and "Sign Out". Below this is a navigation menu with items: Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources.

The main interface is divided into several sections:

- Tools:** Includes "Tool Options" and "Site Info" tabs, and a set of navigation icons (search, pan, zoom, etc.).
- Left Panel:** A tree view showing "Data Mode" (with "Site Map" selected), "Map Size" (Small, Medium, Large), and "Default Map" (Set as Default Map, Clear Default Map, Go to Default Map).
- Map:** A map of Nevada showing various air quality monitoring sites marked with triangles and labels: Apex, Joe Neal, Lone Mountain, Craig Road KLSV, KVG T, J. D. Smith, Palo Verde, alter Johnson, Sunrise Acres, Paul Meyer, Orr, East Sahara, od, Green Valley, Southeast Valley, KLAS NEVADA, KHND, Boulder City, and Lake Mead. Major highways 15, 93, and 215 are also shown. A scale bar at the bottom left indicates 0 to 8 miles.
- Right Panel:** Contains "Options", "Layers", and "Legend" tabs. Below them is a "Filter Sites" section with dropdown menus for "Parameter" (All), "Agency" (All), "Map Domain" (All), "Status" (Active), and "AQS Code" (All). Below that is a "Site Label" section with a "Site Name" dropdown. At the bottom right is an "Apply Changes" button.

Three yellow callout boxes with red arrows point to specific features:

- The top box points to the "Site Map" option in the left panel, containing the text "Site locations with optional Site Label".
- The middle box points to the "Sunrise Acres" site on the map, containing the text "Air quality monitoring site".
- The bottom box points to the "KHND" site on the map, containing the text "NWS site".

Navigator GIS

The screenshot displays the AIRNOW TECH Navigator GIS interface. The top navigation bar includes links for Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources. The user is logged in as Neal Conatser. The main map area shows a map of Las Vegas, Nevada, with several monitoring stations marked with green dots and labeled with numbers: 6, 3, 8, 3, 39, 10, and 15. A scale bar indicates 0 to 8 miles. The interface includes a left sidebar with 'Tools', 'Tool Options', and 'Site Info' tabs. The 'Data Mode' section is expanded, showing 'Site Map' and 'Hourly Data' (selected). The 'Map Size' section has 'Medium' selected. The 'Default Map' section has 'Set as Default Map', 'Clear Default Map', and 'Go to Default Map' options. The right sidebar has 'Options', 'Layers', and 'Legend' tabs. The 'Select Data' section shows 'Air Quality Parameter' set to 'PM2.5 (UG/M3)' and 'Meteorology Parameter' set to 'None'. The 'Time Select' section shows the date '7/13/2006' and 'Hour' set to '15' PST. The 'Advance Hour' section has buttons for '-24', '-8', '-1', '+1', '+8', and '+24'. An 'Apply Changes' button is at the bottom right. Two yellow callout boxes with red arrows point to the 'Hourly Data' option and the 'PM2.5 (UG/M3)' parameter.

Monitor data with labels

Selected PM2.5 hourly data

Select Data

Air Quality Parameter: PM2.5 (UG/M3)

Meteorology Parameter: None

Time Select

Date: 7/13/2006

Hour: 15 PST

Advance Hour

-24 -8 -1 +1 +8 +24

Apply Changes

Navigator GIS

The screenshot displays the AIRNOW TECH Navigator GIS interface. At the top, the logo is on the left, and the text "Navigator" is in the center. To the right of "Navigator" is the user greeting "Welcome, Neal Conatser!" and links for "My Account" and "Sign Out". Below this is a navigation menu with items: Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources.

The main interface is divided into several sections:

- Tools:** Includes "Tool Options" and "Site Info" tabs, and a toolbar with icons for zooming, panning, and other map functions.
- Left Panel:** A tree view showing "Data Mode" (Site Map, Hourly Data), "Map Size" (Small, Medium, Large), and "Default Map" (Set as Default Map, Clear Default Map, Go to Default Map).
- Map:** A map of Las Vegas, Nevada, showing major roads (Interstates 93 and 215), and locations like Henderson and Boulder City. A scale bar indicates 0 to 8 miles.
- Right Panel:** A "Select Data" panel with tabs for "Options", "Layers", and "Legend". It contains two dropdown menus: "Air Quality Parameter" (set to PM2.5 (UG/M3)) and "Meteorology Parameter" (with a dropdown menu open showing options like WIND (BARBS), TEMP (C), RHUM (PERCENT), etc.). An "Apply Changes" button is at the bottom.

A yellow callout box with a black border is overlaid on the map, containing the text: "View up to seven meteorological parameters from both NWS and air quality agencies". A red arrow points from the right side of this box to the "WIND (BARBS)" option in the "Meteorology Parameter" dropdown menu.

Navigator GIS

The screenshot displays the AIRNOW TECH Navigator GIS interface. The main map shows the Las Vegas, Nevada area with several monitoring sites marked by green dots and labeled with numbers: 6, 3, 8, 39, 10, and Henderson. Wind barbs are overlaid on the map, indicating wind direction and speed. A yellow box with a red arrow points to one of the wind barbs, labeled "Wind barbs".

Navigator | Welcome, Neal Conatser! | [My Account](#) | [Sign Out](#)

Home | Agencies | Sites | Navigator | Data | Forecasts | Polling | Notifier | Resources

Tools | Tool Options | Site Info

- Data Mode
 - Site Map
 - Hourly Data
- Map Size
 - Small
 - Medium
 - Large
- Default Map
 - Set as Default Map
 - Clear Default Map
 - Go to Default Map

Select Data

Air Quality Parameter: PM2.5 (UG/M3)

Meteorology Parameter: WIND (BARBS)

Time Select

Date: 7/13/2006 |

Hour: 15 | PST

Advance Hour

Navigator GIS

The screenshot displays the Navigator GIS web application interface. At the top, the AIRNOW TECH logo is on the left, and the word "Navigator" is in the center. A navigation menu includes Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources. A user greeting "Welcome, Neal Conatser!" and links for "My Account" and "Sign Out" are on the right.

The main interface is divided into several sections:

- Tools:** Includes icons for zooming, panning, and other map navigation functions.
- Trajectory Parameters:** A panel on the left with the following settings:
 - Hours:** A dropdown menu set to "24hr Forward".
 - Heights (m agl):** Three input fields, with the first set to "500".
 - Label:** Radio buttons for "Hour", "Height (m agl)", "Pressure (mb)", and "None".
 - Source:** Text indicating "NOAA HYSPLIT model", "NAMNDAS models (40km)", and "Most Recent: 13 Jul 2006 12Z".
- Map:** A central map showing a red trajectory line starting from the southwest and moving northeast through Las Vegas, Henderson, and Boulder City. A yellow box with the text "Input trajectory parameters" has red arrows pointing to the "Hours" and "Heights" fields. Another yellow box with the text "Run backward and forward HYSPLIT trajectories" has a red arrow pointing to the "Run" button in the Tools section.
- Select Data:** A panel on the right with the following settings:
 - Air Quality Parameter:** A dropdown menu set to "PM2.5 (UG/M3)".
 - Meteorology Parameter:** A dropdown menu set to "WIND (BARBS)".
 - Time Select:** A date field set to "7/13/2006" and an hour field set to "15" with "PST" selected.
 - Advance Hour:** A row of buttons for time offsets: "-24", "-8", "-1", "+1", "+8", "+24".
- Apply Changes:** A button at the bottom right of the Select Data panel.

Navigator GIS

The screenshot displays the Navigator GIS web application interface. At the top, the AIRNOW TECH logo is on the left, and the word "Navigator" is in the center. To the right of "Navigator" is the user greeting "Welcome, Neal Conatser!" and links for "My Account" and "Sign Out". Below this is a navigation menu with items: Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources.

The main interface is divided into several sections:

- Tools:** A row of icons for map navigation (zoom in, zoom out, pan, home, etc.).
- Trajectory Parameters:** A panel on the left containing:
 - Hours:** A dropdown menu set to "12hr Backward".
 - Heights (m agl):** Three input fields, with the first containing "500".
 - Label:** A section with the text "(Only appears when map scale is less than 22 mi)" and four radio button options: "Hour" (selected), "Height (m agl)", "Pressure (mb)", and "None". A red arrow points from this section to a yellow callout box.
 - Source:** Text indicating the data source: "NOAA HYSPLIT model", "NAMNDAS models (40km)", "Most Recent: 13 Jul 2006 12Z", and "Model vertical velocity".
- Map:** A central map showing a trajectory (red line) over the Las Vegas area. The trajectory starts at "7/13 21Z" and moves towards "7/13 22Z" and "7/13 23Z". Various locations like Las Vegas, Henderson, and Boulder City are labeled. A scale bar at the bottom left shows "0" to "8mi".
- Select Data:** A panel on the right with tabs for "Options", "Layers", and "Legend". It contains:
 - Air Quality Parameter:** A dropdown menu set to "PM2.5 (UG/M3)".
 - Meteorology Parameter:** A dropdown menu set to "WIND (BARBS)".
 - Time Select:** A date field set to "7/13/2006" and a time field set to "15" PST.
 - Advance Hour:** A row of buttons: "-24", "-8", "-1", "+1", "+8", "+24".
- Apply Changes:** A button at the bottom right of the interface.

A yellow callout box with the text "Backwards trajectory with optional labels" is positioned over the map, with a red arrow pointing to the "Height (m agl)" radio button in the "Label" section of the "Trajectory Parameters" panel.

Navigator GIS

The screenshot displays the Navigator GIS web application interface. At the top, the AIRNOW TECH logo is on the left, and the word "Navigator" is in the center. To the right of "Navigator" are links for "Welcome, Neal Conatser!", "My Account", and "Sign Out". Below this is a navigation menu with items: Home, Agencies, Sites, Navigator, Data, Forecasts, Polling, Notifier, and Resources.

The main interface is divided into several sections:

- Tools:** Includes icons for search, zoom, pan, and other map navigation functions.
- Trajectory Parameters:**
 - Hours:** A dropdown menu set to "12hr Backward".
 - Heights (m agl):** Three input fields, with the first containing "500".
 - Label:** Radio buttons for "Hour" (selected), "Height (m agl)", "Pressure (mb)", and "None".
 - Source:** Text indicating "NOAA HYSPLIT model", "NAMNDAS models (40km)", "Most Recent: 13 Jul 2006 12Z", and "Model vertical velocity".
- Map:** A map of the Las Vegas area showing a red trajectory line with numbered points (1, 3, 5, 21, 4) and a black trajectory line with points labeled "7/13 22Z" and "7/13 21Z". A scale bar at the bottom left indicates "0 8mi".
- Options:** Includes "Layers" and "Legend" tabs.
- Select Data:**
 - Air Quality Parameter:** A dropdown menu set to "PM2.5 (UG/M3)".
 - Meteorology Parameter:** A dropdown menu set to "WIND (BARBS)".
- Time Select:**
 - Date:** A date picker set to "7/13/2006".
 - Hour:** A dropdown menu set to "14" with "PST" next to it.
- Advance Hour:** A row of buttons: "-24", "-8", "-1", "+1", "+8", "+24". A red arrow points to the "-1" button.
- Apply Changes:** A button at the bottom right.

Go to a previous hour or day

The location of the trajectory parcel moves with every hour of time

Navigator GIS

Navigator Welcome, Neal Conatser! | [My Account](#) | [Sign Out](#)

Home Agencies Sites Navigator Data Forecasts Polling Notifier Resources

Tools Tool Options Site Info

Trajectory Parameters

Hours: 12hr Backward

Heights (m agl)

- 500
-
-

Label (Only appears when map scale is less than 22 mi)

- Hour
- Height (m agl)
- Pressure (mb)
- None

Source: NOAA HYSPLIT model
NAMNDAS models (40km)
Most Recent: 26 Oct 2006 00Z
Model vertical velocity

0 101mi BAJA CALIFORNIA NORTE SONORA

Options Layers Legend

Select Data

Air Quality Parameter: PM2.5 (UG/M3)

Meteorology Parameter: WIND (BARBS)

Time Select

Date: 7/13/2006

Hour: 14 PST

Advance Hour

-24 -8 -1 +1 +8 +24

Apply Changes

Use the magnifying glass zoom out tool to view a larger scale regional map

Navigator GIS

AIRNOW TECH Navigator

Welcome, Neal Conatser! | [My Account](#) | [Sign Out](#)

Home Agencies Sites Navigator Data Forecasts Polling Notifier Resources

Tools Tool Options Site Info

Trajectory Parameters

Hours: 24hr Forward

Heights (m agl):
1. 10
2.
3.

Label (Only appears when map scale is less than 22 mi)
 Hour
 Height (m agl)
 Pressure (mb)
 None

Source:
[NOAA HYSPLIT model](#)
NAMNDAS models (40km)
Most Recent: 13 Jul 2006 12Z
Model vertical velocity

Select Data

Air Quality Parameter: PM10 (UG/M3)
Meteorology Parameter: WIND (BARBS)

Time Select

Date: 7/11/2006
Hour: 9 PST

Advance Hour

-24 -8 -1 +1 +8 +24

Hazard Mapping System (HMS) smoke plumes with forward HYSPLIT trajectories

Apply Changes

My Account

Home | Welcome, AIRNow Tech User | [My Account](#) | [Sign Out](#)

[Home](#) | [Agencies](#) | [Sites](#) | [Navigator](#) | [Data](#) | [Forecasts](#) | [Polling](#) | [Notifier](#) | [Resources](#)

News and Events

2007 National Air Quality Conference - Call for Speakers and Posters

The 2007 National Air Quality Conference, sponsored by the EPA, the State and Territorial Air Pollution Program Administrators, and the Association of Local Air Pollution Control Officials (STAAPP/ALAPCO), will be held February 11-14 in Orlando, Florida. Please visit the following website for more information on how you can be a part of the conference!

Link: <http://www.epa.gov/oaqps/2007conference/call-speakers-2.html>

Posted October 4, 2006, 10:37 (PT)

Did you know? Tip 2

How can I tell if a monitor is reporting suspect data?

When an observation (OBS) file is received from an agency, each hourly measurement is compared against a set of QC criteria. These criteria help identify potentially erroneous measurements.

Measurements violating one or more QC criteria are reviewed by an AIRNow operator, after which data is either validated or invalidated. Invalidated data are marked as error in the AIRNow database and are assigned a value of -9. Measurements are neither used to calculate the AQI nor to produce AIRNow maps or related information. In a message is prevented from viewing what would otherwise be an indication of real-time air quality.

How can you tell if a monitor has reported data via email?

Sign up for and view the "Agency Daily" email. You can do this by visiting the My Account page in AIRNow-Tech. Go to the My Account page at [airnowtech.com](#) and click on the "My Account" link in the top right corner.

Posted October 18, 2006, 12:25 (PT)

My Agency's Forecasts

Issue Date: 10/20/2006

City	Today	Tomorrow	Action Day
Atlanta	PM2.5	PM2.5	

My Agency's Realtime Observed

	Ozone	PM _{2.5}	PM ₁₀
Yesterday	36	86	47
Max Today	30	74	45
Current	30	21	45

My Agency's Polling Summary

Agency	Ozone	PM _{2.5}	PM ₁₀
GA1	10/20 16:00	10/20 16:00	10/20 15:00

Polling Summary

Color Legend

Green = Current Yellow = 2 to 5 hrs old

Agency	Ozone	PM _{2.5}	PM ₁₀
AZ1	10/20 16:00	10/20 16:00	10/20 16:00
AZ2	10/20 16:00	10/20 16:00	10/20 16:00

Home Page Preferences

- My Agency's Forecasts
- My Agency's Realtime Observed
- My Agency's Polling Summary

My Account | Welcome, AIRNow Tech User | [My Account](#) | [Sign Out](#)

[Home](#) | [Agencies](#) | [Sites](#) | [Navigator](#) | [Data](#) | [Forecasts](#) | [Polling](#) | [Notifier](#) | [Resources](#)

Agencies > [Arkansas Dept. of Environmental Quality](#) > AIRNow Tech User

Arkansas Dept. of Environmental Quality

First Name: AIRNow Tech | Phone: 000-000-0000 | Fax: n/a

Last Name: User | Address 1: n/a

Email Address: airnowtech.user@gmail.com | Address 2: n/a

Login: Your Username | City: n/a

Password: ***** | State: n/a | Zip: n/a

Verify Password: ***** | Country: USA

Contacts: Agency Forecast

Notifications: Agency Daily Forecast Daily Agency Hourly

Home Page Preferences

My Agency's Forecasts

My Agency's Realtime Observed

My Agency's Polling Summary

Site List Management

Total: 11 sites

Email Report Management

Report:

Site List:

Query:

Interval:

My Account

AIRNOW TECH My Account Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

[Home](#) [Agencies](#) [Sites](#) [Navigator](#) [Data](#) [Forecasts](#) [Polling](#) [Notifier](#) [Resources](#)

[Agencies](#) > [Arkansas Dept. of Environmental Quality](#) > AIRNow Tech User

Arkansas Dept. of Environmental Quality

First Name:	<input type="text" value="AIRNow Tech"/>	Phone:	<input type="text" value="000-000-0000"/>	Fax:	<input type="text" value="n/a"/>
Last Name:	<input type="text" value="User"/>	Address 1:	<input type="text" value="n/a"/>		
E-mail Address:	<input type="text" value="airnowtech.user@gmail.com"/>	Address 2:	<input type="text" value="n/a"/>		
Login:	<input type="text" value="Your Username"/>	City:	<input type="text" value="n/a"/>		
Password:	<input type="password" value="*****"/>	State:	<input type="text" value="n/a"/>	Zip:	<input type="text" value="n/a"/>
Verify Password:	<input type="password" value="*****"/>	Country:	<input type="text"/>		

DMC e-mails on/off

Contacts: Agency Forecast

Notifications: Agency Daily: Forecast Daily:
Agency Hourly:

Home Page Preferences

- My Agency's Forecasts
- My Agency's Realtime C
- My Agency's Polling Sur

Site List Management

Arkansas - All

- 050350005 - MARION
- 050350006 - Clarkdale
- 050350007 - Earle
- 050970001 - ODEN
- 051010002 - DEER
- 051130003 - EAGLEMT
- 051190007 - PARR
- 051191002 - NLRAP
- 051191005 - ADEQ-45
- 051390006 - El Dorado
- 051430004 - FAYETTEVILLE

Total: 11 sites

Email Report Management

Report Name:

Site List:

Query:

Time Interval:

My Account



My Account

Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

[Home](#) | [Agencies](#) | [Sites](#) | [Navigator](#) | [Data](#) | [Forecasts](#) | [Polling](#) | [Notifier](#) | [Resources](#)

[Agencies](#) > [Arkansas Dept. of Environmental Quality](#) > AIRNow Tech User

Arkansas Dept. of Environmental Quality

First Name: AIRNow Tech Phone: 800-000-0000 Fax: n/a
Last Name: User Address: n/a
E-mail Address: airnowtech.user@gmail.com
Login: Your Username
Password: *****
Verify Password: *****

Home Page Preferences

My
 My
 My

Site List Management

Arkansas - All

050350005 - MARION
050350006 - Clarkdale
050350007 - Earle
050970001 - ODEN
051010002 - DEER
051130003 - EAGLEMT
051190007 - PARR
051191002 - NLRAP
051191005 - ADEQ-45
051390006 - El Dorado
051430004 - FAYETTEVILLE

Total: 11 sites

My Account

AIRNOW TECH My Account Welcome, AIRNow Tech User! | [My Account](#) | [Sign Out](#)

[Home](#) [Agencies](#) [Sites](#) [Navigator](#) [Data](#) [Forecasts](#) [Polling](#) [Notifier](#) [Resources](#)

[Agencies](#) > [Arkansas Dept. of Environmental Quality](#) > AIRNow Tech User

Arkansas Dept. of Environmental Quality

First Name: AIRNow Tech Phone: 000-000-0000 Fax: n/a
Last Name: User Address 1: n/a
E-mail Address: airnowtech.user@gmail.com Address 2: n/a
Login: Your Username City: n/a
Password: ***** State: n/a Zip: n/a
Verify Password: ***** Country: USA

Agency Forecast
Agency Daily: Forecast Daily:
Agency Hourly:

Email Report Management

Report Name: Weely Ozone Exceedances
Site List: Michigan Ozone
Query: Ozone: Days Above 100 AQI
Time Interval: Weekly

Select a Report
Select a Sitelist
Choose a query
Time Interval: Select an interval

050970001 - ODEN
051010002 - DEER
051190003 - EAGLEMT
051190007 - PARR
051191002 - NLRAP
051191005 - ADEQ-45
051390006 - El Dorado
051430004 - FAYETTEVILLE

Total: 11 sites

Resources

- View the AIRNow-Tech Resources page:
 - Tutorial videos
 - Manuals / Instructions
 - Data formats and processing
 - Links and other useful information



Request an Account - Contacts

www.airnowtech.org

The screenshot shows the AIRNOW TECH website interface. At the top, there is a navigation menu with links for Home, Agencies, Sites, Navigator, and Data. The main content area features a login section with fields for Username and Password, a Log In button, and a link for 'Forgot your password'. A red circle highlights the link 'Request an AIRNow-Tech Account', and a black arrow points from this link to a detailed account request form on the right. The form is titled 'Request an AIRNow-Tech Account' and includes the following fields: First Name*, Last Name*, Login Name*, E-mail Address*, Phone*, Comment, Agency* (with a dropdown menu showing '(Select Agency)'), and a 'Send Request' button. A legend at the bottom of the form indicates that '*' denotes required fields.

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909.541.4814

Alan Chan, Neal Conatser, Tim Dye

airnowdmc@sonomatech.com

707.665.9900