

AQMIS

Air Quality and Meteorological Information
System

Interagency Air and Smoke Council Meeting

November 9, 2004

AQMIS

Outline

- *What is AQMIS?*
- *Current Status*
- *What's Next?*
- *Summary*

What is AQMIS?

A web-based data system containing real-time and historical air quality and met data, with many uses:

- *Provide Public Information*
- *Track Progress*
- *Serve Smoke Management Program*
- *Support Air Quality Analyses and Modeling Efforts*
- *Support Emergency Response Model*

System Overview

- Three servers
 - *database, application, web*
 - *dedicated modem polling box*
- Linux platform
 - *PHP, Ocaml, Python*
- PostgreSQL database
- Goal: all open source and easy to maintain

Current Status

Who Are the Data Providers?

Data available for 166 AQ sites & >800 Met. Sites

- *Air Resources Board*
- *Bay Area AQMD*
- *Buoys and Coastal Reports*
- *Mesonet*
- *Mojave Desert AQMD*
- *Monterey Bay Unified APCD*
- *National Park Service*
- *Sacramento Metro AQMD*
- *San Diego APCD*
- *San Joaquin Valley APCD*
- *San Luis Obispo APCD*
- *Santa Barbara County AQMD*
- *South Coast AQMD*
- *Ventura County APCD*

AQMIS Air Quality sites



Current Status (*continued*)

What Types of Data Are Available?

Air Quality

- *Ozone*
- *PM₁₀ & PM_{2.5}*
- *NO, NO₂, & NO_x*
- *CO*
- *CH₄, NMHC & THC*
- *SO₂ & H₂S*

Ground Level Meteorology

- *Wind Speed & Direction*
- *Temperature*
- *Relative Humidity*
- *Dewpoint*
- *Precipitation*
- *Barometric Pressure*
- *UV and Solar Radiation*

Current Status *(continued)*

Value-added Quality Assurance

- *Apply quality flags indicated by data suppliers*
- *Statistical routines to screen incoming data for spurious values*
- *Routines are trained on 3 years of historical data and are site specific*
- *Plan to make further refinements and extend to other pollutants and met parameters (currently ozone only)*

Current Status *(continued)*

Ozone Alert Notification

- *Watch for Critical Ozone Values*
- *Confirm Values with Data Providers*
- *Notify Interested Parties*
- *Purpose: Federal and state implementation plans*

What's Next

- Work in Progress
 - *Dynamic Graphing*
 - *Enhanced QA Routines*
 - *More Data Streams*
 - *Open Source Software*
- Integration with other systems
 - *historical data, fire reporting system, community health*
- Trajectory Model
- Other enhancements on continuous basis

Summary

AQMIS Provides:

- *Current data*
- *Ease of use*
- *Many Levels of Detail*
- *Tables and Graphs*
- *Future Enhancements Underway (Maps)*

For More Information

AQMIS Web Address:

<http://www.arb.ca.gov/airqualitytoday>

Questions about AQMIS:

Contact Mena Shah (916) 324-7165

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**Yesterday's
Ozone Air Quality**

**Current Year's
Ozone Air Quality**

Real-Time Query Tool

Map Pages



This shows information on ozone exceedances for yesterday and for the year so far, for selected areas within the state.

This shows information on ozone exceedances for the last three years and includes exceedances so far in the current year, for selected areas within the state. The results can be viewed at site level if desired.

This query tool allows you, the user, to select real-time air quality or meteorological data, a time frame, an area of the state, and the type of report. Results can be clicked through for more detail.

Map Pages are currently not functional with the new database.

[About AQMS](#)



Ozone Summary (Preliminary Data)

Ozone Air Quality for the Day of 2004-11-07

Based on preliminary and possible incomplete data, subject to change.

Region	Days Exceeding the Standard			Maximum Concentration (ppm)	
	State 1-hr	National 1-hr	National 8-hr	1-hour	8-hour
Sacramento Metropolitan Area*				0.05	0.04
San Diego Air Basin	N/A	N/A	N/A		
San Francisco Bay Area Air Basin				0.04	0.04
San Joaquin Valley Air Basin				0.05	0.05
South Coast Air Basin				0.06	0.05
Ventura County				0.04	0.03
San Luis Obispo County				0.05	0.04
Santa Barbara County				0.05	0.05
Mojave Desert Air Basin				0.05	0.04
North Central Coast Air Basin				0.05	0.04



Annual Ozone Summaries for Selected Regions

Year 2004 data are only through 11/07/2004

[Year-to-Date data for all years](#)

Region	Year	Exceedance Days**			Maximum Concentration (ppm)		National Design Value (ppm)	
		State	National		1-hour	8-hour	1-hour	8-hour
		1-hr	1-hr	8-hr	1-hour	8-hour	1-hour	8-hour
Sacramento Metropolitan Area***	2001	52	3	41	0.15	0.11	0.133	0.104
	2002	59	10	47	0.16	0.14	0.143	0.106
	2003	53	6	43	0.15	0.12	0.143	0.107
	2004*	27	0	20	0.12	0.1	NA	NA
San Diego Air Basin	2001	29	2	17	0.14	0.12	0.118	0.094
	2002	15	0	13	0.12	0.10	0.118	0.095
	2003	23	1	6	0.13	0.10	0.118	0.093
	2004*	8	0	6	0.11	0.09	NA	NA
San Francisco Bay Area Air Basin	2001	15	1	7	0.13	0.10	0.137	0.082
	2002	16	2	7	0.16	0.11	0.126	0.082
	2003	19	1	7	0.13	0.10	0.123	0.086
	2004*	7	0	0	0.11	0.08	NA	NA



Real-Time Query Tool

Step 1: Select a Pollutant
Ozone (ppb)

Step 2: Select an End Date and Time
Date: 2004 November 8 Time: Mid-Day

Step 3: Select One
--COUNTY-- --AIR BASIN-- --PART OF STATE--

Step 4: Select a Type of Report
Daily Max

Step 5: Select the Sort Order
Basin/County/Site

RETRIEVE DATA

[Annual Ozone Summary](#) | [Air Quality Information Page \(AQMIS2\)](#)

[Air Quality Index \(AQI\)](#) | [Year-to-Date Ozone Report](#)

**Sacramento Valley Air Basin
Daily PM2.5 (BAM) - Maximum 1 Hour Average Data
Seven Day Display Ending 11/08/2004
Micrograms Per Cubic Meter (ug/m3)**

Bas/Cnty	Site Name	7 Day Max	11/02/2004	11/03/2004	11/04/2004	11/05/2004	11/06/2004	11/07/2004	11/08/2004	GraphIt
SV BUT	Chico-Manzanita Avenue	106	73	32	58	92	95	106	103 *	<input type="checkbox"/>
SV BUT	Gridley-Cowee Avenue	993	22	993	15	24	28	33	41 *	<input type="checkbox"/>
SV COL	Colusa-Sunrise Blvd	917	175 *	183	149	917	914	914	914 *	<input type="checkbox"/>
SV GLE	Willows-E Laurel Street	62	46	45	24	25	30	62	52 *	<input type="checkbox"/>
SV PLA	Roseville-N Sunrise Blvd	996	30	30	996	25	42	83	43 *	<input type="checkbox"/>
SV SAC	Elk Grove-Bruceville Road	1000	42	56	13	27			1000 *	<input type="checkbox"/>
SV SAC	Folsom-Natoma Street	42	39	32	1	23			42 *	<input type="checkbox"/>
SV SAC	Sacramento-Del Paso Manor	66	57	33	9	66			40 *	<input type="checkbox"/>
SV SAC	Sacramento-T Street	45	45 *							<input type="checkbox"/>
SV SUT	Yuba City-Almond Street	995	35	914	995	34	36	67	73 *	<input type="checkbox"/>
SV YOL	Davis-UCD Campus	996	996	996	996	996	27	43	45 *	<input type="checkbox"/>

[View Hourly Data for this Area](#)

Download Data: [Quick](#) or [Select Format](#)

extracted on November 8, 2004 at 03:36:58

- Asterisk * Indicates 25% or more hourly values are missing.
- Red text identifies highest value observed in selected time period.
- Blank values indicate data not available.
- Click on name of monitoring site to see more data for the site.
- Click on daily value to see hourly data for the day.
- Check up to 4 boxes and click "GraphIt" button to see a graph.

Change Selection

2004 November 8
 PM2.5 (BAM)
 Daily Max*
 Sort: Basin/County/Site



Data are preliminary

