

Role of AIRNow during Air Emergency Response

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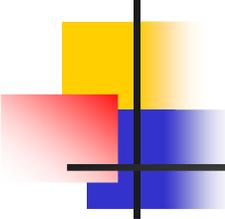


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Environmental Protection Agency
Research Triangle Park, NC



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California Air Response Planning Alliance Summit
Sacramento, CA
October 15, 2008



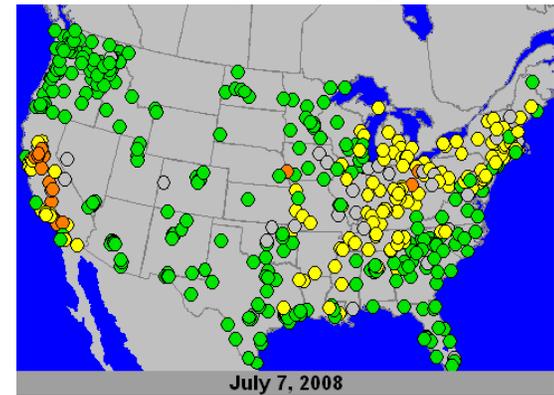
Outline

- Overview of AIRNow
 - AIRNow Community
 - Data Flow
 - AIRNow Tools
- Use of AIRNow during wildfires
- Contact and Resources

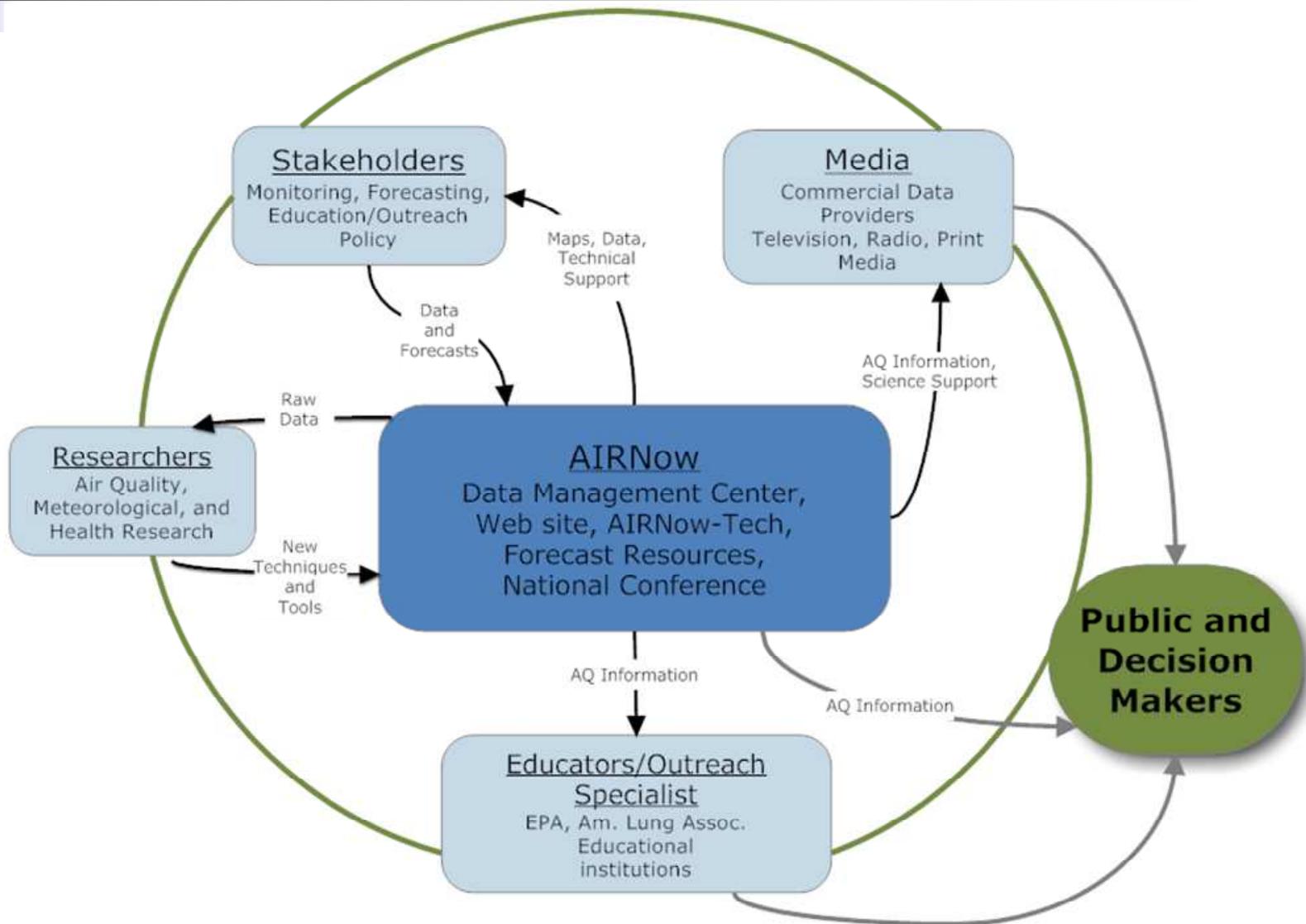
Overview of AIRNow

AIRNow provides a common framework for acquiring and distributing air quality information

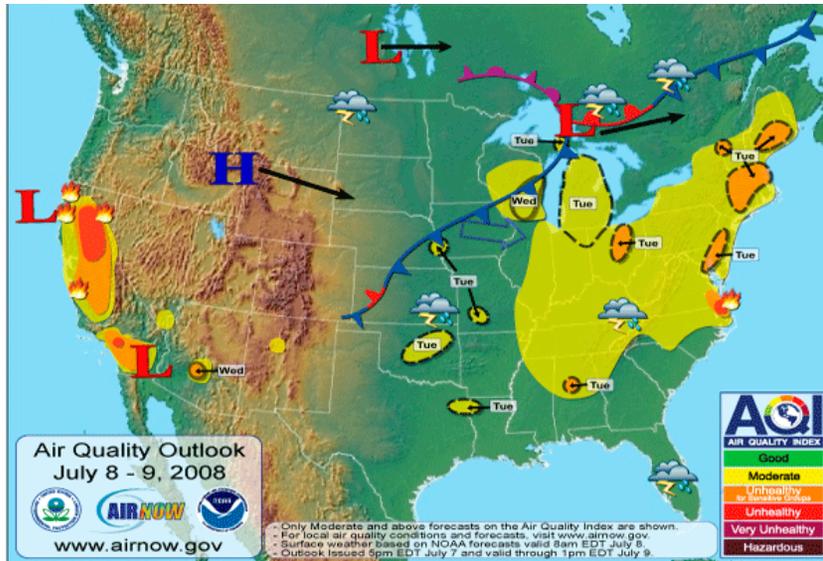
- Foster community effort among Federal, State, Local and Tribal air quality agencies (120+)
- Collect, quality assure, and transfer real-time and forecasted air quality information to the public
- Communicate air quality via the Air Quality Index (AQI)
- Issue weather/air quality news stories
- Partner with national media
- Provide air quality education and outreach



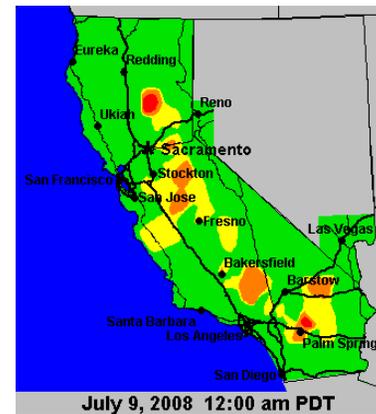
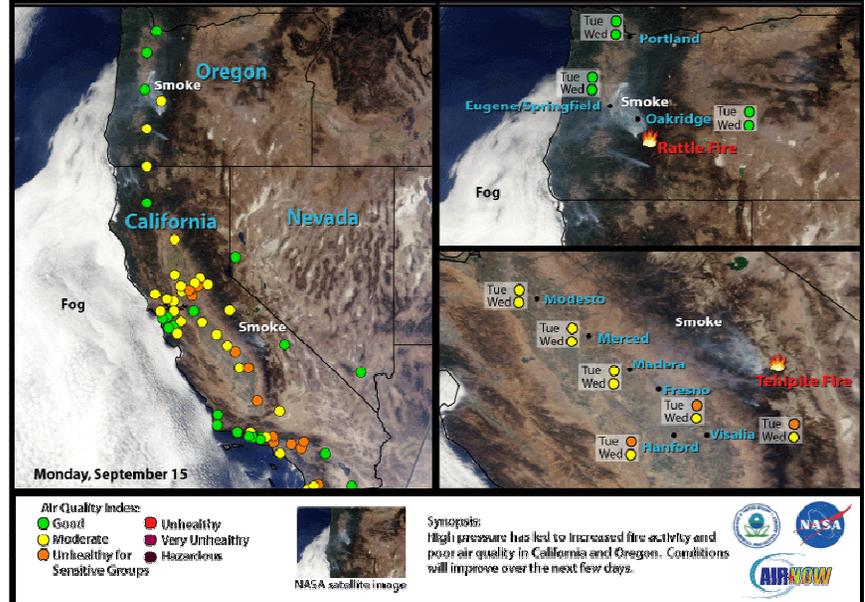
AIRNow Community



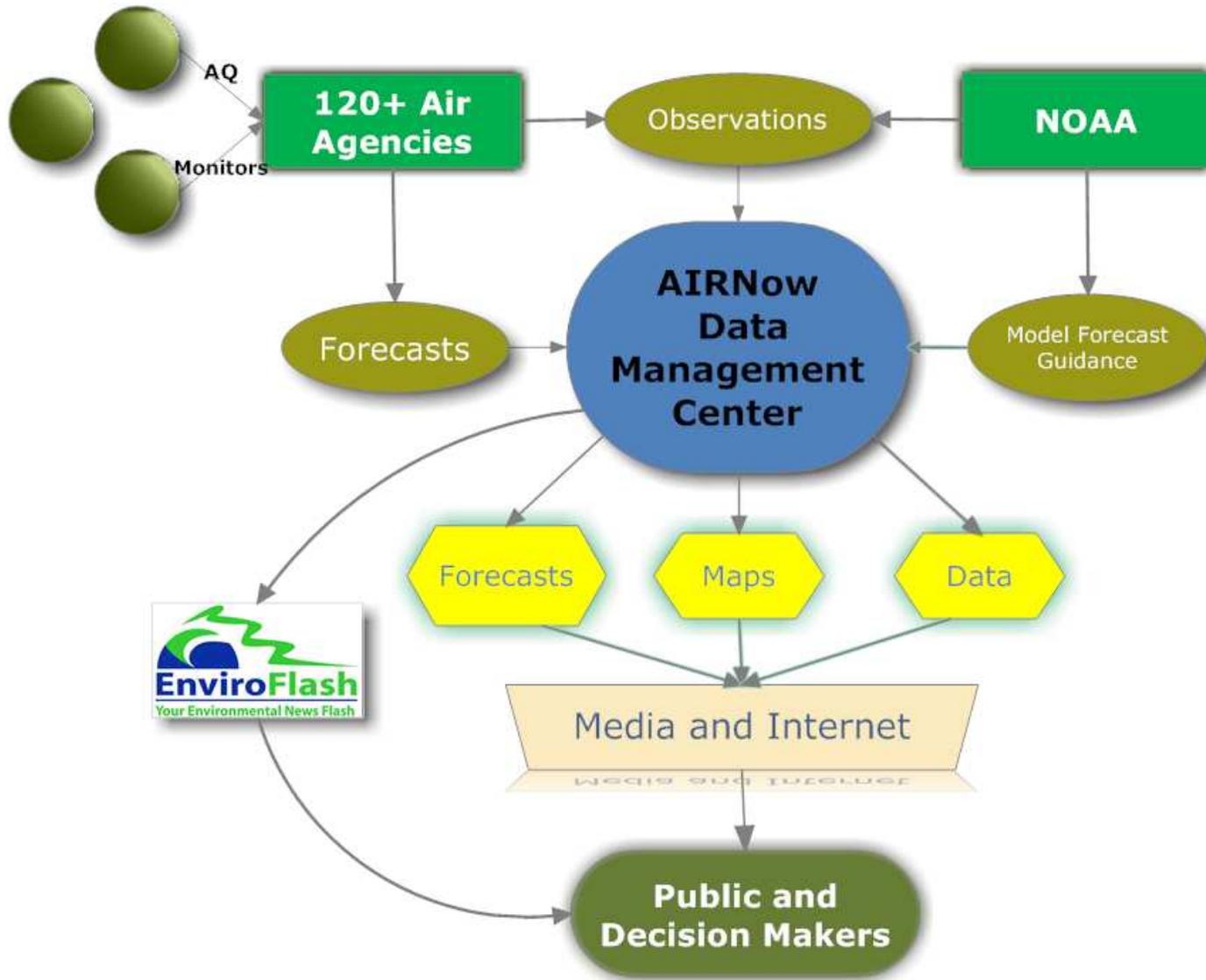
AIRNow Products



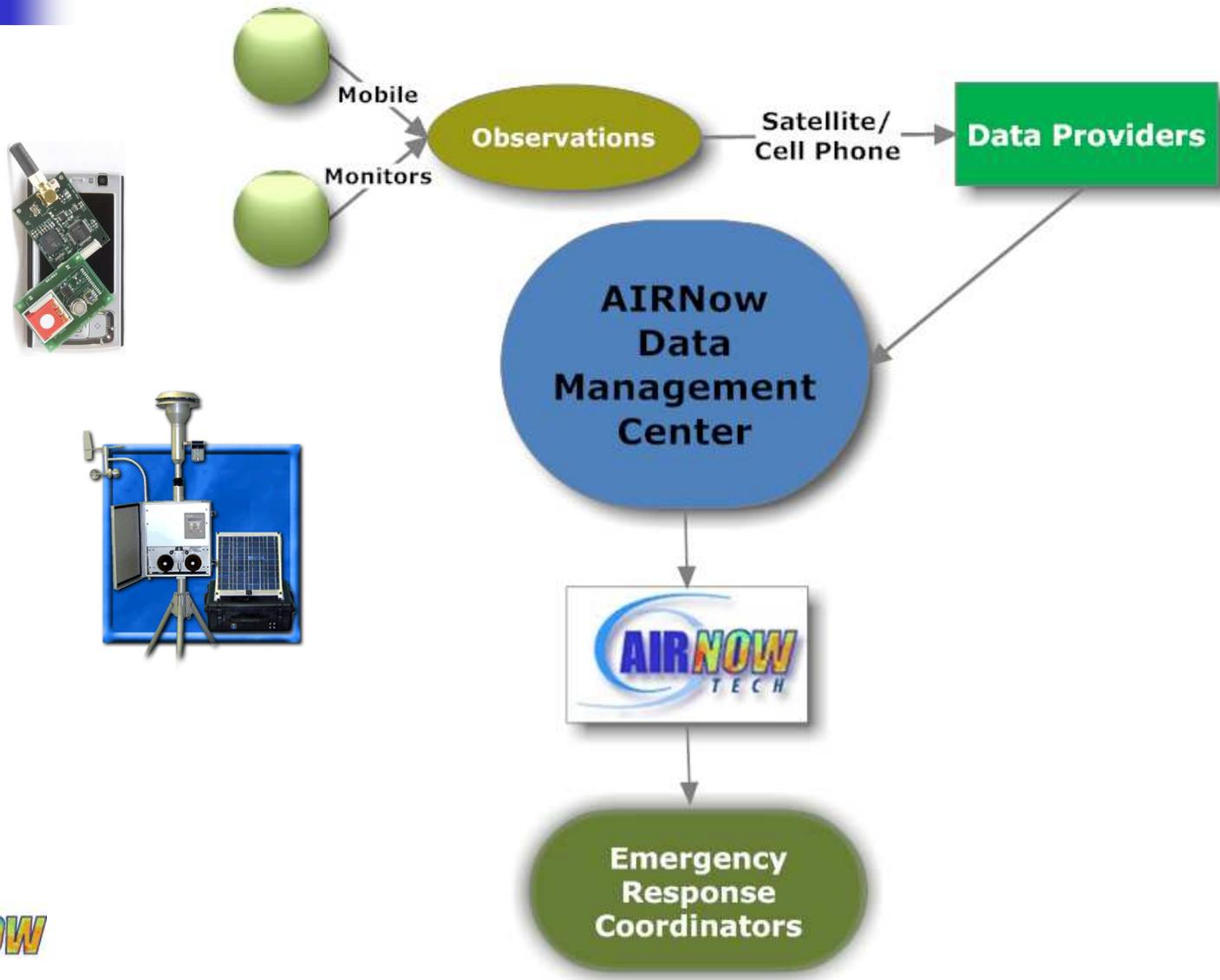
Air Quality Story: Western U.S. Wildfires September 15-17, 2008



Data Flow



Data Flow – Other Data Sources



AIRNow Tools (1 of 5)

AIRNow.gov

- Current ozone and PM_{2.5} maps
- Air quality news stories
- Archived air quality maps
- Air quality forecast display
- NOAA ozone forecast model

Location	Current AQI	Forecast		
		Thursday October 9	Thursday October 9	Friday October 10
<input type="checkbox"/> City <input type="checkbox"/>				
Los Angeles Inland, CA	OZONE 20 G PM2.5 85 M	Particles (PM2.5) M		N/A
Los Angeles Metro and Inland Orange Co., CA	OZONE 24 G PM2.5 108 M	Particles (PM2.5) M		N/A
Los Angeles and Orange Co. Coastal, CA	OZONE 24 G	Particles (PM2.5) M		N/A
Madera, CA	OZONE 9 G	Particles (PM10) M	Particles (PM10) M	
Merced, CA	OZONE 16 G	Particles (PM10) M	Ozone M	
Modesto, CA	OZONE 11 G PM2.5 27 G	Particles (PM10) M	Particles (PM10) M	

A cross-agency U.S. Government Web site: [List of AIRNow partner agencies](#) | [About AIRNow](#) | [Contact Us](#) | [FAQs](#) | [Search:](#) [GO](#)

AIRNOW Quality of Air Means Quality of Life

National Overview June 9th, 2008
National Outlook for June 10-11
 Unhealthy AQI levels along the East Coast — [More](#) —

Air Quality Outlook June 10 - 11, 2008

[National Forecast](#) | [Ozone Now](#) | [Particles Now](#) | [Map Center](#)

Local Air Quality Conditions and Forecasts
 [Select by map](#)

Today's Highest AQI Forecasts

Atlanta, GA	!	OZONE
Atlantic City, NJ	!	OZONE
Bayonne, NJ	!	OZONE
Bridgeport, CT	!	OZONE
Camden, NJ	!	OZONE

— [More](#) — ! - city declared an **Action Day**

Note: EPA established a tighter fine particle standard in the fall of 2006 to better protect public health. — [More Information](#) —

AIRNow is a government-backed program. Through AIRNow, EPA, NOAA, NPS, news media, tribal, state, and local agencies work together to report conditions for ozone and particle pollution. [State, Local and Tribal Partners.](#)

Air Quality News
Air Quality Alert for Most of New England - Tuesday, June 10
 Release Date: 06/09/2008 — [More](#) — [EXIT AIRNOW](#)

Partners
 For Partners
 List of Partners

Air Quality Basics
 Air Quality Index
 Ozone
 Particles
 UV

The AQI for:
 Health Providers
 Older Adults
 Weathercasters

Key Topics
 Your Health
 Smoke From Fires
 International Air Quality

The Learning Center
 Kids (K-10)
 Students
 Teachers

Resources
 AQI in Google Earth
 Publications
 Publications (En Español)
 FAQ
 Movies
 What You Can Do
 NAQ Conferences
 About the Data

Accessibility
Privacy and Security

E-mail Notification
 Sign-up for e-mail, cell phone or pager
EnviroFlash air quality notices

Historical Information
Air Compare
 Compare Air Quality of U.S. Cities

Announcements
[2008 National Air Quality Conference Presentations](#)
[Updated - Air Quality Guide for Ozone \(PDF\)](#)
[EPA Revises Ozone Standards, Updates Air Quality Index](#)

Web Cams [EXIT AIRNOW](#)

[Current Visibility at Big Bend National Park, TX](#)
[View Other Visibility Cams](#)



AIRNow Tools (2 of 5)

AIRNowGateway.org

- An alternate way to access AIRNow data
- Products include
 - text files with hourly and daily air quality values, forecasts, and location information
 - web service queries (XML) that can be viewed by various applications



AIRNow GATEWAY

[Home](#) | [Request Account](#) | [Data Feeds](#) | [Login](#)

About AIRNow-Gateway

The U.S. Environmental Protection Agency's (EPA) AIRNow (www.airnow.gov), provides real-time air quality data and forecasts to protect public health across the United States, Canada, and parts of Mexico. AIRNow receives real-time ozone and PM_{2.5} data from over 2,000 monitors and collects forecasts for more than 300 cities.

As part of the Global Earth Observation System of Systems (GEOS) program, the AIRNow Gateway system broadens access to AIRNow data and data products. AIRNow Gateway produces data products in several standard data formats and makes them available via FTP and web services.

All data provided by AIRNow-Gateway are made possible by the efforts of more than 120 local, state, tribal, provincial, and federal government agencies (<http://www.airnow.gov/index.cfm?action=airnow.partnerslist>). These data are not fully verified or validated and should be considered preliminary and subject to change. Data and information reported to AIRNow from federal, state, local and tribal agencies are for the express purpose of reporting and forecasting the [Air Quality Index \(AQI\)](#). As such, they should not be used to formulate or support regulation, trends, guidance, or any other government or public decision making. Official regulatory air quality data must be obtained from EPA's Air Quality System ([AQIS](#)).

Data Feeds

[Data Use Guidelines](#)

AIRNow Gateway provides various data products to user communities who want access to real-time air quality data and air quality forecasts. Several types of data products and formats are available.

1. Text files that contain hourly and daily air quality values, forecasts, and location information
2. Web services that provides hourly air quality data using two protocols

Sign up

To access AIRNow-Gateway data, you need to request an account.
[Sign up here](#)

Other data sources

Real-time data for the public
[AIRNow](#)

Historical data archives
[AIR Data](#)
[AIR Explorer](#)

For more information contact: airnowdmc@sonomatech.com



AIRNow Tools (3 of 5)

Enviroflash.info

EPA's free email system that automatically sends an AQI forecast notice to subscribers at health levels they select. (more information on airnow.gov)

AIRNOW Air Quality Notifications **EnviroFlash**
Your Environmental News Flash

[EnviroFlash Home](#)
[EnviroFlash Fact Sheet \(175kb, PDF\)](#)
Learn how EnviroFlash works!
[EnviroFlash Press Kit \(365kb, DOC\)](#)
Available to AIRNow partner agencies
[About the Air Quality Index \(AQI\)](#)
(905kb, PDF)
[Today's National Air Quality Forecast](#)
[About EnviroFlash](#)

Subscribe to EnviroFlash | Registered Subscribers

Welcome to EnviroFlash! Air quality affects how you live and breathe. Like the weather, it can change from day to day, or even hour to hour. Up-to-date information allows you to make decisions based on air quality forecasts. EnviroFlash comes to you through a partnership between the US EPA and your state or local air quality agency - notifying you about air quality so you don't have to go searching for it!

Legend

- Cities with EnviroFlash
- ★ Cities Recently Joining EnviroFlash

An [on-line subscription page](#) allows you to sign up, edit your profile, or cancel the service. After you choose the type and frequency of service you want, EnviroFlash will be sent to your email or cell phone as specified.



[EPA Home](#)

EnviroFlash: Air quality information straight to your inbox!



[AIRNow Home](#)

AIRNow Tools (4 of 5)

AIRShare.info

A resource for Air Quality Communicators to share outreach materials

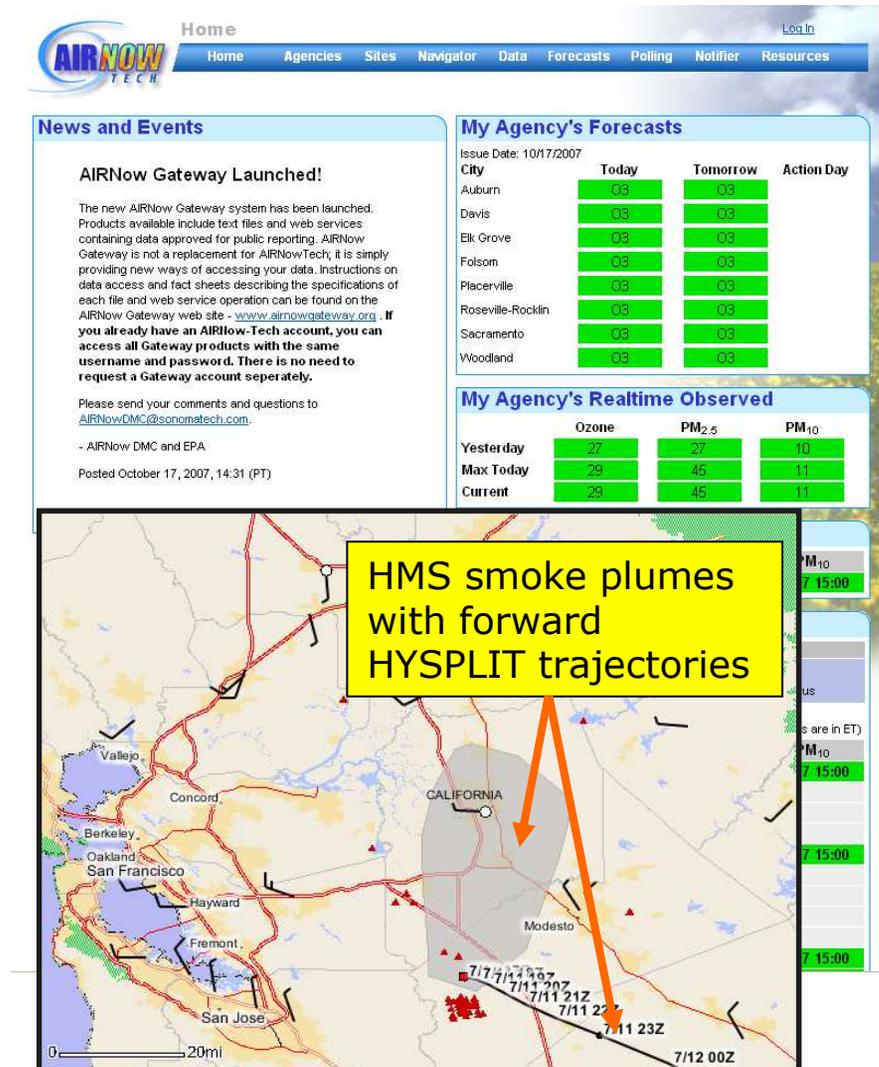
The screenshot shows the AIRShare.info website in a Microsoft Internet Explorer browser window. The browser title is "AirShare - Air Quality Communicator's Home Page". The address bar shows "http://www.airshare.info/". The website header features the "airSHARE.info" logo and the text "Air Quality Communicator's Home Page". Below the header is a navigation menu with links for Home, News, Submit, Search AirShare, Forum, Find Colleague, FAQ, Site Map, Contact Us, and My Account. The main content area is titled "AirShare Newsroom" and displays several news items with dates and headlines, such as "Collax fire in CA's Sierra Nevada range" and "EPA certifies first hybrid SUV for sale in U.S.". To the right of the newsroom is a "AQI for" section showing current and forecast air quality for "Houston-Galveston, TX" with a color-coded AQI scale. Below this are sections for "ACTION DAYS" (listing AQI ranges for various cities), "TODAY'S TOP AQI FORECASTS", "WHAT'S NEW", and "WHAT'S HOT". A "Quick Links" section on the right contains icons for AIRNow, EPA, and other resources. At the bottom, there are promotional banners for "List of 8-hour designations for ozone", "EPA 2003 STATE BY STATE AIR QUALITY TRENDS", and "20th Annual State Source/Class R List".



AIRNow Tools (5 of 5)

AIRNowTech.org

- Decision Support System: management and analysis tool for the AIRNow program
- GIS functions - HYSPLIT trajectory tool, satellite and smoke products
- Data queries, personalized tools, preferences, and services
- Ability to view meteorological and air quality data



AIRNow-Tech



Navigator Welcome, Forecasters at Sonoma Technology! | [My Account](#) | [Sign Out](#)

AIRNOW TECH 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

Options Layers Legend

Select Data

Air Quality Parameter:

Meteorology Parameter:

Time Select

Date:

Hour: PST

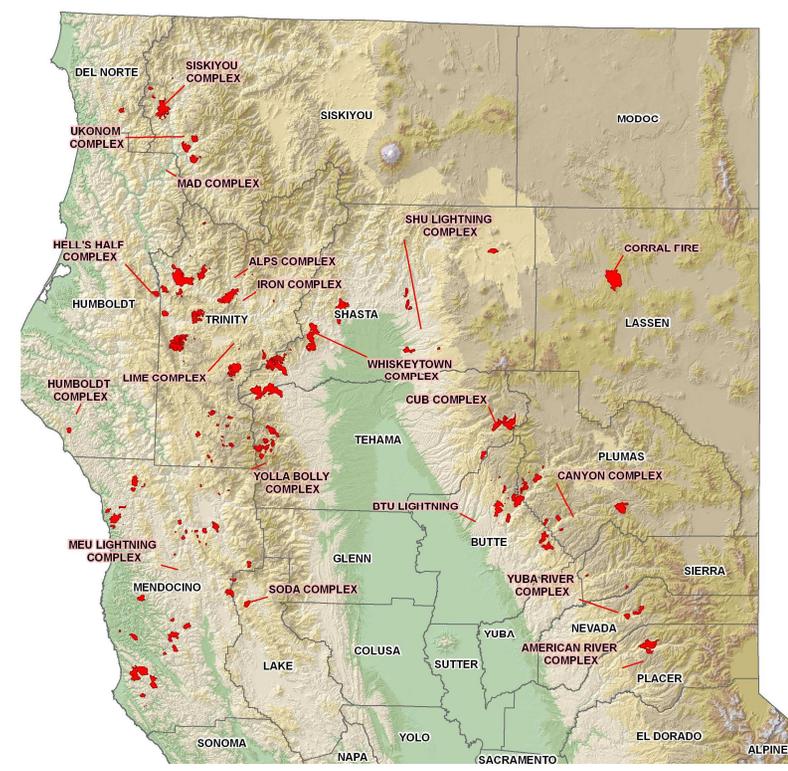
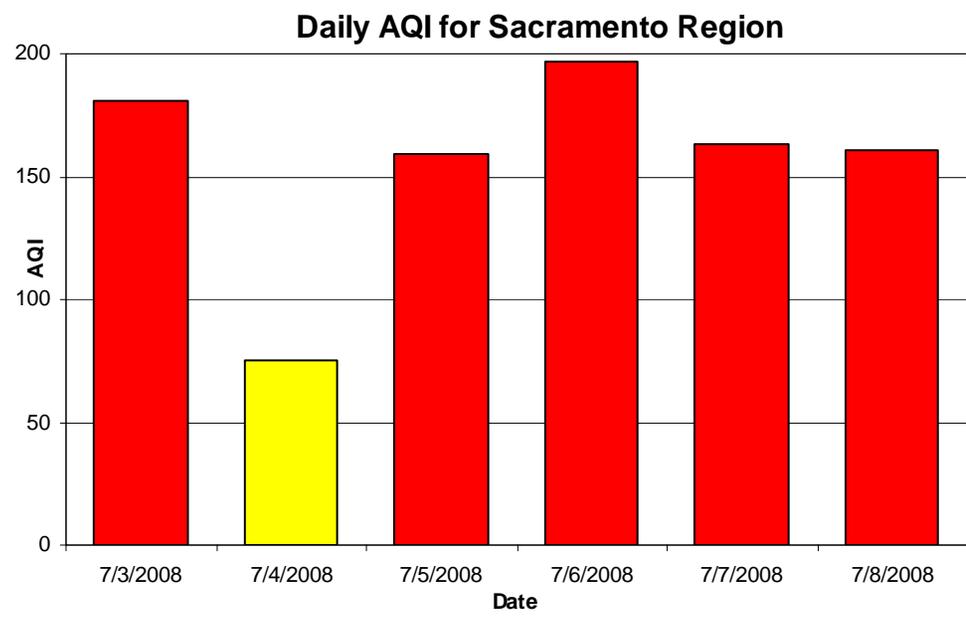
Shift Hour

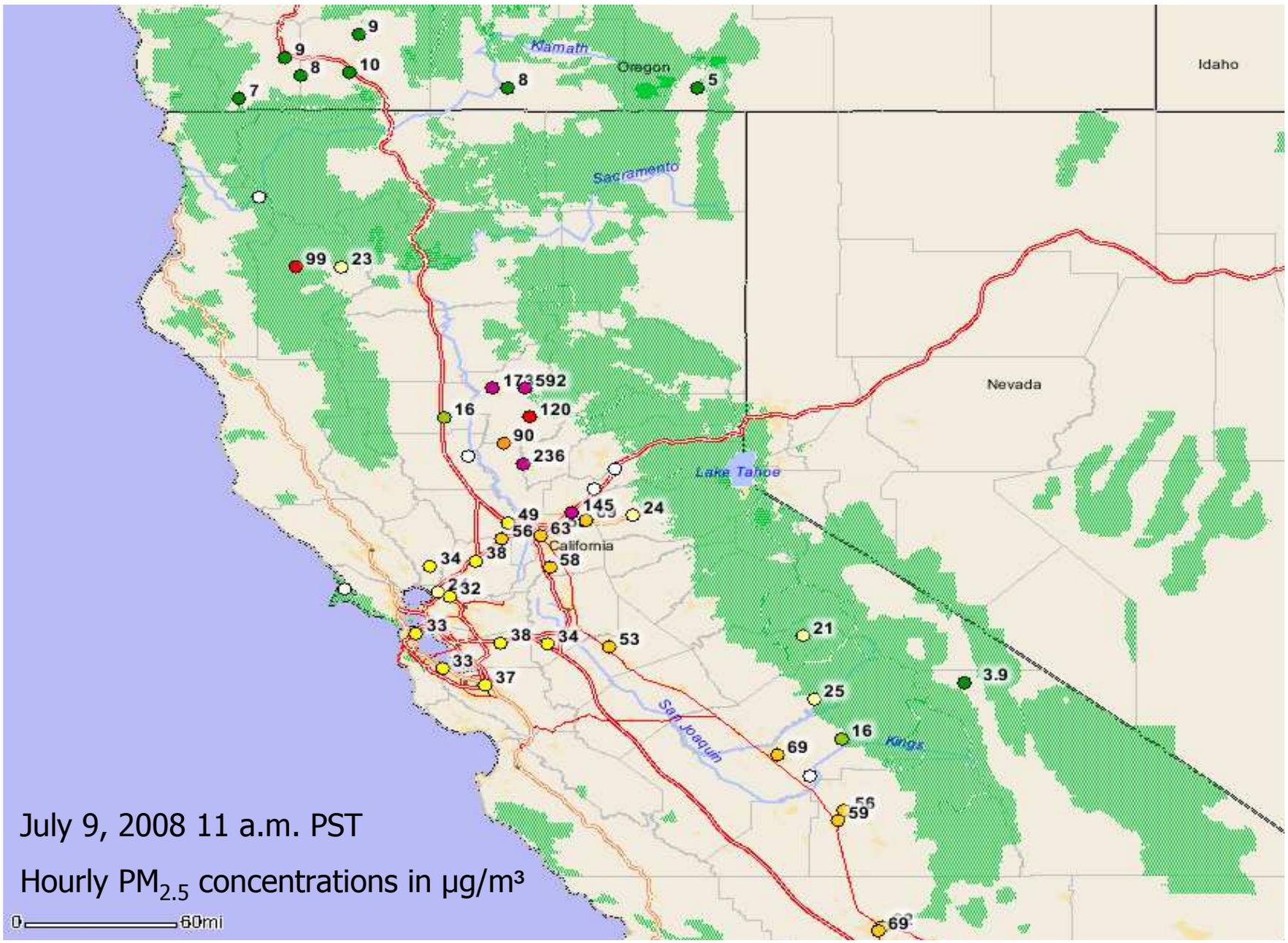
AIRNOW

July 9, 2008 – Northern California

July 8th: AQI for PM_{2.5} = 161

July 9th: 19 active fire complexes in N. California



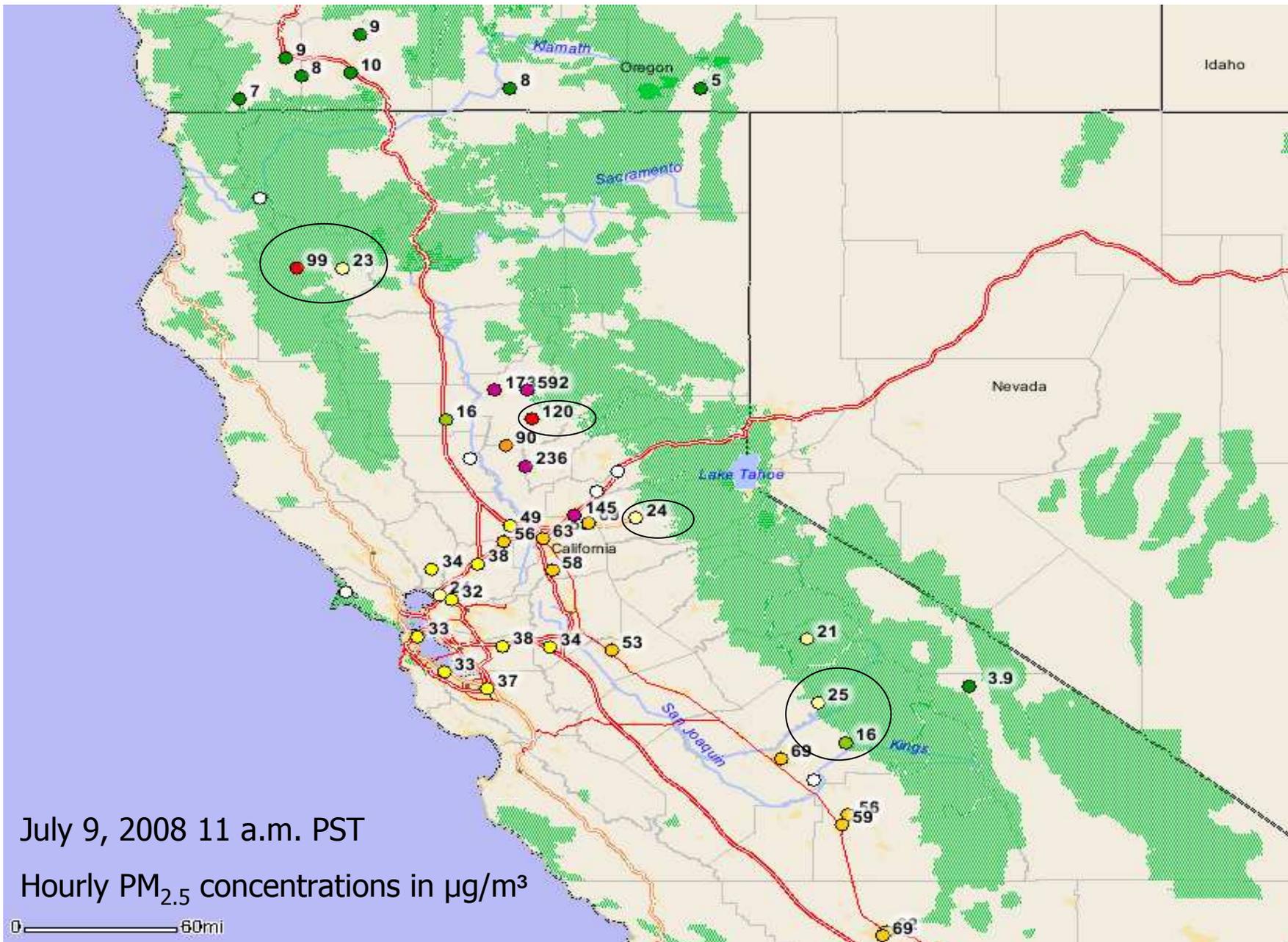


July 9, 2008 11 a.m. PST

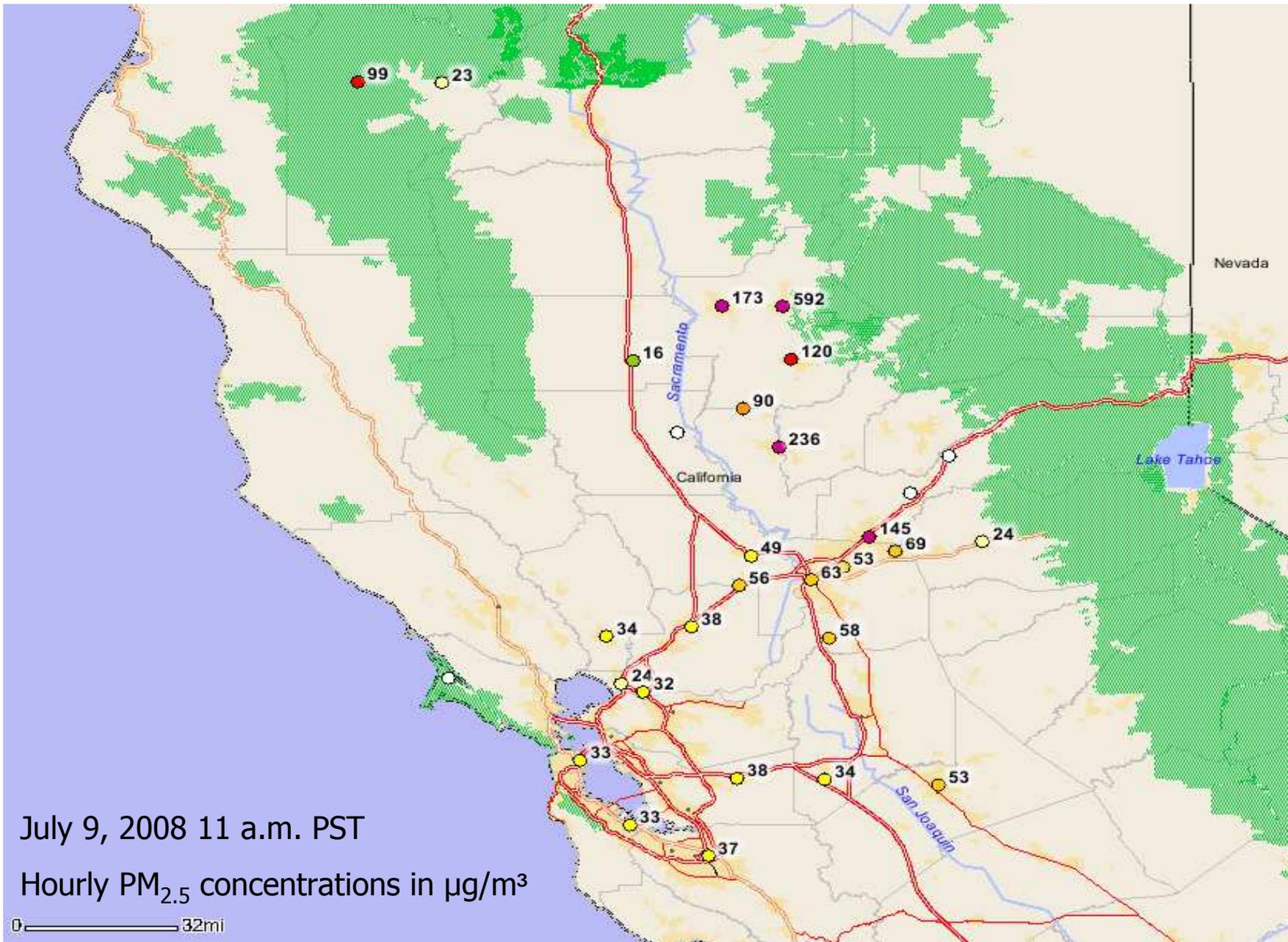
Hourly PM_{2.5} concentrations in µg/m³

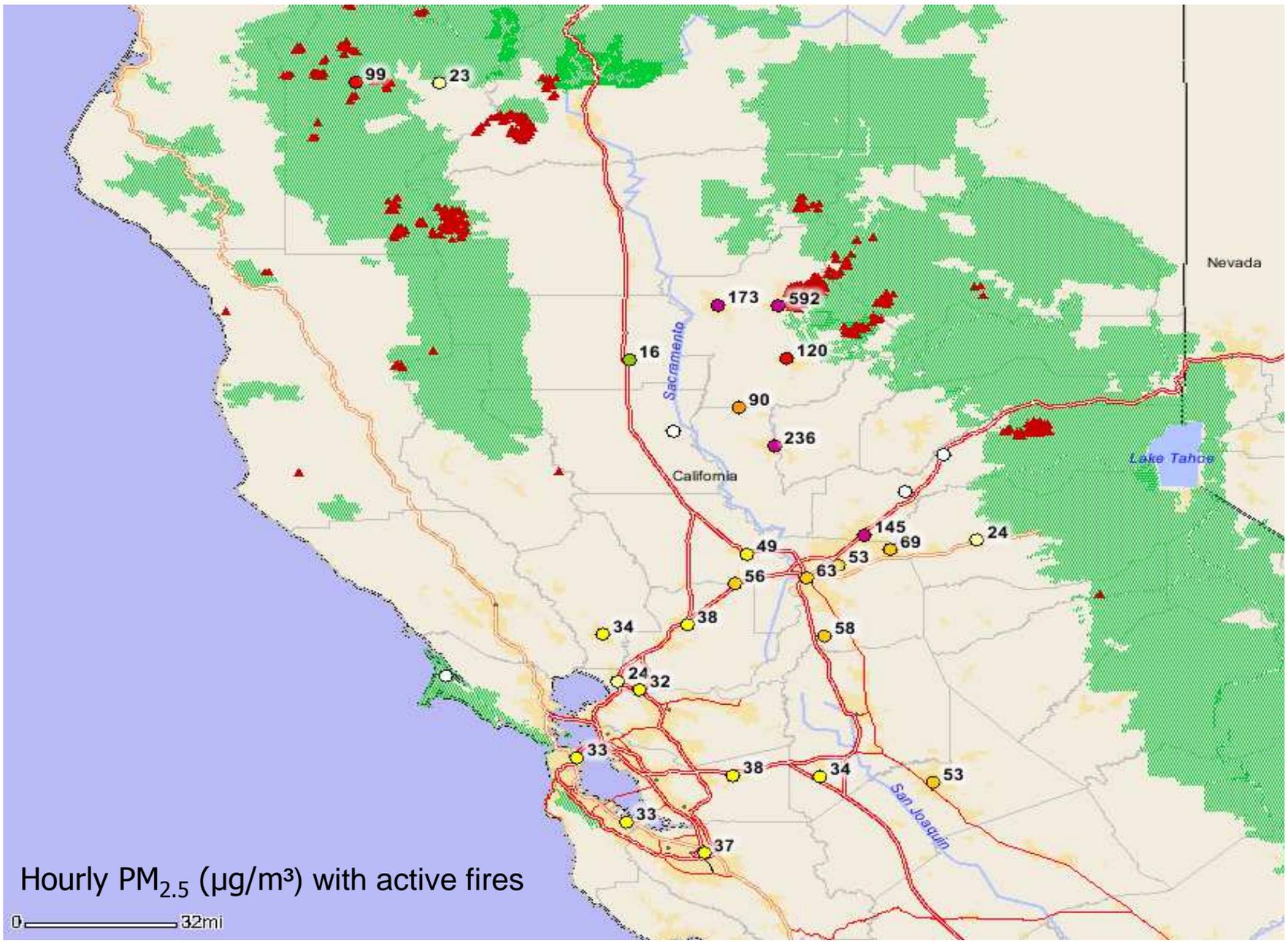
0 60mi

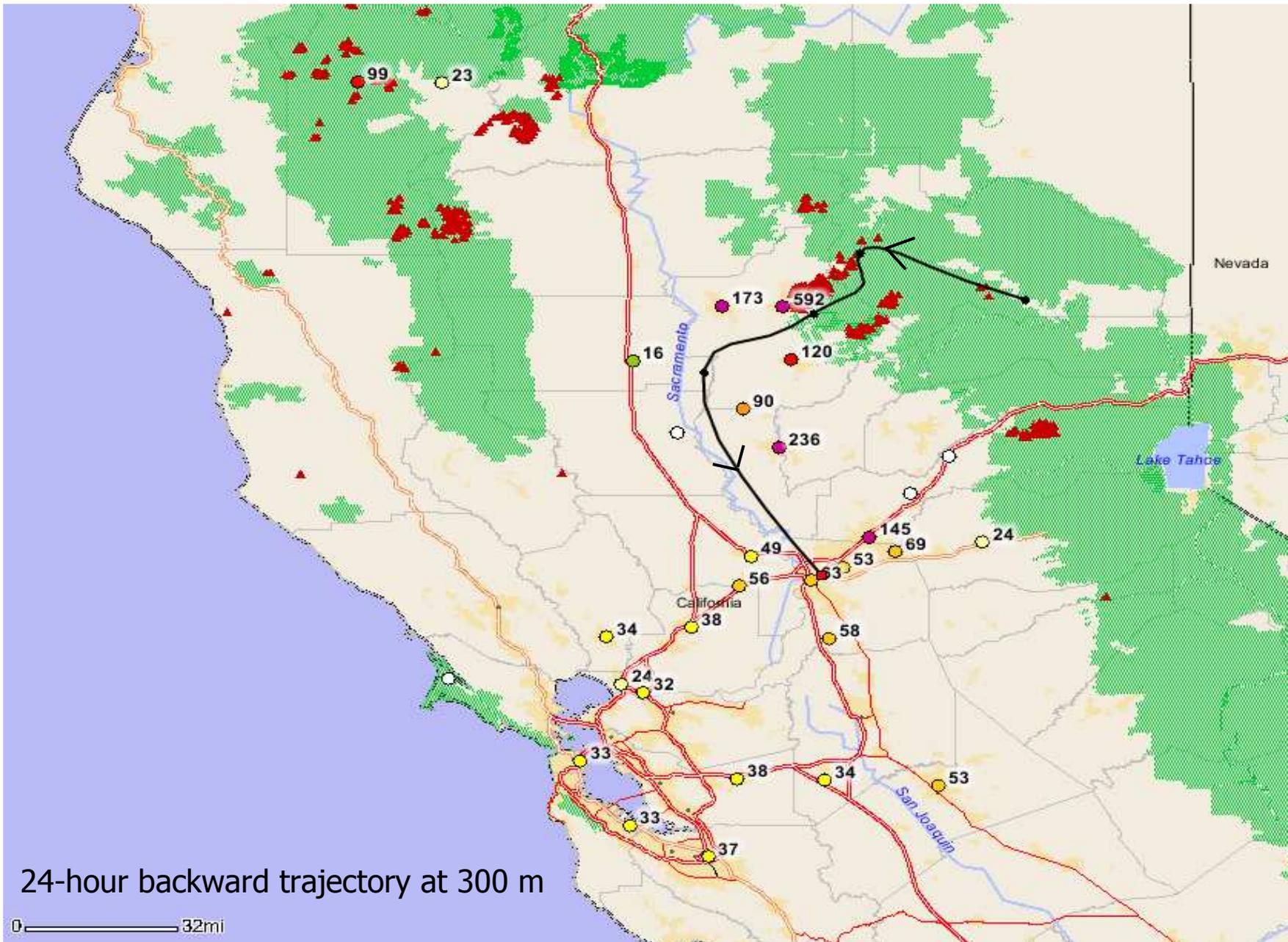


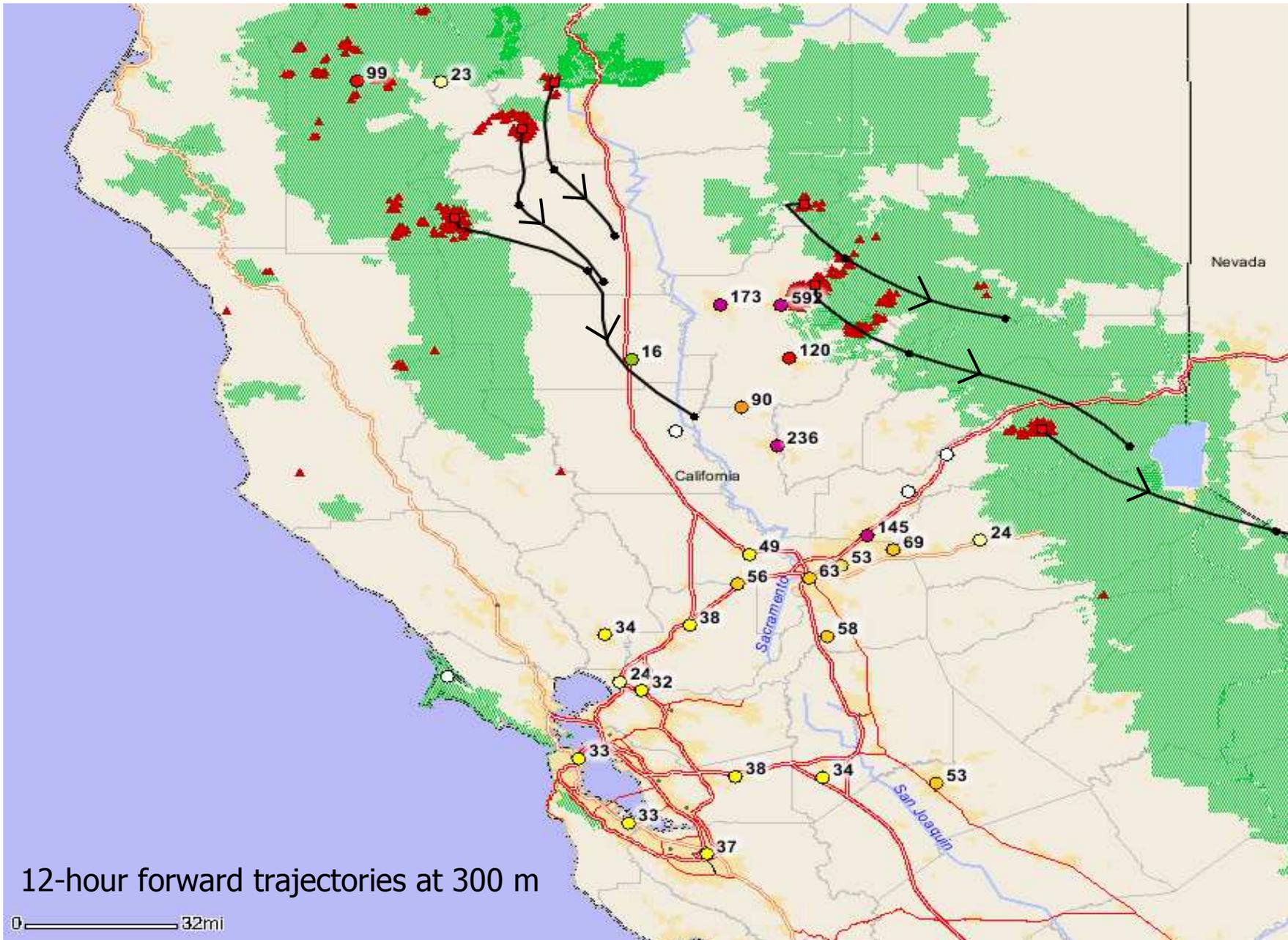


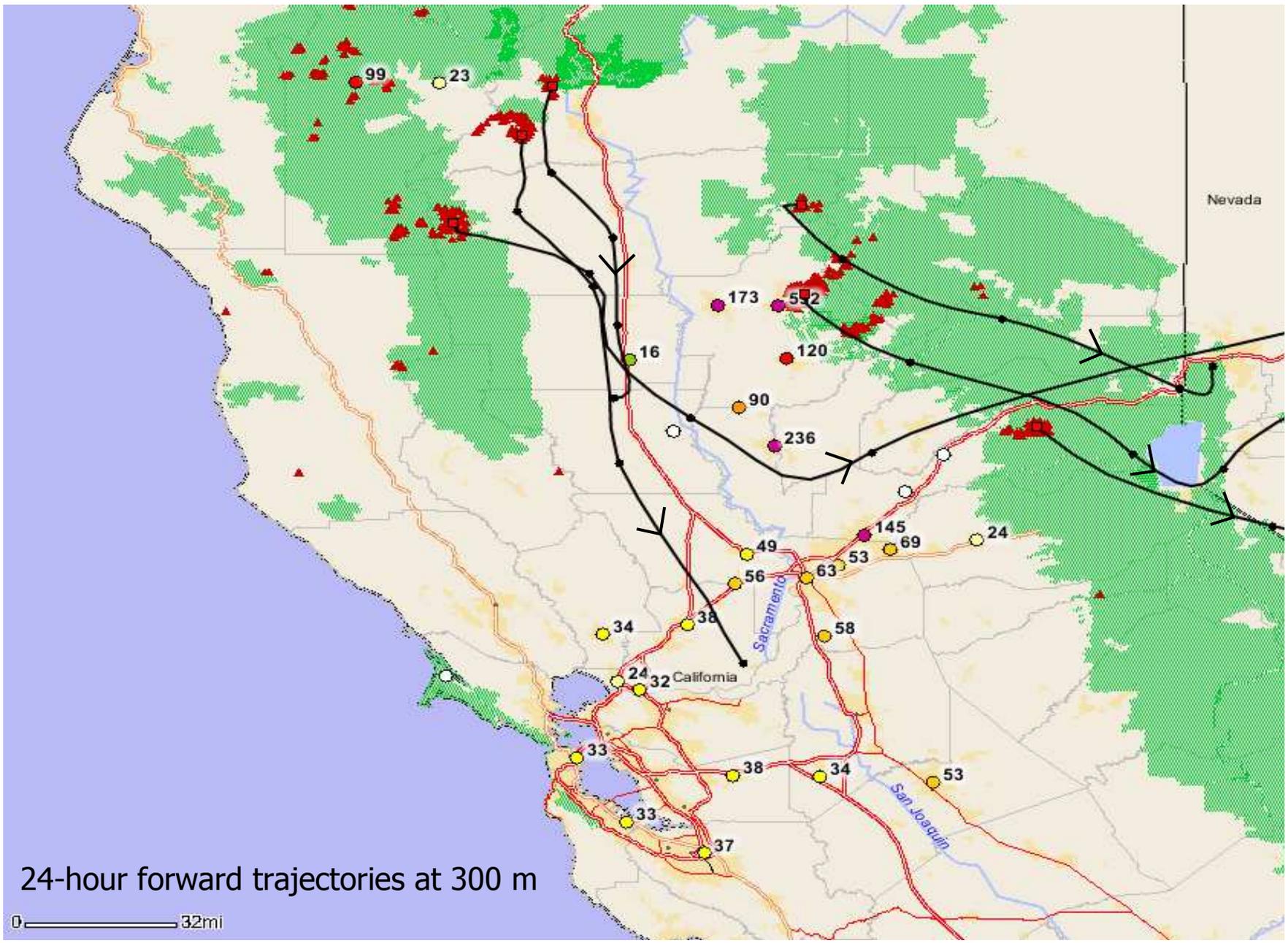
○ = Mobile Monitors

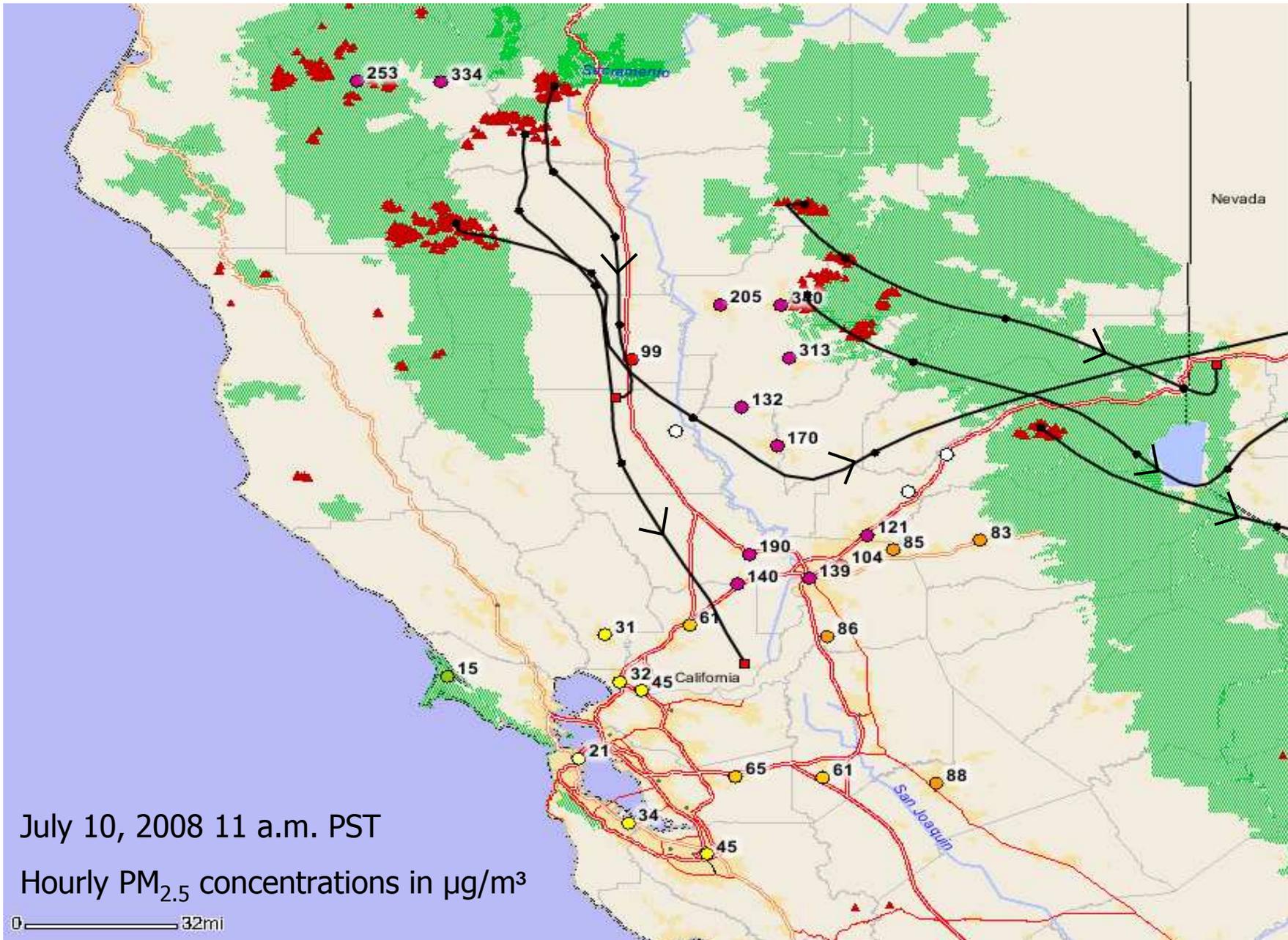






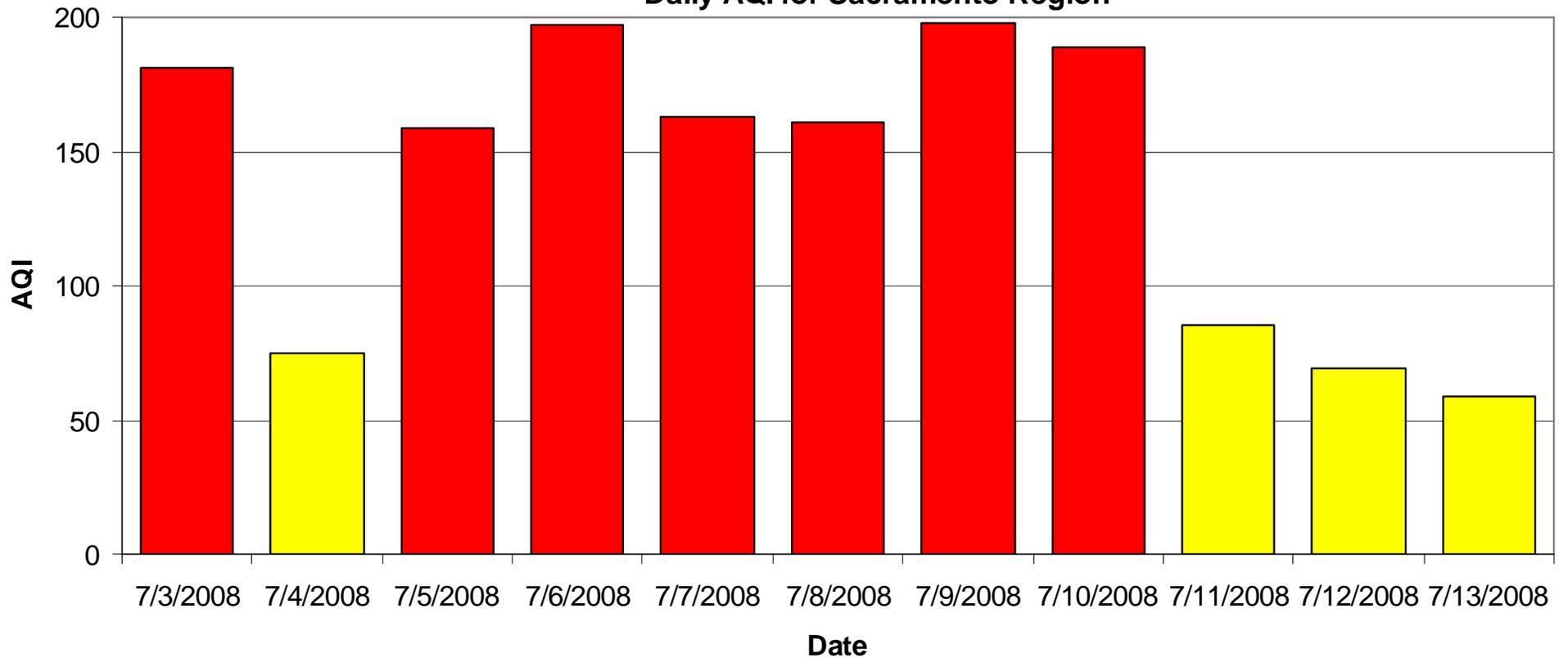


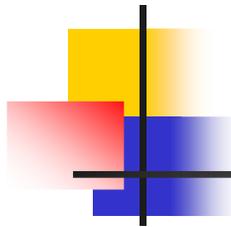




Daily AQI July 3 – July 13, 2008

Daily AQI for Sacramento Region





Resources

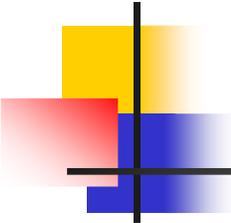
AIRNow.gov – public resource

AIRNow-Tech.org – decision support system
(password required)

AIRNowGateway.org – data resources, web
services, etc.

AirShare.info – public outreach/education
information





Contact and Resources

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Tim Dye, dye.tim@epa.gov

Alan Chan, chan.alan@epa.gov

AIRNow Data Management Center

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