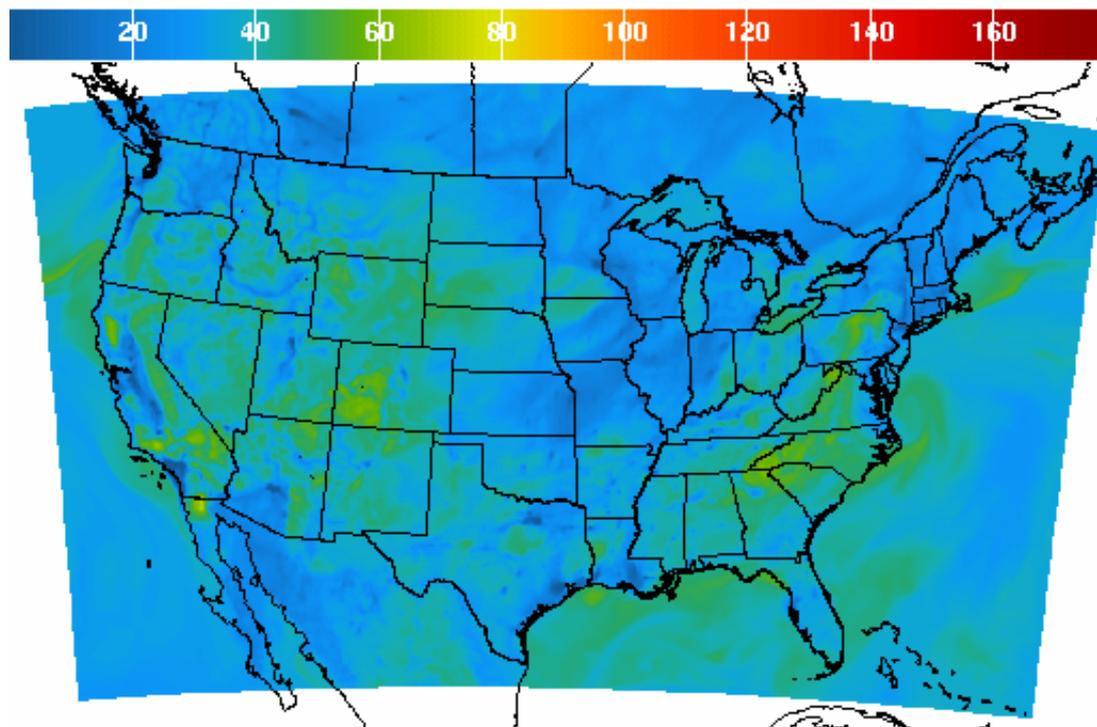


Air Quality Graphical Products

<http://www.weather.gov/aq/>



1Hr Avg Ozone Concentration(PPB) Ending Mon Sep 10 2007 10AM EDT
(Mon Sep 10 2007 14Z)



National Digital Guidance Database
06z model run Graphic created-Sep 10 8:21AM EDT



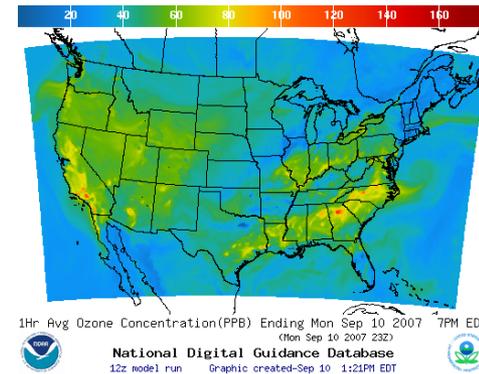
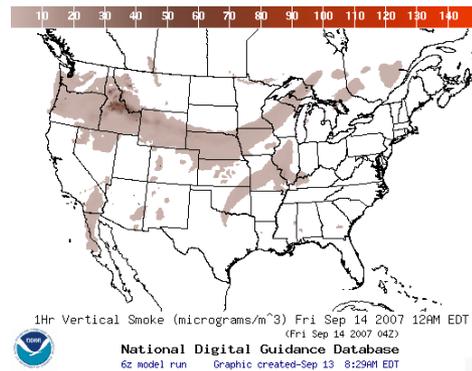
September 18, 2007

Air Quality Forecaster Focus Group Workshop
Falls Church, VA

Marc Saccucci, Meteorological Development Laboratory

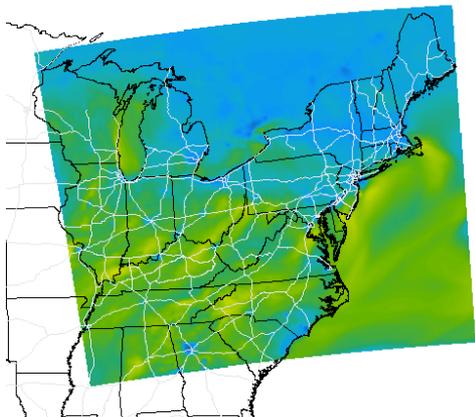
Air Quality Visualization Update: Major Operational Changes

- ❖ Smoke products made operational 2-28-2007
 - 1hr Average Surface Smoke ($\mu\text{g}/\text{m}^3$)
 - 1hr Average Vertical Smoke Integration ($\mu\text{g}/\text{m}^3$)
- ❖ Experimental Ozone (5X) made operational 9-18-2007
 - 1hr Average Ozone Concentration (PPB)
 - 8hr Average Ozone Concentration (PPB)



Air Quality Visualization Update: Online Graphics History

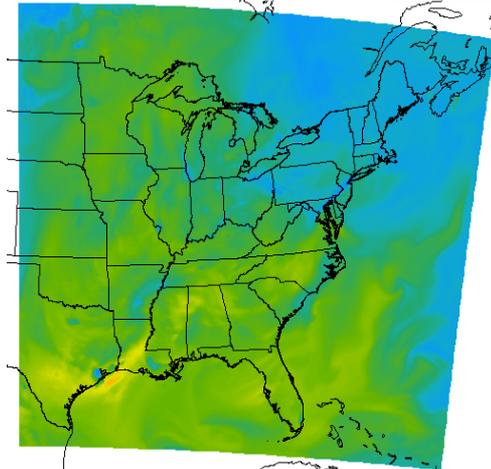
2004



8Hr Avg Ozone Concentration (PPB) Ending Thu Sep 02 2004 12AM EDT
(Thu Sep 02 2004 04Z)
National Digital Guidance Database
Experimental graphic created 09/01/2004 1:26PM EDT



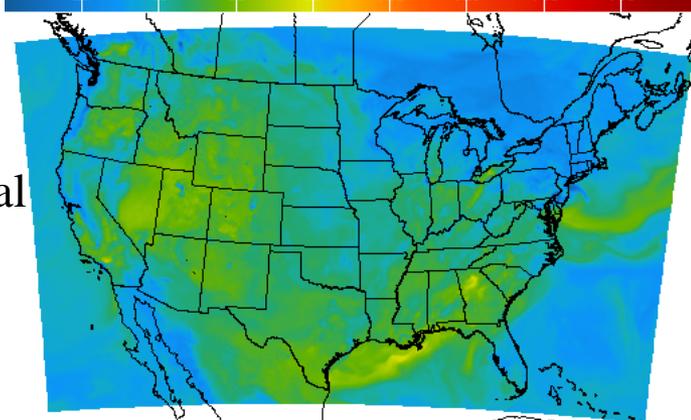
2005 (3X domain)



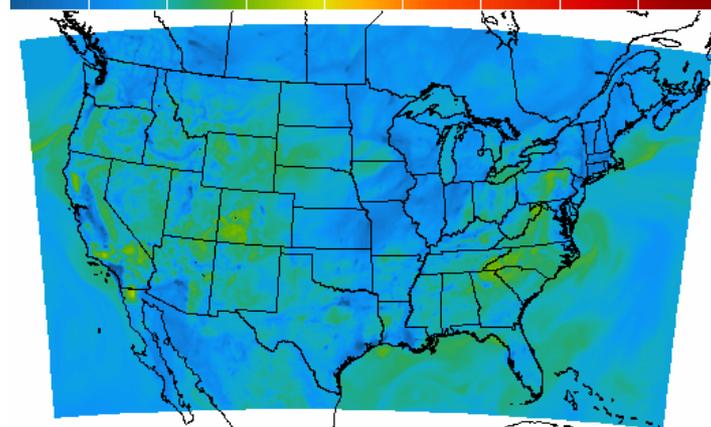
1Hr Avg Ozone Concentration (PPB) Ending Mon Sep 05 2005 12PM EDT
(Mon Sep 05 2005 16Z)
National Digital Guidance Database
12z model run Graphic created-Sep 05 7:21AM EDT

**2007 Full
CONUS
Operational**

2006
Experimental



1Hr Avg Ozone Concentration (PPB) Ending Tue Sep 05 2006 12PM EDT
Experimental (Tue Sep 05 2006 16Z)
National Digital Guidance Database
06z model run Graphic created-Sep 05 9:32AM EDT



1Hr Avg Ozone Concentration (PPB) Ending Mon Sep 10 2007 10AM EDT
(Mon Sep 10 2007 14Z)
National Digital Guidance Database
06z model run Graphic created-Sep 10 8:21AM EDT

Air Quality Visualization Update: Operational Ozone Available in the Western US

National Oceanic and Atmospheric Administration's
National Weather Service

Site Map
News
Organization

Home > Air Quality Forecast Guidance > Southern California

This map shows NOAA's National Weather Service Air Quality Forecast Guidance. Ozone is shown as 1-hour and 8-hour concentrations (in parts per billion or ppb), updated twice daily. Official Air Quality point forecasts, issued by state and local air quality forecasters, along with additional information on air quality can be found under EPA's AIRNow site.

Surface and column-average concentrations of predicted smoke for large fires are displayed as 1-hour averages (in micrograms per cubic meter), updated each day. Fire locations are provided by NOAA / NESDIS' Hazard Mapping System. For further information, see the Air Resources Laboratory web site. Public comments and suggestions are encouraged. A FAQ page is available.

Warnings & Forecasts
Graphical Forecasts
National Maps
Radar
Water
Air Quality
Satellite
Climate

Air Quality Forecast Guidance - Southern California

Daily View
Loops
Point Data

Page Help

Mouse over or click on the table below to change the guidance image.

Today								+12Hrs					
Valid Hour (EDT):	8	9	10	11	12	1	2	3	4	5	6	7	
1Hr Average Ozone Concentration	---	---	---	---	---	---	---	---	---	---	---	---	---
8Hr Average Ozone Concentration	---	---	---	---	---	---	---	---	---	---	---	---	---
1Hr Average Surface Smoke	---	---	---	---	---	---	---	---	---	---	---	---	---
1Hr Average Vertical Smoke Integration	---	---	---	---	---	---	---	---	---	---	---	---	---

Table MouseOver Effect On v

Overview

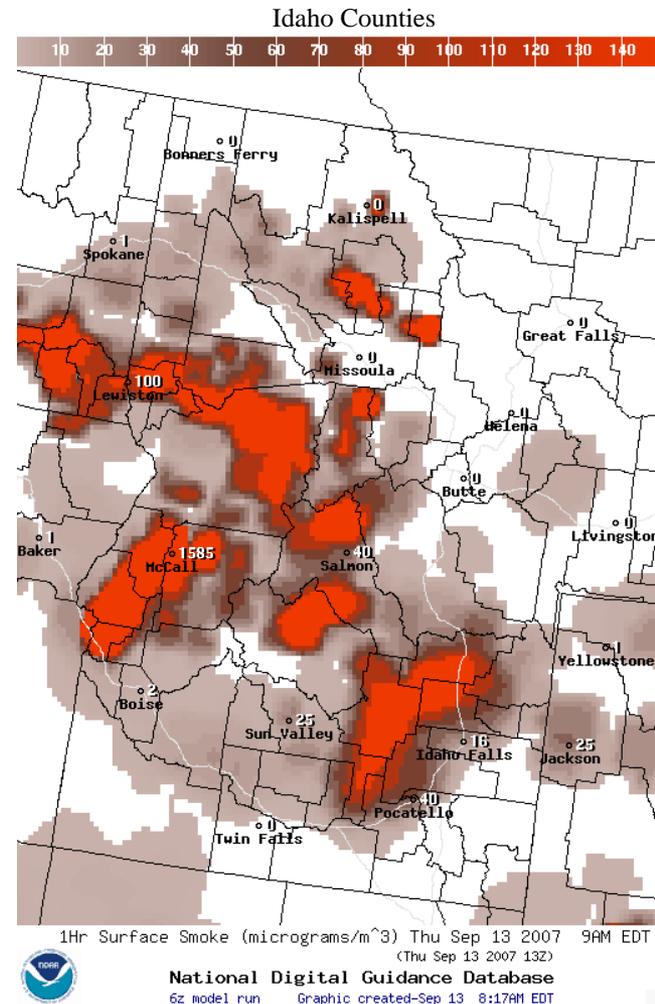
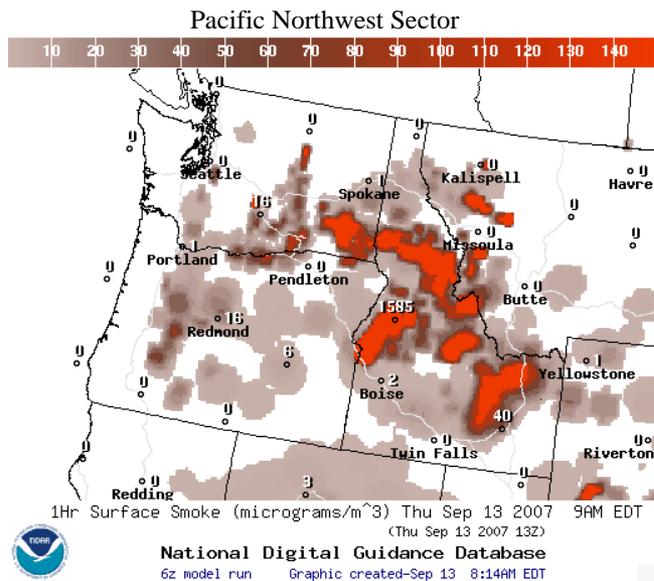
1Hr Avg Ozone Concentration (PPB) Ending Tue Sep 11 2007 10AM EDT
(Tue Sep 11 2007 14Z)

National Digital Guidance Database

06z model run
Graphic created-Sep 11 8:34AM EDT

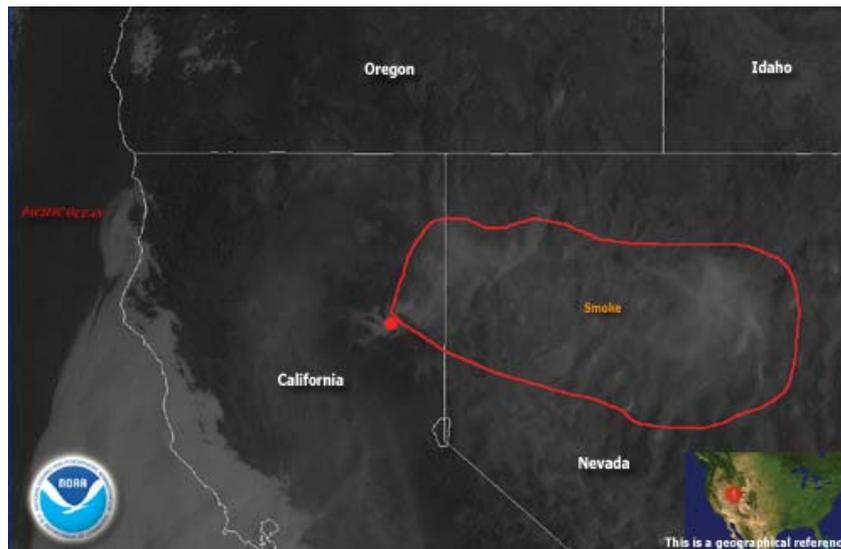
Air Quality Examples:

Operational Smoke During the Idaho Fires - Sept. 2007

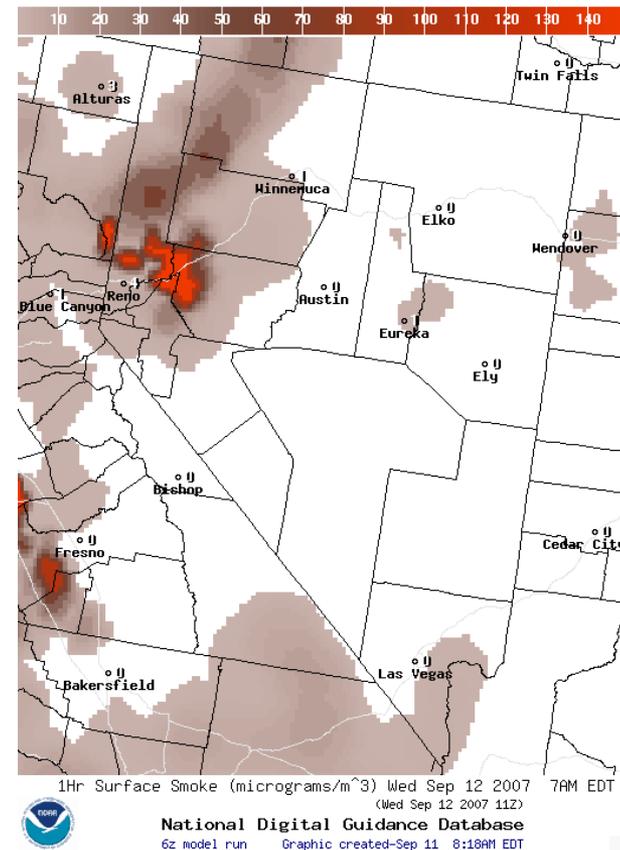


Air Quality Examples: Smoke Guidance for Northern California Fires

Visible satellite image showing smoke



NOAA GOES West Imagery Courtesy of NESDIS



Air Quality Point Data Access: How It Works

User Input from interface:

- Clicks on the image (X,Y image coordinates)
- Enters City, State Information (lookup table)
- Enters exact Latitude, Longitude Information



All converted to Latitude, Longitude based on map projection information



Lat, Lon used to query data cubes to return guidance values



The results are displayed on the web for the nearest grid point location

Air Quality Point Data Access: Point Data Mode Additions

Air Quality Forecast Guidance - Midatlantic

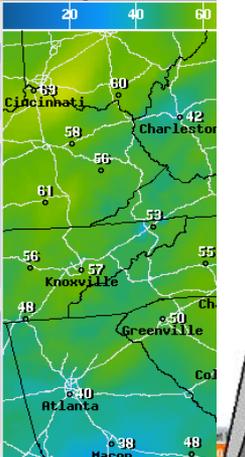
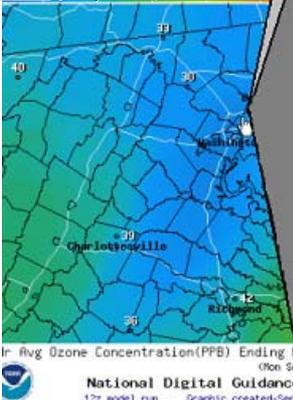
[Daily View](#) | [Loops](#) | [Point Data](#) | [Page Help](#) | [Go to Region](#)

Three ways to get the forecast:

Click On Image
Click on the interactive forecast image to the right to get the forecast for that point.

Enter a City and State
Enter a city and select the state to obtain National Digital Forecast Data for.
City/Town: Silver Spring
State:

Enter a Latitude, Longitude
(Example: Latitude: 38.9, Longitude: -77.0)
Latitude:
Longitude:

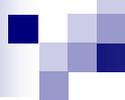



National Digital Guidance
12z model run. Graphic created-Sep 14 2014

Air Quality Forecast Guidance for Silver Spring, MD
 Displayed below are NOAA-EPA Air Quality Forecast Guidance values for latitude: 39.00 N, longitude: 77.05 W.
 Ozone concentrations are presented in parts per billion (PPB).
 Public comments and suggestions are encouraged.
 A FAQ page is available.
 More information...

Ozone Ending Time (Local Time)	1 Hour Average Ozone Concentration (PPB) 12Z Model Run	8 Hour Average Ozone Concentration (PPB) 12Z Model Run	Smoke Ending Time (Local Time)	1 Hour Surface Smoke (µg/m ³) 06Z Model Run	1 Hour Column-Integrated Smoke (µg/m ³) 06Z Model Run
Fri, Sep 14 04 PM	58	53	Fri, Sep 14 02 PM	0	0
Fri, Sep 14 05 PM	56	55	Fri, Sep 14 03 PM	0	0
Fri, Sep 14 06 PM	55	56	Fri, Sep 14 04 PM	0	0
Fri, Sep 14 07 PM	52	56	Fri, Sep 14 05 PM	0	0
Fri, Sep 14 08 PM	48	56	Fri, Sep 14 06 PM	0	0
Fri, Sep 14 09 PM	47	54	Fri, Sep 14 07 PM	0	0
Fri, Sep 14 10 PM	46	52	Fri, Sep 14 08 PM	0	0
Fri, Sep 14 11 PM	43	51	Fri, Sep 14 09 PM	0	0
Sat, Sep 15 12 AM	46	49	Fri, Sep 14 10 PM	0	0
Sat, Sep 15 01 AM	50	48	Fri, Sep 14 11 PM	0	0
Sat, Sep 15 02 AM	52	48	Sat, Sep 15 12 AM	0	0
Sat, Sep 15 03 AM	47	47	Sat, Sep 15 01 AM	0	0
Sat, Sep 15 04 AM	37	46	Sat, Sep 15 02 AM	0	0
Sat, Sep 15 05 AM	30	44	Sat, Sep 15 03 AM	0	0
Sat, Sep 15 06 AM	29	42	Sat, Sep 15 04 AM	0	0
Sat, Sep 15 07 AM	42	42	Sat, Sep 15 05 AM	0	1
Sat, Sep 15 08 AM	49	42	Sat, Sep 15 06 AM	0	2
Sat, Sep 15 09 AM	47	42	Sat, Sep 15 07 AM	0	1
Sat, Sep 15 10 AM	43	40	Sat, Sep 15 08 AM	0	1
Sat, Sep 15 11 AM	47	40	Sat, Sep 15 09 AM	0	1
Sat, Sep 15 12 PM	50	42	Sat, Sep 15 10 AM	0	1
Sat, Sep 15 01 PM	48	44	Sat, Sep 15 11 AM	0	0
Sat, Sep 15 02 PM	51	47	Sat, Sep 15 12 PM	0	0
Sat, Sep 15 03 PM	54	49	Sat, Sep 15 01 PM	0	0
Sat, Sep 15 04 PM	56	49	Sat, Sep 15 02 PM	0	0
Sat, Sep 15 05 PM	59	51	Sat, Sep 15 03 PM	0	0

- Now includes operational smoke guidance
- Linked to from each NWS Forecast Office



Air Quality Guidance:

Data access from www.weather.gov

❖ Graphical Ozone & Smoke Guidance Display:

<http://www.nws.noaa.gov/aq/>

❖ Graphical Product Survey:

<http://www.weather.gov/survey/nws-survey.php?code=eaq>

❖ GRIB2 Data Download:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndgd/AR.conus/>