Exceptional Event Documentation

Ozone - Eight Hour Average
Wildland Fire Smoke
San Luis Obispo County – June & July 2008

March 10, 2009

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO

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List of Acronyms

AGL	Above Ground Level
APCD	San Luis Obispo County Air Pollution Control District
ARB	California Air Resources Board
ARL	NOAA Air Resource Laboratory
CAA	Clean Air Act
CAAA	1990 Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standard
CAP	Clean Air Plan for San Luis Obispo County
EPA	United States Environmental Protection Agency
FRM	Federal Reference Method
GMT	Greenwich Mean Time
HYSPLIT	Trajectory model provided by NOAA
NAAQS	National Ambient Air Quality Standard
NASA	National Aeronautics and Space Administration
NOAA	National Oceanic and Atmospheric Administration
NOx	Oxides of Nitrogen
MODIS	High resolution satellite image provided by NASA
PM10	Particulate Matter (less than 10 μm)
PPB	Parts Per Billion
ROG	Reactive Organic Gases
SLO	San Luis Obispo
UTC	Greenwich Mean Time

Exceptional Event Documentation

OZONE - WILDLAND FIRE SMOKE
SAN LUIS OBISPO COUNTY - 2008

Exceedances of the eight hour ozone National Ambient Air Quality Standard (NAAQS) recorded in San Luis Obispo County during June and July 2008 meet the criteria for an exceptional event as defined by federal policies. This report demonstrates that wildland fires produced ozone precursor emissions which increased the ambient ozone concentrations in San Luis Obispo County to levels that exceeded the National Ambient Air Quality Standards (NAAQS).

This is the second edition of this report. The first edition, dated February 5, 2009, provided evidence of San Luis Obispo County wildfire smoke impacts using satellite images and smoke model analysis. This edition provides additional evidence that the fire emissions significantly impacted ozone measurements at the monitoring stations in San Luis Obispo County.

1 BACKGROUND

In the March 22, 2007 Federal Register, the Environmental Protection Agency (EPA) presented the final rule addressing the review and handling of air quality monitoring data influenced by exceptional events. Exceptional events are events for which the normal planning and regulatory process established by the Clean Air Act (CAA) is not appropriate. In this rulemaking action, EPA finalized the proposal to:

- Implement section 319(b)(3)(B) and section 107(d)(3) authority to exclude air quality monitoring data from regulatory determinations related to exceedances or violations of the NAAQS; and,
- Avoid designating an area as nonattainment, redesignating an area as nonattainment, or reclassifying an existing nonattainment area to a higher classification if a State adequately demonstrates that an exceptional event has caused an exceedance or violation of a NAAQS.

The EPA requires states to take reasonable measures to mitigate the impacts of an exceptional event. In accordance with the language in section 319, EPA defines the term "exceptional event" to mean an event that:

(i) Affects air quality;
(ii) Is not reasonably controllable or preventable;
(iii) Is an event caused by human activity that is unlikely to recur at a particular location or a natural event; and
(iv) Is determined by EPA through the process established in the regulations to be an exceptional event.

Impacted data is flagged in the EPA data base with the code ‘RT’ and the comment ‘Northern/Central California Wildfire Episode’ to indicate that the data has been significantly impacted by wildfire emissions. Data flagging serves multiple purposes. According to the 1986 U. S. Environmental Protection Agency (EPA) guidance document, *Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events*, knowledge and understanding of what data represent are critical in the overall air quality process. The major thrust of a data flagging system is information exchange, and data flags are meant to prevent the misuse of data. Flagging the data to indicate that the NAAQS exceedances were caused by ozone precursor emissions produced by wildfires will ensure that the data is not misinterpreted as being the result of local San Luis Obispo County emissions.

EPA notes that natural events, which are one form of exceptional events according to this definition, may recur, sometimes frequently (e.g., western wildfires). For the purposes of this rule, EPA defines "natural event" as an event in which human activity plays little or no direct causal role to the event in question. The EPA recognizes that over time, certain human activities may have had some impact on the conditions which later give rise to a "natural" air pollution event. However, EPA does not believe that small historical human contributions should preclude an event from being deemed "natural."

The analysis in this report will provide 'weight of evidence' to establish that:

- the event met the exceptional event criteria as set forth by the EPA;
- there was a clear causal relationship between the concentration and the event;
- the event was above normal historical fluctuations, including background;
- the concentration at the monitoring sites would not have exceeded the standards 'but for' the event; and,
- reasonable and appropriate actions were taken by the APCD to inform the public of smoke impacts and provide education to protect public health.

The initial version of this report was submitted to the California Air Resources Board (ARB) on February 5, 2009 for transmittal to EPA. The public was provided an opportunity to review the documentation and provide comments. The public was notified of a 30-day comment period by a notice placed in the San Luis Obispo County Tribune newspaper and posted on the APCD website. No public comments were received during the 30-day comment period. The ARB provided comments to the APCD on February 26, 2009. This version of the submittal provides specific materials that demonstrate the impact of the exceptional event at the San Luis Obispo County ozone data for the dates listed in Table 1.

Monitoring Station	Date
San Luis Obispo	June 19, 2008
Morro Bay	June 20, 2008
Red Hills	June 27, 2008 July 8, 2008 July 9, 2008 July 25, 2008 July 26, 2008
Carrizo Plains	June 27, 2008 July 8, 2008 July 9, 2008 July 25, 2008

Table 1. Dates of 2008 Exceptional Event

2 EXCEPTIONAL EVENT CRITERIA

CRITERIA SUMMARY

This document will provide 'weight of evidence' that an exceptional event occurred at the following San Luis Obispo County monitoring stations on the following dates:

- San Luis Obispo, June 19, 2008
- Morro Bay, June 20, 2008
- Red Hills and Carrizo Plains, June 27, 2008, July 8 & 9, 2008, July 25, 2008
- Red Hills, July 26, 2008

The following evidence will be presented in this document:

1) <u>The event affected air quality.</u>

- Ozone reached a peak 8-hour concentration greater than the NAAQS.
- Unusual ozone traces at the monitoring stations are a result of the exceptional event.

2) <u>There is a clear causal connection between the exceedances and the exceptional event.</u>

- Evidence is provided to demonstrate long range transport of high concentrations of ozone and ozone precursor emissions generated by wood combustion during the fires to the monitoring stations in San Luis Obispo County.
- Ozone measurements at San Luis Obispo County monitoring stations during the event show rapid ozone changes of 48 to 60 ppb as a result of the exceptional event.
- Data analysis show temporal ozone patterns during the event which indicates ozone measurements in San Luis Obispo County were significantly impacted by the event.
- Smoke model animations shows movement of smoke plumes from the fires to San Luis Obispo County.
- Photochemical modeling has shown that ozone can increase as much as 40 ppb or more during large wildfires.
- Field studies with instrumented aircraft have measured ozone increases of up to 30 ppb in a smoke plume.

3) <u>The event is associated with measured concentration in excess of normal historical fluctuations including background.</u>

- The 8-hour ozone concentration of 97 ppb at Red Hills during the fire event was the highest recorded 8-hour ozone concentration in San Luis Obispo County since 2003.
- A plot of Peak Annual 8 Hour Ozone for San Luis Obispo and Morro Bay demonstrate that the 2008 Peak Annual 8 Hour Ozone was significantly higher than years 1999 to 2007.
- Overnight ozone patterns were exceptional and unusual and are attributed to the wildfire impacts.

- The summer 2008 wildfire event is considered exceptional in the number and extent of wildfires in Central and Northern California.

4) There would have been no exceedance "but for" the event.

- Evidence is provided to demonstrate long range transport of high concentrations of ozone and ozone precursor generated by wood combustion during the fires to the monitoring stations in San Luis Obispo County. Local San Luis Obispo County emission sources would not have generated the ozone concentrations that occurred during the event.
- On site measurements indicate the difference between the smoke impacted air mass and "cleaner" local air mass was estimated to be 48 ppb at Red Hills and 60 ppb at Carrizo Plains. These increases are more than sufficient to cause the exceedance of the standard on the days listed.
- Smoke model animations and satellite images indicate large quantities of smoke and ozone precursor emissions impacted San Luis Obispo County during this period.
- Photochemical modeling has shown that ozone can increase as much as 40 ppb or more during large wildfires.
- Field studies with instrumented aircraft have measured increases of up to 30 ppb in ozone concentrations as the aircraft flies through the smoke plume.

EVIDENCE OF CLEAR CAUSAL CONNECTION

The following section will present evidence of the clear causal connection between wildfire smoke and ozone concentration increases that caused exceedances of the NAAQS. The evidence will include photochemical modeling performed by the California Air Resources Board (ARB) and aircraft studies investigating the connection between smoke plumes and increases in ozone concentrations.

Exceptional and Unusual Ozone Trends at San Luis Obispo County Monitoring Stations

Chapter 3 will provide detailed evidence of exceptional and unusual trends at San Luis Obispo County monitoring stations. This evidence indicates:

- A change in air mass from the smoke impacted air mass to a "cleaner" local San Luis Obispo County air mass was estimated to be 48 ppb at Red Hills and 60 ppb at Carrizo Plains;
- Long range transport of ozone and ozone precursors from wood combustion occurred during the fires. Similar ozone trends were evident at monitoring stations 100 and 200 miles upwind of the San Luis Obispo County monitoring stations;
- Local emissions were typical during the event and did not cause the ozone exceedances. Ozone precursor emissions at Red Hills and Carrizo Plains are typically very low.

Photochemical Modeling

Figure 1 shows a photochemical model provided by ARB with smoke impacts from a large wildfire producing peak ozone of 126 ppb, with surrounding areas of 80 ppb or less, implying an increase of 40 ppb or more in the smoke plume.

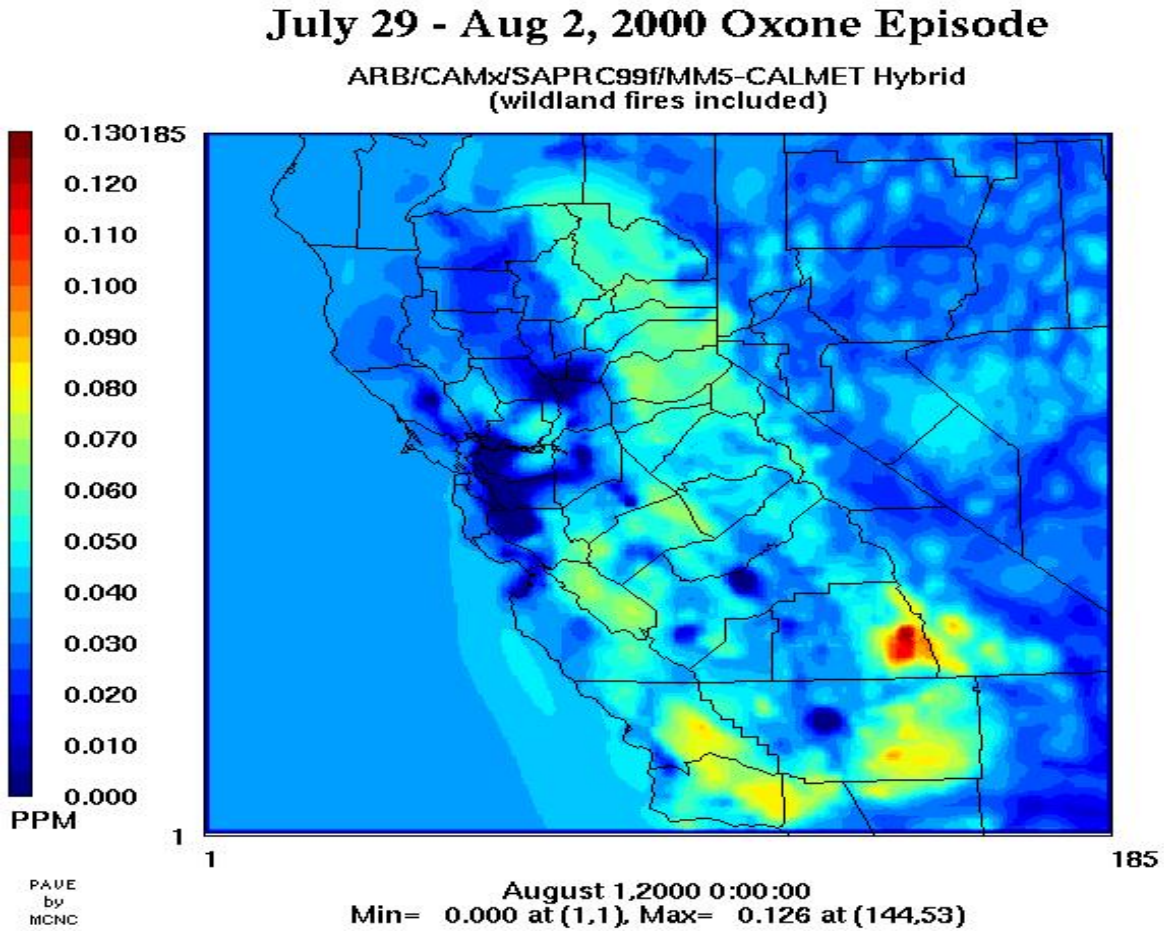


Figure 1. Photochemical model indicating a large increase in ozone concentrations in a wildland fire smoke plume.

Aircraft Studies

An aircraft study of the Zaca Fire plume in August 2007 (Bush, 2008) provides direct measurements of the ozone concentration increase in a smoke plume. The study concluded that increases of 15 to 20 ppb were possible. The plot in Figure 2 indicates increases up to 30 ppb, hundreds of miles downwind from the source, during a period when the smoke plume was not significantly visible in the MODIS satellite image (see page 6-32 in the appendix for a link to the complete study documentation).

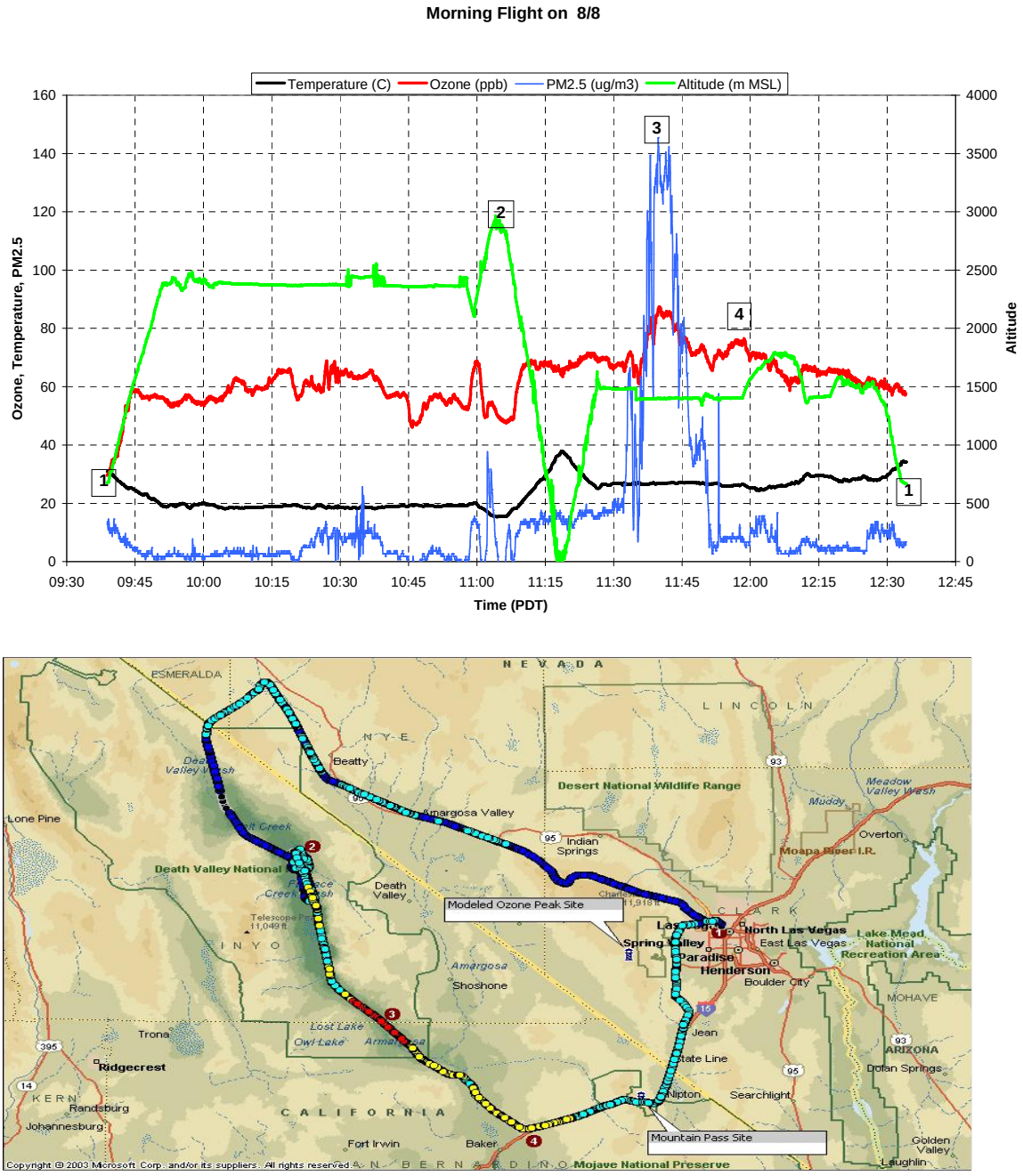


Figure 2. Plot shows 25 to 30 ppb increase in ozone concentration when the aircraft passes through smoke plume. Flight path is color coded to show ozone concentration.

Satellite images indicate smoke impacts on days identified by the APCD as exceptional events are much more significant than 8 August 2007 Zaca Fire aircraft flight. This indicates potential impacts greater than 30 ppb on the days impacted by smoke in San Luis Obispo County. Satellite images and details of the aircraft study may be found in the appendix.

3 DESCRIPTION OF EVENT

The Northern/Central California Wildfire Episode, which occurred during the summer of 2008, was comprised of 2780 fires. Some fires started on June 6, 2008. The more significant event occurred two weeks later. Dry thunderstorms on June 20 and 21, 2008 produced approximately 25,000 lightning strikes in Northern California, starting approximately 2000 fires during a period when severe drought had resulted in extremely flammable woodlands and grasslands. The resulting firestorms spread thick smoke over Northern and Central California during the summer of 2008. Exceptional amounts of ozone precursors were generated as a result of wood combustion during the fires.

In addition, numerous fires in surrounding counties of Monterey, Kern and Santa Barbara impacted San Luis Obispo County. Fires in Big Sur heavily impacted San Luis Obispo County during the summer and fall of 2008. Figure 3 is a map of the San Luis Obispo County air monitoring stations. Ozone measurements at Morro Bay, San Luis Obispo, Red Hills and Carrizo Plains were significantly impacted by ozone precursors produced by the fires.

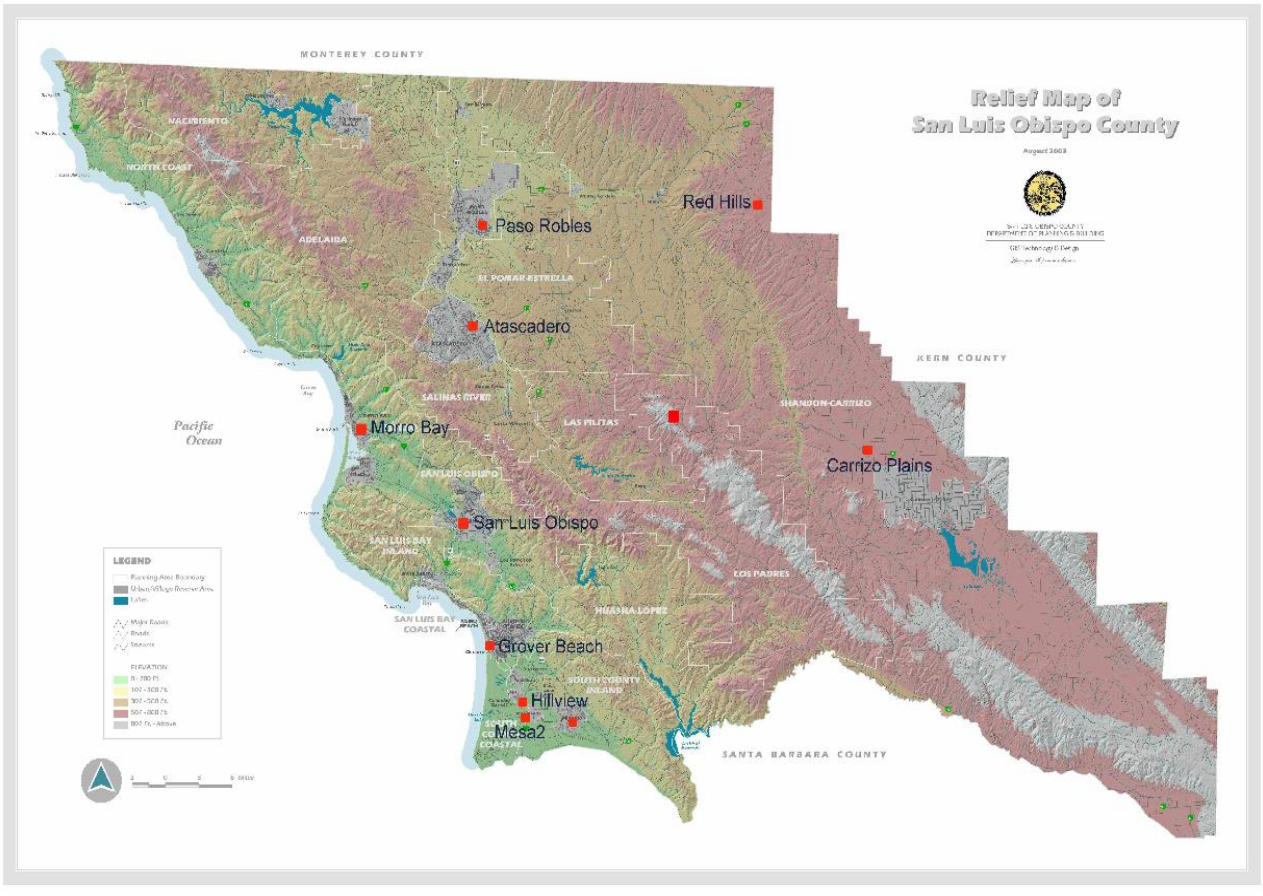


Figure 3. San Luis Obispo County air monitoring stations

EXCEPTIONAL EVENT - SAN LUIS OBISPO AND MORRO BAY

The Indians Fire started on Sunday, June 8, 2008 and was declared 100 % contained on Thursday, July 10, 2008. The fire burned 81,378 acres in the Big Sur area in Monterey County. Satellite images of the smoke are provided in the appendix. Maps and a description of the fire may be obtained from the Inciweb fire summary:

http://www.inciweb.org/incident/1298

Smoke generated ozone from the Indians wildland fire traveled southward along the coast and impacted Morro Bay and San Luis Obispo on June 19 and 20, 2008. An animation of smoke transport from the Indians fire to San Luis Obispo County may be viewed by visiting the following NOAA smoke animation website:

June 19, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080619/loop.gif

June 20, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080620/loop.gif

As evident in the animation, emissions from the fire traveled southward and impacted San Luis Obispo County on June 19 and 20, 2008. San Luis Obispo recorded an exceedance of the NAAQS on June 19, 2008 of 76.1 ppb and exceeded the California Ambient Air Quality Standard (CAAQS) on June 20, 2008. Morro Bay recorded an exceedance of the standard on June 20, 2008 of 80.5 ppb.

Figures 4 and 5 demonstrate the exceptional nature of the event in Morro Bay and San Luis Obispo. Figure 4 demonstrates that the Peak Annual 8 Hour Ozone Concentrations for San Luis Obispo and Morro Bay on June 19 and 20, 2008 is significantly higher any ozone peak for the period 1999-2008, and are the only exceedances of the 75 ppb standard for the 10 year period. Figure 5 show that the ozone on these days was exceptionally higher than any other days in 2008. The smoke event is evident in the sharp spike in the annual ozone plot.

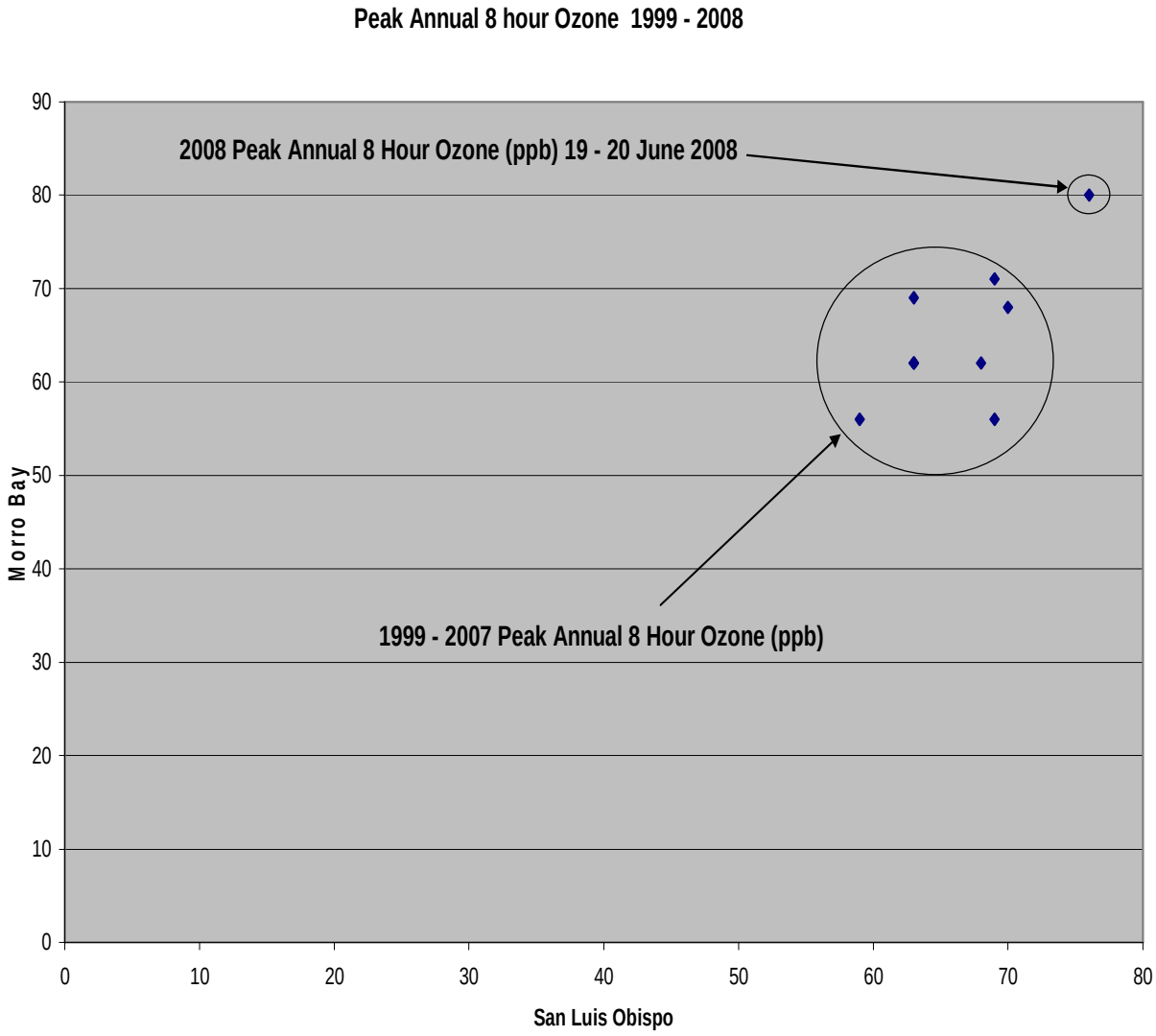
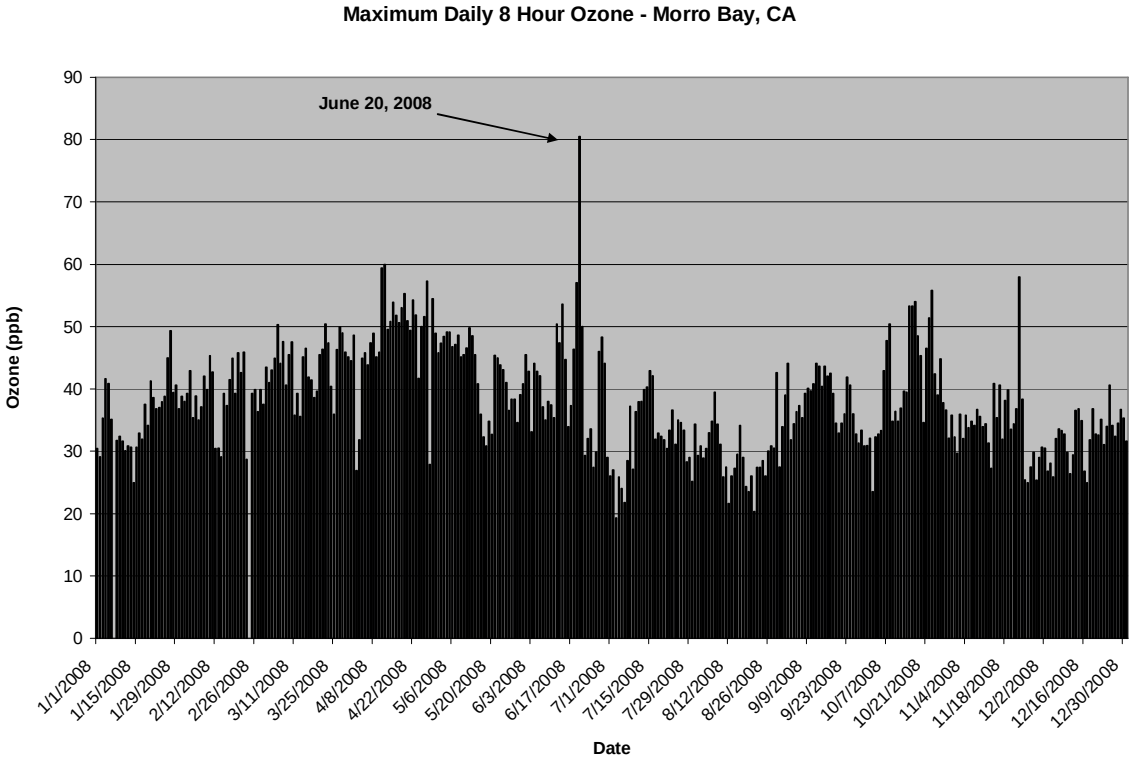


Figure 4. Plot of 1999 to 2008 Peak Annual 8 Hour Ozone (ppb) for San Luis Obispo and Morro Bay.



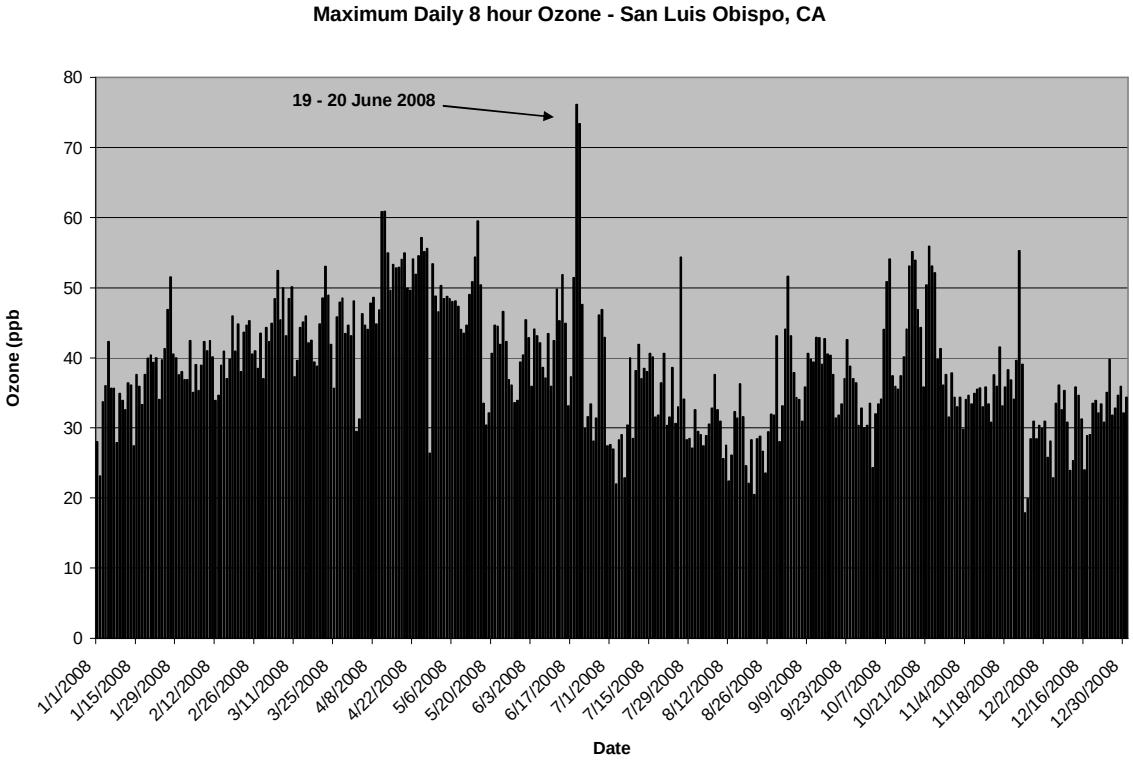


Figure 5. Plot of 2008 Daily Maximum 8 Hour Ozone (ppb) for San Luis Obispo and Morro Bay.

EXCEPTIONAL EVENT – RED HILLS & CARRIZO PLAINS

Figure 6 is a summary map of the California wildfire incidents from June 22, 2008 to August 11, 2008. These fires were mostly lightning caused and naturally occurring. 2095 fires burned 1,157,930 acres during this period, mostly in Northern and Central California.

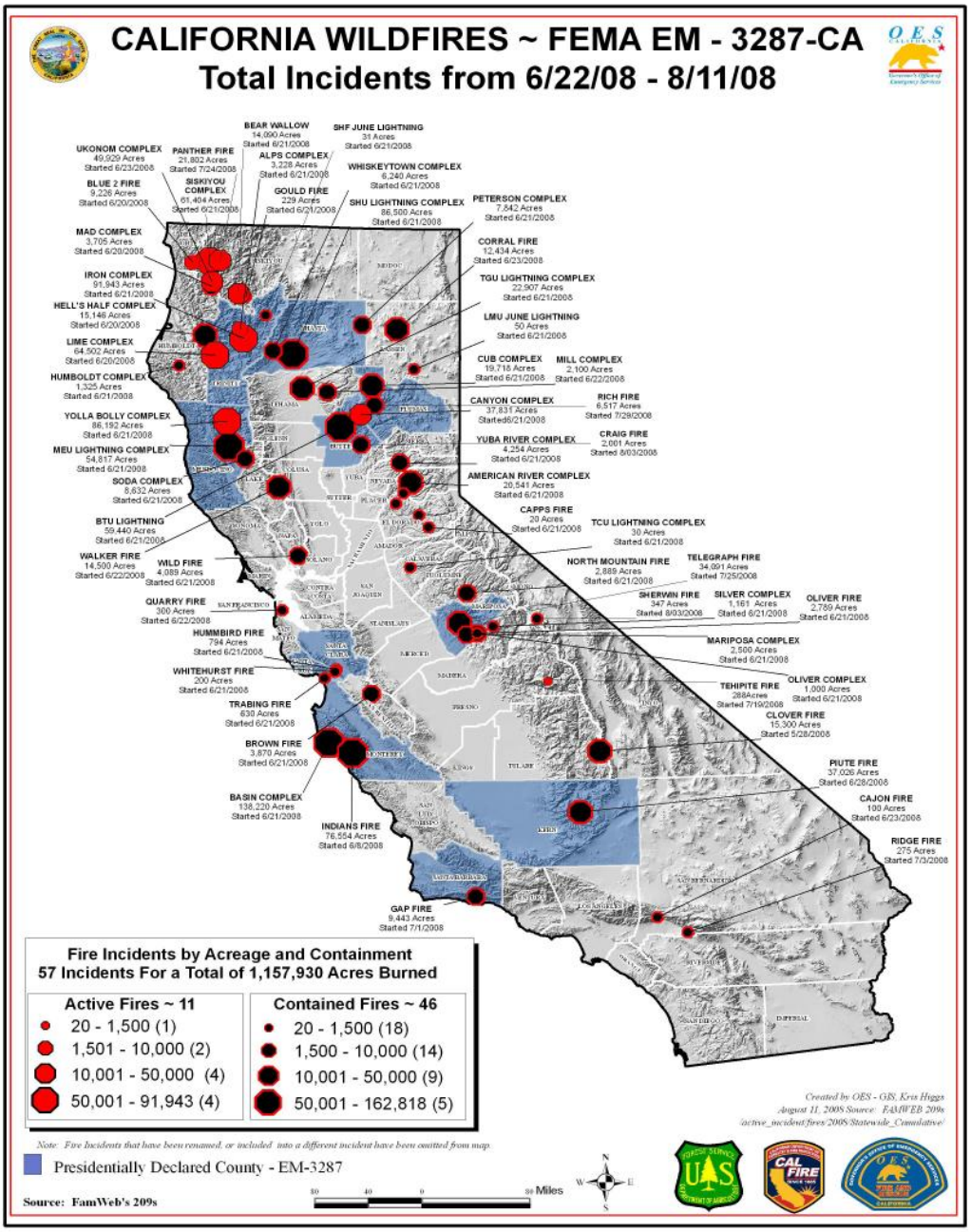


Figure 6. Wildfire summary (Source: FamWeb's 209s)

Smoke from the Indians and Basin fires in Monterey County's Big Sur heavily impacted San Luis Obispo County in 2008. 220,000 acres (nearly 350 square miles) burned in Monterey County. Monterey Bay Unified Air Pollution Control District (MBUAPCD) estimates that combined PM10 emissions from the Monterey County events to be over 20,000 tons, with peak daily emissions near 1,000 tons or 10 times that from nonwildfire sources (source : MBUAPCD). As noted in Figure 6, Monterey, Kern and Santa Barbara were Presidentially Declared Counties (EM 3287) due to the wildfires.

Smoke from fires impacted San Luis Obispo County at times from mid June 2008 through July 2008. In the February 5, 2009 submittal, the APCD demonstrated that smoke impacts occurred in San Luis Obispo County during the following periods, based upon review of MODIS satellite images, trajectory analysis and particulate model animations (see appendix for satellite images and trajectory analyses for these days):

-June 26 and 27, 2008
-July 2, 2008
-July 7, 8, 8, and 10, 2008
-July 23, 24, 25 and 26, 2008

The analysis has been refined to examine impacts at specific monitoring stations. Two additional days were added to the analysis and days that had lesser impacts were removed from the original list:

- San Luis Obispo, June 19, 2008
- Morro Bay, June 20, 2008
- Red Hills & Carrizo Plains, June 27, 2008, 8 & July 9, 2008, July 25, 2008
- Red Hills, July 26, 2008

To provide the 'weight of evidence' for the exceptional event, the following analyses will be presented:

- Smoke animations showing movement of smoke plumes to San Luis Obispo County
- Particulate data
- Comparison of peak days to show large scale transport
- Diurnal ozone trends providing evidence of San Luis Obispo County ozone impacts
- Long term trends during the smoke event
- Air mass link between Red Hills and Carrizo Plains
- Media coverage of smoke impacts in San Luis Obispo County

Smoke Animations

Smoke animations are provided to graphically show the smoke trajectory and concentration during the event days. An animation of smoke transport from the fires in Northern California and Big Sur to San Luis Obispo County may be viewed by visiting the following NOAA website:

June 27, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080627/loop.gif

July 8, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080708/loop.gif

July 9, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080709/loop.gif

July 25, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080725/loop.gif

July 26, 2008 animation:
http://www.ready.noaa.gov/data/archives/fires/national/arcweb/20080726/loop.gif

These animations show smoke from fire in Northern California and Big Sur being transported southward and impacting San Luis Obispo County and support conclusions from trajectory analysis provided with the February 5, 2009 submittal. Still images of the analyses are provided in the appendix.

Particulate Data

The Red Hills monitor was installed to investigate ozone transport to elevated locations in the hills and mountains that bound the western edge of the San Joaquin Valley. Carrizo Plains monitor is also at a similar elevation, at approximately 600 to 700 meters and is also impacted by ozone transport. Both monitoring stations are in areas of very low population and very few local emission sources. These stations do not currently measure pollutants other than ozone. CO and hourly PM2.5 measurements would provide additional information on smoke transport; however, these parameters were not measured at the Red Hills and Carrizo Plains monitoring stations during the smoke event.

To investigate smoke impacts during the event, the APCD deployed a portable particulate monitor in the Paso Robles area. Based on 2008 ozone data, Paso Robles ozone measurements do not appear to have been impacted to the same degree as other monitoring stations in San Luis Obispo County. However, the temporary PM10 monitor located west of Paso Robles did record some significantly smoke impacts at times. PM10 data was provided to the public via the press releases (see appendix for press releases). The following data was provided in the press release issued on July 10, 2008:

> Tuesday July 8: In North County San Luis Obispo, the Paso Robles 24-hour average was **70** ug/m3, exceeding 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **237** ug/m3.
>
> Wednesday July 9: In North County San Luis Obispo, the Paso Robles 24-hour average was **61** ug/m3, exceeding 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **72** ug/m3.

In addition, the 1 hour maximum PM10 on Friday, June 27 was **65.2** ug/m3. This data provides evidence of significant PM 10 impacts in San Luis Obispo County on June 27, July 8 and July 9, which are days that were impacted by the exceptional event at Red Hills and Carrizo Plains.

Figure 7 is a plot of 2007 Paso Robles PM10 measurements. There was no measured exceedance of state or federal $PM_{2.5}$ standards or the federal air quality standard for PM_{10} in 2007. The temporary

monitor recorded exceedances of the 50 ug/m3 standard on July 8 and 9, 2008, which provides evidence of significant smoke impacts in San Luis Obispo County on these days.

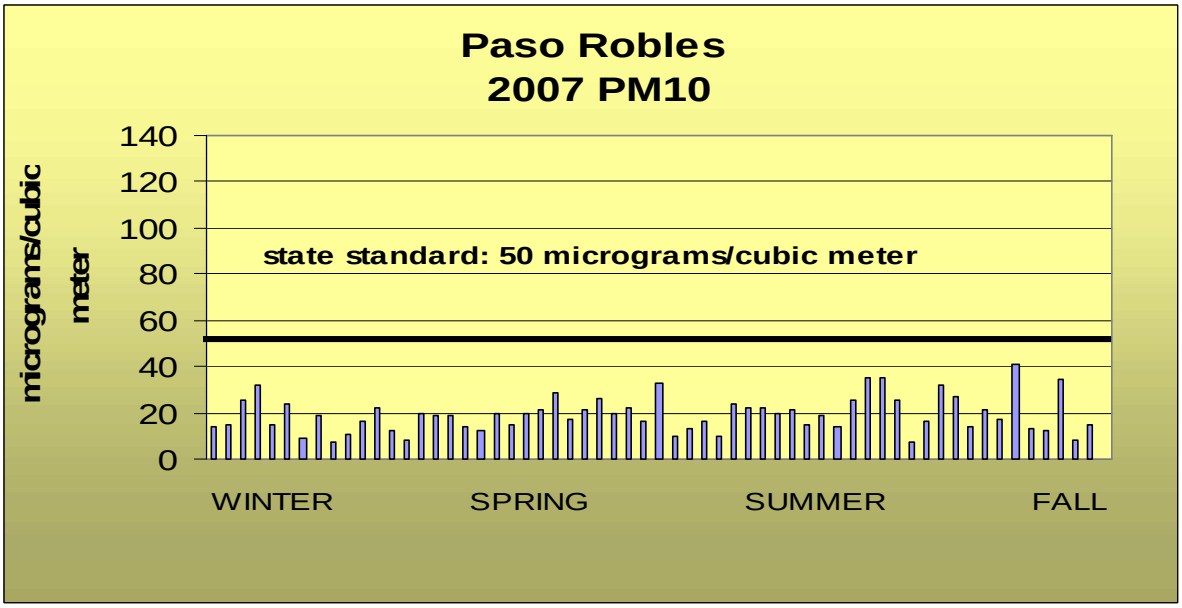


Figure 7. Paso Robles 2007 PM10

Peak Ozone Impacts Provide Evidence of Long Range Ozone Transport

Peak impacts occurred on June 27, 2008, 8 and July 9, 2008 and July 25, 2008 at Red Hills and Carrizo Plains, and July 26, 2008 at Red Hills. Red Hills and Carrizo Plains peak ozone days coincided with peak ozone days at Pinnacles National Monument in San Benito County as shown in Table 2.

	Red Hills	Carrizo Plains	Pinnacles
8 July	1	2	1
9 July	2	1	2
27 June	6	1	3
25 July	4	3	4
26 July	5		

Table 2. Ranking of 2008 ozone peak days.

The highest ozone concentrations at Red Hills in 2008 were:

1. July 8, 2008
2. July 9, 2008
3. June 13, 2008
4. July 25, 2008
5. July 26, 2008
6. June 27, 2008

The highest ozone concentrations at Carrizo Plains in 2008 were:

1. July 9, 2008
2. July 8, 2008, June 27, 2008
3. July 25, 2008
4. June 28. 2008

The highest ozone concentrations at Pinnacles National Monument in 2008 were:

1. July 8, 2008
2. July 9, 2008
3. June 27, 2008
4. July 25, 2008

The highest two ozone days at Pinnacles National Monument and Red Hills occurred on the same days; July 8 and 9, 2008. Carrizo Plains also recorded the highest concentrations on these event days. June 27 and July 25, 2008 were impacted significantly at Pinnacles, Red Hills and Carrizo as well. The Pinnacles, Red Hills and Carrizo Plains monitors are at elevations between 300 and 700 meters, aligned northwest to southeast, parallel to the Diablo Range. The fact that peak ozone days coincided at stations with similar topography over a distance of 100 miles demonstrates the regional nature of the impacts and that the impacts were not from San Luis Obispo County sources.

In addition, similar ozone trends were reported at the 1600 foot level at the Walnut Grove Tower, 200 miles upwind of Red Hills and Carrizo Plains. The Walnut Grove Tower is a radio tower near Walnut Grove, CA, in the delta region southwest of Sacramento, CA. Ozone concentrations are collected at 30, 400, 800, 1200, 1600 feet above ground level (AGL) from spring to fall (Data Source: ARB, T & B Systems).

Figure 8 is a satellite image for July 9, 2008, with the location of Walnut Grove, Pinnacles, Red Hills and Carrizo Plains identified. Pinnacles is 100 miles upwind and Walnut Grove tower is 200 miles upwind of Red Hills and Carrizo Plains. The image shows smoke blanketing much of Northern and Central California. Smoke animations show smoke moving north to south, or top to bottom in the image.

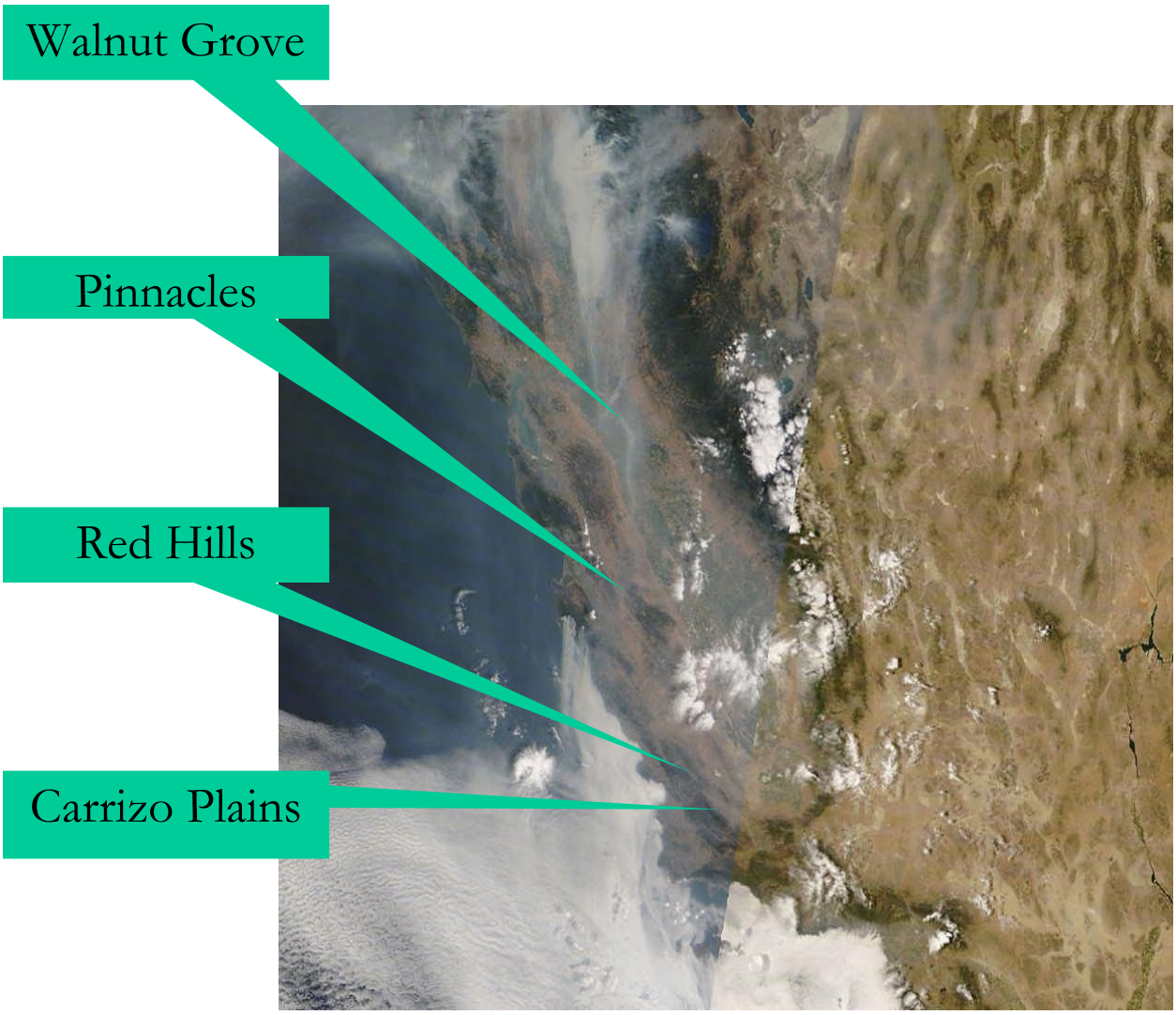


Figure 8. MODIS satellite image for July 9, 2008

Significant impacts were recorded at the 1600 foot level at the Walnut Grove Tower during the event. Figure 9 provides an example of evidence that ozone concentrations were much higher at upper levels than at the surface in Northern and Central California during the smoke event. On June 28, 2008, ozone concentrations reached 139 ppb at 1600 feet AGL at the same time the concentration at 30 foot AGL was 59 ppb. Vertical distribution of ozone is more homogeneous during typical summer days without smoke, although transported ozone aloft is evident at times. Additional analyses will be presented in the following sections to show how the Walnut Grove Tower data add to the evidence that there was large scale transport of ozone aloft during the exceptional event.

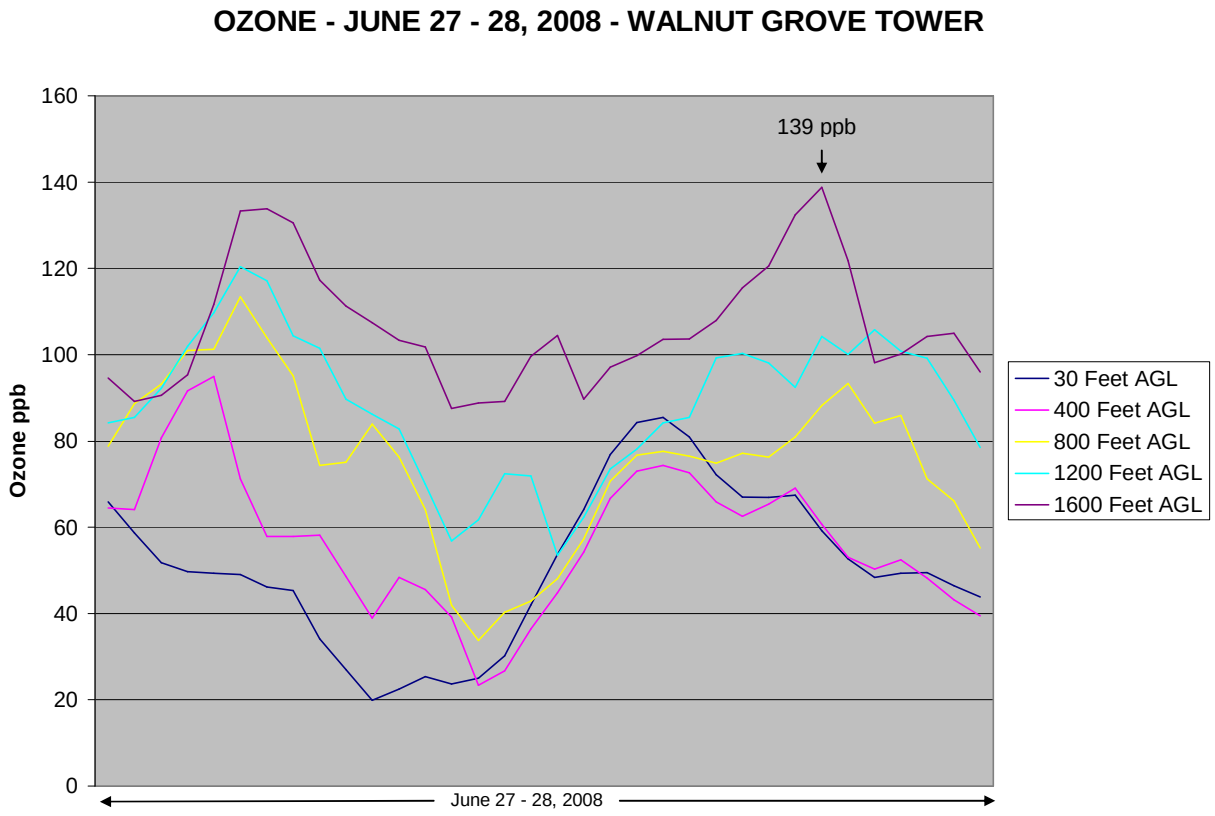


Figure 9. Walnut Grove Tower data for June 27 and 28, 2008.

Temporal Ozone Patterns

Photochemical air pollution (primarily ozone) is produced by the atmospheric reaction of organic substances (such as reactive organic gases, ROG) and nitrogen dioxide (NO_2) under the influence of sunlight.

$$NO_2 + ROG + Sunlight => O_3$$

During typical summer days, ozone concentrations are very dependent on the amount of solar radiation. Ozone concentrations typically peak midday through late afternoon, coinciding with the longest period of daily solar radiation. After sunset, the chemical reaction between nitrous oxide and ozone begins to dominate, reducing ozone concentrations. This process is called ozone scavenging.

$$O_3 + NO => NO_2 + O_2$$

Ozone scavenging reduces the ozone concentration in the atmosphere through the early morning hours when there is no sunlight, resulting in lowest ozone levels near sunrise when the ozone concentration can approach zero. If additional ozone precursors are available for photochemistry, photochemistry increases as solar radiation increases and ozone increases as the morning progresses. If the ozone scavenging is not present, other processes may be evident, such as long range transport

of emissions. High overnight ozone concentrations are an indicator of long range transport and impacts from the transported ozone precursors from the fires.

The following analyses demonstrate the exceptional nature of the ozone diurnal pattern at San Luis Obispo County monitoring stations, which indicates impact on the measurement from ozone precursors generated by the fires and transported to the monitoring station. Unusual temporal patterns of elevated ozone are similar over a wide area of Central California, indicating the regional nature of the long range transport and that local San Luis Obispo County sources were not the cause the of the high ozone concentrations.

Figure 10 is a plot of ozone in San Luis Obispo on a typical summer day before the major fire event occurred. Ozone scavenging is significant in the early morning hours. The ozone concentration drops to 5 ppb by 5 am and peaks at 45 ppb at midday.

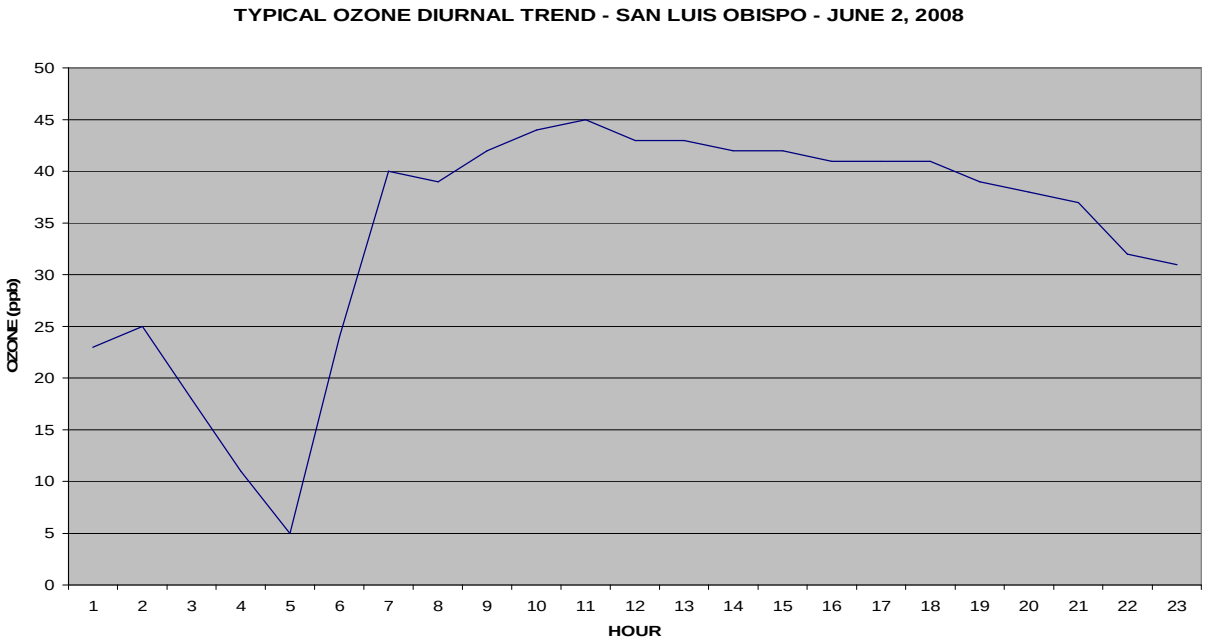


Figure 10. Typical variation in diurnal ozone trend.

Based on the typical diurnal pattern, ozone concentrations at 5 am (near sunrise) are the lowest ozone concentrations recorded for the day. 5 am ozone concentrations can be an indicator of periods with smoke transport impacts. Figure 11 shows Red Hills ozone concentrations above 80 ppb at 5 am correspond with peak smoke concentrations as indicated by smoke models, satellite images and Walnut Grove Tower ozone data. Red Hills is far from local sources of San Luis Obispo County emissions, so high ozone concentrations are due to ozone transport.

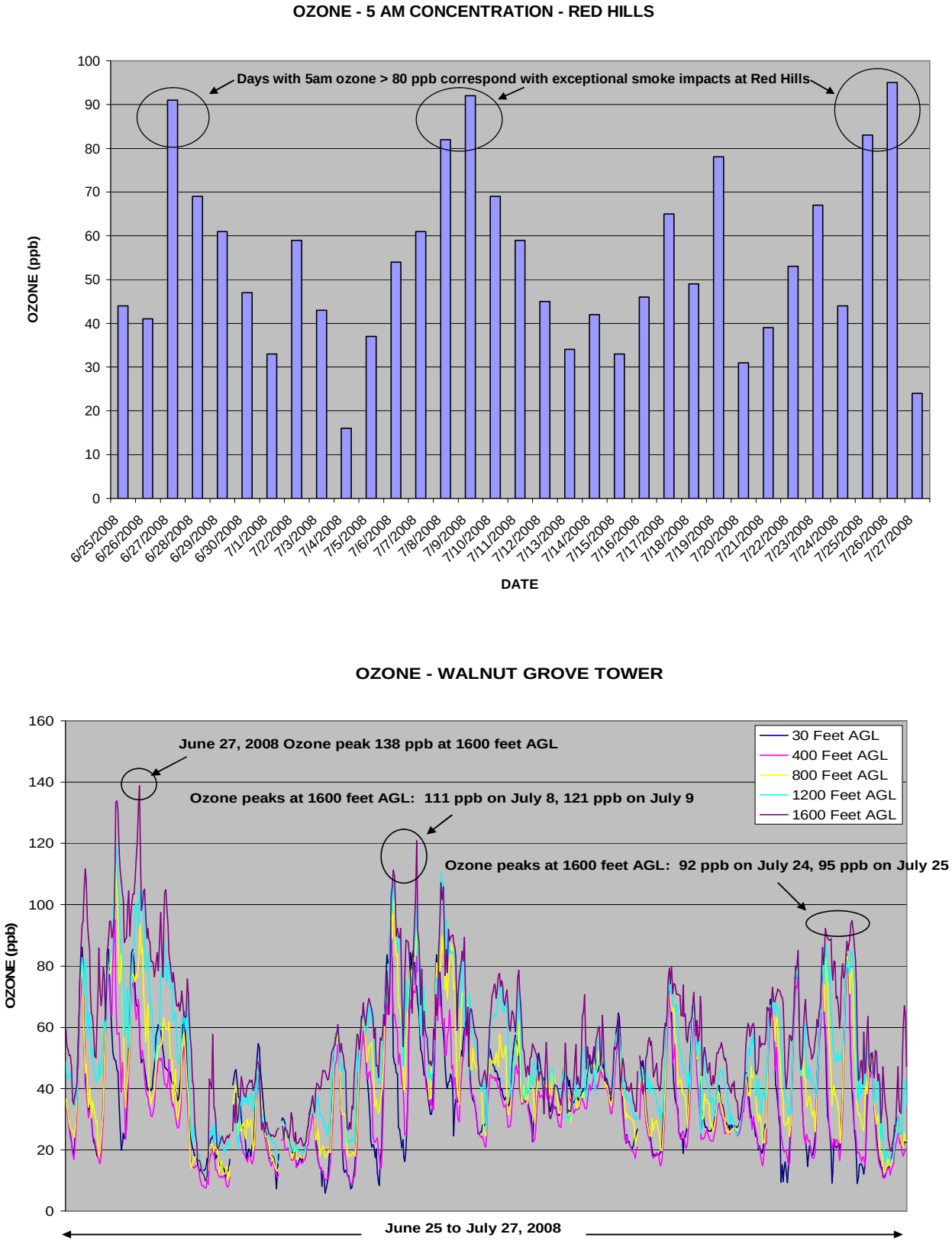


Figure 11. Red Hills 5 am ozone concentrations compared to Walnut Grove ozone data.

Figure 11 demonstrates the regional nature of the smoke impacts aloft. Peak 5 am ozone concentrations at Red Hills (Elevation 680 meters) occur at similar time frames as peak ozone concentrations at the 1600 foot level (488 meters) on the Walnut Grove Tower in the Sacramento delta. This data implies that a reservoir of ozone aloft had been generated during the wildfire events and traveled south as shown in the animations. Ozone measurements from the Sacramento Delta, Pinnacles, Red Hills and Carrizo Plain demonstrate high regional ozone concentrations aloft during periods when smoke is observed in the smoke model animations to move southward.

Examination of 5am ozone at Red Hills and traces at Walnut Grove can be used to detect additional smoke impacts. As a result of generating the plots in Figure 11, smoke impacts were evident on July 19, 2008. The 78 ppb concentration at 5 am was the highest recorded ozone for the day at Red Hills. The satellite image below (Figure 12) indicates potential smoke impacts from Big Sur fires. However, because the 8 hour average for the day was only 76 ppb, the case is not as strong for an exceptional event based on guidance criteria provided by ARB.

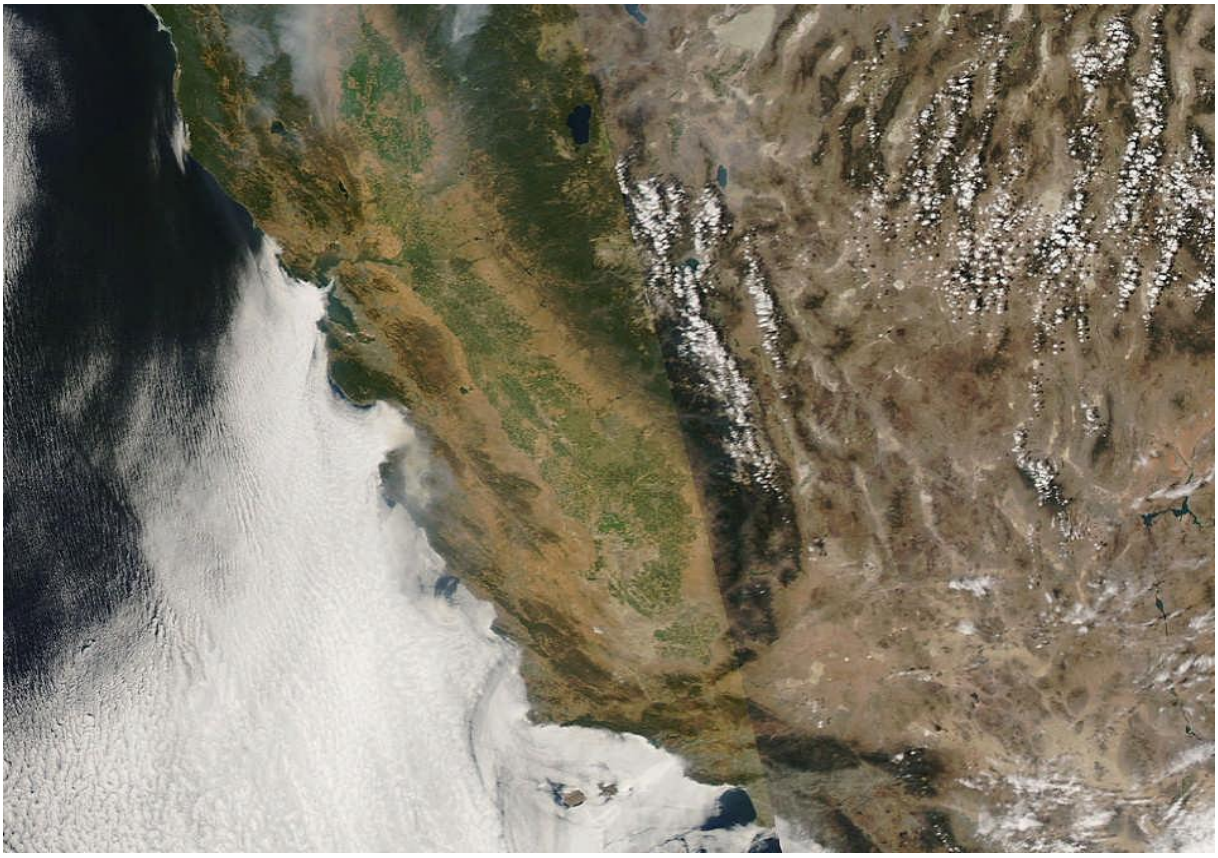


Figure 12. Satellite image for July 19, 2008.

The lack of overnight ozone scavenging due to long range transport of ozone is evident the ozone diurnal pattern recorded by the surface monitors in San Luis Obispo County. The high early morning ozone concentrations were common during the smoke events. Figure 13 presents the diurnal pattern on June 27, 2008. An exceptionally high ozone peak of 95 ppb occurred at 2 am, at the time when ozone levels normally decrease due to scavenging and lack of photochemistry.

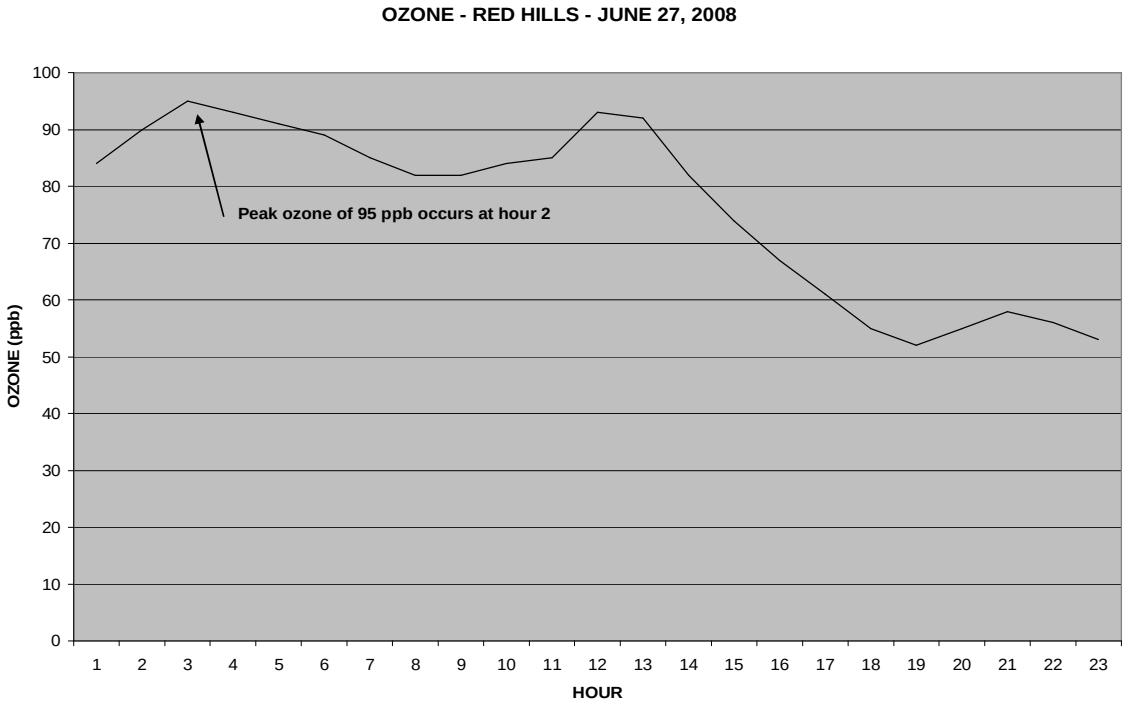
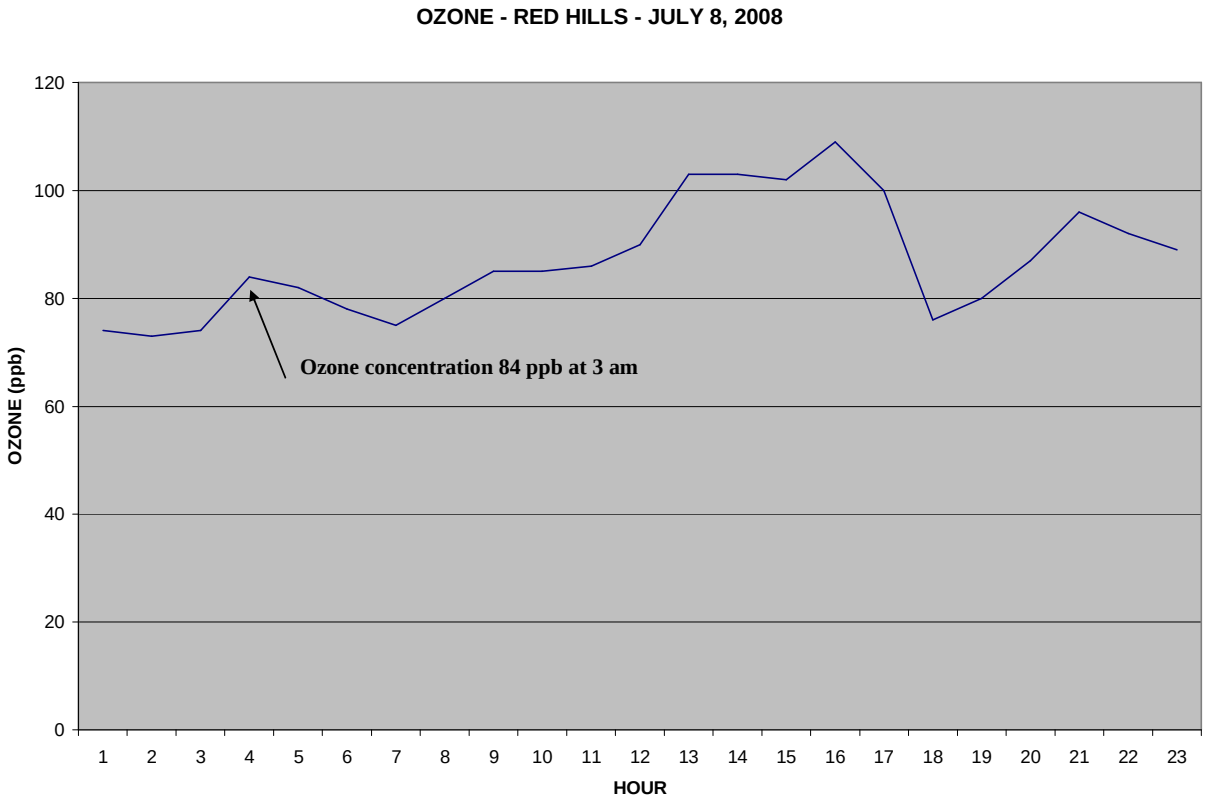


Figure 13. Red Hills diurnal ozone pattern for June 27, 2008.

Ozone concentrations were exceptionally high during the early morning hours of July 8 and July 9, 2008, as shown in Figure 14. Ozone reached 92 ppb at hour 5 on July 9, 2008. While elevated overnight concentrations of ozone at Red Hills can occur at times due to pollution transport, 92 ppb at 5 am is exceptional and indicates the impact of transported ozone precursors from the smoke plume. Figures 15 to 17 provide additional examples of high early morning ozone concentrations during the exceptional event at Red Hills, Morro Bay and San Luis Obispo. A peak of 95 ppb was measured at Red Hills on July 26, 2008.

Some overnight scavenging can occur at Carrizo Plains, most likely due to some vehicle emissions associated with California State Highway 58. Caltrans data indicates 350 to 450 vehicle counts per day on Highway 58, which indicates relatively low vehicle traffic, but this activity may be adequate to cause some early morning scavenging. Traffic on Gillis Canyon Road near the Red Hills monitoring station is expected to be near zero overnight, and no impacts are evident.



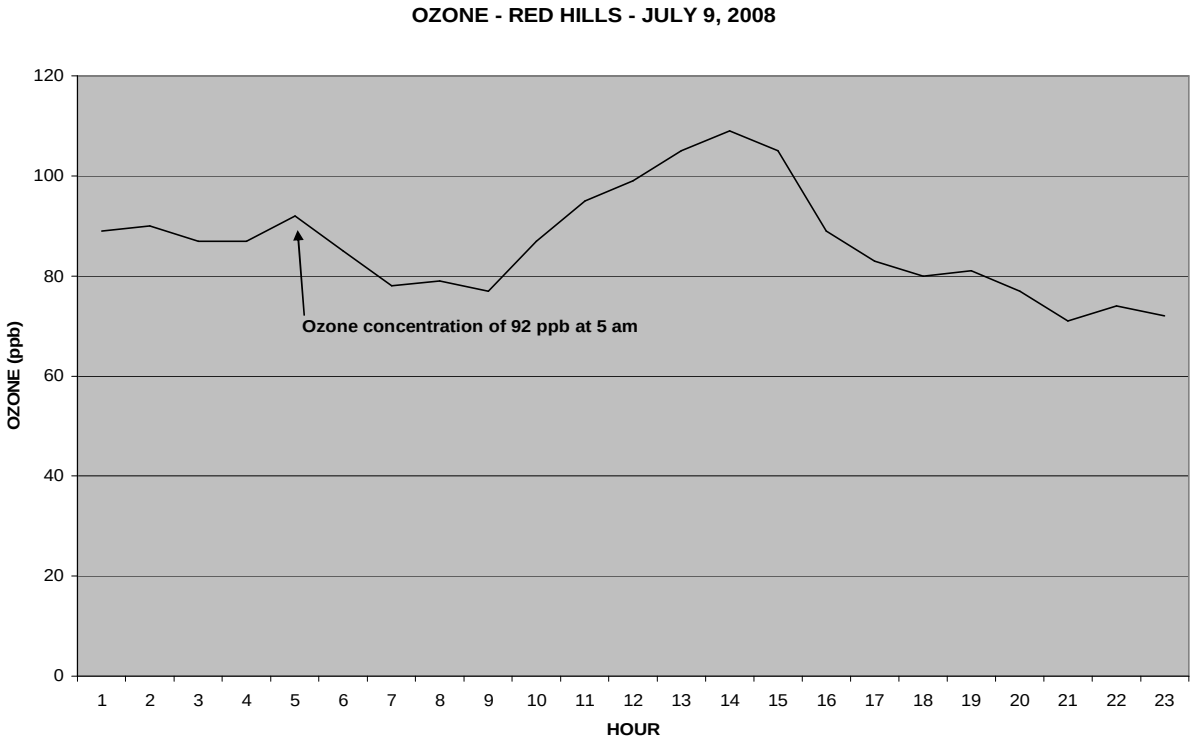
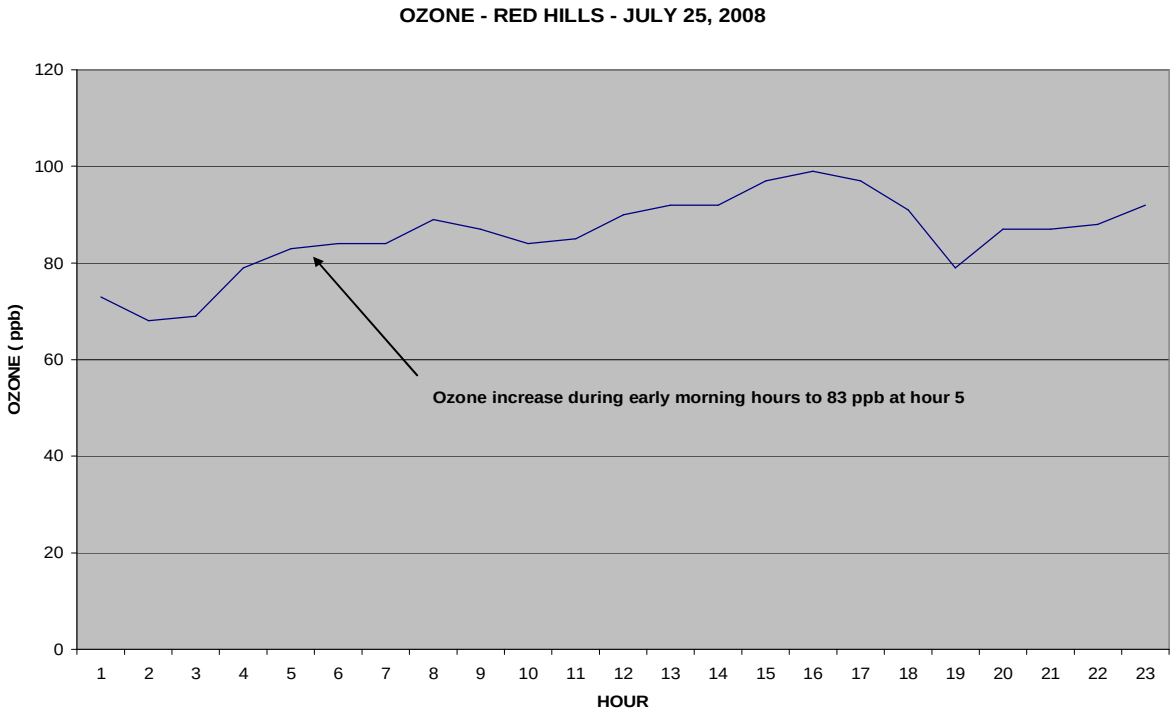


Figure 14. Red Hills diurnal ozone pattern for July 7 & 8, 2008.



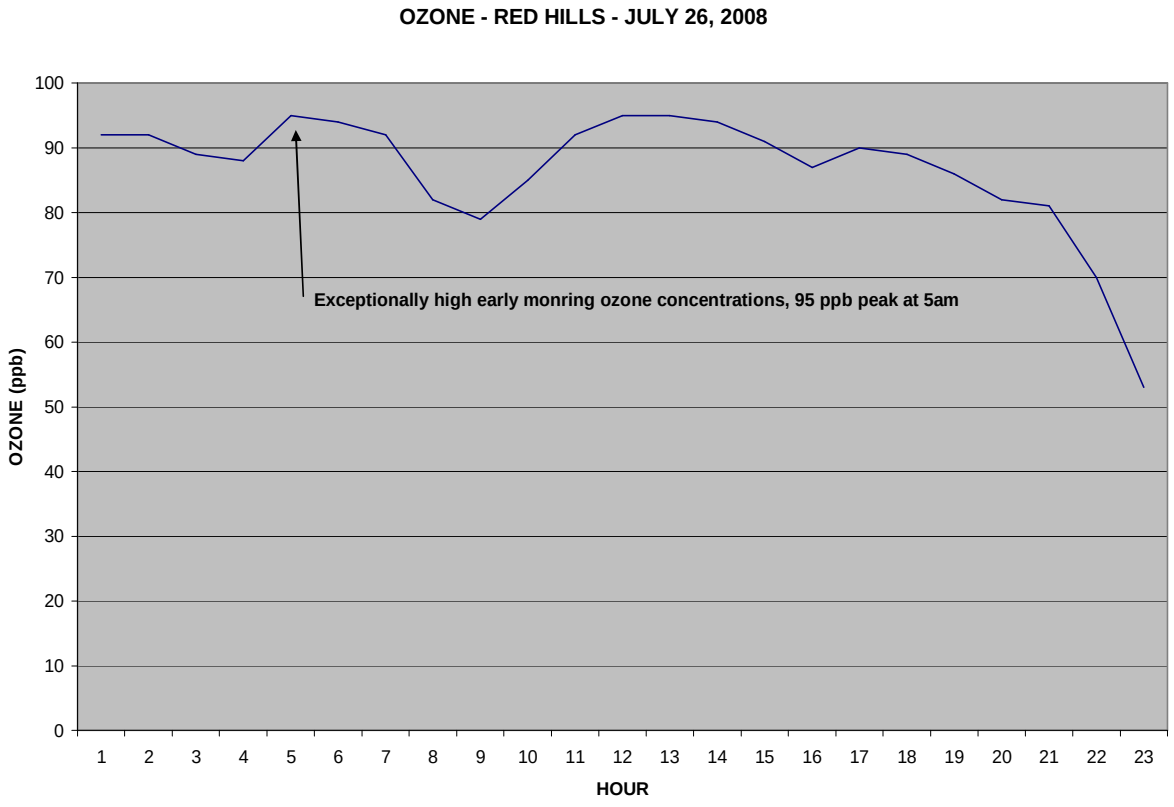


Figure 15. Red Hills diurnal ozone pattern for July 25 & 26, 2008.

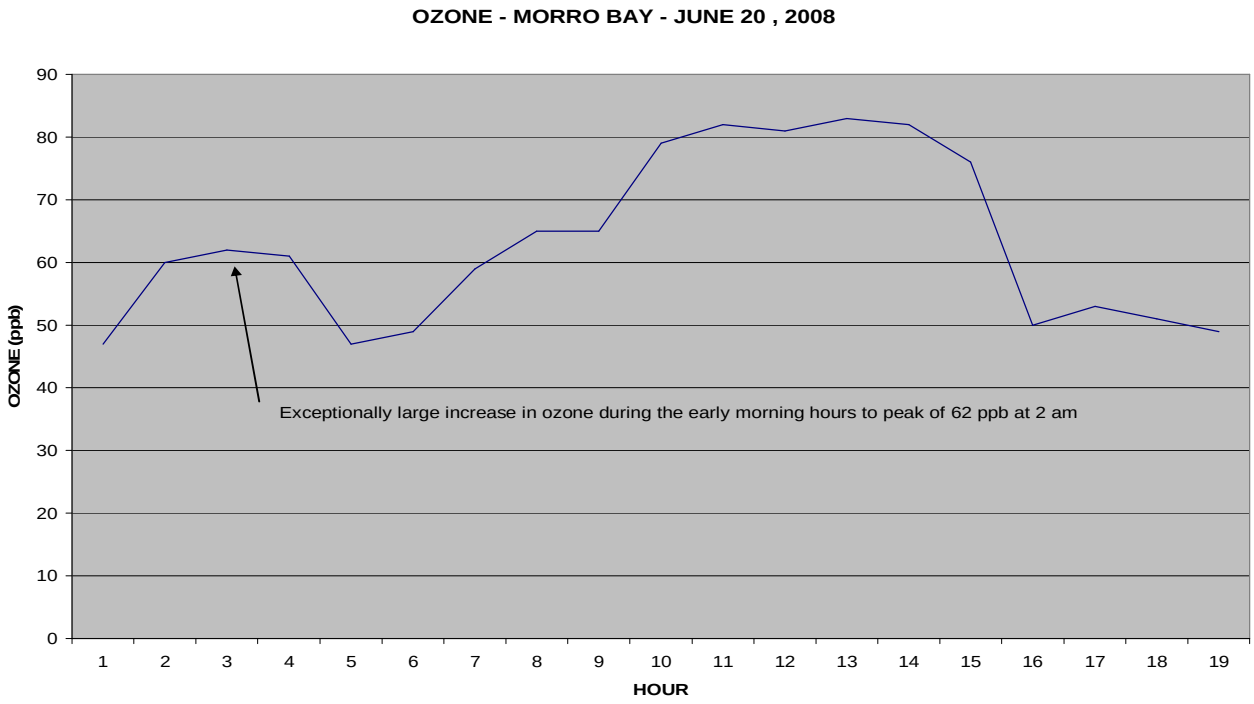


Figure 16. Morro Bay diurnal ozone pattern for June 20, 2008.

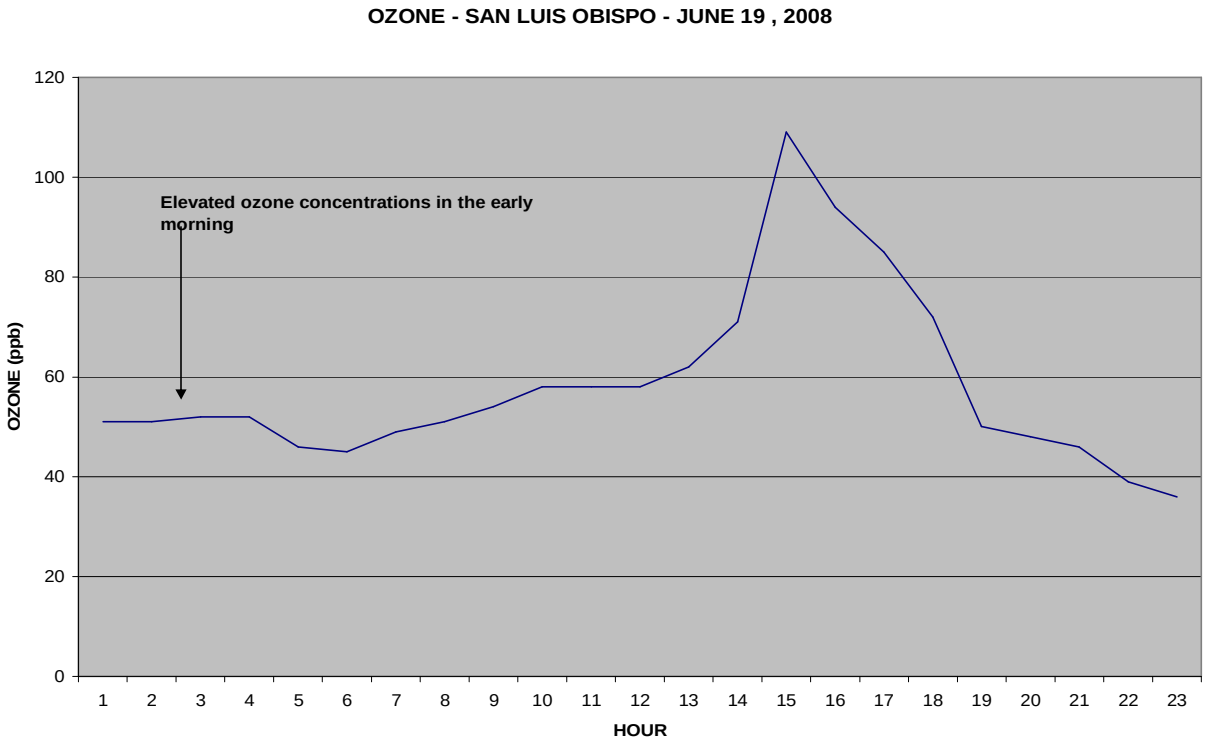


Figure 17. San Luis Obispo diurnal ozone pattern for June 19, 2008.

Additional Evidence to Support the "but for" Argument

Figure 18 plot presents Walnut Grove Tower ozone data from April 23 to August 5, 2008. The trace exhibits a significant change in characteristic during the exceptional event with peaks during the periods of peak fire activity and smoke that was not evident before the exceptional event.

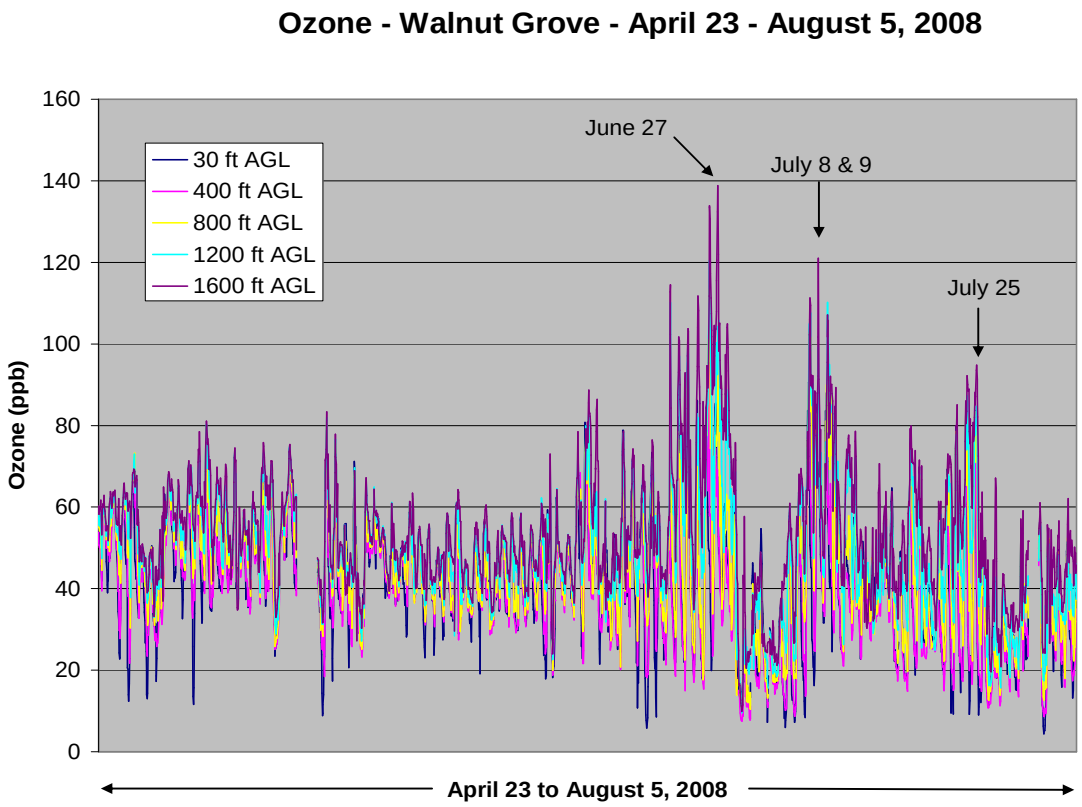


Figure 18. Walnut Gove Tower ozone data for April 23 to August 5, 2008.

Airmass Link Between Red Hills and Carrizo Plains

Red Hills and Carrizo Plains monitoring stations have many characteristics that are similar and demonstrate airmass linkages between the stations. Both stations are influenced by long range transport. Both stations are at approximately the same elevation (600-700 meters) which appears to be an optimal elevation for being impacted by transported ozone aloft.

An examination of chart traces in Figures 19a, 19b and 19c on the peak day July 8, 2008, demonstrates the link between the stations during the smoke event, and provides evidence that the exceedances would not have occurred "but for " the event.

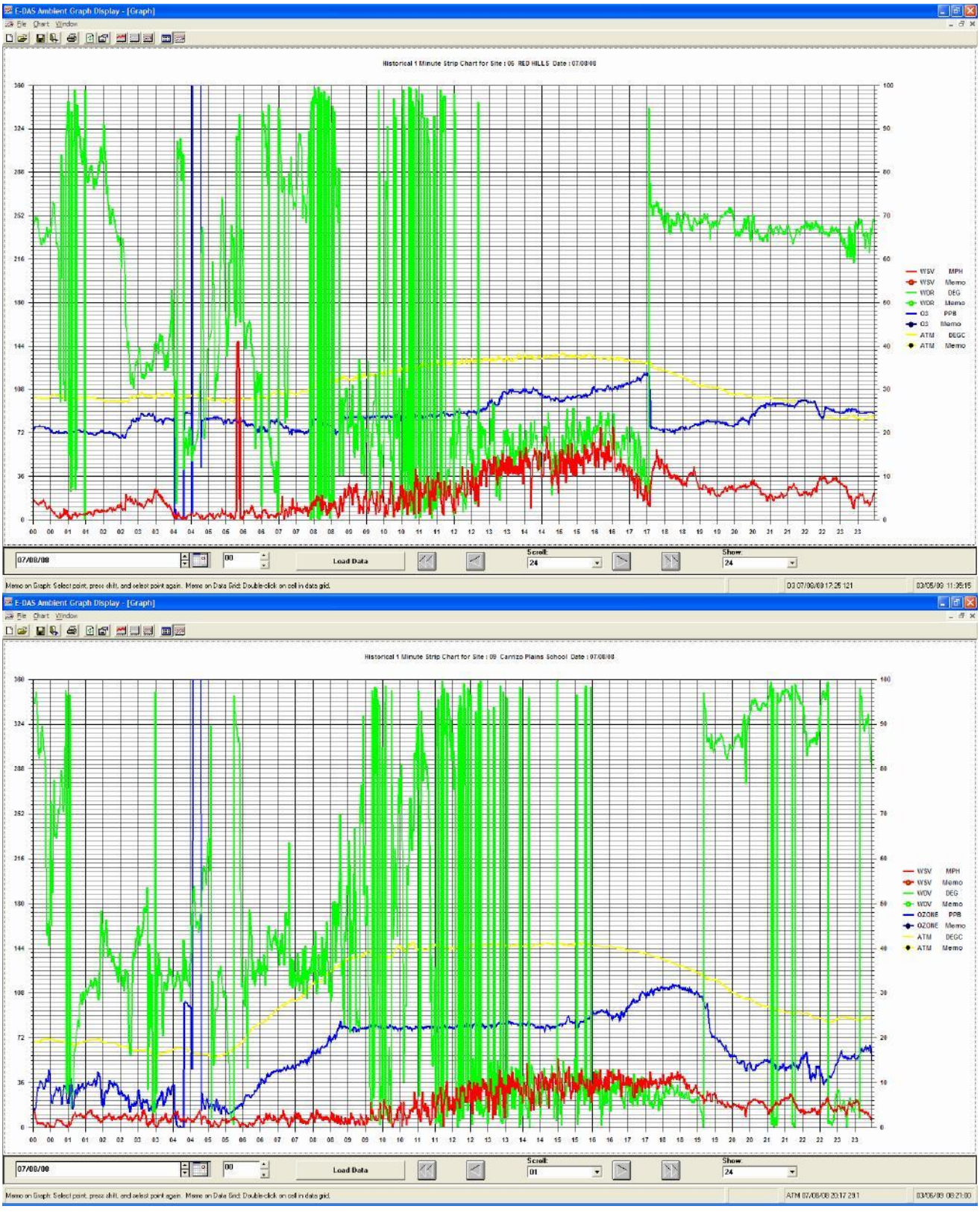
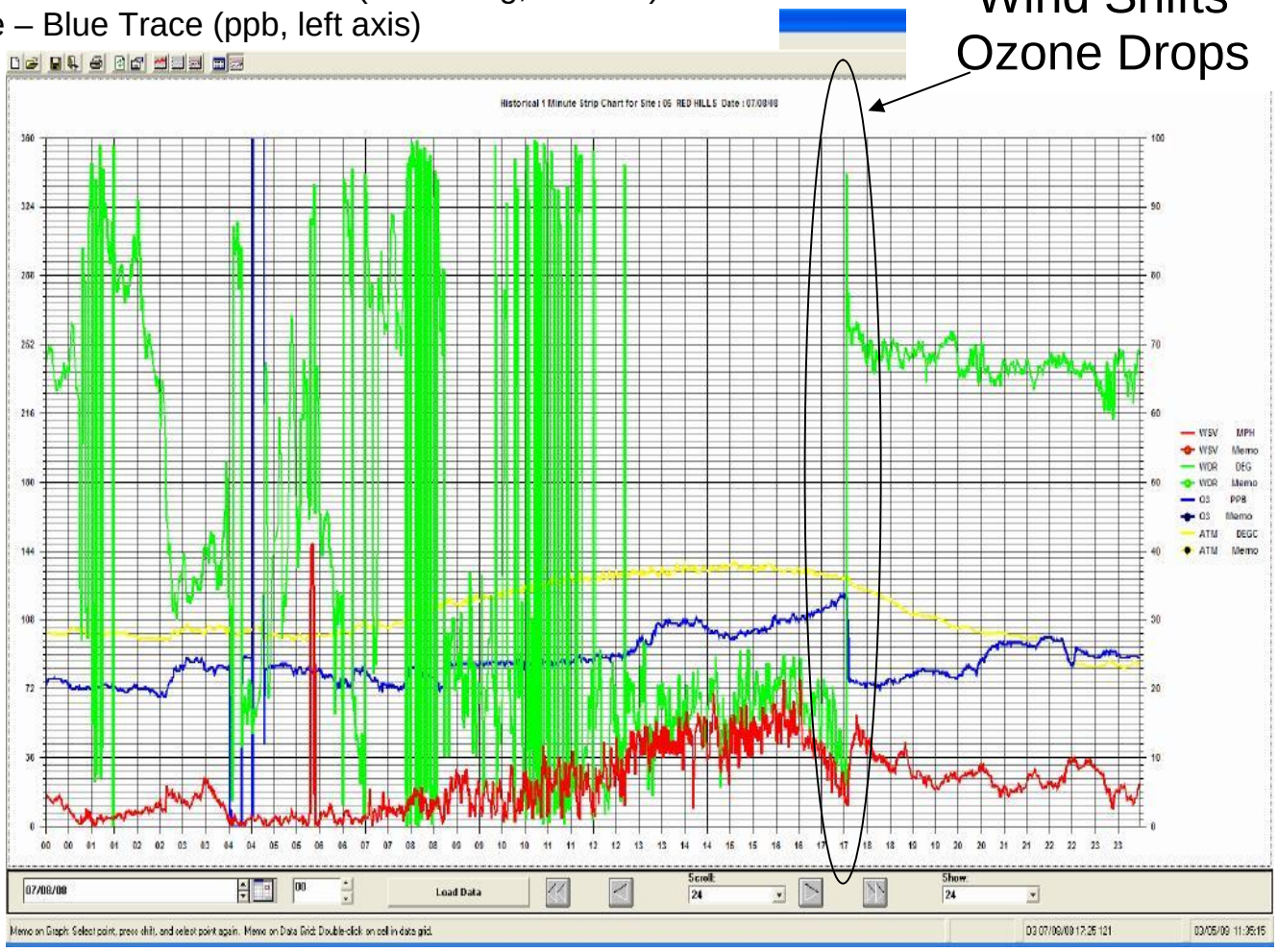


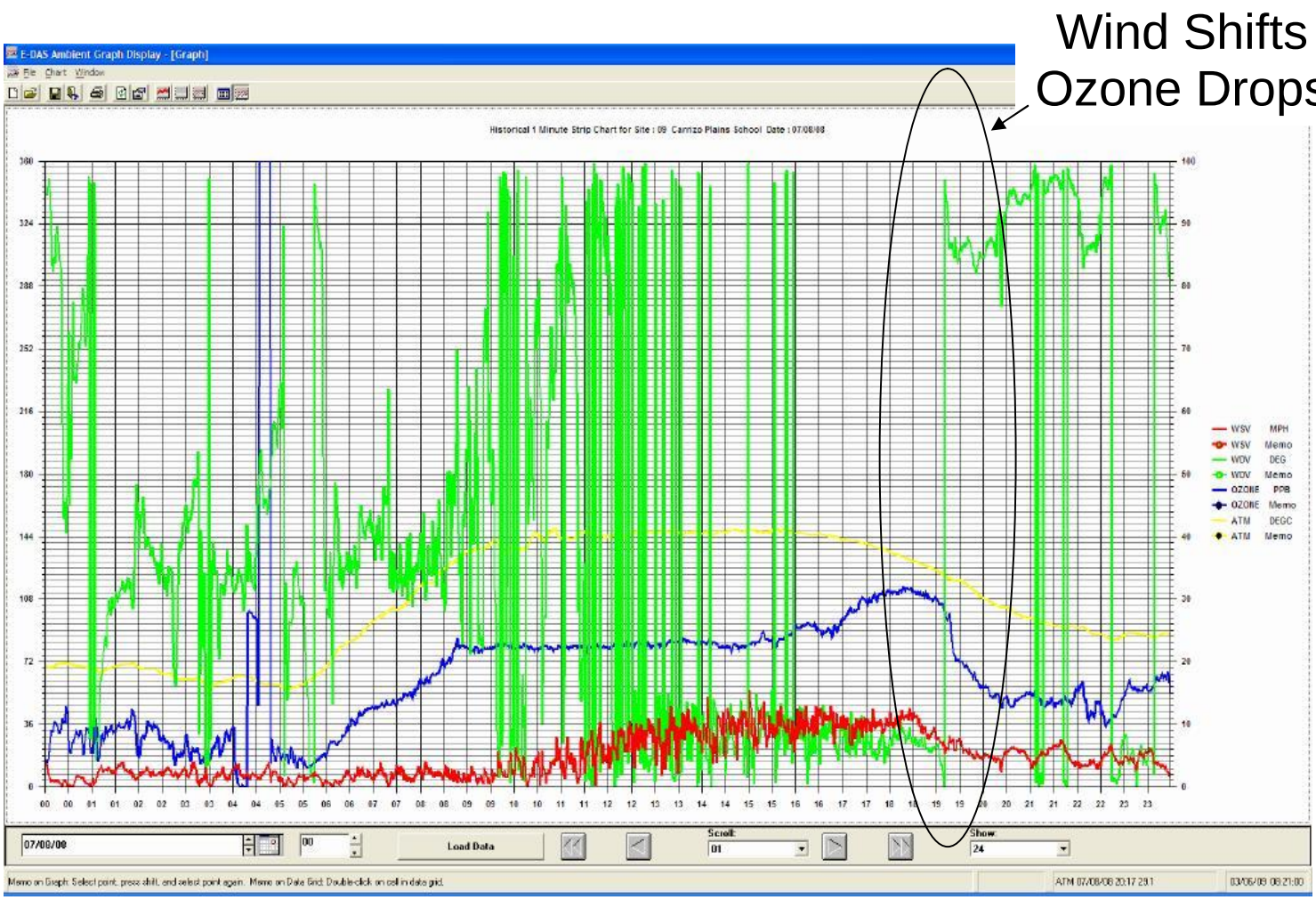
Figure 19a. Side by side comparison of chart traces for Red Hills and Carrizo Plains on July 8, 2008.

Wind Direction – Green Trace (0-360 deg, left axis)
Ozone – Blue Trace (ppb, left axis)



Red Hills

Figure 19b. Explanation of chart traces for Red Hills on July 8, 2008.



Carrizo Plains

Figure 19c. Explanation of chart traces for Carrizo Plains on July 8, 2008.

On the afternoon of July 8, 2008, Red Hills and Carrizo Plains monitoring stations reported winds which would allow transport of smoke and ozone precursors from fires in northern California to impact these monitoring stations. A wind shift occurred to in the late afternoon at both stations. After the wind shift, winds transported 'cleaner air' from the coastal portions of San Luis Obispo County and the ozone concentrations dropped significantly. The wind shift occurred during hour 17 at Red Hills and during hour 19 at Carrizo Plains. The ozone concentration before the wind shift, during the period of influence from the smoky air mass, ozone concentrations was approximately 120 ppb at Red Hills and 110 ppb at Carrizo Plains. After the wind shift, during the period of influence from the air mass from central and western San Luis Obispo County, the ozone concentrations dropped to 72 ppb at Red Hills and 50 ppb at Carrizo Plains. The difference between the "dirty" air mass and "cleaner" air mass was 48 ppb at Red Hills and 60 ppb at Carrizo Plains. This provides additional evidence that exceedances would not have occurred "but for" the transported ozone impacting the monitors. It also demonstrates that long range transport of ozone is the mechanism for the high early morning ozone concentrations and the exceedance. Data from upwind monitoring station at Walnut Grove and Pinnacles indicate similar trends and the transport of the high concentrations of ozone aloft produced by the fires southward to Red Hills and Carrizo Plains where the impacts occurred. An examination of San Joaquin Valley monitoring data shows similar transport and impacts.

Media coverage of the smoke event

A San Luis Obispo County television station, KSBY, posted many stories and images of the smoke event on their website, such as:

> **SMOKE INVADES SAN LUIS OBISPO**
>
> Smoke from the fires in Monterey County continues to make its way to San Luis Obispo County. The smoke seems to be worst in the San Luis Obispo area. According to Paso Robles resident Joe Rivera, the air isn't too smokey but he can see a thick blanket in the direction of San Luis Obispo. Action News reporter Stacy Daniel said the air around Pismo Beach and the Five Cities is clear in comparison.
>
> The smoke is making its way down the coast from the Basin Complex Fire along Big Sur and the Indians Fire also in Monterey County.

Additional KSBY news coverage of the exceptional event is provided in the appendix or by visiting http://www.ksby.com/Global/story.asp?S=8550395

4 CONCLUSIONS AND RECOMMENDATIONS

The APCD concludes that an exceptional event occurred at the locations and dates shown below and recommends that data be flagged accordingly.

San Luis Obispo - June 19, 2008
Morro Bay - June 20, 2008
Red Hills and Carrizo Plains – June 27, 2008, July 7 and 9, 2008, July 25, 2008
Red Hills – July 26, 2008

Multiple analyses provides a 'weight of evidence' that the wildfires caused the exceptional event. In particular, the analysis has shown that:

(i) The event has met the definition of an 'exceptional event' and,

a. Affected air quality;
b. Was not reasonably controllable or preventable; and
c. Was a natural event;

It has been shown for the locations and dates listed above that the smoke event affected air quality and was a natural event. The event was due to lightning caused fires that were not reasonably controllable or preventable.

(ii) A clear causal relationship was shown between the event and the concentration measured at the monitoring site;

Data has been presented to show the exceptional and unusual nature of ozone measurements during periods when satellite data indicate smoke from fires was impacting the monitoring sites. Ozone diurnal trends at San Luis Obispo County monitoring station show atypical traces directly linked to smoke transport.

(iii) The event was above normal historical fluctuations (including background).

Data has been presented to indicate that the peak ozone days were above normal historical fluctuations. Early morning ozone concentrations were exceptionally higher than normal fluctuations, indicating impacts from smoke plumes.

(iv) The exceedance at the monitoring site would not have occurred 'but for' the event.

Data has been presented to show that ozone measurements at Red Hills and Carrizo Plains indicate the difference between the smoke impacted air mass and "cleaner" air mass was estimated to be 48 ppb at Red Hills and 60 ppb at Carrizo Plains. These increases are more than sufficient to cause the exceedance of the standard on the days listed, which would not have occurred without the smoke impacts.

Information available to the APCD indicates that ozone precursor emissions from sources within San Luis Obispo County did not change significantly during the event and were approximately constant

before, during, and after the event. No unusual events occurred that would produce a significant increase in vehicle traffic. The APCD concludes that the ozone exceedance would not have occurred without the wildfire impact.

Field studies indicate ozone can increase up to 30 ppb in smoke plumes and ARB modeling indicates ozone can increase 40 ppb or more in smoke plumes.

(v) Reasonable and appropriate actions were taken to protect public health and provide for public comment on the establishment of this event as an 'exceptional' event.

As stated in the EPA rule, States must assure that reasonable measures were taken to protect the public from the emissions created by the wildland fire smoke. Under this rule, state and local air districts are also strongly encouraged to institute educational programs that alert the public to the health effects associated with exposure to emissions from wildland fire smoke.

The APCD issued many press releases and smoke advisories during the summer of 2008 to educate the public on the health concerns generated by wildland fire smoke. The press releases included suggested appropriate actions to be taken to protect public health. Individual press releases and public education statements are provided in the appendix (beginning on page 6-82) and are listed chronologically by date of issuance. It should be noted that during the smoke event, press releases were not issued daily if conditions did not change significantly. It is common public outreach practice to allow one advisory to apply to multiple days.

5 REFERENCES

Bush, David (2008): Southwest Desert to Las Vegas Ozone Transport Study (SLOTS), Presentation, 2008 National Air Quality Conference, funded by Clark County Nevada Department of Air Quality and Environmental Management, conducted by T & B Systems and Clark County, Nevada
http://www.accessclarkcounty.com/depts/daqem/aq/planning/Pages/ozone.aspx

California Air Resources Board: ADAM website, Photochemical Model Output, Walnut Grove Tower data (from T& B Systems)

California Air Resources Board (ARB): AQMIS data base,
http://www.arb.ca.gov/aqmis2/paqdselect.php

Environmental Protection Agency (EPA): AQS data base.

Environmental Protection Agency (EPA): Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events. July 1986.

FamWeb's 209s: Wildfire summary

Federal Register: March 22, 2007 (Volume 72, Number 55)], [Rules and Regulations],[Page 13559-13581] From the Federal Register Online via GPO Access [wais.access.gpo.gov], [DOCID:fr22mr07-14], Environmental Protection Agency, 40 CFR Parts 50 and 51, [EPA-HQ-OAR-2005-0159; FRL-8289-5], RIN 2060-AN40, Treatment of Data Influenced by Exceptional Events.

KSBY: News coverage, 2008, http://www.ksby.com/Global/story.asp?S=8550395

Monterey Bay Unified Air Pollution Control District: 2008 Wildfire Season presentation, http://www.mbuapcd.org/index.cfm/Cat/61.htm, Personnal communication with Bob Nunes.

National Aeronautics and Space Administration (NASA): Moderate Resolution Imaging Spectroradiometer (MODIS) website,
http://rapidfire.sci.gsfc.nasa.gov/subsets/index2.php?subset=AERONET_Fresno

National Oceanic and Atmospheric Administration (NOAA): Atmospheric Research Laboratory website, http://www.arl.noaa.gov/ready/cmet.html
Smoke Product websites,
http://www.ready.noaa.gov/ready-bin/smokevrf.pl?yr=2008&mn=06&dy=24

San Luis Obispo County Air Pollution Control District: Air Monitoring Data

Smog Blog website

6 APPENDIX – SUPPORTING DOCUMENTS

PUBLIC NOTICE

The following notice was posted on the APCD website on February 5, 2009 and in the San Luis Obispo Tribune on February 9, 2009:

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

NOTICE OF INTENT TO SUBMIT
EXCEPTIONAL EVENT DOCUMENTATION

NOTICE IS HEREBY GIVEN that public comments are being received on Exceptional Event Documentation describing wildland fire smoke impacts that resulted in high ambient ozone concentrations in San Luis Obispo County during the summer of 2008.

Interested persons may submit comments to:

Gary Arcemont
Air Quality Specialist
San Luis Obispo County Air Pollution Control District
3433 Roberto Court
San Luis Obispo, CA 93401-7126
Phone: (805) 781-5743
Email: garcemont@co.clo.ca.us

Comments will be received for a 30 day period ending on March 9, 2009.

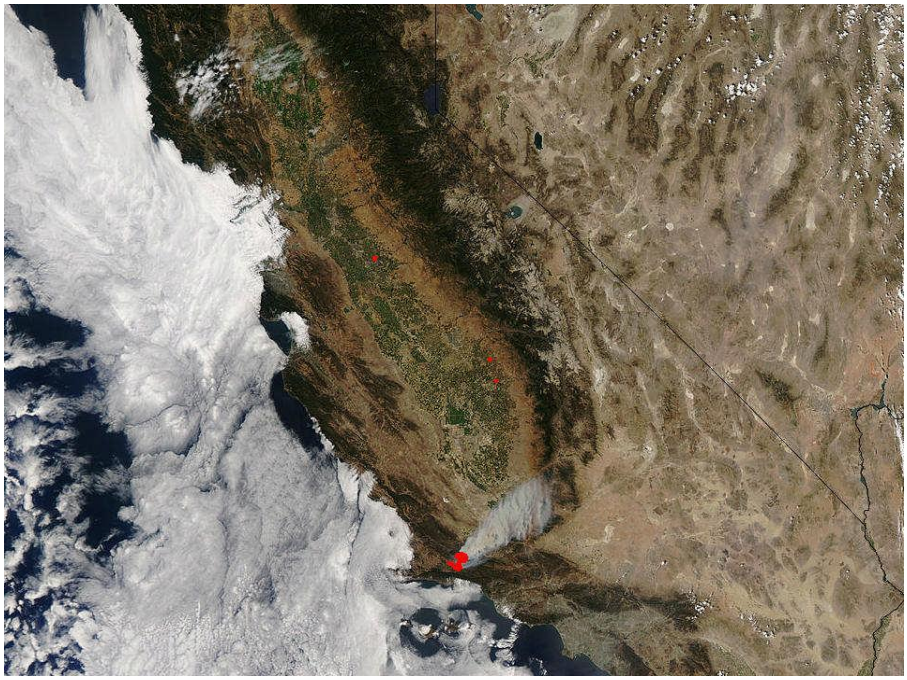
NOTICE IS FURTHER GIVEN THAT, according to the United States Environmental Protection Agency (US EPA) policy, high pollution concentrations are not considered in the San Luis Obispo County attainment designation when there is a clear, causal relationship between the exceptional event and the high pollution concentrations.

The San Luis Obispo County Air Pollution Control District will submit documentation regarding the causes and contributing factors of the high pollution episodes to the California Air Resources Board. The San Luis Obispo County Air Pollution Control District is requesting that the California Air Resources Board submit the Exceptional Event documentation to the US EPA by March 12, 2009.

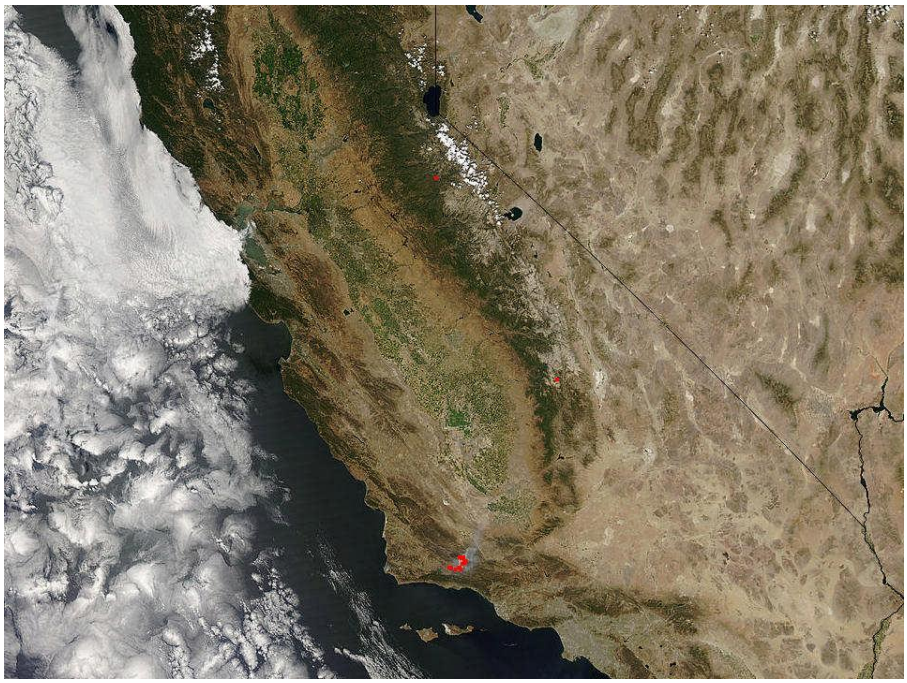
Copies of the documents can be obtained by calling (805) 781-5912, or by faxing your request to (805) 781-1002. You may also review the documentation by visiting the San Luis Obispo County Air Pollution Control District website www.slocleanair.org

AIRCRAFT STUDY

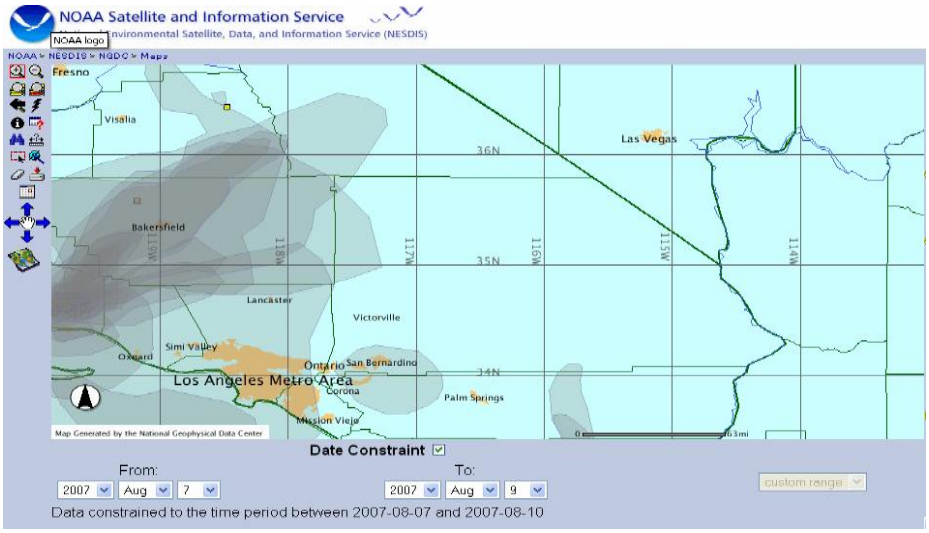
Images of the Zaca Fire on August 5 and August 8, 2007 are shown below:



August 5, 2007 – plume clearly visible



August 8, 2008 – note that plume during the flight is not significant enough to be visible in the image, indicating much lower concentrations than experienced in SLO County exceptional events



Graphic shows extent of plume on 7 to 10 August 2007

Flight path is color coded to show location of ozone increases

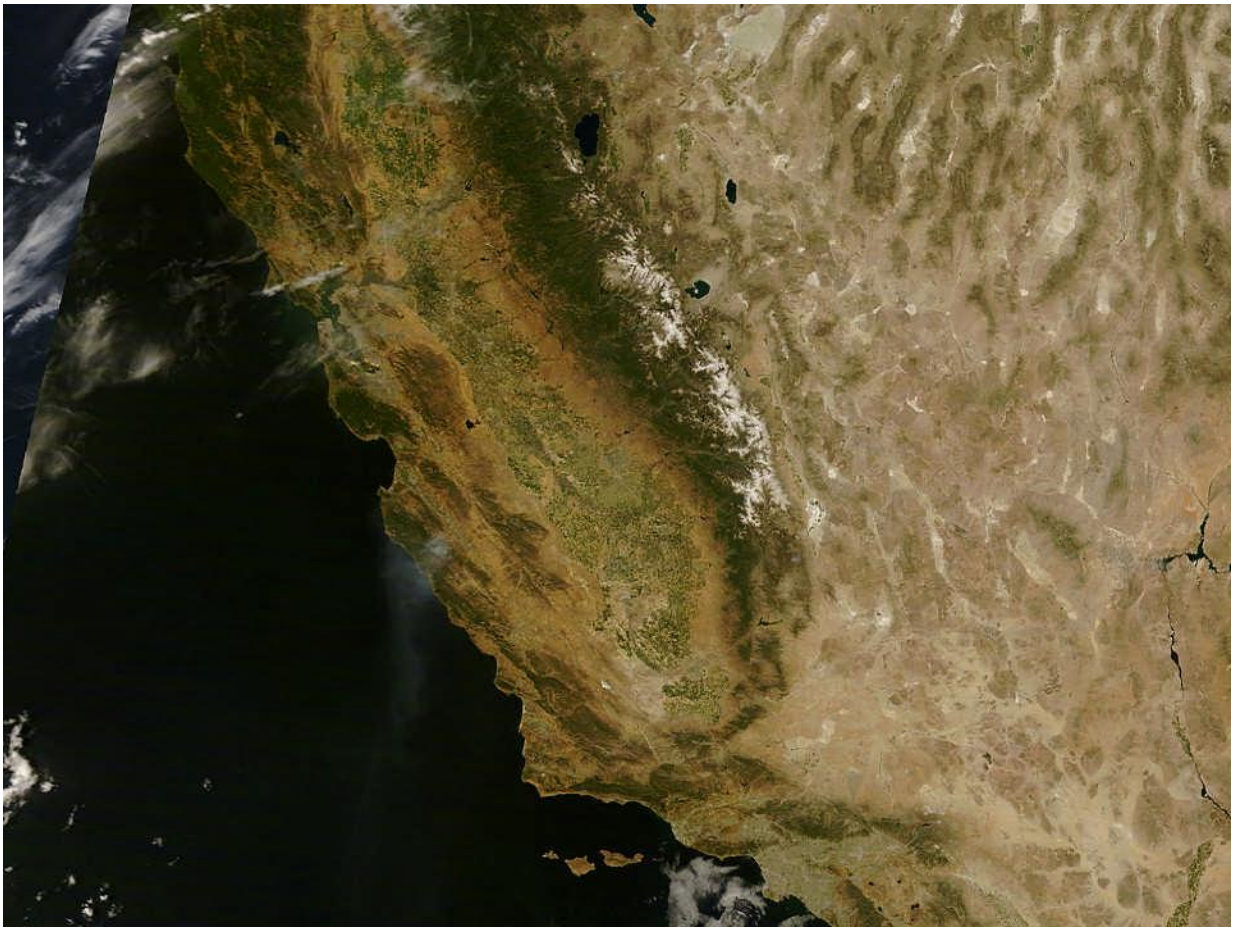
See the following link for the complete presentation:

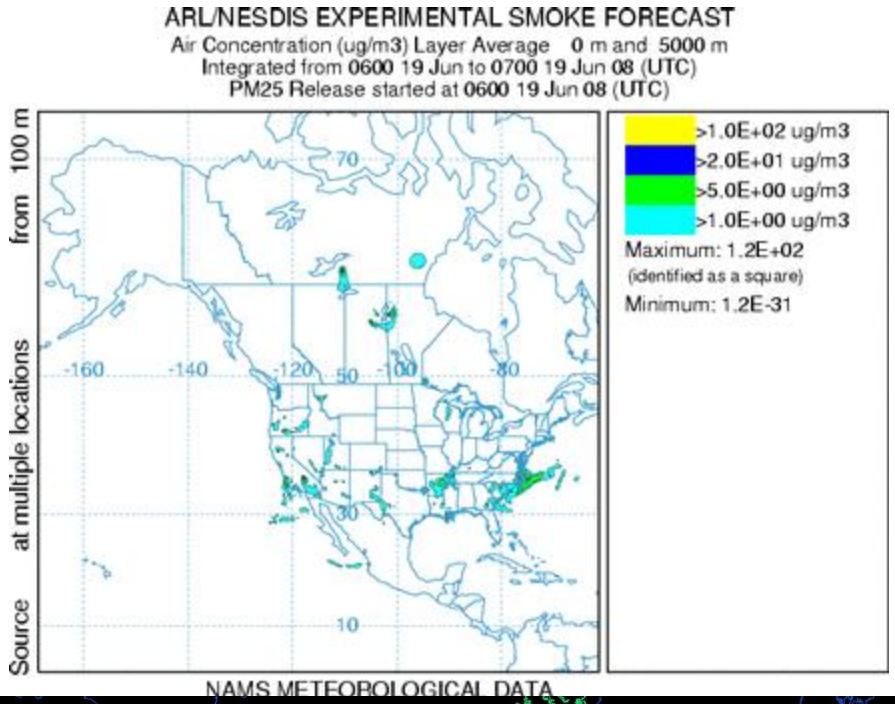
http://www.accessclarkcounty.com/depts/daqem/aq/planning/Pages/ozone.aspx

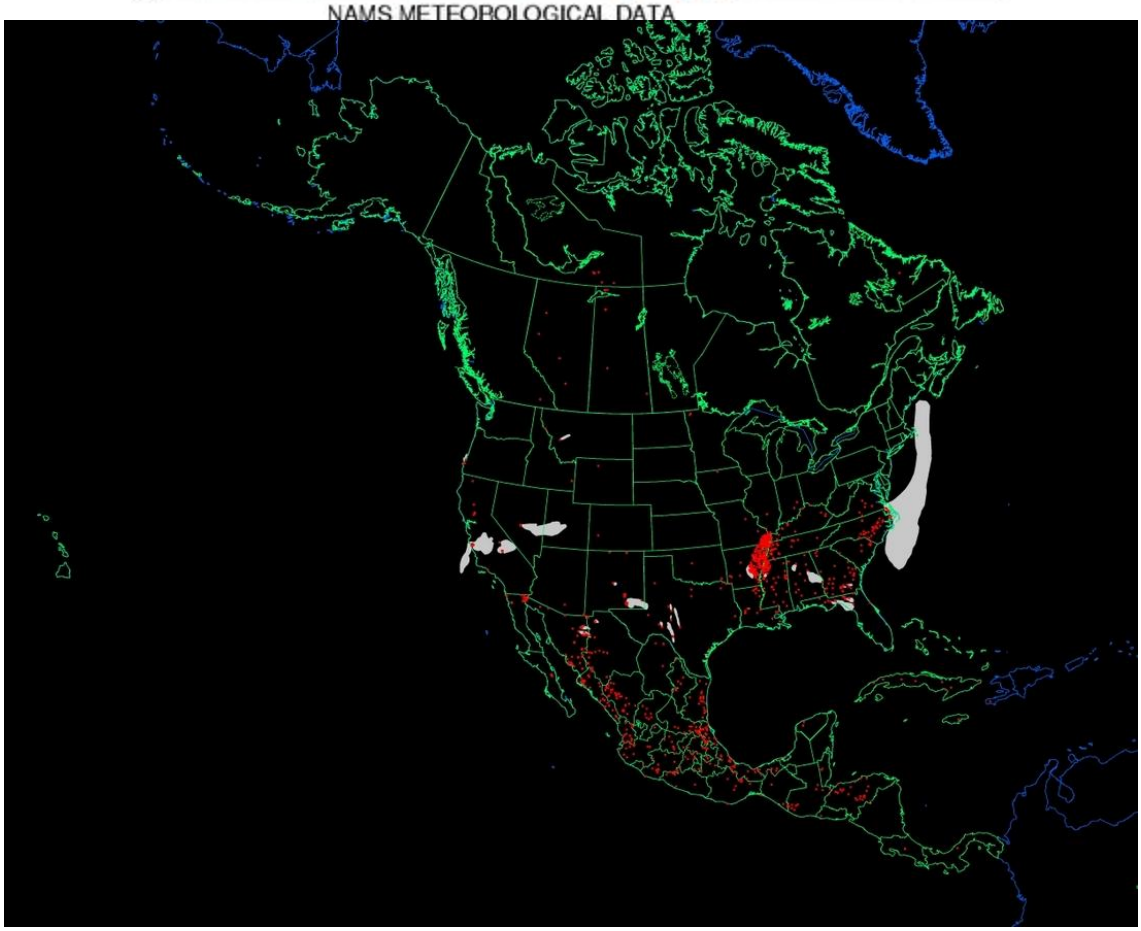
EVIDENCE SUPPORTING CLEAR CAUSAL CONNECTION

This section provides satellite images and satellite derived particulate and smoke analyses that indicate San Luis Obispo County was being impacted by wildland fire smoke.

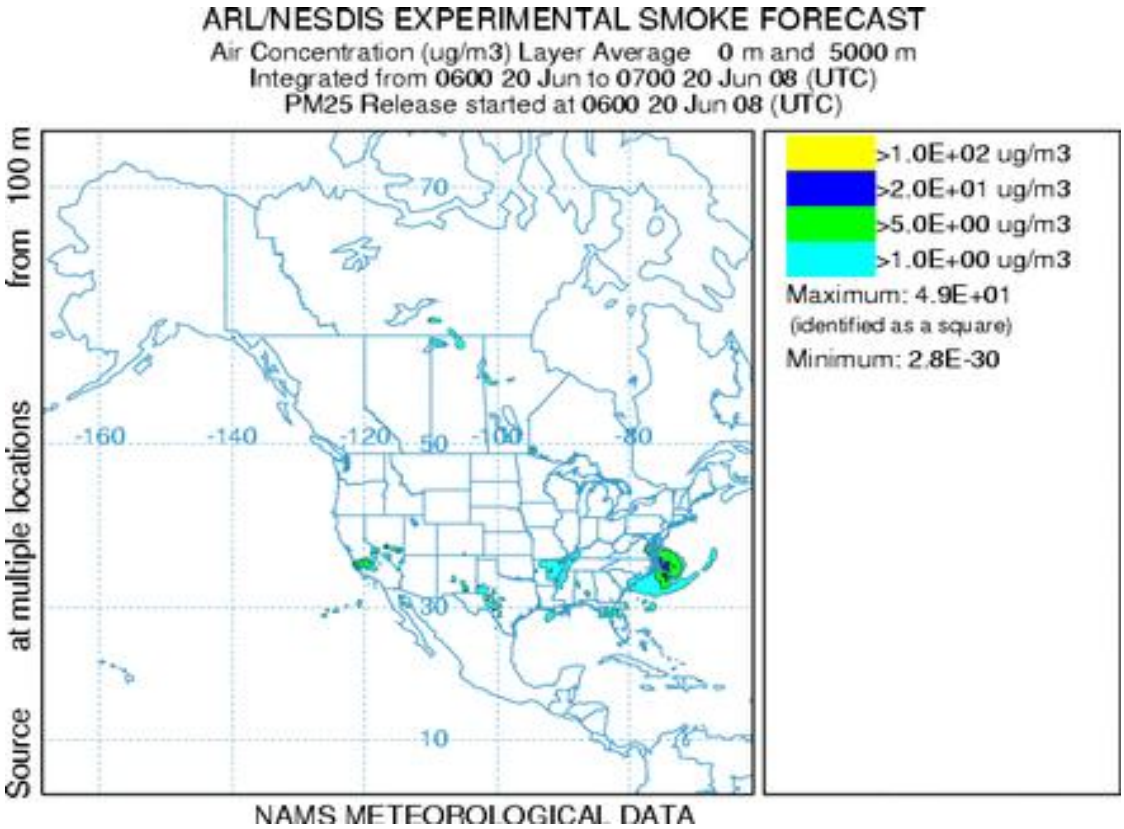
June 19, 2008




ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 19 Jun to 0700 19 Jun 08 (UTC)
PM25 Release started at 0600 19 Jun 08 (UTC)
Source from 100 m at multiple locations
70
-160
-140
-120
50
-100
-80
30
10
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 1.2E+02
(identified as a square)
Minimum: 1.2E-31
NAMS METEOROLOGICAL DATA



June 20, 2008


ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 20 Jun to 0700 20 Jun 08 (UTC)
PM25 Release started at 0600 20 Jun 08 (UTC)
Source at multiple locations from 100 m
70
-160
-140
-120
50
-100
-80
30
10
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 4.9E+01
(identified as a square)
Minimum: 2.8E-30
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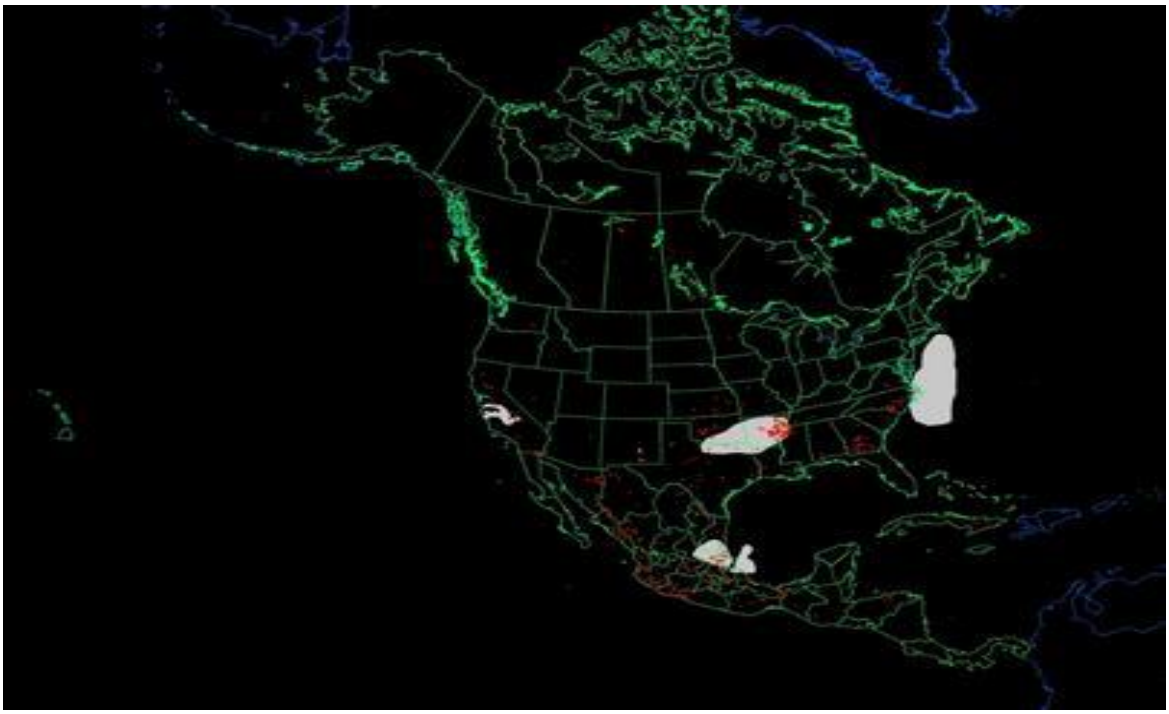
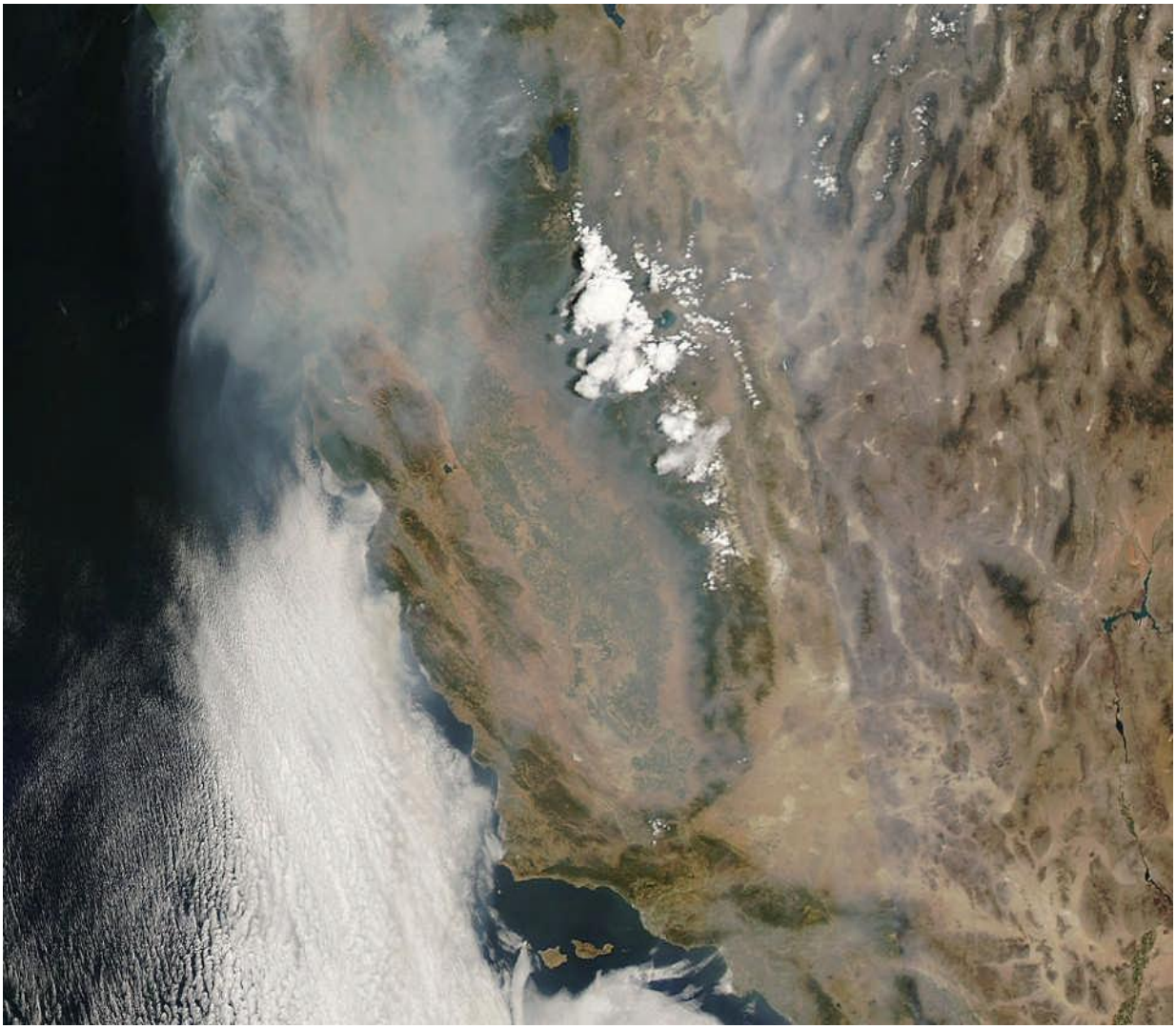
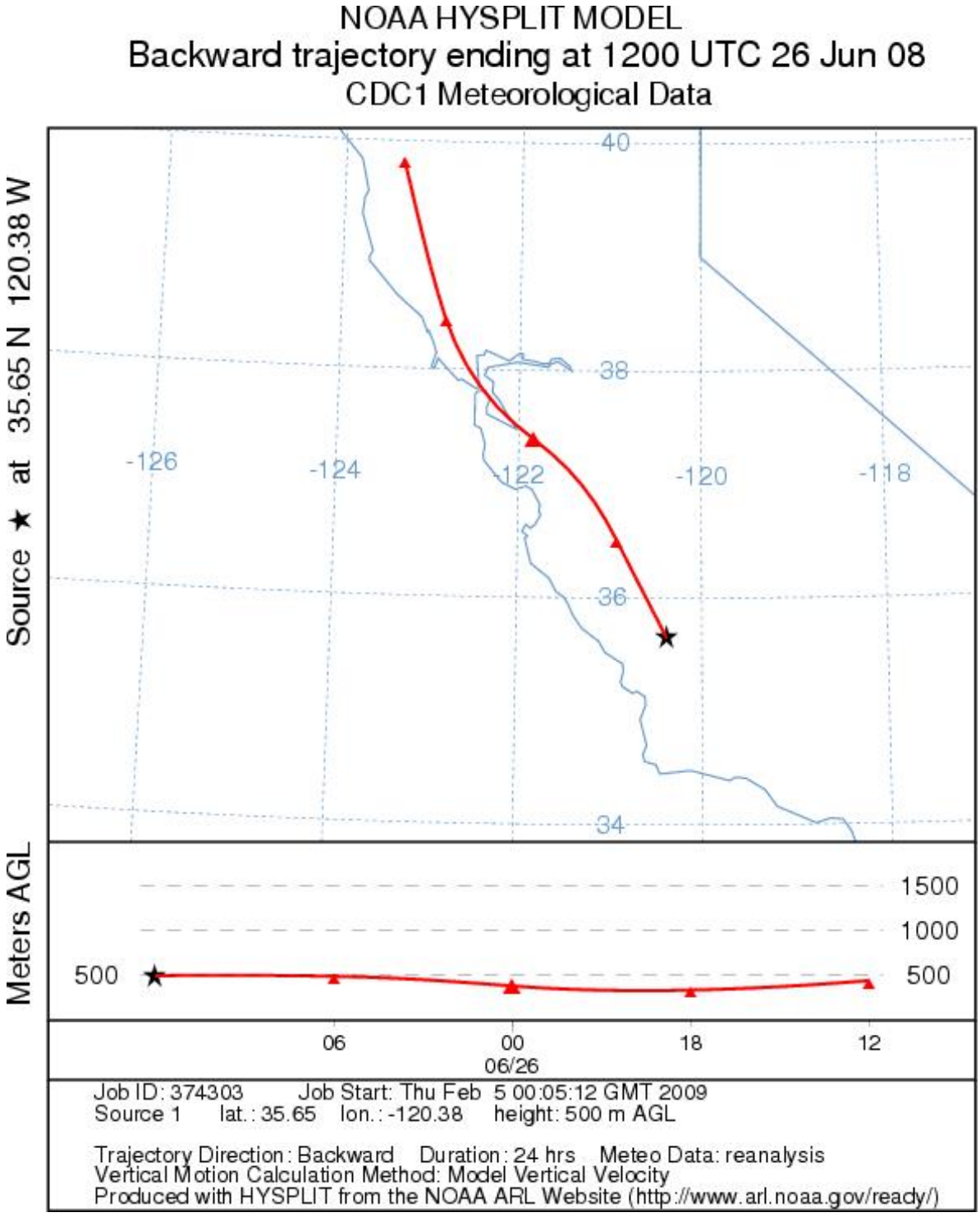
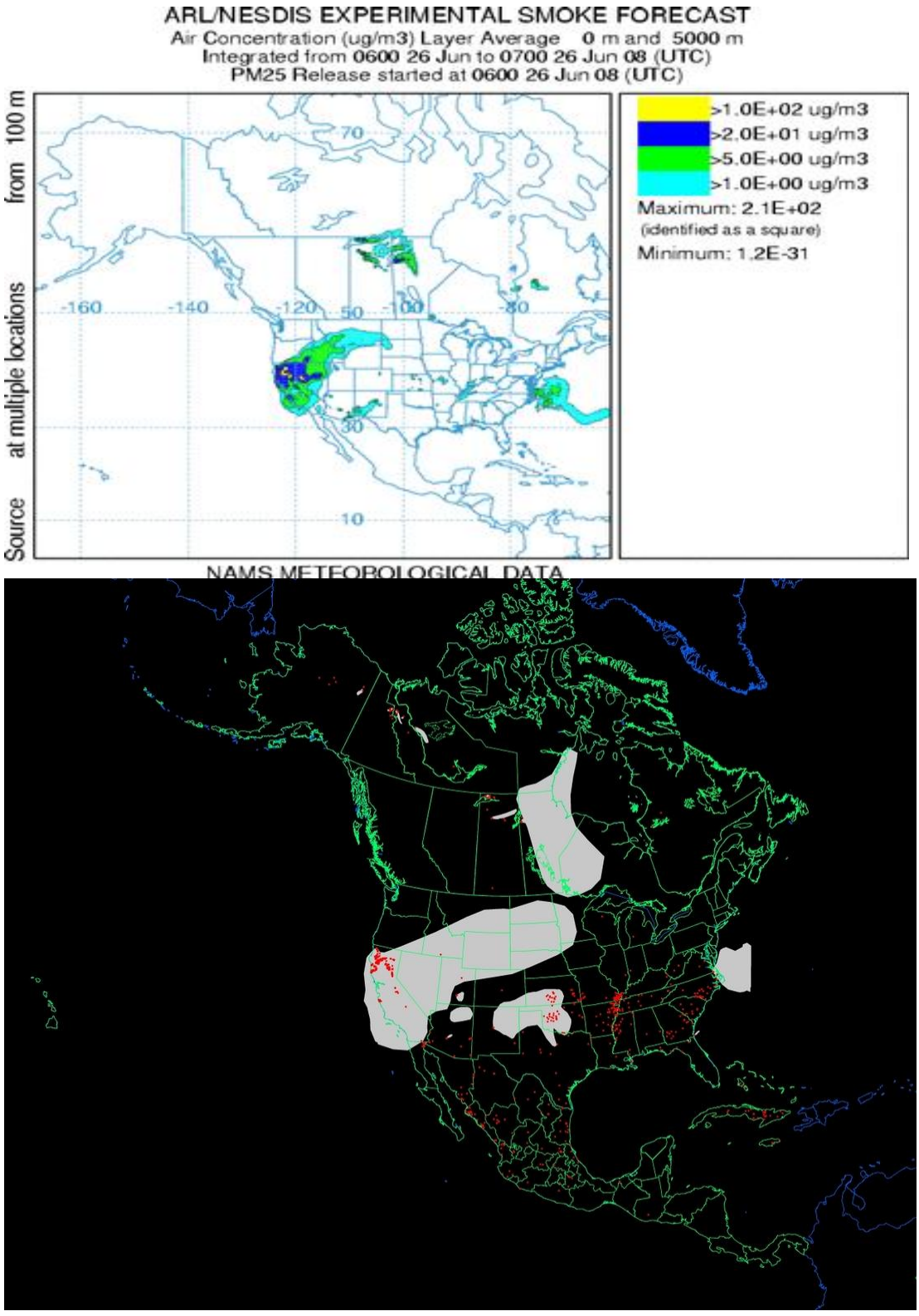


June 26, 2008

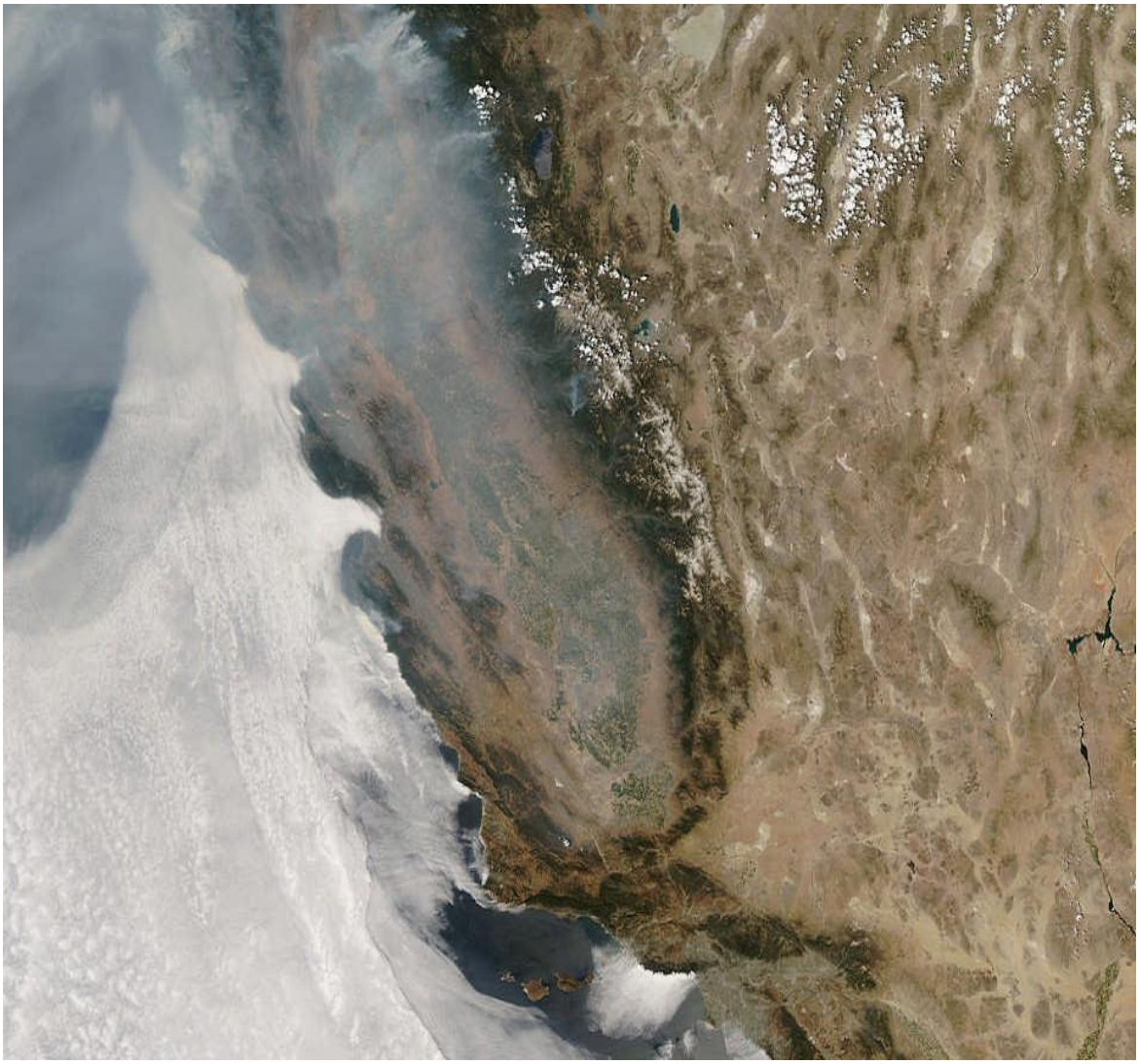


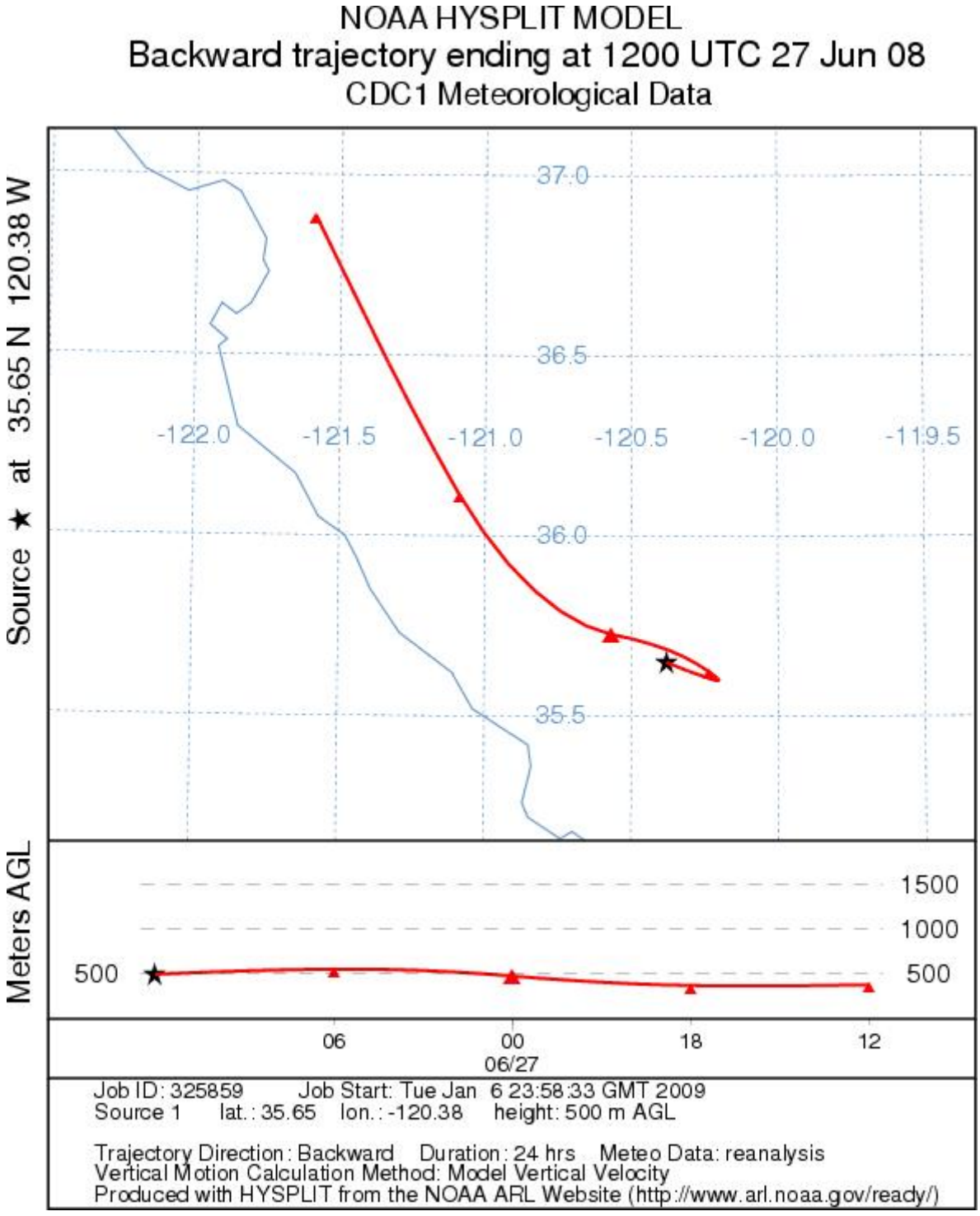


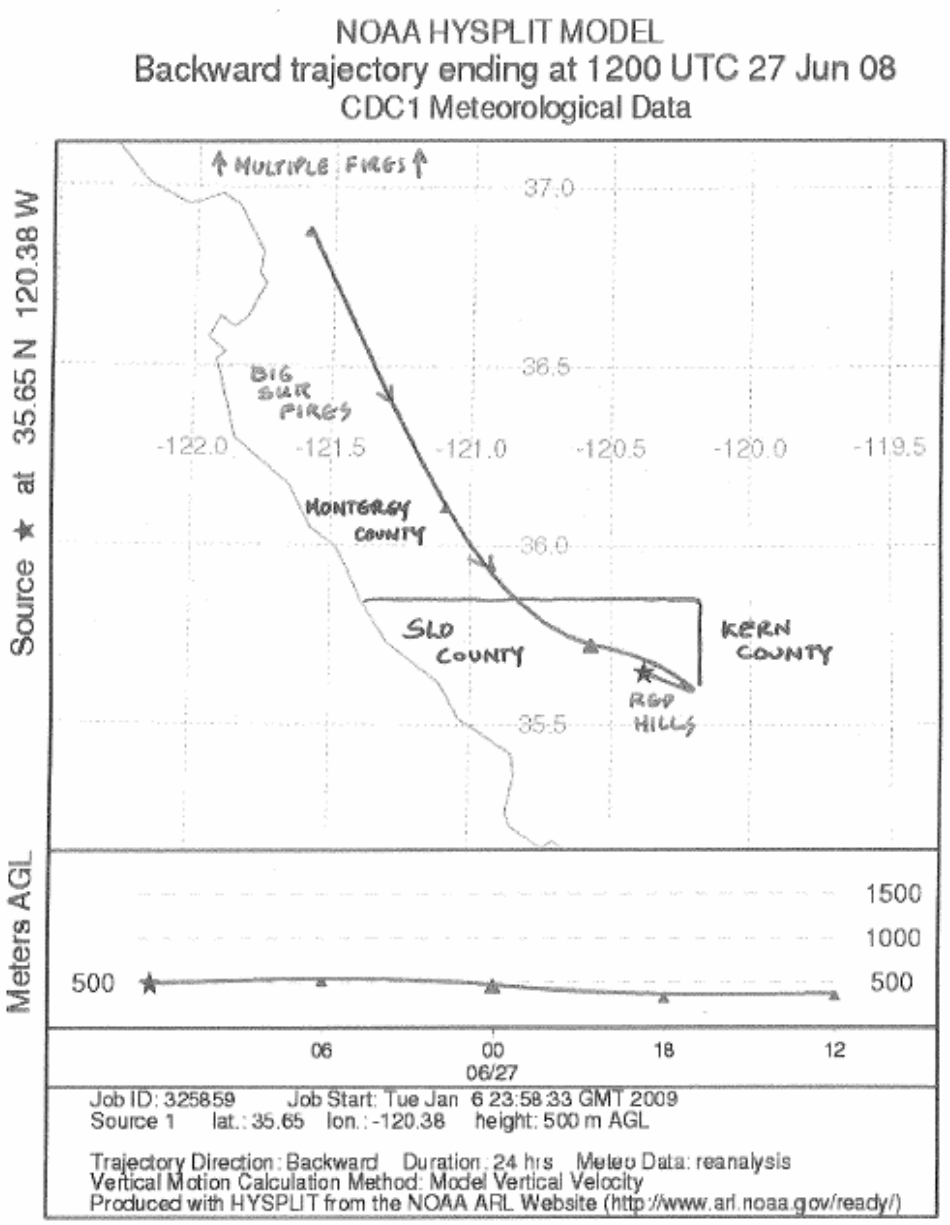
Trajectory indicates flow from fires in Big Sur and Northern California


ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 26 Jun to 0700 26 Jun 08 (UTC)
PM25 Release started at 0600 26 Jun 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 2.1E+02
(identified as a square)
Minimum: 1.2E-31
70
-160
-140
-120
50
-100
-80
30
10
NAMS METEOROLOGICAL DATA

June 27, 2008

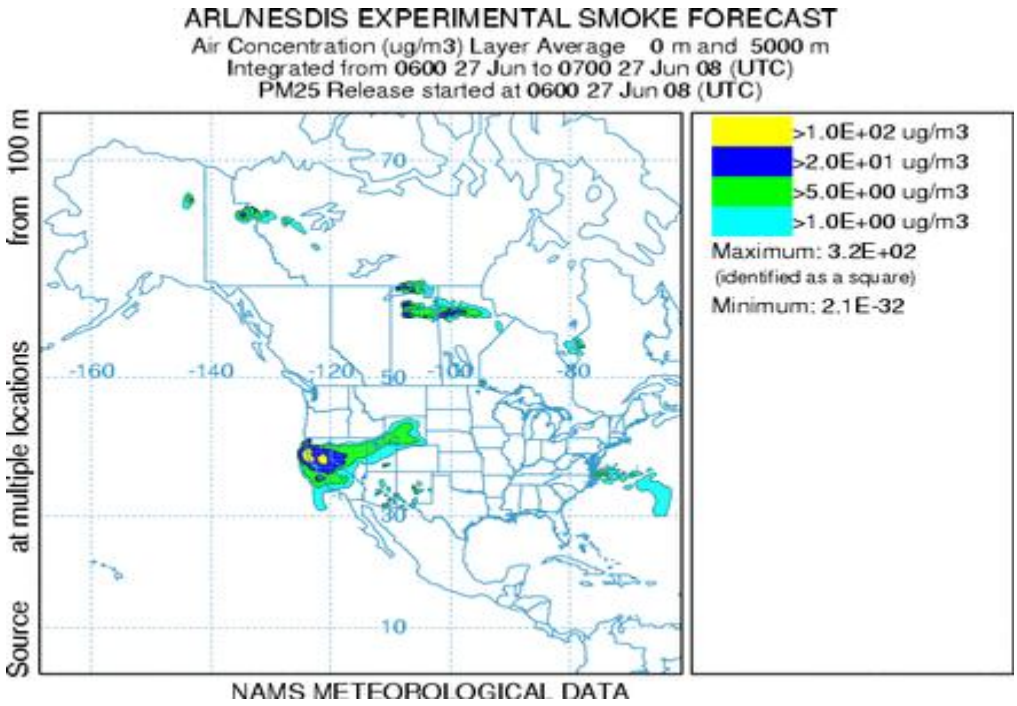


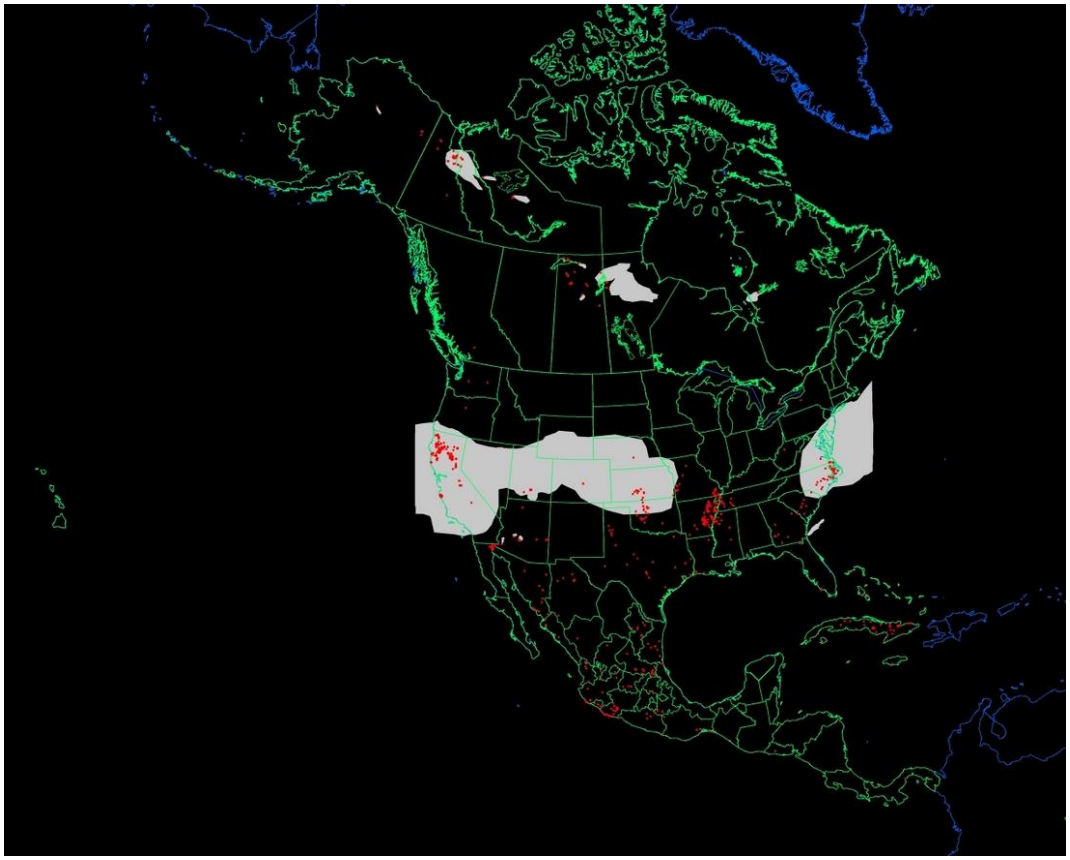

NOAA HYSPLIT MODEL
Backward trajectory ending at 1200 UTC 27 Jun 08
CDC1 Meteorological Data
Source ★ at 35.65 N 120.38 W
37.0
36.5
36.0
35.5
-122.0
-121.5
-121.0
-120.5
-120.0
-119.5
Meters AGL
1500
1000
500
500
06
00
06/27
18
12
Job ID: 325859 Job Start: Tue Jan 6 23:58:33 GMT 2009
Source 1 lat.: 35.65 lon.: -120.38 height: 500 m AGL
Trajectory Direction: Backward Duration: 24 hrs Meteo Data: reanalysis
Vertical Motion Calculation Method: Model Vertical Velocity
Produced with HYSPLIT from the NOAA ARL Website (http://www.arl.noaa.gov/ready/)



Trajectory with landmarks added

Trajectory indicates flow from fires in Big Sur and Northern California

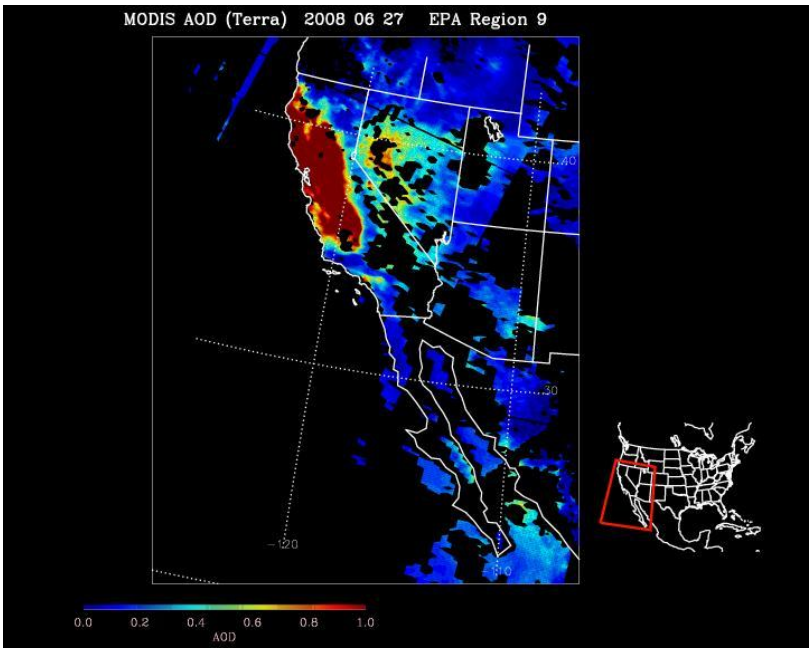

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 27 Jun to 0700 27 Jun 08 (UTC)
PM25 Release started at 0600 27 Jun 08 (UTC)
Source from 100 m at multiple locations
70
-160
-140
-120
50
-100
-80
30
10
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 3.2E+02
(identified as a square)
Minimum: 2.1E-32
NAMS METEOROLOGICAL DATA



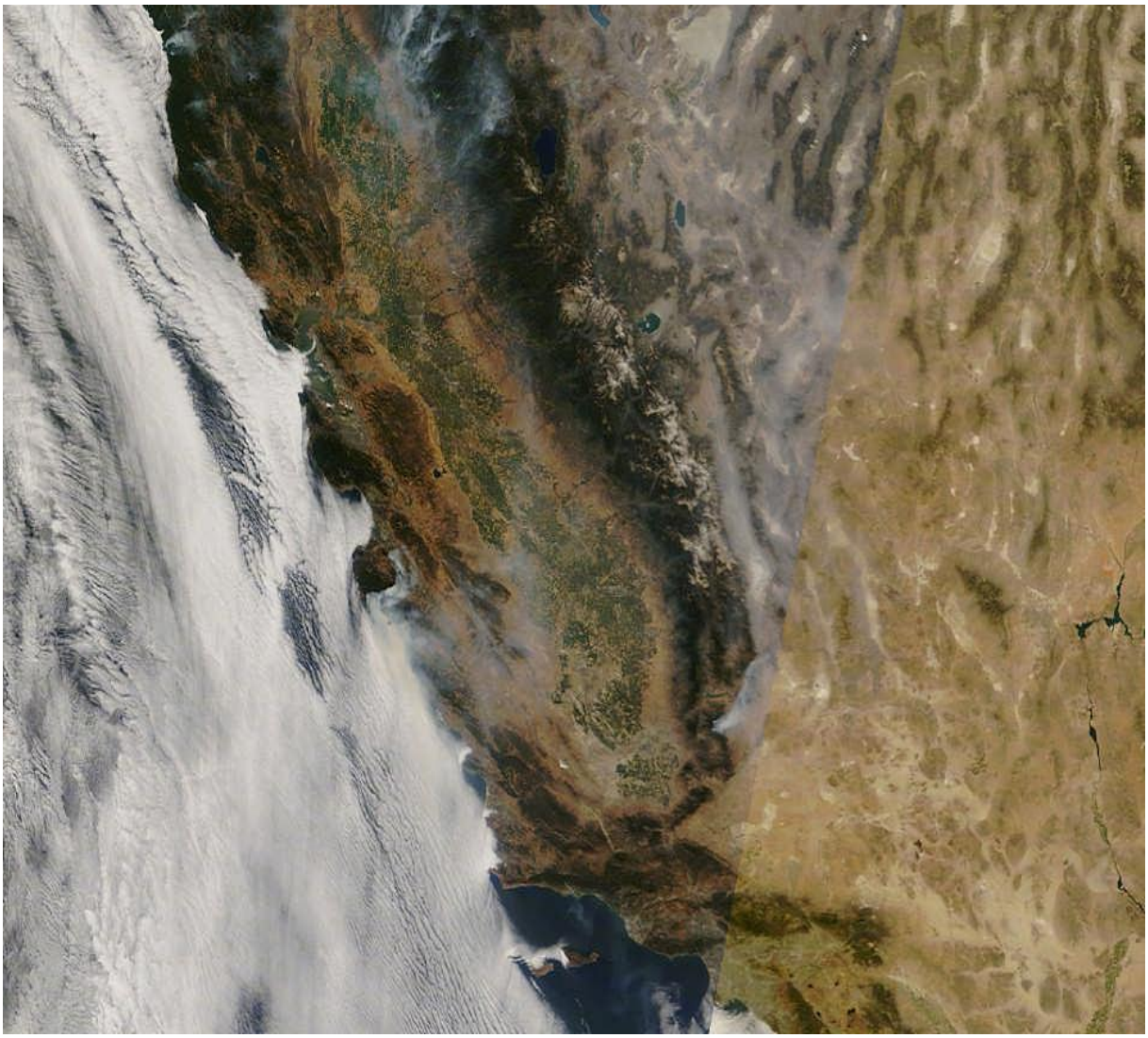
June 27, 2008 (From the Smog Blog)

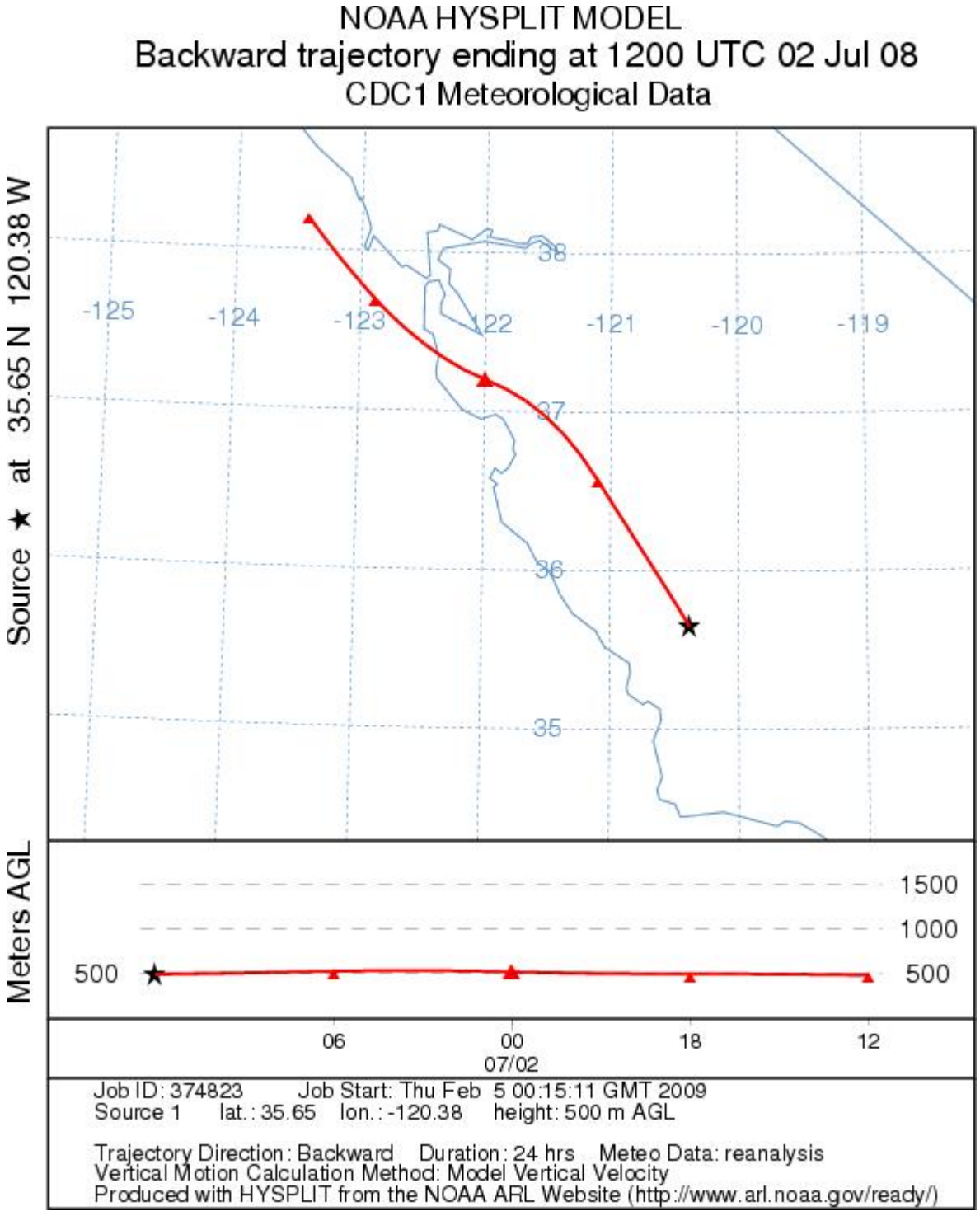
VERY UNHEALTHY AIR QUALITY IN CALIFORNIA CONTINUES

Air quality continues to range from Unhealthy for Sensitive Groups (Code Orange) to Unhealthy (Code Red) and Very Unhealthy (Code Purple) across Northern California and the Central Valley. Very high levels of both ozone and PM2.5 are contributing to the extremely poor air quality conditions. Today's MODIS Terra true color image of the AERONET Moss Landing region clearly shows the widespread smoke, seen as grey and defuse across the Central Valley and flowing off the Pacific Coast. The corresponding MODIS Terra AOD image for Region 9 (below) shows the very high AOD levels from the smoke across California.

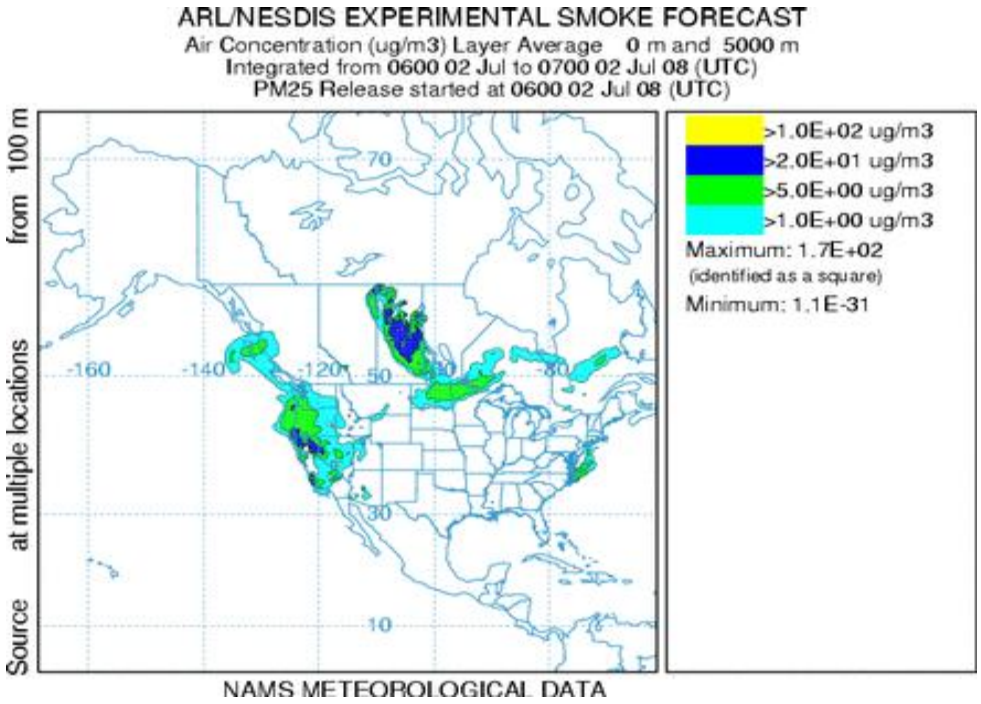


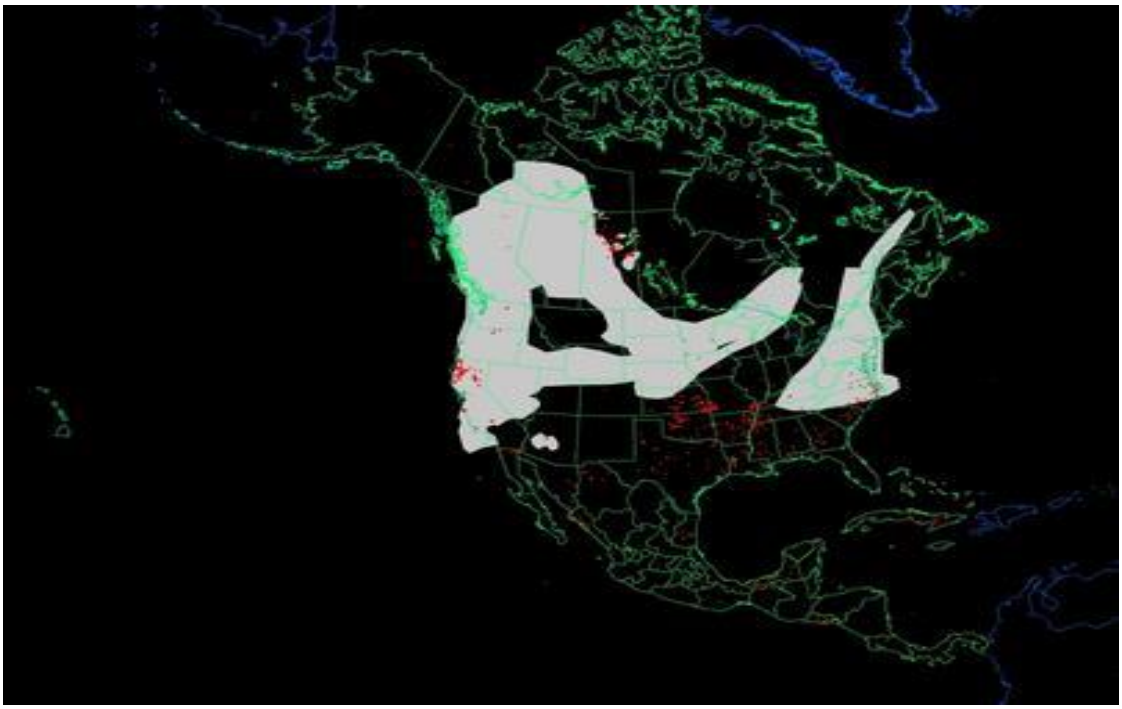
July 2, 2008



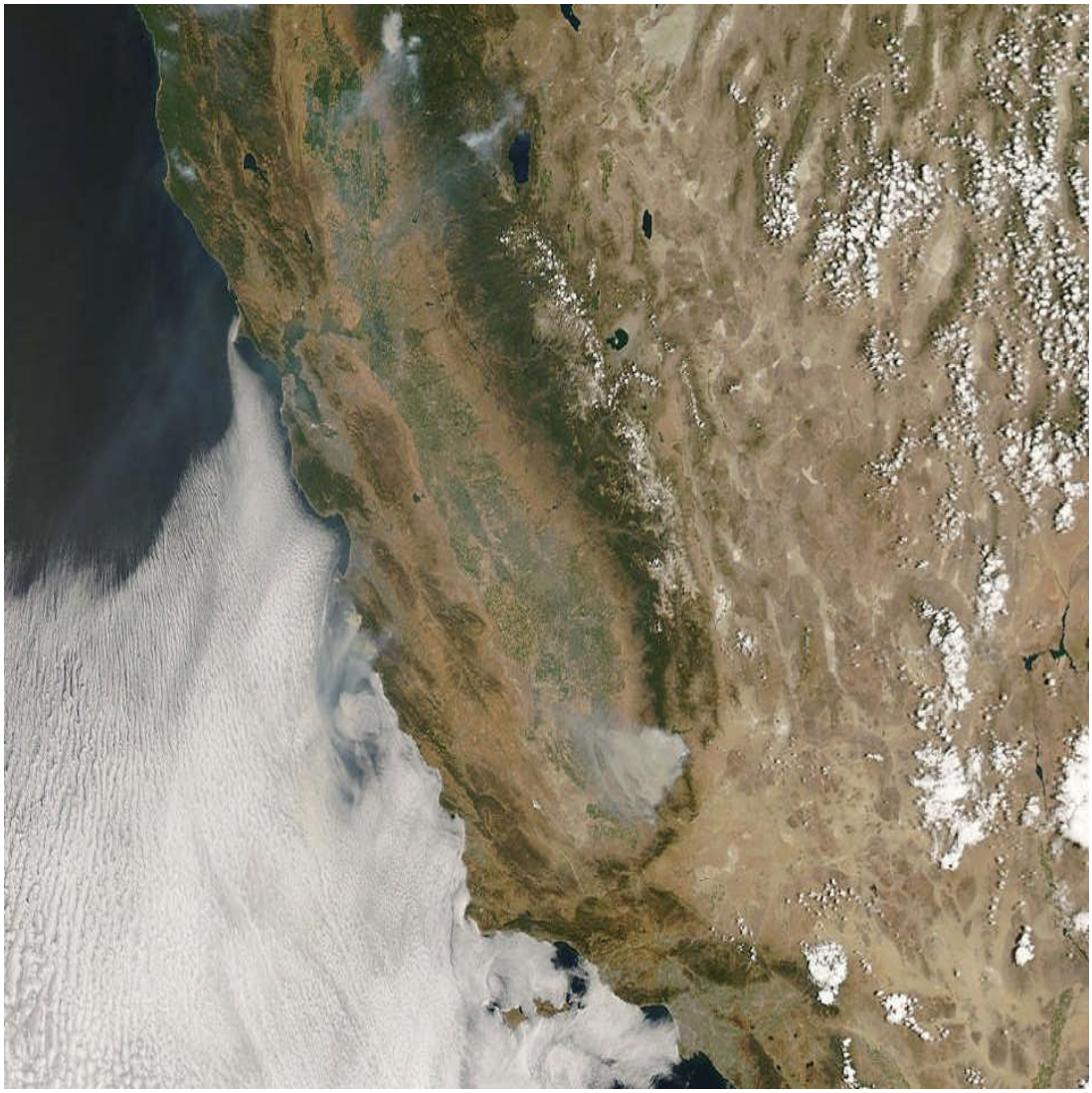


Trajectory indicates flow from fires in Big Sur and Northern California

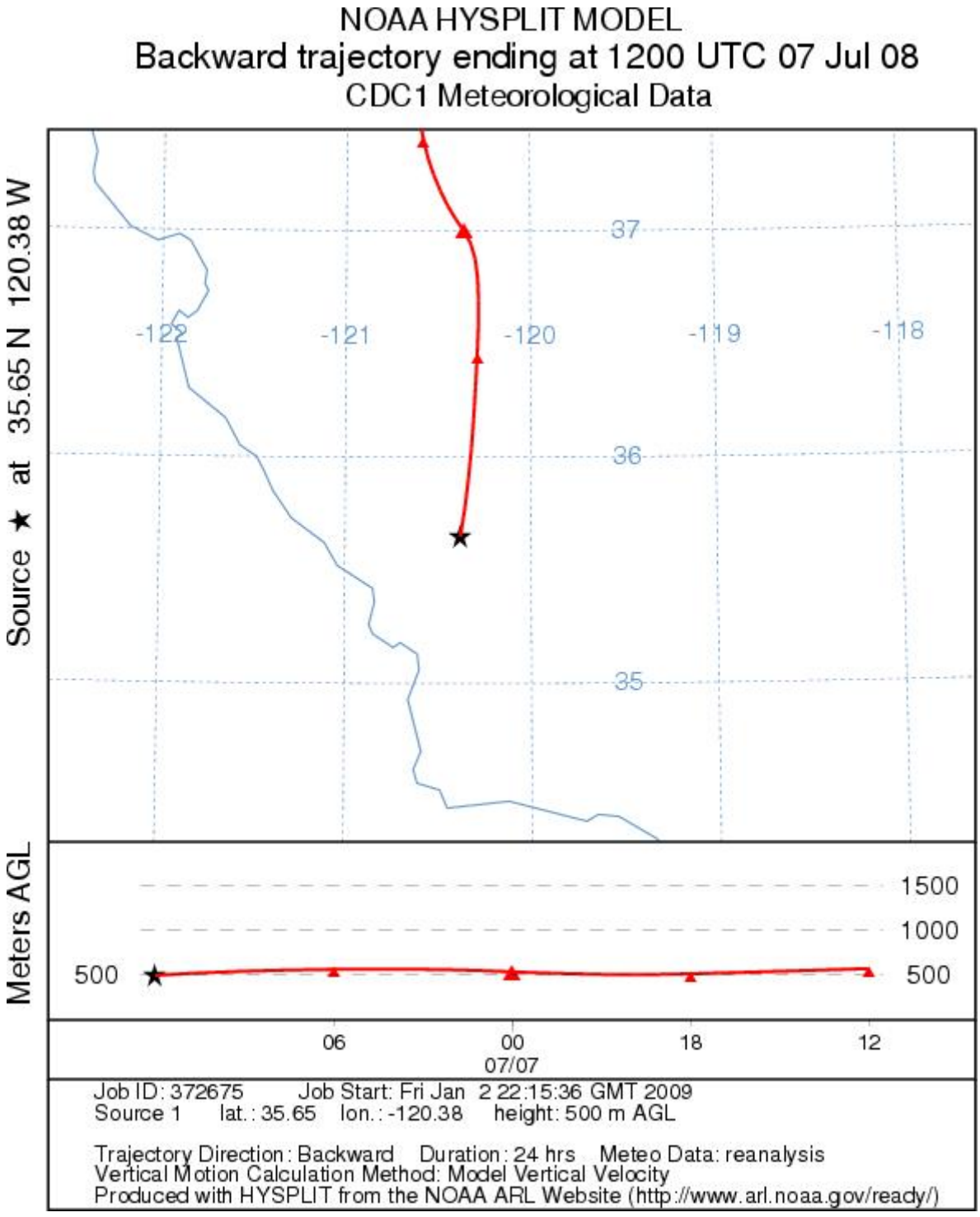

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 02 Jul to 0700 02 Jul 08 (UTC)
PM25 Release started at 0600 02 Jul 08 (UTC)
Source from 100 m at multiple locations
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 1.7E+02
(identified as a square)
Minimum: 1.1E-31
70
-160
-140
-120
50
30
10
NAMS METEOROLOGICAL DATA



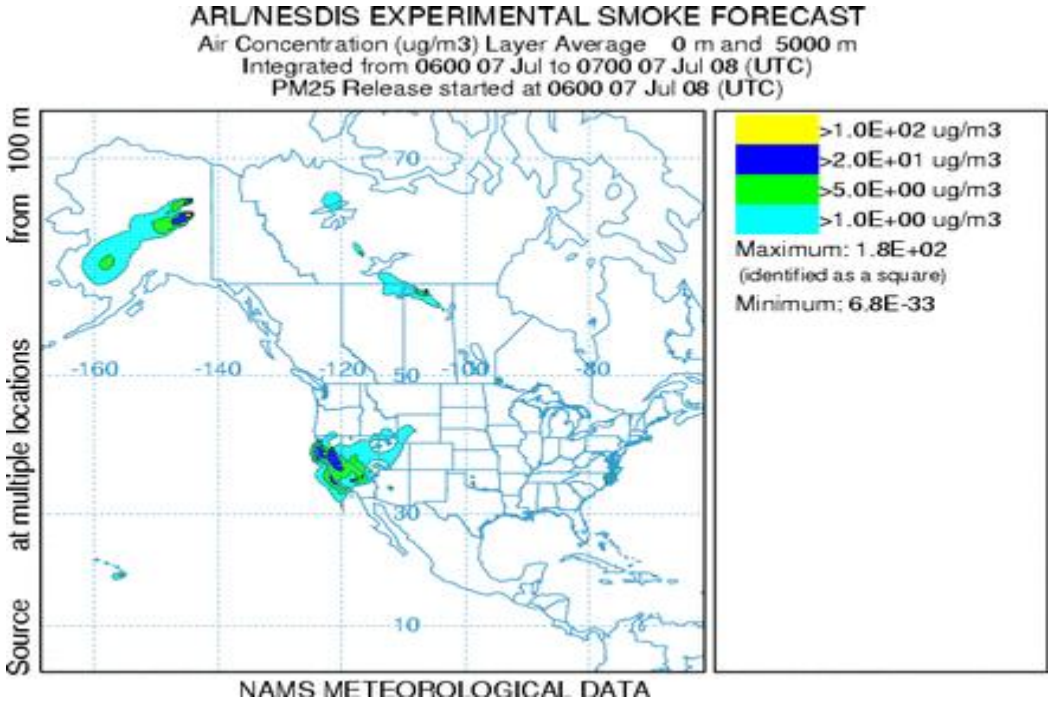
July 7 – 10, 2008 Event

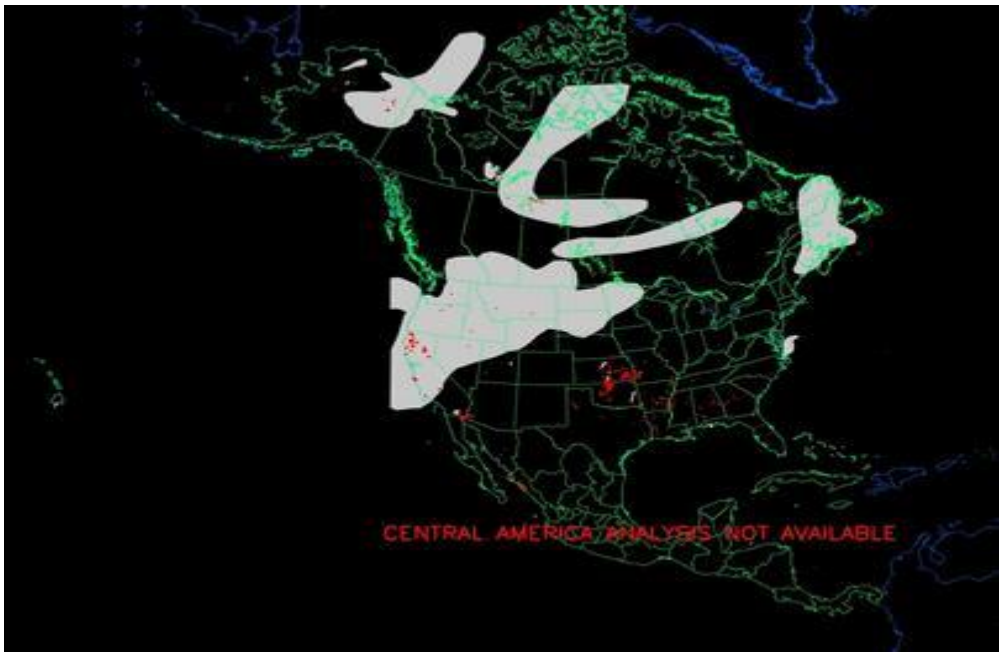


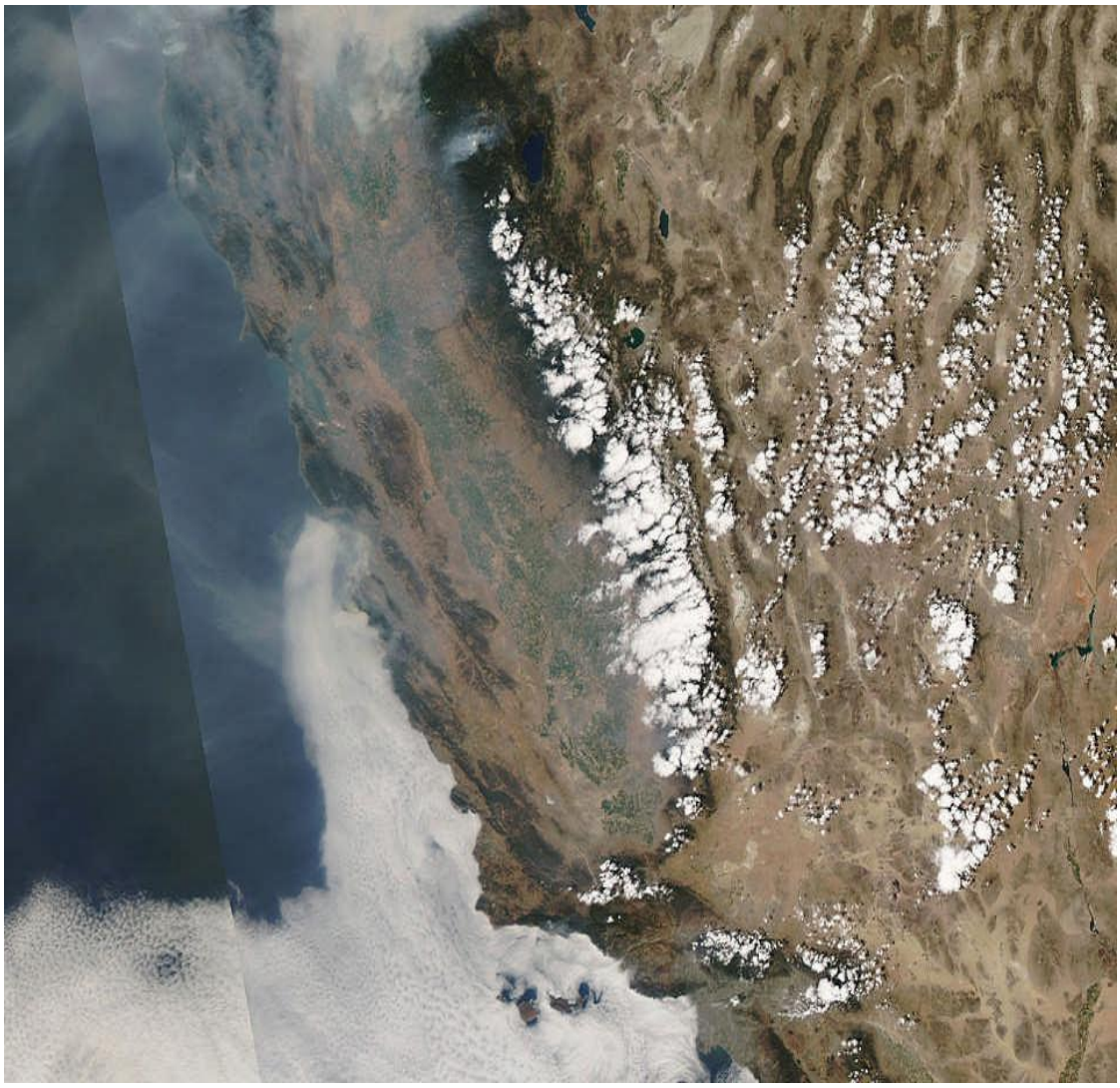
July 7, 2008



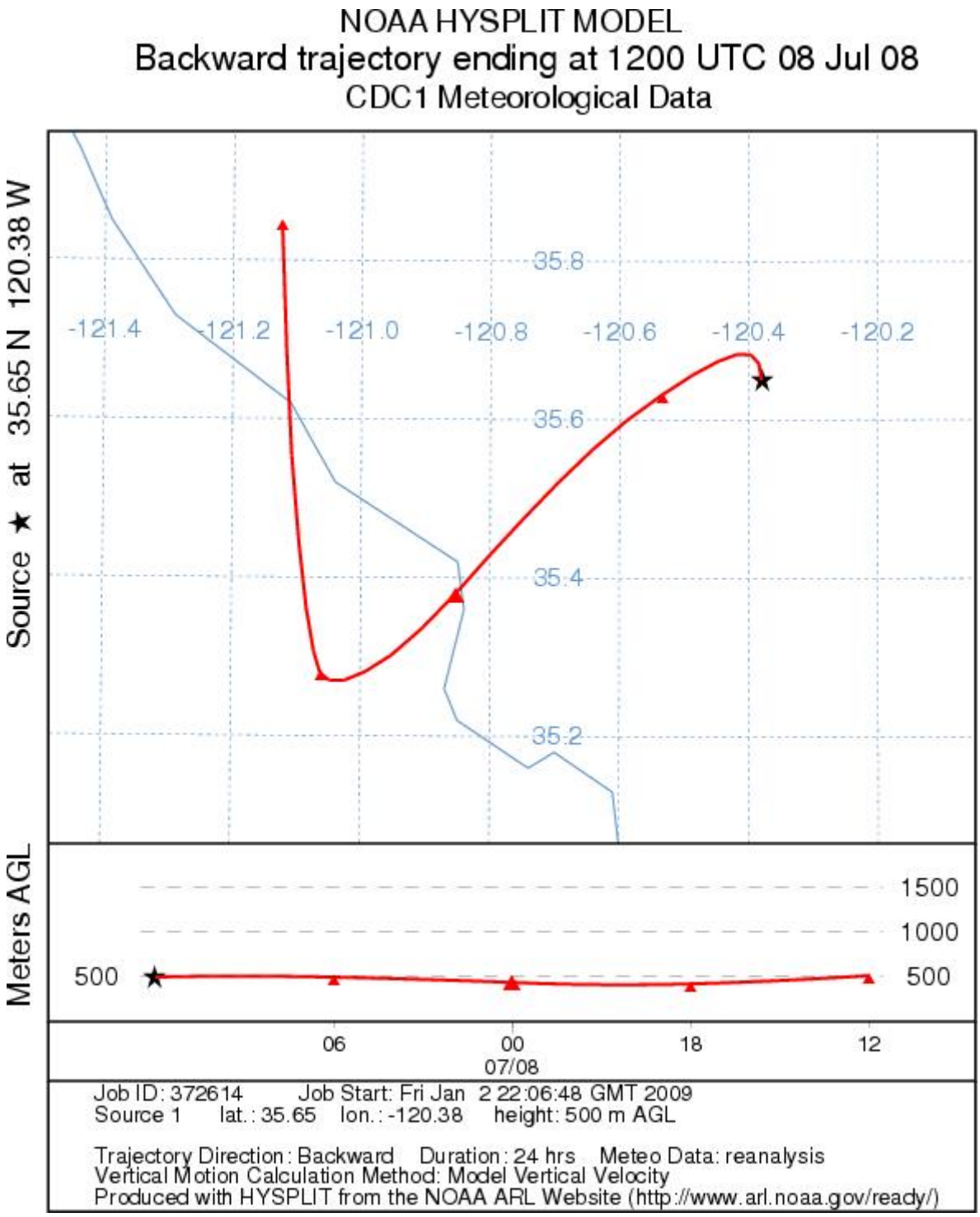
Trajectory shows air parcel movement from Northern California and Big Sur wildfire complex plume to Red Hills monitor at 4 am on July 7, 2008


ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 07 Jul to 0700 07 Jul 08 (UTC)
PM25 Release started at 0600 07 Jul 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 1.8E+02
(identified as a square)
Minimum: 6.8E-33
70
-160
-140
-120
50
-100
-80
30
10
NAMS METEOROLOGICAL DATA

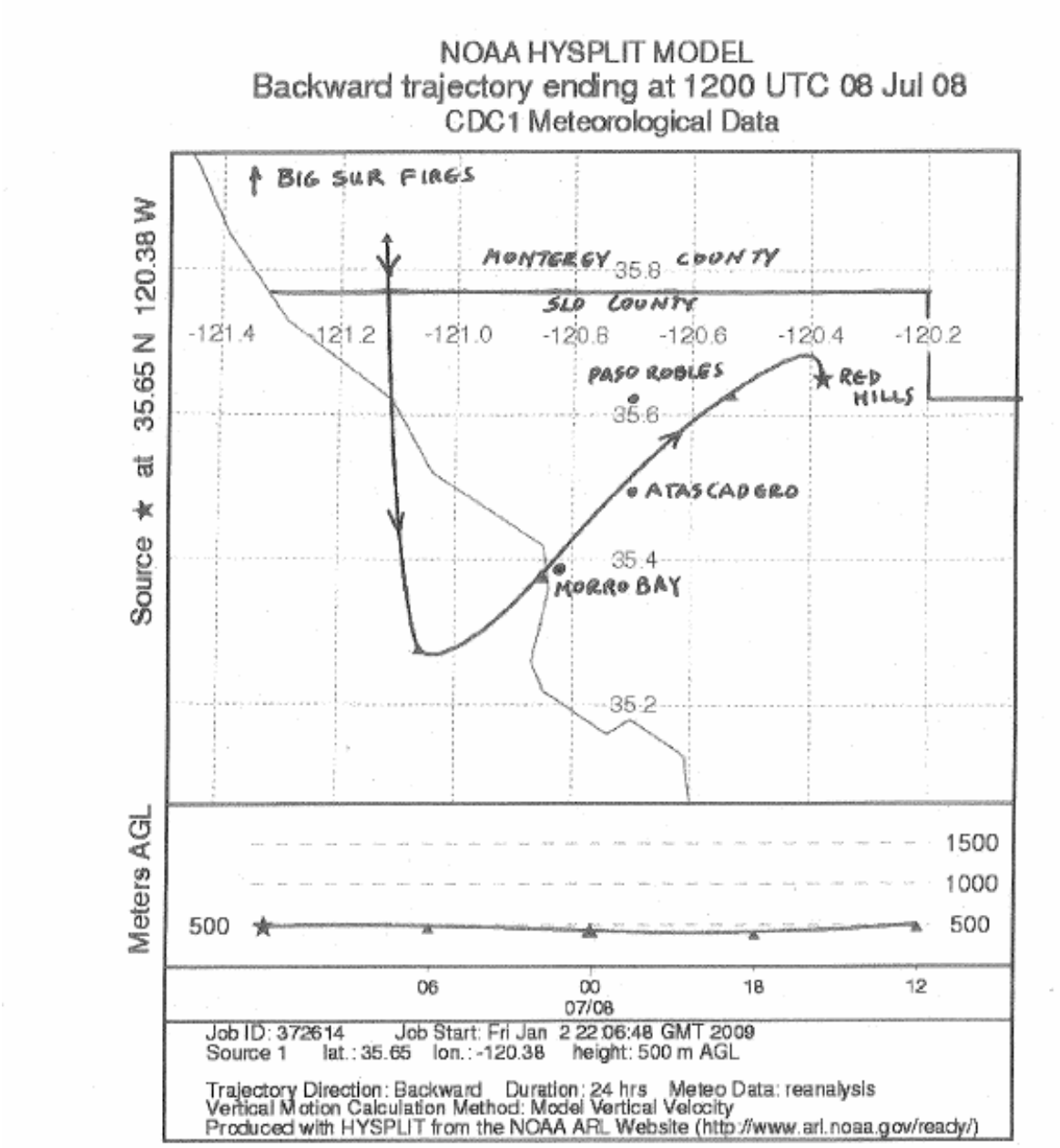

CENTRAL AMERICA ANALYSIS NOT AVAILABLE



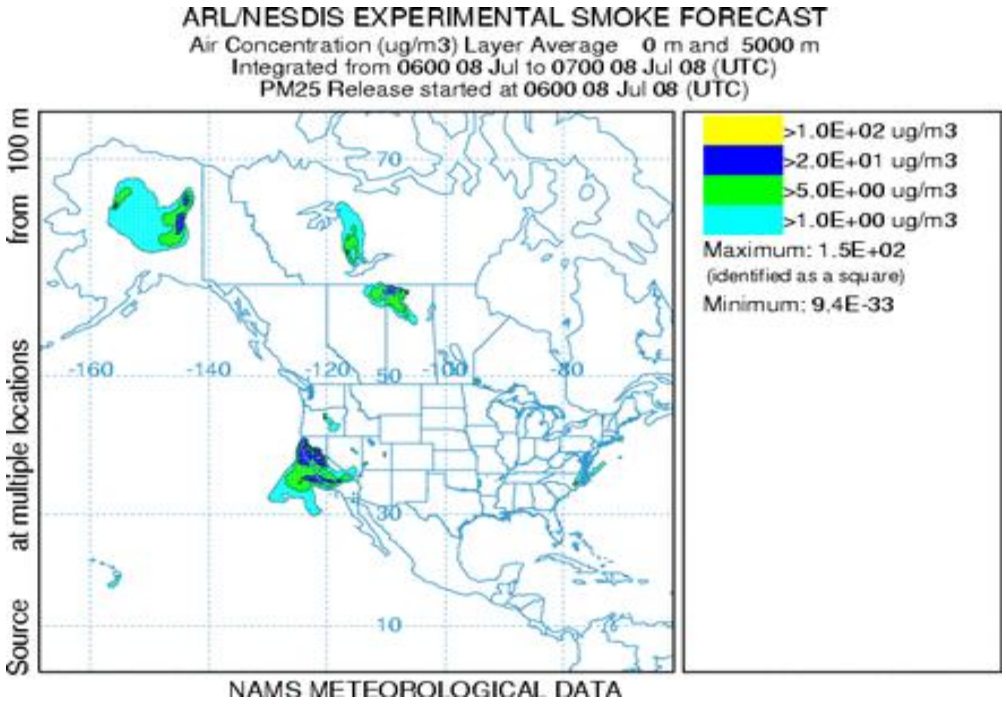
July 8, 2008

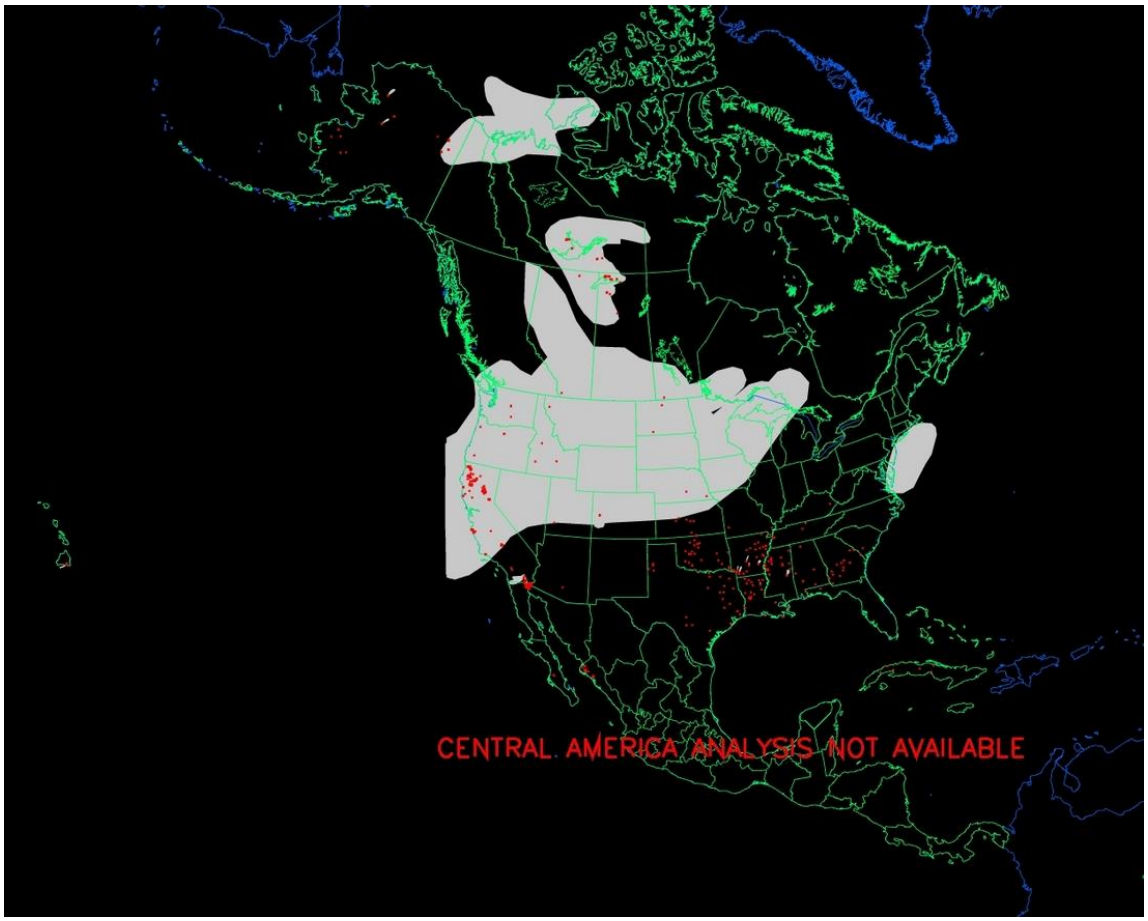


Trajectory shows air parcel movement from Big Sur wildfire complex plume to Red Hills monitor at 4 am on July 8. 2008



Trajectory with landmarks added

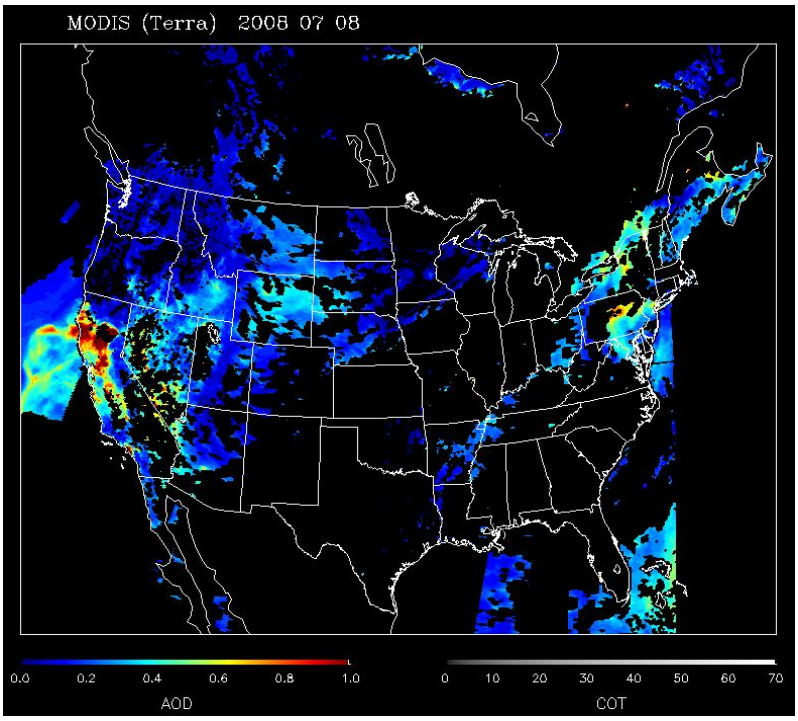

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 08 Jul to 0700 08 Jul 08 (UTC)
PM25 Release started at 0600 08 Jul 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 1.5E+02
(identified as a square)
Minimum: 9.4E-33
70
-160
-140
-120
50
-100
30
30
10
NAMS METEOROLOGICAL DATA

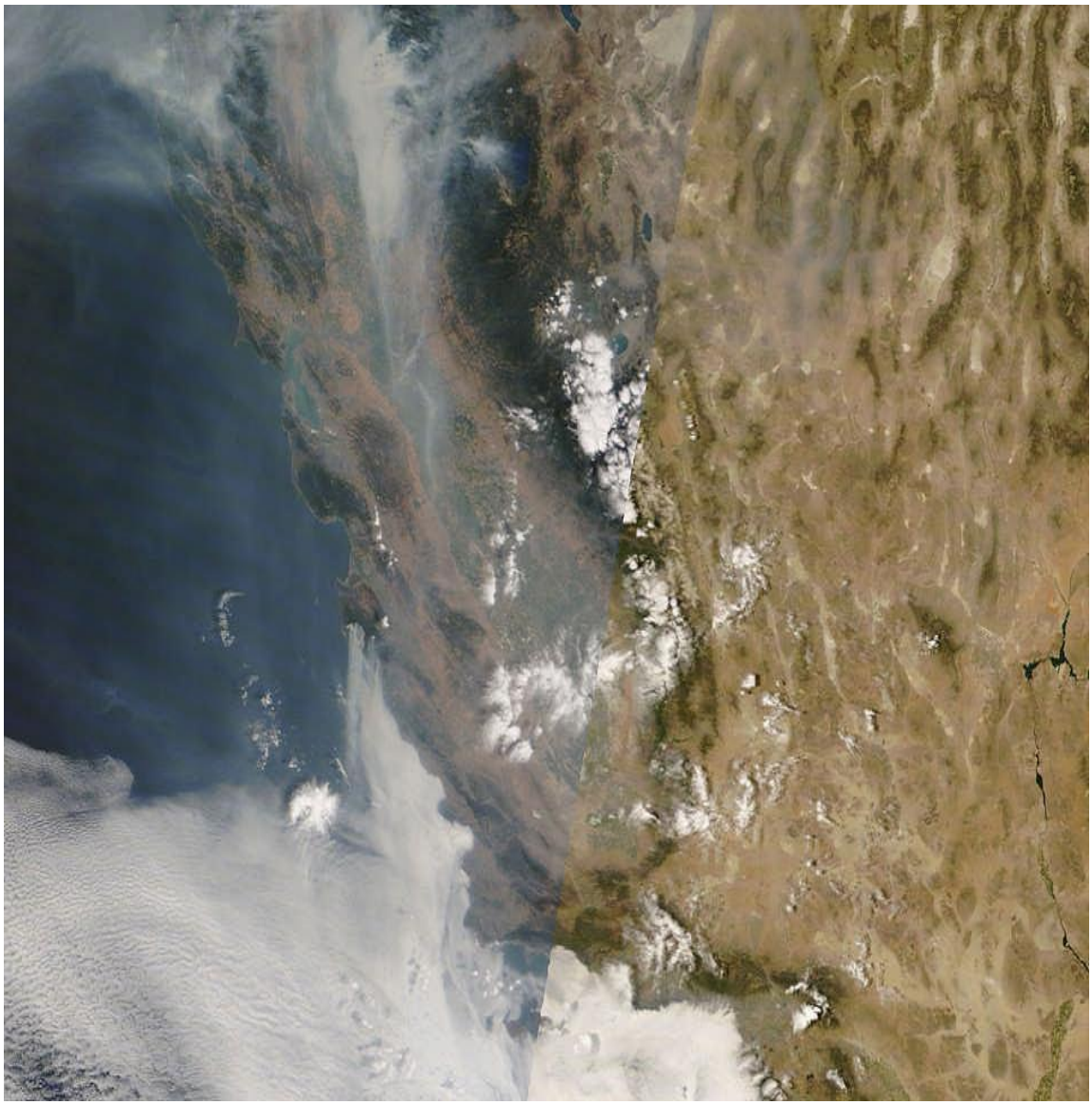

CENTRAL AMERICA ANALYSIS NOT AVAILABLE

July 8, 2008 (from the Smog Blog)

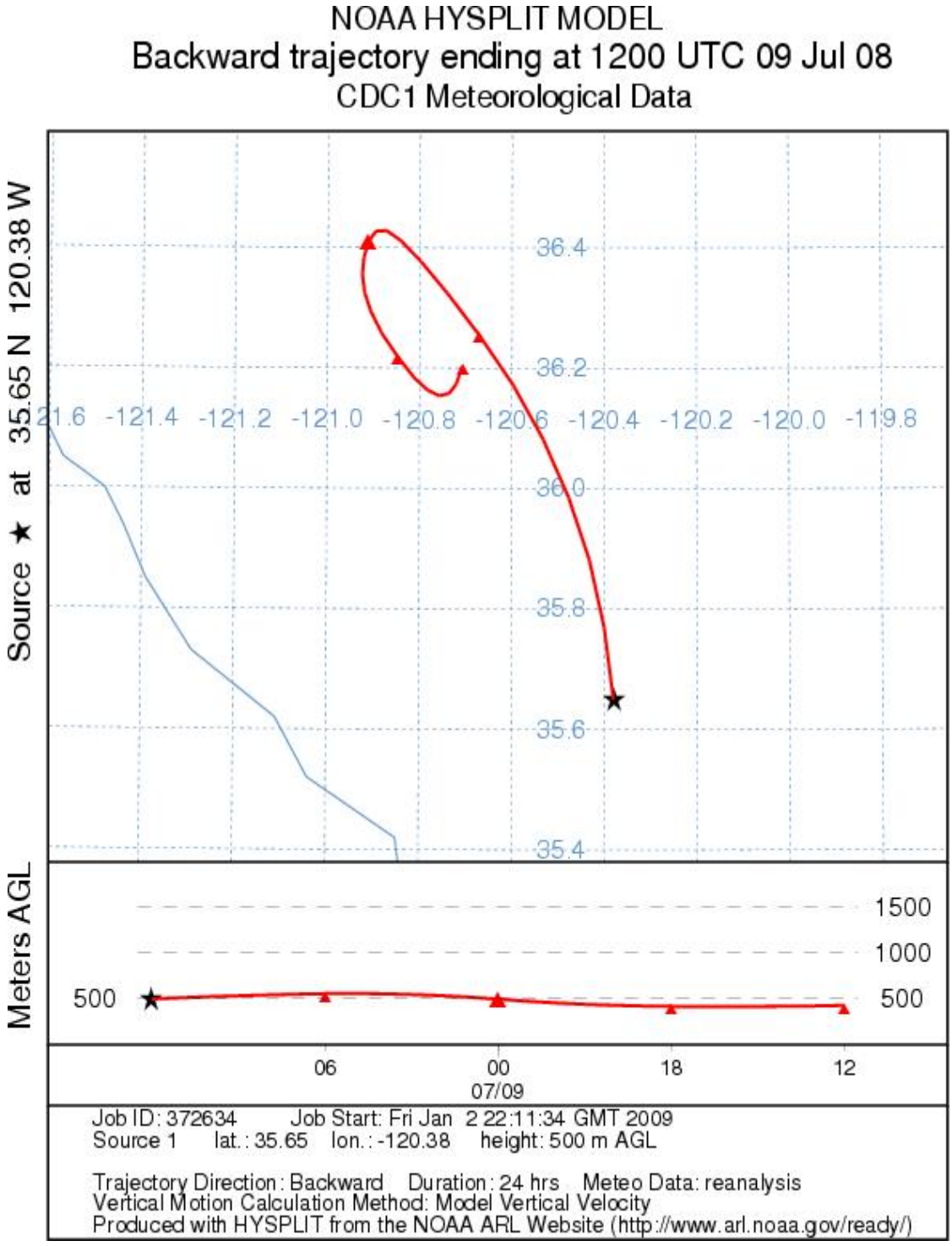
A LITTLE OF EVERYTHING FOR EARLY JULY

Dense smoke remains over the Northwest and continues to drift over the Pacific. AOD (below; source: NOAA-UMBC GASP IDEA) is unity over most of California. Particulate matter monitors (EPA AIRNow) in California are recording primarily code orange (unhealthy for sensitive groups; 40.5 < PM2.5-ug/m3 < 65.4) air quality. Smoke from California fires (transport from Russian and Canadian fires is a possibility as well) is likely impacting other states in the Northwest.

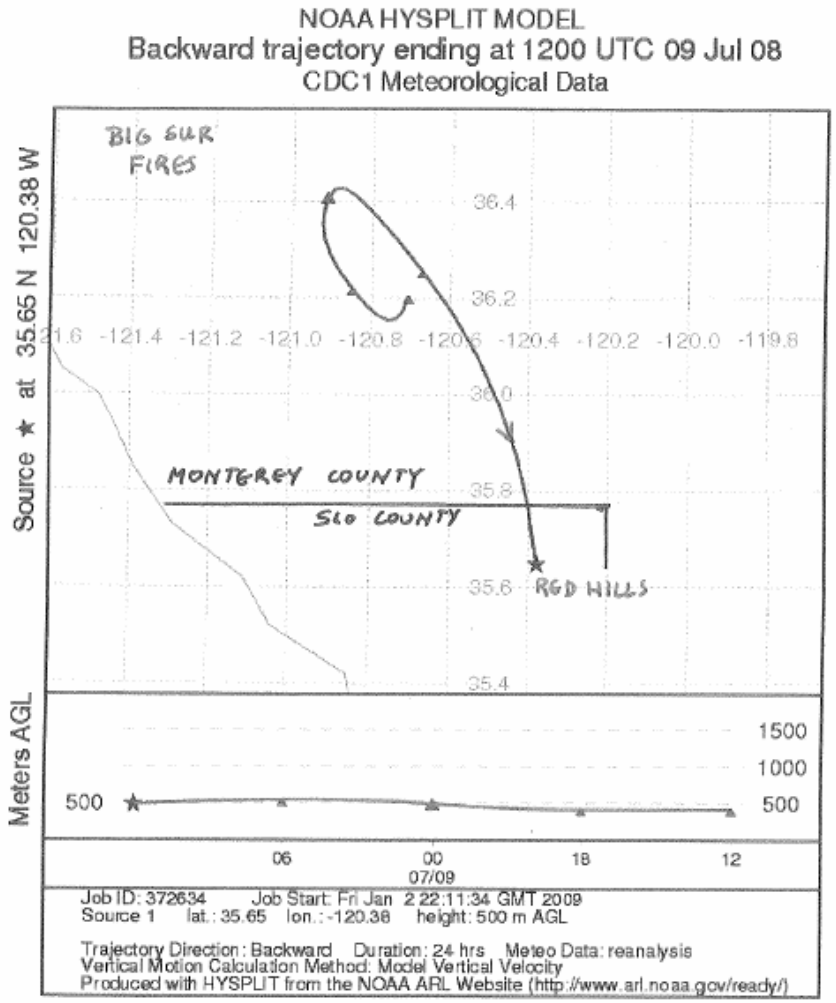




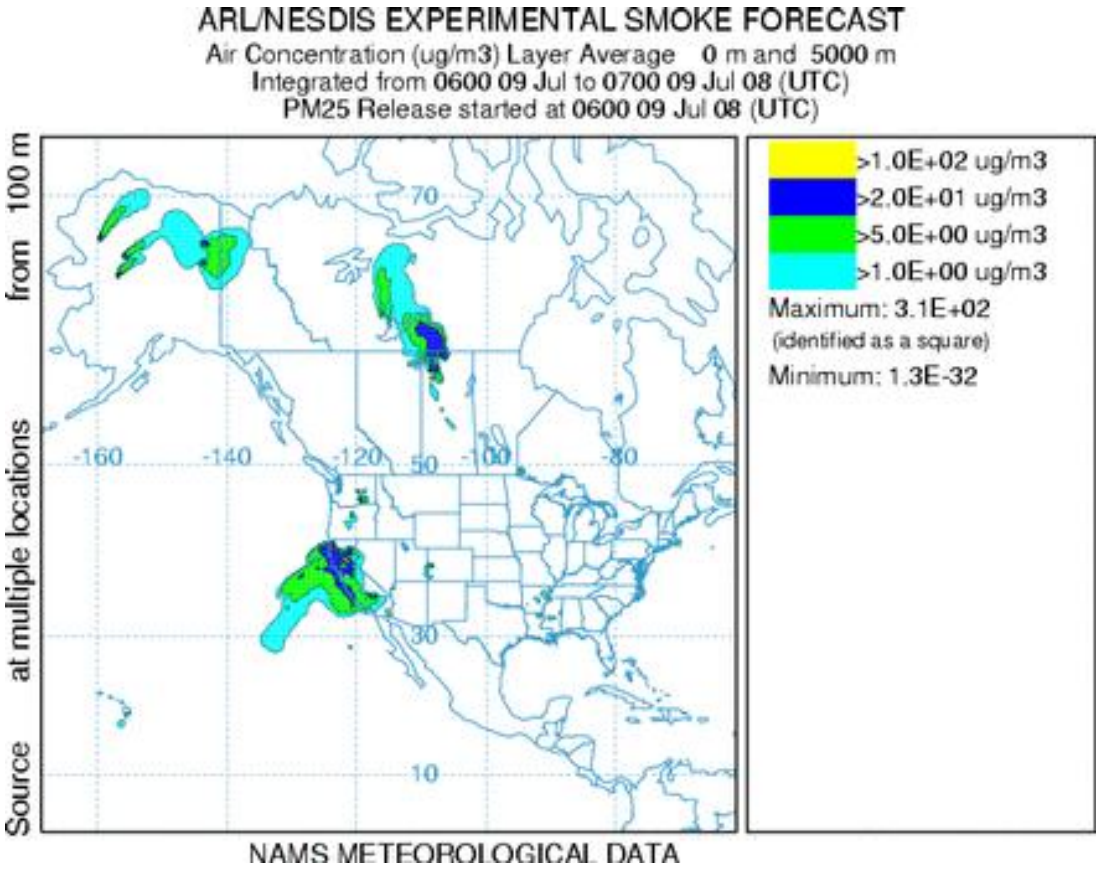
July 9, 2008

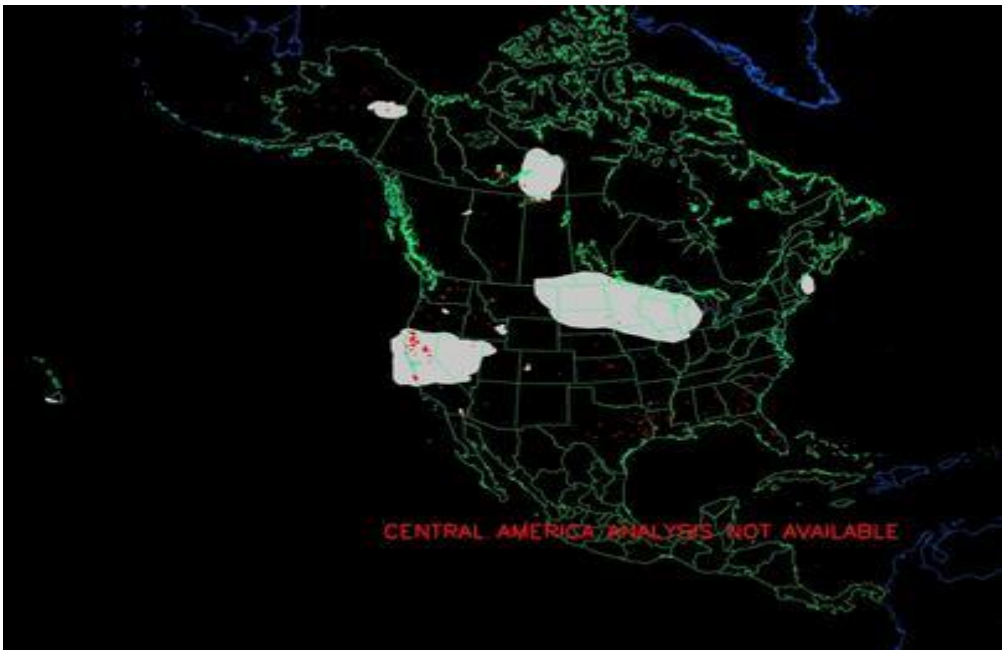


Trajectory shows air parcel movement from Big Sur wildfire complex plume to Red Hills monitor at 4 am on July 9. 2008



Trajectory with landmarks added


ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 09 Jul to 0700 09 Jul 08 (UTC)
PM25 Release started at 0600 09 Jul 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 3.1E+02
(identified as a square)
Minimum: 1.3E-32
70
-160
-140
-120
50
-100
-80
30
10
NAMS METEOROLOGICAL DATA

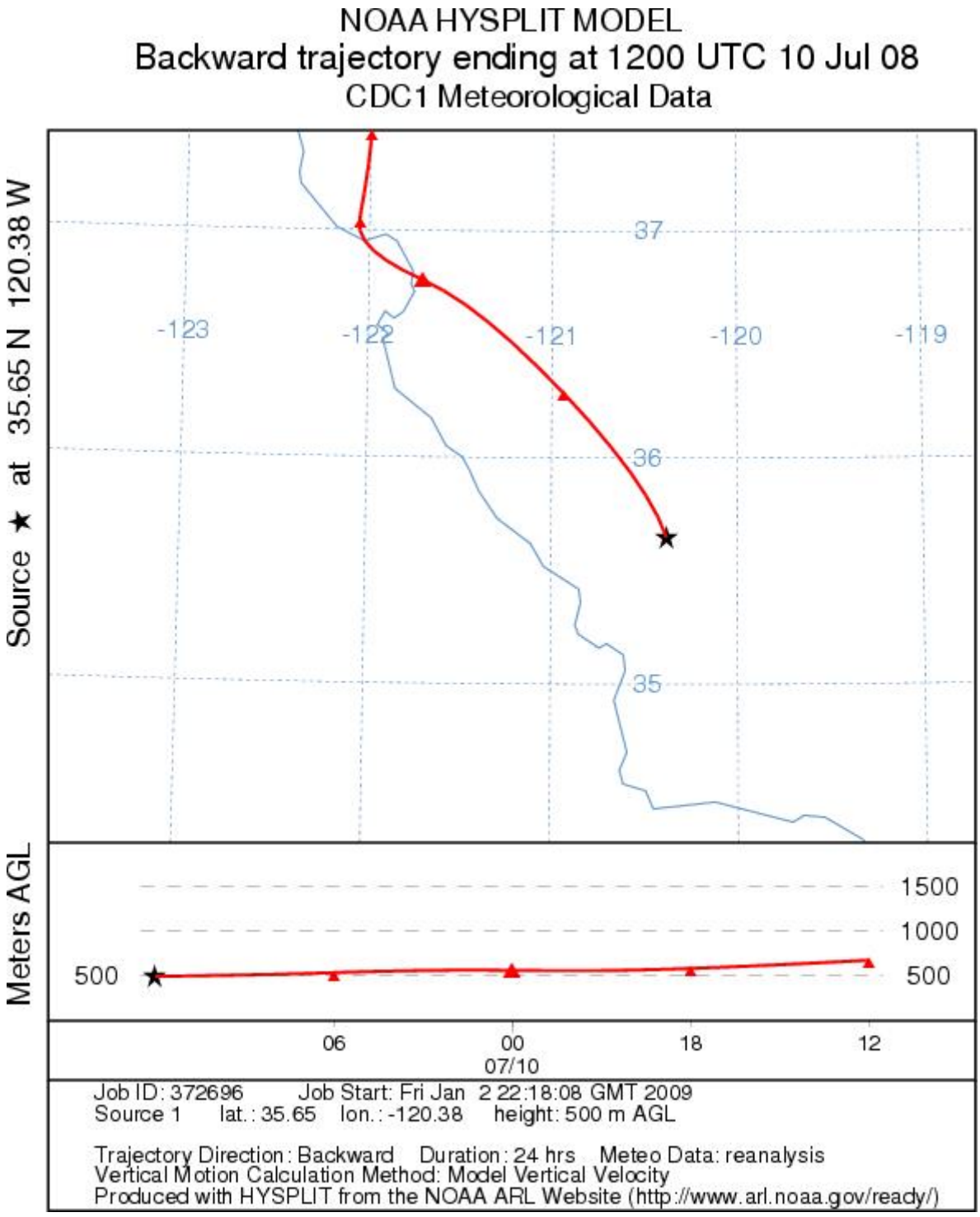

CENTRAL AMERICA ANALYSES NOT AVAILABLE

July 9, 2008 (From the Smog Blog)

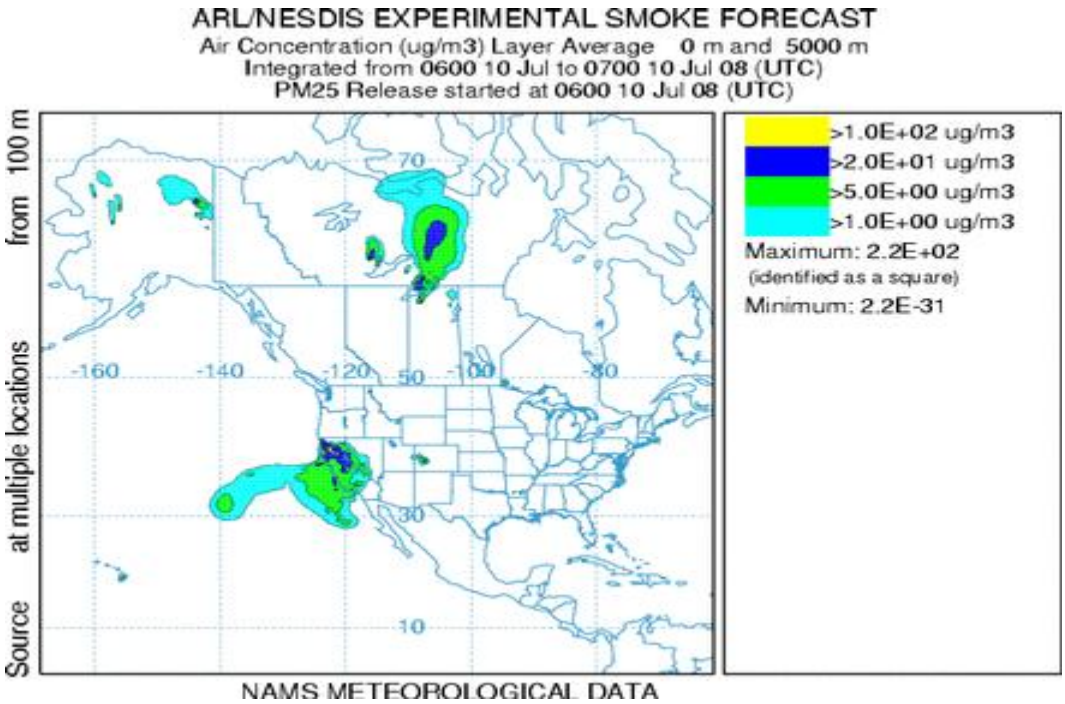
FIRES CONTINUE IN CALIFORNIA, HAZE AND SMOKE IN COASTAL NEW ENGLAND AND UPPER MIDWEST

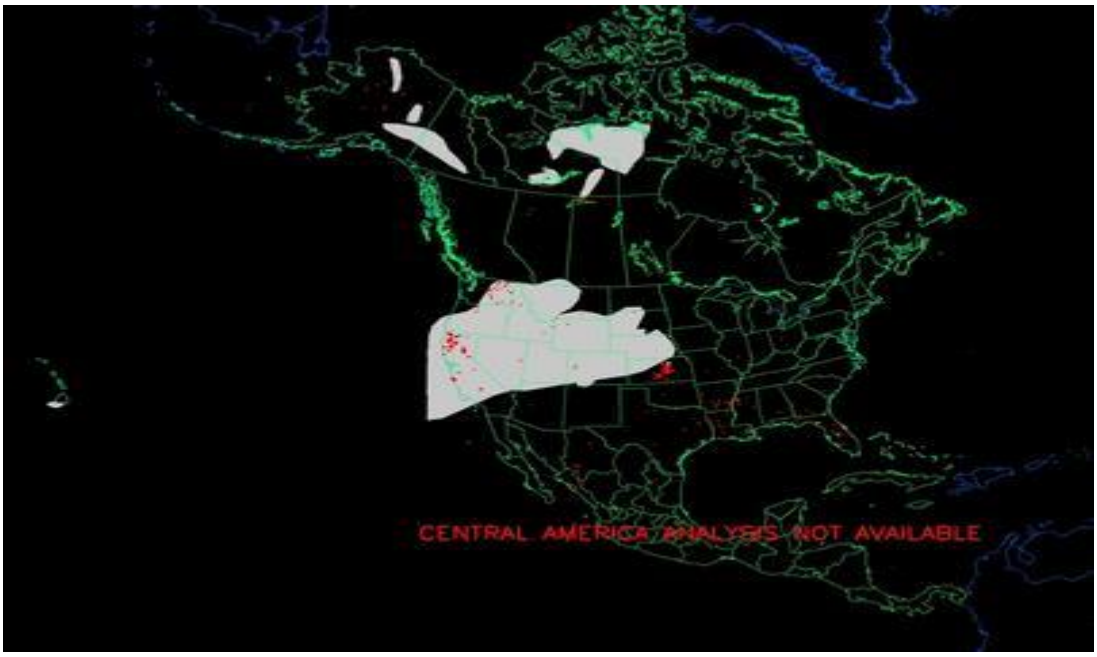
The National Interagency Fire Center reports that California continues to have heavy fire activity while activity in the rest of the country is relatively light, with the exception of large fires in Texas, Oklahoma, and Utah. AIRNow reported PM2.5 levels in California as Orange (Unhealthy for Sensitive Groups) and Red (Unhealthy) between Sacramento and Chico. Stepping back to view the continental U.S., the GASP satellite recorded elevated AOD indicating high levels of particles in New England and parts of the Southeast, in addition to California.

July 10, 2008



Trajectory shows air parcel movement from Northern California and Big Sur wildfire complex plume to Red Hills monitor at 4 am on July 10, 2008

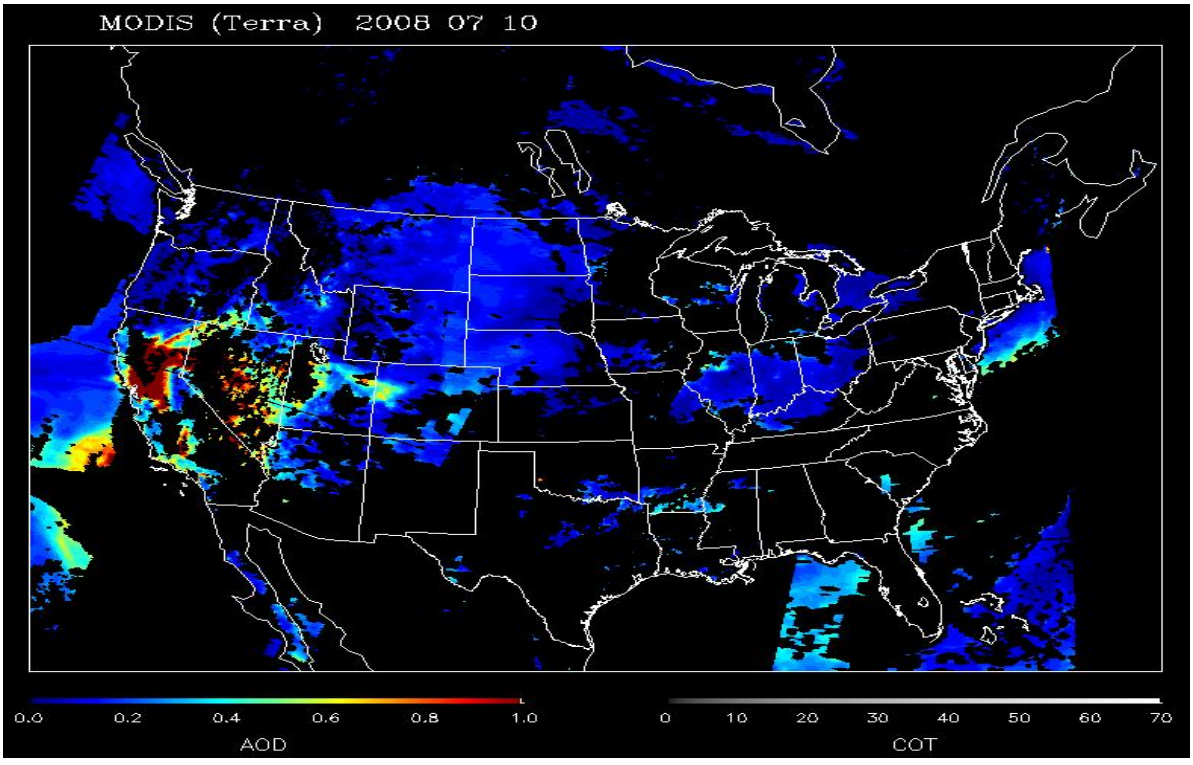

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 10 Jul to 0700 10 Jul 08 (UTC)
PM25 Release started at 0600 10 Jul 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 2.2E+02
(identified as a square)
Minimum: 2.2E-31
70
-160
-140
-120
50
-100
-80
30
10
NAMS METEOROLOGICAL DATA


CENTRAL AMERICA ANALYSES NOT AVAILABLE

July 10, 2008 (From the Smog Blog)

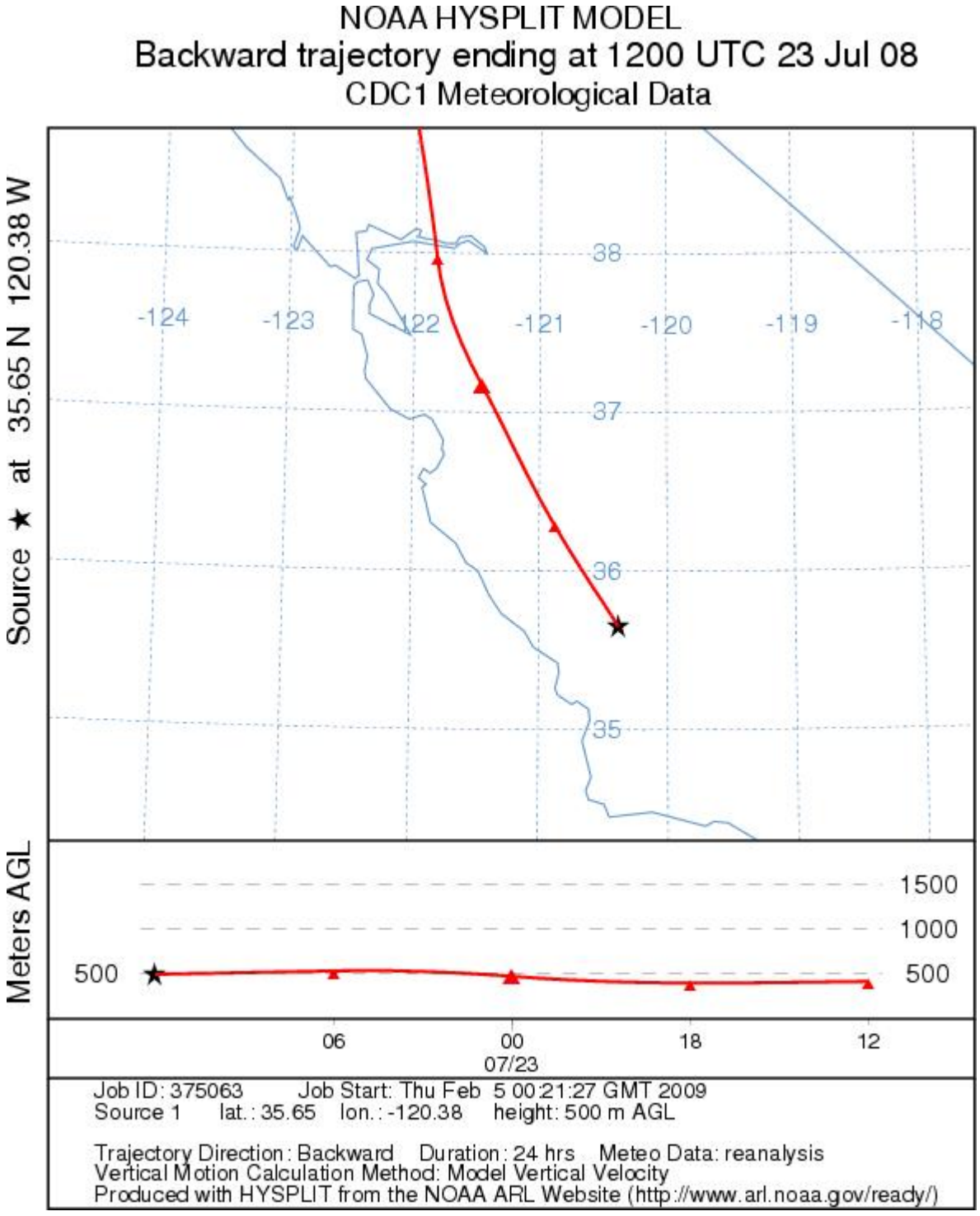
IMPROVEMENTS ON THE EAST BUT POOR AQ IN THE WEST

Smoke from Canadian (and/or Russian) fires has likely moved over the Northeast and is lingering over the Atlantic. Particulate sulfates and nitrates (PM2.5) from local sources are probably primarily contributing to the high AOD (below; NOAA-UMBC GASP IDEA) in this region. Air quality near the surface has improved over most of the Midwest and East, but remains very unhealthy (PM2.5-ug/m3 > 40.5) in California. Tropospheric ozone is elevated as well.

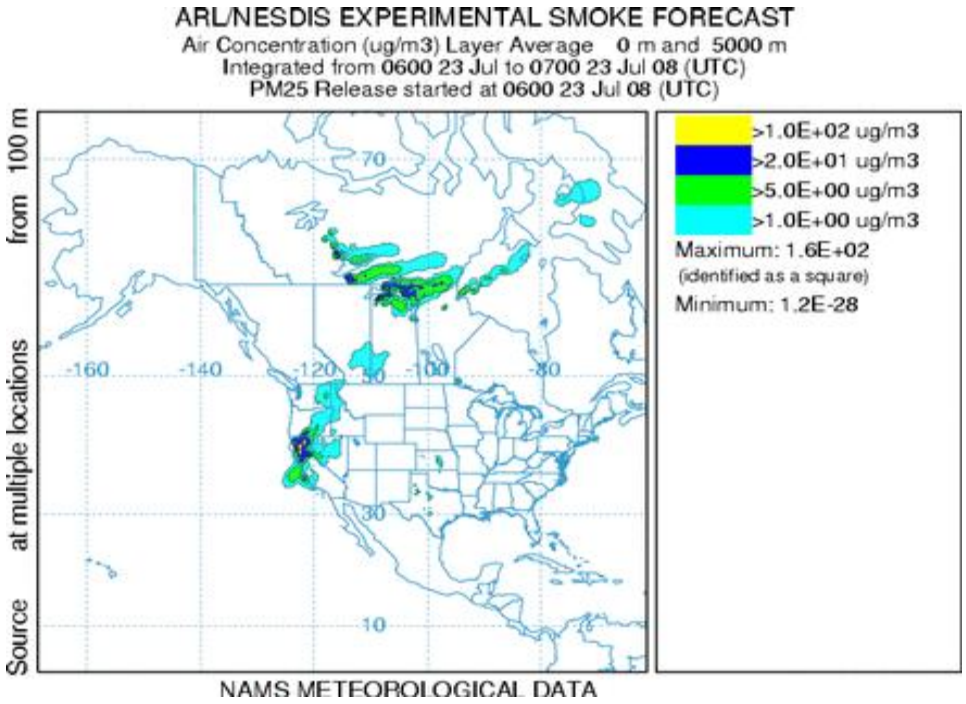


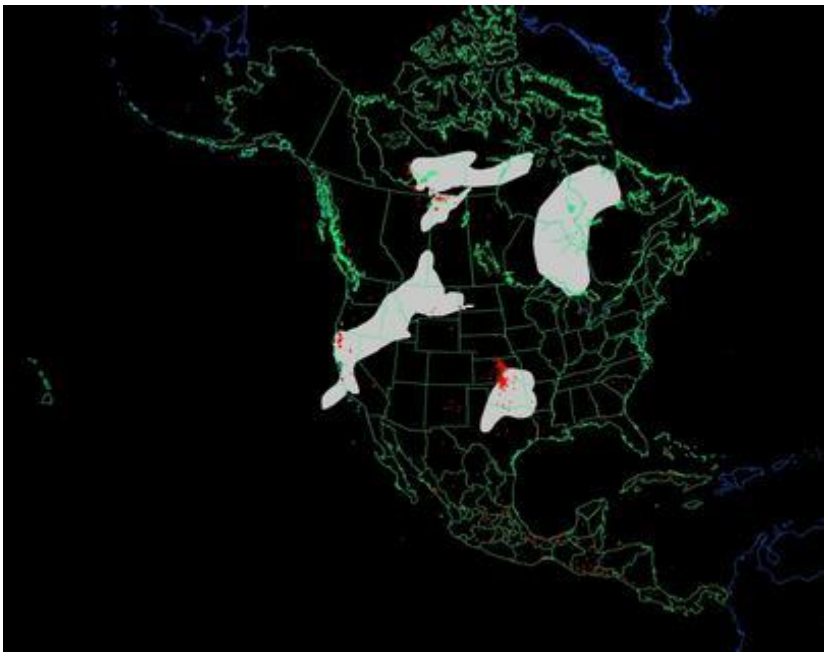
July 23 - 26, 2008 Event

July 23, 2008

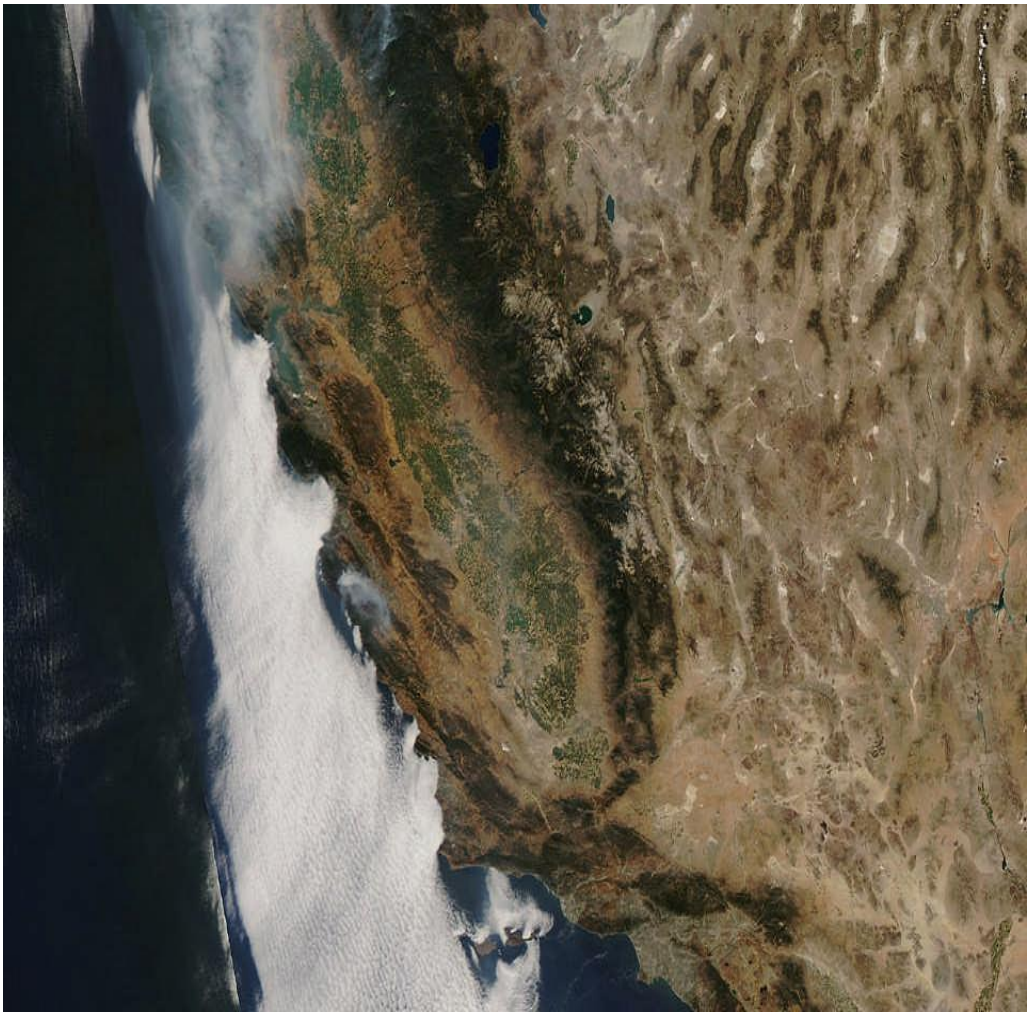


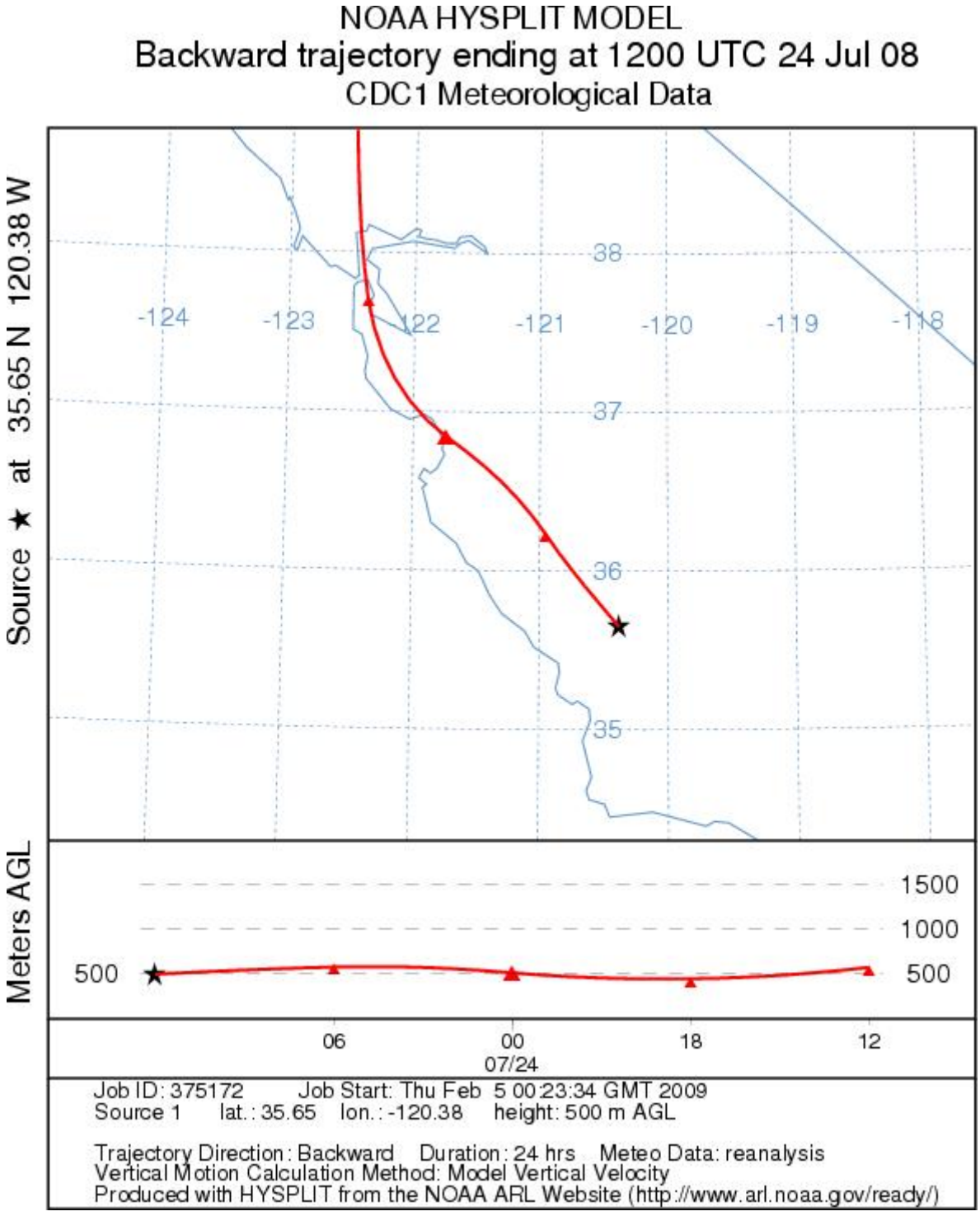
Trajectory shows air parcel movement from Big Sur wildfire complex plume to Red Hills


ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 23 Jul to 0700 23 Jul 08 (UTC)
PM25 Release started at 0600 23 Jul 08 (UTC)
Source from 100 m at multiple locations
70
-160
-140
-120
-100
-80
30
10
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 1.6E+02
(identified as a square)
Minimum: 1.2E-28
NAMS METEOROLOGICAL DATA

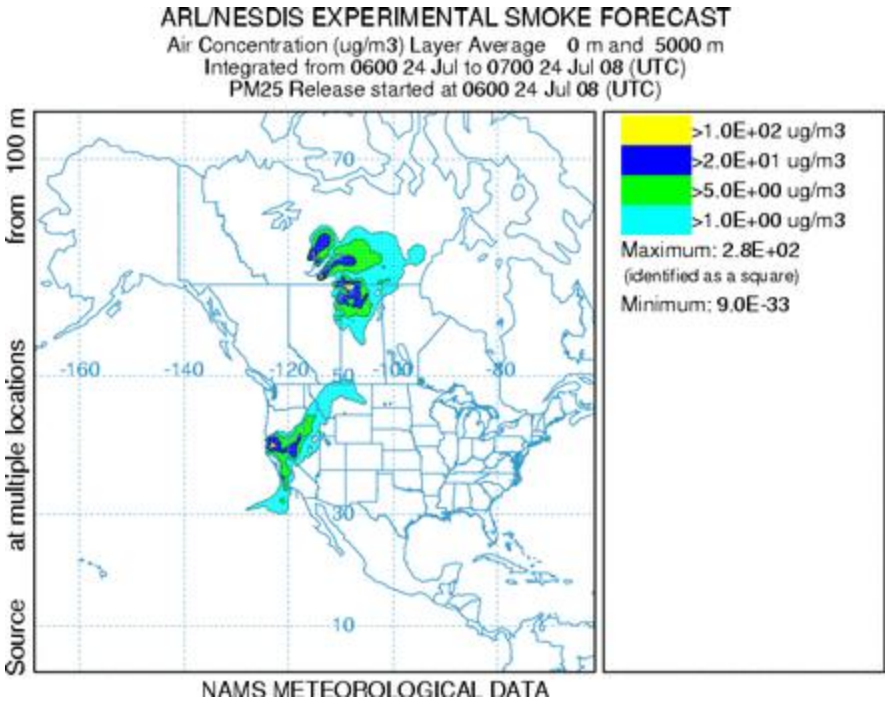


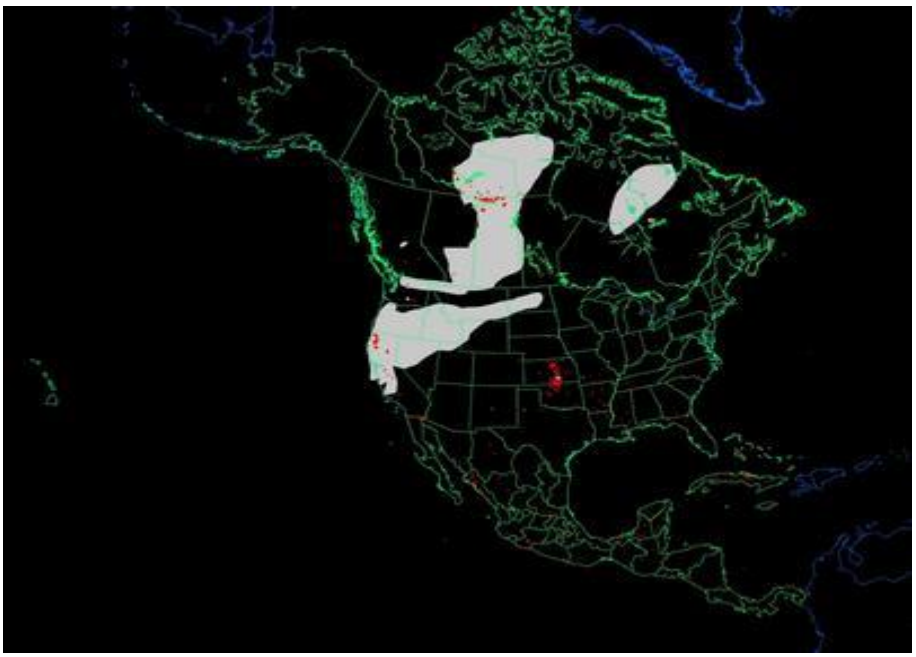
July 24, 2008



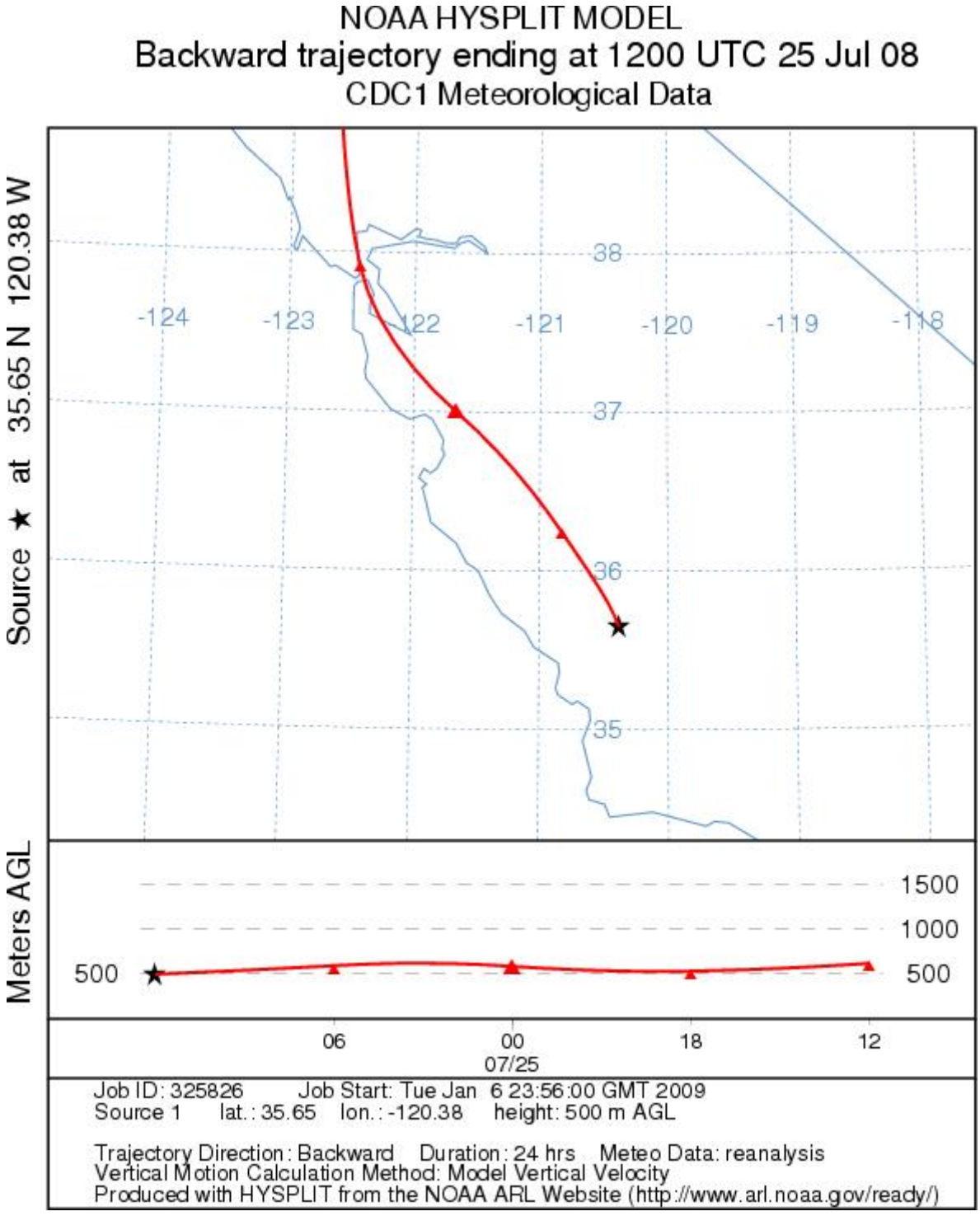


Trajectory shows air parcel movement from Big Sur wildfire complex plume to Red Hills

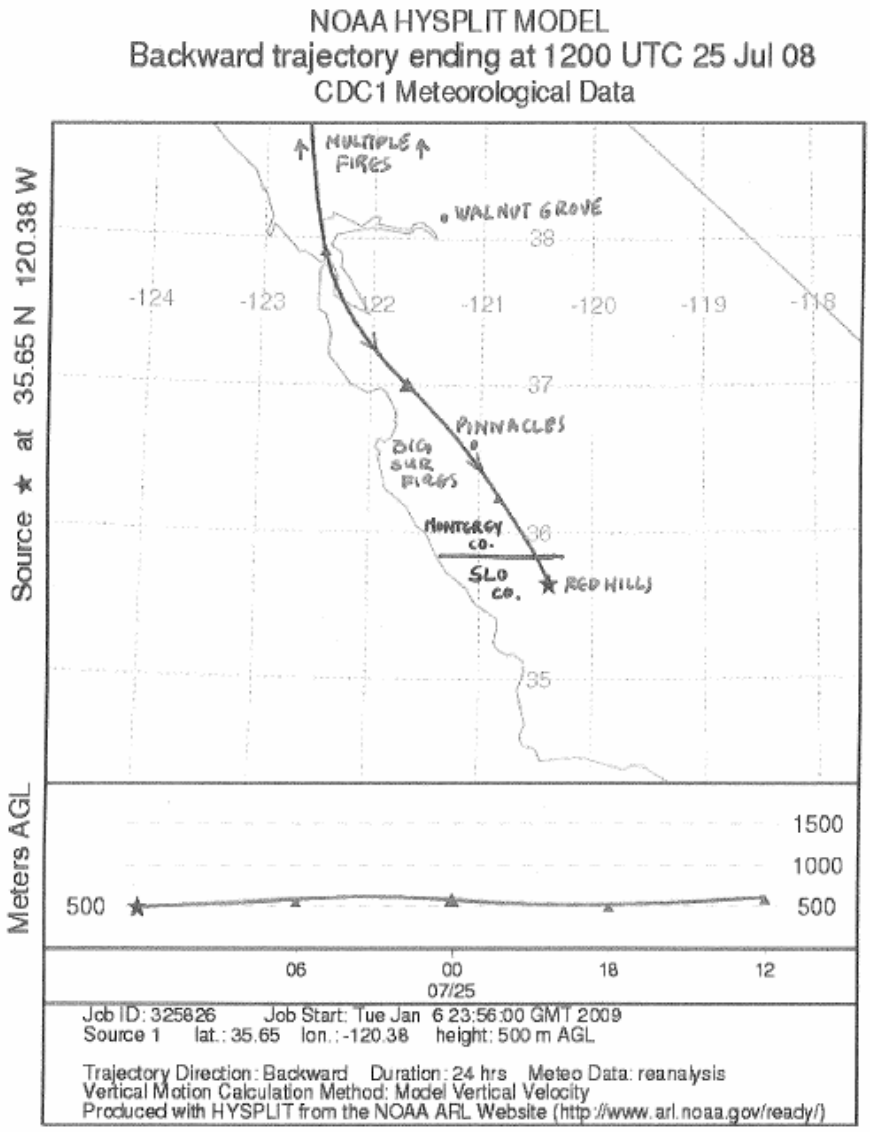

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 24 Jul to 0700 24 Jul 08 (UTC)
PM25 Release started at 0600 24 Jul 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 2.8E+02
(identified as a square)
Minimum: 9.0E-33
70
-160
-140
-120
50
-100
-80
30
10
NAMS METEOROLOGICAL DATA



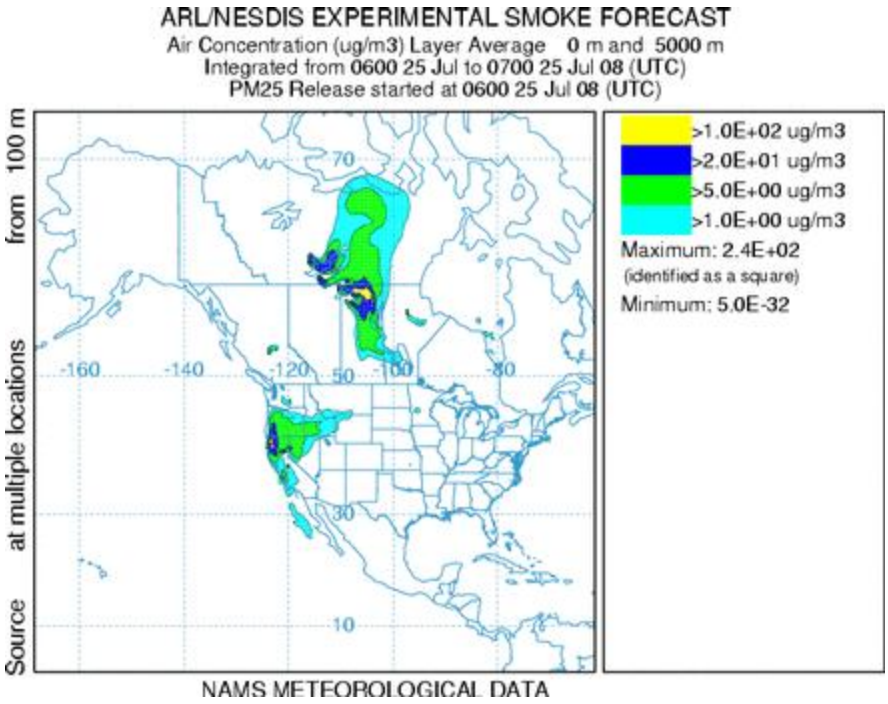
July 25, 2008

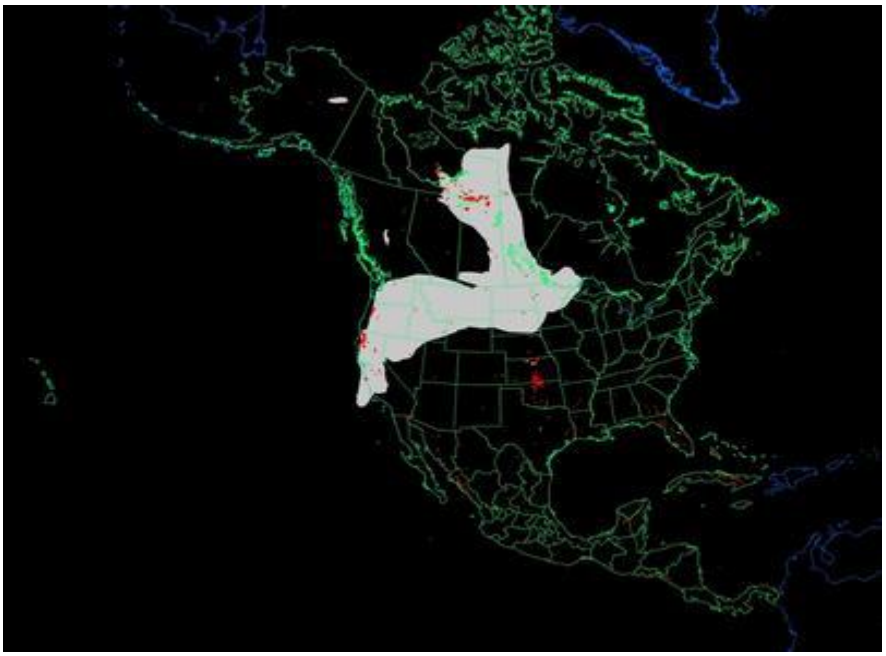


Trajectory indicates flow from fires in Big Sur and Northern California



Trajectory with landmarks added

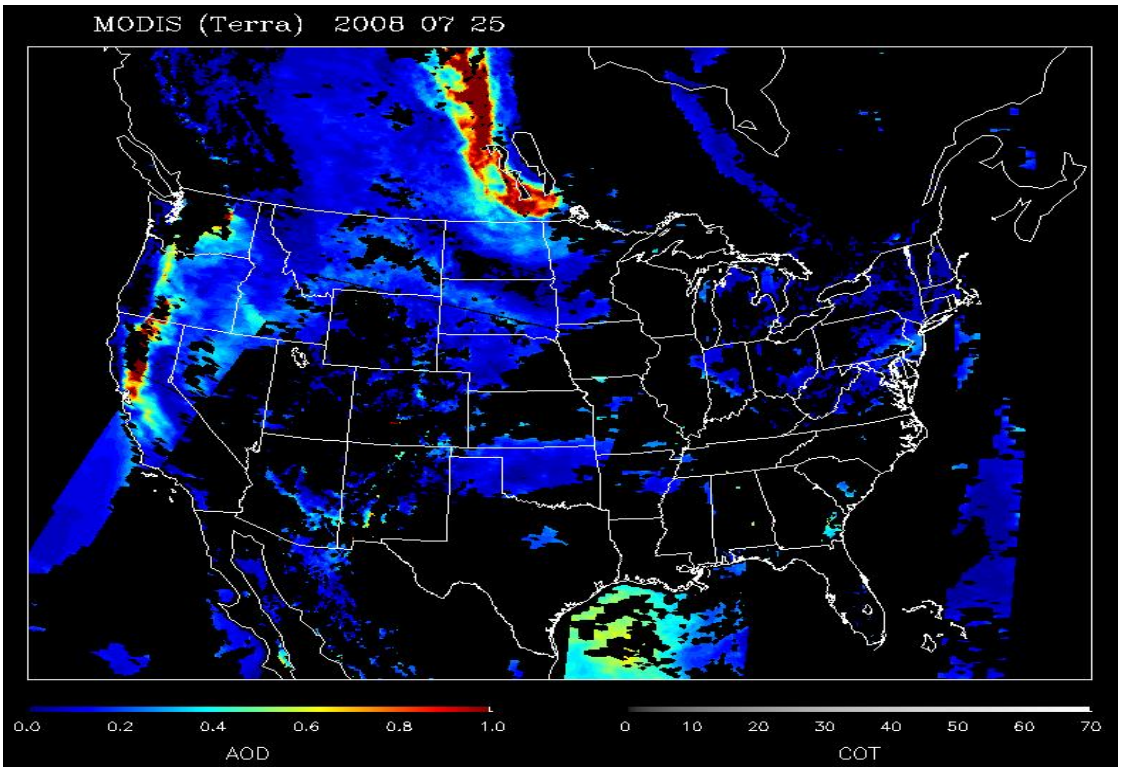

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 25 Jul to 0700 25 Jul 08 (UTC)
PM25 Release started at 0600 25 Jul 08 (UTC)
Source from 100 m at multiple locations
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 2.4E+02
(identified as a square)
Minimum: 5.0E-32
70
-160
-140
-120
50
-100
-80
30
10
NAMS METEOROLOGICAL DATA

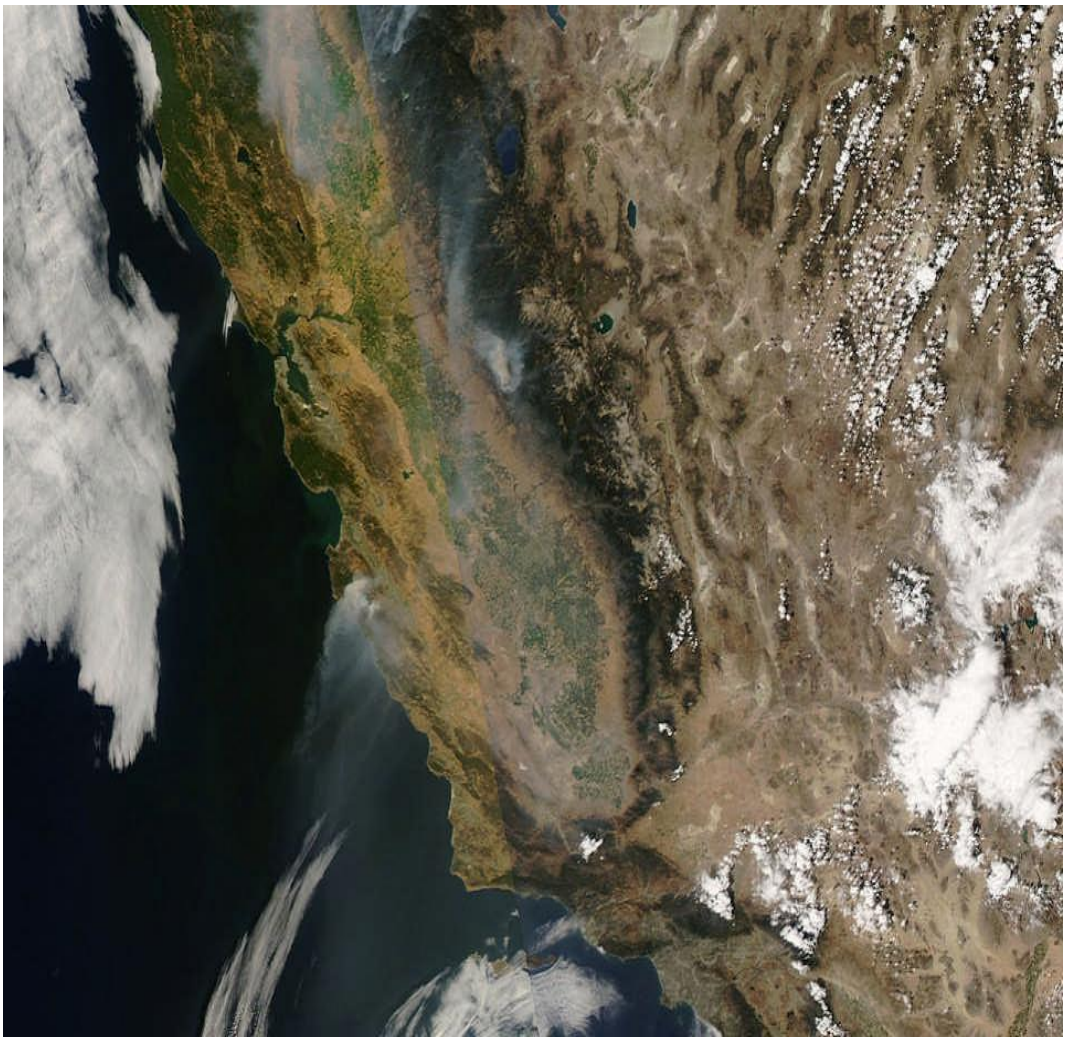


July 25, 2008 (From the Smog Blog)

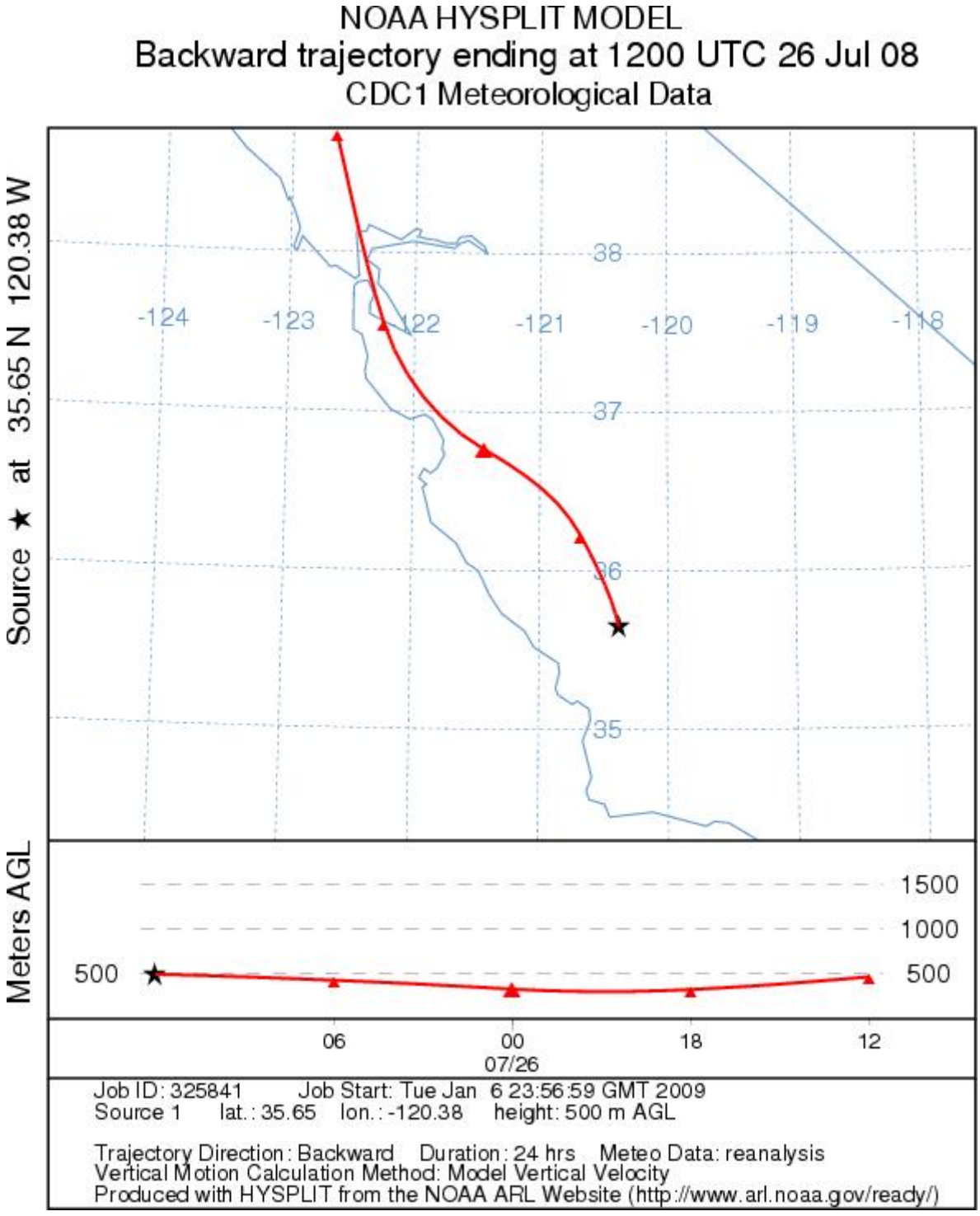
SMOKE OVER CANADA AND UNHEALTHY CONDITIONS IN CALIFORNIA

There is smoke over central Canada that is just beginning to enter the US over northern North Dakota and Minnesota. This can be seen in the MODIS Terra AOD imagery (below), and was also reported in the HMS analysis. The smoke is also visible in the Terra aqua RGB. The red dots are the fire locations of the fires leading to this intense smoke plume. Central California is experiencing code yellow to orange conditions due to ozone, and unhealthy air quality due to the smoke (PM2.5) is currently present in northern California.

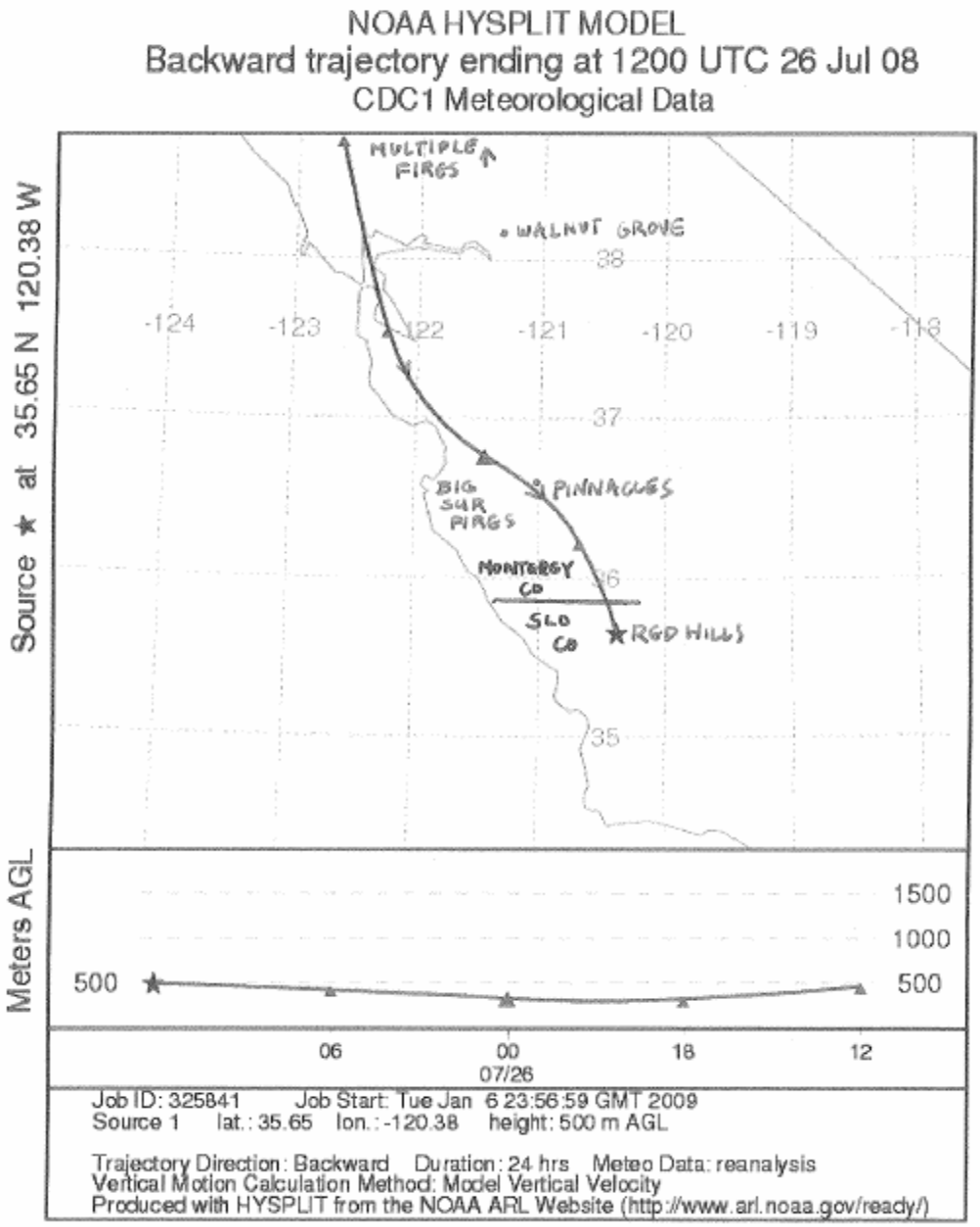




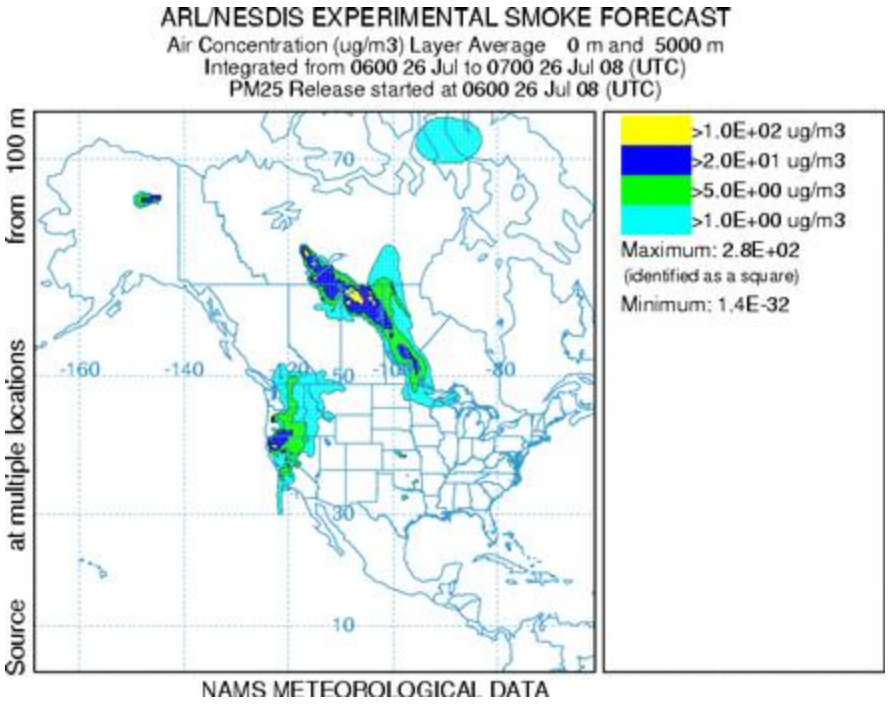
July 26, 2008

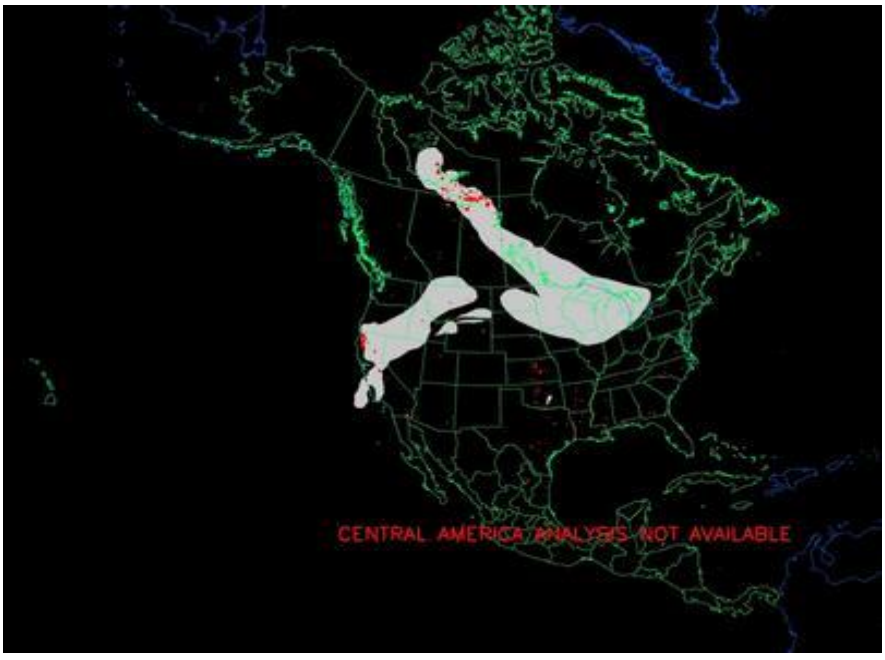


Trajectory indicates flow from fires in Big Sur and Northern California



Trajectory with landmarks added

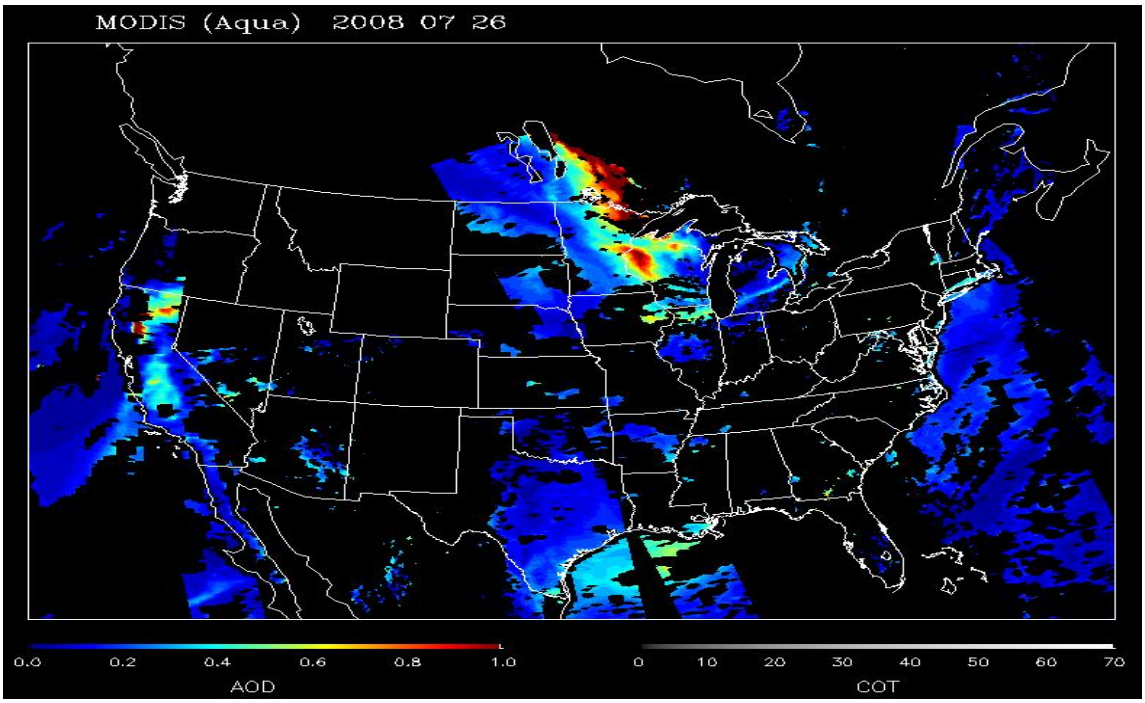

ARL/NESDIS EXPERIMENTAL SMOKE FORECAST
Air Concentration (ug/m3) Layer Average 0 m and 5000 m
Integrated from 0600 26 Jul to 0700 26 Jul 08 (UTC)
PM25 Release started at 0600 26 Jul 08 (UTC)
Source at multiple locations from 100 m
>1.0E+02 ug/m3
>2.0E+01 ug/m3
>5.0E+00 ug/m3
>1.0E+00 ug/m3
Maximum: 2.8E+02
(identified as a square)
Minimum: 1.4E-32
70
-160
-140
-120
-100
-80
30
10
NAMS METEOROLOGICAL DATA


CENTRAL AMERICA ANALYSIS NOT AVAILABLE

July 26, 2008 (From the Smog Blog)

SMOKE IN THE MIDWEST, CALIFORNIA SMOKE MOVING EAST, & HAZE OVER THE GULF

Air quality conditions are, in general, worse in California. Smoke from local fires, which have been burning for a considerable time, is likely the predominant source of surface pollution. Some of this smoke is blowing East over adjacent states. Haze is noticeable over the Gulf region as well; neighboring states will likely be impacted soon (if not already).



PRESS RELEASES

Issued June 11, 2008:

*** SMOKE ADVISORY ***

FOR IMMEDIATE RELEASE

Contact: **Aeron Arlin Genet, 781-5912**
SLO County Air Pollution Control District

Dr. Craig McMillan, 781-5500
SLO County Public Health Department

SMOKE ADVISORY FOR SLO COUNTY DUE TO INDIANS FIRE

SAN LUIS OBISPO, CALIFORNIA, June 11, 2008 – The San Luis Obispo (SLO) County Air Pollution Control District (APCD) and the Public Health Department want to notify residents to take precautions due to smoke impacts from the wildfires now occurring in Monterey County, about 20 miles west of King City in the Ventana Wilderness of the Los Padres National Forest. High temperatures, low humidity and strong winds have contributed to the spread of the Indians Fire, and smoke is now affecting air quality in coastal and northern regions of SLO County.

With the 4,200 acre fire only ten percent (10%) contained and no relief expected from the weather soon, the event is expected to continue. As the fire develops over multiple days, regions throughout SLO County will likely become more impacted by the smoke.

County agencies urge residents to use common sense and take precautions to reduce the harmful health effects associated with smoke exposure. When you can see or smell the smoke in your surroundings, officials recommend you avoid strenuous outdoor activity and remain indoors as much as possible. Below are a few things to keep in mind during fire season:

- If you smell smoke, be cautious and use common sense to protect your family's health. Everyone, especially people with heart or lung disease (including asthma), older adults, and children, should limit time spent outdoors and avoid outdoor exercise.
- If you have symptoms of lung or heart disease that may be impacted by excessive smoke exposure, including repeated coughing, shortness of breath or difficulty breathing, wheezing, chest tightness or pain, palpitations, nausea or unusual fatigue or light-headedness, call your doctor and seek medical attention.
- When it is obvious that there is smoke in the air, County officials continue to recommend that even healthy adults and children avoid strenuous outdoor activity and remain indoors as much as possible. Levels of particulates in the smoke may be high enough that the potential exists for even healthy people to be affected.

The District will continue to closely monitor smoke impacts and air quality in San Luis Obispo County.

Issued June 16, 2008:

*** CAUTIONARY SMOKE ADVISORY ***

FOR IMMEDIATE RELEASE: June 16, 2008

Contact: **Aeron Arlin Genet, 781-5998**
SLO County Air Pollution Control District

Dr. Craig McMillan, 781-5500
SLO County Public Health Department

INDIANS FIRE SMOKE ADVISORY CONTINUES FOR SLO COUNTY

SAN LUIS OBISPO, CALIFORNIA, – The San Luis Obispo (SLO) County Air Pollution Control District and Public Health Department are advising individuals that the smoke advisory resulting from the Indians Fire in Monterey County will remain intact in the early part of this week.

The Indians Fire is still burning out of control about 20 miles west of King City in the Ventana Wilderness of the Los Padres National Forest. The fire is over 33,000 acres in size and is only 31% contained. Currently winds the blowing southeasterly and pushing smoke and ash towards SLO County line. While fog has kept the smoke off the coast, communities in the northern regions of the county (e.g., Heritage Ranch and San Miguel) may experience smoke impacts.

Residents are advised to monitor conditions and take precautions if experiencing smoke or ash in the area. These precautions are especially important for people with respiratory and heart conditions.

When you can see or smell smoke in your surroundings, officials recommend you avoid strenuous outdoor activity and remain indoors as much as possible. If a cough, shortness of breath, wheezing, exhaustion, light-headedness or chest pain occurs, outdoor activity should be stopped and the affected person should seek medical attention.

The agencies will continue to closely monitor the air quality in San Luis Obispo County and notify residents of any change in status.

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Issued June 20, 2008:

FOR IMMEDIATE RELEASE: June 20, 2008

Contact: Aeron Arlin Genet, 781-5998
SLO County Air Pollution Control District

SMOKE ADVISORY FROM INDIANS FIRE REMAINS IN PLACE FOR SLO COUNTY

SAN LUIS OBISPO, CALIFORNIA, – The San Luis Obispo (SLO) County Air Pollution Control District are reminding individuals that the smoke advisory resulting from the Indians Fire in Monterey County will remain in effect due to the continuing fires. High temperatures and low humidity have contributed to the spread of the Indians Fire, and smoke is affecting air quality in coastal and northern regions of SLO County.

Residents should use common sense and take precautions to reduce the harmful health effects associated with smoke exposure. These precautions are especially important for people with respiratory and heart conditions.

When it is obvious that there is smoke in the air, County officials continue to recommend that individuals avoid strenuous outdoor activity and remain indoors as much as possible. Levels of particulates in the smoke may be high enough that the potential exists for even healthy people to be affected. If a cough, shortness of breath, wheezing, exhaustion, light-headedness or chest pain occurs, outdoor activity should be stopped and the affected person should seek medical attention.

The fire is over 50,000 acres and currently forty-one percent (41%) contained and is expected to continue over multiple days. Until the wildfire is put out, smoke and ash will intermittently be present in our county's air for what may be days to come. Due to changing winds and weather conditions, it is difficult to predict which areas of the county may be most affected by smoke and ash from the fire.

County officials will continue to closely monitor the air quality in San Luis Obispo County and notify residents of any change in status.

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Issued June 30, 2008:

San Luis Obispo County Air Quality Monitoring Report for PM10 - June 23 through 29, 2008

Monday June 23: South County San Luis Obispo particulate did exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **52.4** ug/m3 and the maximum 1-hour measured was **159.7** ug/m3. In North County San Luis Obispo, the Atascadero 24-hour average was **29** ug/m3 - **less than** 50 ug/m3.

Tuesday June 24 through Friday June 27: South County San Luis Obispo did not exceed the California health-based standard for a day's 24-hour average of 50 ug/m3 for particulate matter (PM10). However, on 2 days monitoring recorded measurements of 1 hour maximums over 50 ug/m3 on Wednesday June 25 – **85.6** ug/m3 and Friday June 27 – **65.2** ug/m3.

Saturday June 28: South and North County San Luis Obispo particulate did not exceed the California health-based standard for a day's 24-hour average of 50 ug/m3. The 24-hour average in Nipomo was **27.0** ug/m3 and the maximum 1-hour measured was **41.2** ug/m3. The Paso Robles average was **40.5** ug/m3 and the maximum 1-hour measured was **70** ug/m3.

Sunday June 29: South and North County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 ug/m3. The 24-hour average in Nipomo was **18.2** ug/m3 and the maximum 1-hour measured was **39.2** ug/m3. The Paso Robles average was **33.7** ug/m3 and the maximum 1-hour measured was **63** ug/m3.

Use the following index to assess the air quality based on the visibility in a given area:
• Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
• The visible range is the point where even high-contrast objects disappear.
• After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.

WILDFIRE SMOKE VISIBILITY INDEX		
Visibility Range	Health Category	Cautionary Statements
10+ miles	Good	None
5 – 10 miles	Moderate	Usually sensitive people should consider reducing prolonged or heavy exertion.
3 – 5 miles	Unhealthy for Sensitive Groups	Sensitive people should reduce prolonged or heavy exertion.
1.5 – 2.5 miles	Unhealthy	Sensitive people should avoid prolonged or heavy exertion. Everyone else should reduce prolonged or heavy exertion.
1 – 1.25 miles	Very Unhealthy	Very Unhealthy Sensitive people should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
<0.75 miles	Hazardous	Sensitive people should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

Weather Update:
The low pressure system off our coast that has governed overall conditions for the past several days continues to drift north and is now off the Oregon/California coast as high pressure develops over the 4-corners area. This should maintain the general southerly flow over our area through today with a gradual transition to more westerly flow on Tuesday July 1 and possibly northwesterly by Wednesday July 2. The transition should slowly shift the areas most impacted by the smoke and ash from areas north of the fires to areas more east and south of the fires – San Luis Obispo County.

Continued June-like conditions are expected to persist for the next few days with cool temperatures and fog along the coast and warm temperatures inland. The significant aspect of this is that smoke may be embedded in the fog, so smoky, foggy skies can be expected in coastal areas, especially during mid-day when the marine layer tends to break up, mixing Moderate to Unhealthy levels of smoke down to the surface. As long as the southerly flow regime persists, episodes of significant smoke and ash fallout can be expected to impact communities in north Monterey County and Santa Cruz County until the upper level winds turn westerly, which will transport the smoke more off to the east and then southeast to San Luis Obispo County. Pilot reports indicate the top of the smoke layer is at about 7,000' msl.

While this is what is forecast for the overall basin-wide smoke transport, the areas that are most affected can change throughout the day as winds, smoke production and mixing patterns change, resulting in an overall pattern of continuing area-wide haze, ash fallout and locally patchy smoke.

Issued July 8, 2008:

The smoke advisory issued by the San Luis Obispo (SLO) County Air Pollution Control District and County Health Department is still in effect due to continuing local impacts from the fires burning in Monterey and Santa Barbara counties.

Due to basin-wide smoke transport into SLO County, the areas in our region that are most affected can change throughout the day as winds, smoke production and atmospheric mixing conditions change, resulting in an overall pattern of continuing area-wide haze, ash fallout and locally patchy smoke.

Residents should use common sense and take precautions to reduce the harmful health effects associated with smoke exposure. These precautions are especially important for people with respiratory and heart conditions. When it is obvious that there is smoke in the air, County officials continue to recommend that individuals avoid strenuous outdoor activity and remain indoors as much as possible. Levels of particulates in the smoke may be high enough that the potential exists for even healthy people to be affected. Even if you don't see visible smoke in your area, if you can smell it, your exposure is probably significant enough to take precautionary measures to limit your exposure. If a cough, shortness of breath, wheezing, exhaustion, light-headedness or chest pain occurs, outdoor activity should be stopped and the affected person should seek medical attention.

The Air District and Health Department will continue to closely monitor the air quality throughout the county and notify residents of any change in status.

Issued July 9, 2008:

San Luis Obispo County Air Quality Monitoring Report for PM10 – July 7 through 9, 2008

Monday July 7: South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **16** ug/m3 and the maximum 1-hour measured was **29.6** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **less than** 50 ug/m3.

Tuesday July 8: South County San Luis Obispo did not exceed the California health-based standard for a day's 24-hour average of 50 ug/m3 for particulate matter (PM10). The 24-hour average in Nipomo was **13.3** ug/m3. However, Nipomo monitoring recorded a 1 hour maximum of **58.8** ug/m3. In North County San Luis Obispo, the Paso Robles maximum 1-hour measured **exceeded** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **233** ug/m3.

Wednesday July 9: South County San Luis Obispo particulate is currently not exceeding the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 10 am PDT was **10.3** ug/m3. In North County San Luis Obispo, the Paso Robles maximum 1-hour measured as of 7 am PDT is **exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **60** ug/m3.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 10, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 7 through 10, 2008

Monday July 7: South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **16** ug/m3 and the maximum 1-hour measured was **29.6** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **34** ug/m3, **less than** 50 ug/m3.

Tuesday July 8: South County San Luis Obispo did not exceed the California health-based standard for a day's 24-hour average of 50 ug/m3 for particulate matter (PM10). The 24-hour average in Nipomo was **13.3** ug/m3. However, Nipomo monitoring recorded a 1 hour maximum of **58.8** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **70** ug/m3, **exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **237** ug/m3.

Wednesday July 9: South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **8.8** ug/m3 and the maximum 1-hour was **14.9** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **61** ug/m3, **exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **72** ug/m3.

Thursday July 10: South County San Luis Obispo particulate is currently not exceeding the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 3pm PDT was **40.4** ug/m3. In North County San Luis Obispo, the Paso Robles maximum 1-hour measured as of 5 am PDT is **exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **58** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of	People with heart or lung disease, the elderly, children and pregnant women

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
			existing lung and heart disease; increasing likelihood of respiratory effects in general population.	should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 11, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 7 through 11, 2008

Monday July 7: South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **16** ug/m3 and the maximum 1-hour measured was **29.6** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **34** ug/m3, **less than** 50 ug/m3.

Tuesday July 8: South County San Luis Obispo did not exceed the California health-based standard for a day's 24-hour average of 50 ug/m3 for particulate matter (PM10). The 24-hour average in Nipomo was **13.3** ug/m3. However, Nipomo monitoring recorded a 1 hour maximum of **58.8** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **70** ug/m3, **exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **237** ug/m3.

Wednesday July 9: South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **8.8** ug/m3 and the maximum 1-hour was **14.9** ug/m3. In North County San Luis Obispo, the Paso Robles 24-hour average was **61** ug/m3, **exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **72** ug/m3.

Thursday July 10:

- South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **11** ug/m3 and the maximum 1-hour was **40.4** ug/m3.
- ***NEW** -In San Luis Obispo, the 24-hour average was **21** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **34** ug/m3.
- In North County San Luis Obispo, the Paso Robles 24-hour average was **46** ug/m3, **not exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **51** ug/m3.

Friday July 11:

- South County San Luis Obispo particulate is currently not exceeding the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 8 am PDT was **18.6** ug/m3.
- ***NEW** -In San Luis Obispo, the maximum 1-hour measured as of 8 am PDT is **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **45** ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 7 am PDT is **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **32** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.

- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 14, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 11 through 14, 2008

Friday July 11:
- South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **14** ug/m3 and the maximum 1-hour was **25.7** ug/m3.
- In San Luis Obispo, the 24-hour average was **21** ug/m3, **not exceeding** 50 ug/m3 and the 1 hour maximum was **45** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **33** ug/m3, **not exceeding** 50 ug/m3 and the 1 hour maximum was **46** ug/m3.

Saturday July 12:
- South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.8** ug/m3 and the maximum 1-hour was **25.3** ug/m3.
- In San Luis Obispo, the 24-hour average was **20** ug/m3, **not exceeding** 50 ug/m3 and the 1 hour maximum was **38** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **36** ug/m3, **not exceeding** 50 ug/m3 and the 1 hour maximum was **55** ug/m3.

Sunday July 13:
- South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **28** ug/m3 and the maximum 1-hour was **24.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **29** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **47** ug/m3.

- In North County San Luis Obispo, the 24-hour average was **36** ug/m3, **not exceeding** 50 ug/m3. Paso Robles monitoring recorded a 1 hour maximum of **81** ug/m3.

Monday July 14:

- South County San Luis Obispo particulate is currently not exceeding the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 8 am PDT was **26.4** ug/m3.
- In San Luis Obispo, the maximum 1-hour measured as of 7 am PDT is **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **44** ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 7 am PDT is **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **34** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 15, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 13 through 15, 2008

Sunday July 13:

- South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **28** ug/m3 and the maximum 1-hour was **24.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **29** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **47** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **36** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **81** ug/m3.

Monday July 14:

- South County San Luis Obispo particulate did not exceed the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.6** ug/m3 and the maximum 1-hour was **47.6** ug/m3.
- In San Luis Obispo, the 24-hour average was **32** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **52** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **45.6**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **51** ug/m3.

Tuesday July 15:

- South County San Luis Obispo particulate is currently not exceeding the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 8 am PDT was **23** ug/m3.
- In San Luis Obispo, the maximum 1-hour measured as of 8:30 am PDT is **25** ug/m3, **not exceeding** 50 ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 12 noon PDT is **exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **53** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very	1 to 1 ¼	301 - 500	Significant increase in respiratory	People with heart or lung disease, the

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Unhealthy			symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 16, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 13 through 16, 2008

Sunday July 13:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.4** ug/m3 and the maximum 1-hour was **24.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **29** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **47** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **36** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **81** ug/m3.

Monday July 14:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.6** ug/m3 and the maximum 1-hour was **47.6** ug/m3.
- In San Luis Obispo, the 24-hour average was **32** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **52** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **31.6**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **34** ug/m3.

Tuesday July 15:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **30.5** ug/m3 and the maximum 1-hour was **122.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **35** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **50** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **34.9**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **53** ug/m3.

Wednesday July 16:

- South County San Luis Obispo particulate is **currently not exceeding** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 6 am PDT was **31.7** ug/m3.
- In San Luis Obispo, the maximum 1-hour measured as of 7:00 am PDT is **36** ug/m3, **not exceeding** 50 ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 6 am PDT is **exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **59** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.

- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 17, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 13 through 17, 2008

Sunday July 13:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.4** ug/m3 and the maximum 1-hour was **24.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **29** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **47** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **36** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **81** ug/m3.

Monday July 14:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.6** ug/m3 and the maximum 1-hour was **47.6** ug/m3.
- In San Luis Obispo, the 24-hour average was **32** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **52** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **31.6**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **34** ug/m3.

Tuesday July 15:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **30.5** ug/m3 and the maximum 1-hour was **122.2** ug/m3.

- In San Luis Obispo, the 24-hour average was **35** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **50** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **34.9**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **53** ug/m3.

Wednesday July 16:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **24.5** ug/m3 and the maximum 1-hour was **35.3** ug/m3.
- In San Luis Obispo, the 24-hour average was **37** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **51** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **51.4** ug/m3, **exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **114** ug/m3.

Thursday July 17:
- South County San Luis Obispo particulate is **currently not exceeding** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 8 am PDT was **26.1** ug/m3.
- In San Luis Obispo, the maximum 1-hour measured as of 9 am PDT is **37** ug/m3, **not exceeding** 50 ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 8 am PDT is **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **29** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:
- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 18, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 13 through 18, 2008

Sunday July 13:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.4** ug/m3 and the maximum 1-hour was **24.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **29** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **47** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **36** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **81** ug/m3.

Monday July 14:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **18.6** ug/m3 and the maximum 1-hour was **47.6** ug/m3.
- In San Luis Obispo, the 24-hour average was **32** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **52** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **31.6**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **34** ug/m3.

Tuesday July 15:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **30.5** ug/m3 and the maximum 1-hour was **122.2** ug/m3.
- In San Luis Obispo, the 24-hour average was **35** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **50** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **34.9**ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **53** ug/m3.

Wednesday July 16:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **24.5** ug/m3 and the maximum 1-hour was **35.3** ug/m3.
- In San Luis Obispo, the 24-hour average was **37** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **51** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **51.4** ug/m3, **exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **114** ug/m3.

Thursday July 17:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **28** ug/m3 and the maximum 1-hour was **48.9** ug/m3.
- In San Luis Obispo, the 24-hour average was **37** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **78** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **27.5** ug/m3, **did not exceed** 50 ug/m3. Monitoring recorded a 1 hour maximum of **35** ug/m3. Surges of smoke in the late afternoon blanketed the Atascadero and Paso Robles area until nightfall when the marine layer moved in and help to mitigate the effects of smoke.

Friday July 18:

- South County San Luis Obispo particulate is **currently not exceeding** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 6 am PDT was **34.7** ug/m3.
- In San Luis Obispo, the maximum 1-hour measured as of 8 am PDT is **29** ug/m3, **not exceeding** 50 ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 7 am PDT is **exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **53** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:

- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 21, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 18 through 21, 2008

Friday July 18:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **29.1** ug/m3 and the maximum 1-hour was **35.8** ug/m3.
- In San Luis Obispo, the 24-hour average was **44** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **68** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **47.4** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **119** ug/m3

Saturday July 19:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **23.6** ug/m3 and the maximum 1-hour was **42.6** ug/m3.
- In San Luis Obispo, the 24-hour average was **38** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **62** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **26.4** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **72** ug/m3

Sunday July 20:

- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **13.9** ug/m3 and the maximum 1-hour was **19.4** ug/m3.
- In San Luis Obispo, the 24-hour average was **18** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **49** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **20.6** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **36** ug/m3.

Monday July 21:
- South County San Luis Obispo particulate is **currently not exceeding** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 6 am PDT was **14.3** ug/m3.
- In San Luis Obispo, the maximum 1-hour measured as of 6 am PDT is **11** ug/m3, **not exceeding** 50 ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 6 am PDT is **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **5** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:
- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Issued July 22, 2008:

San Luis Obispo County Air Quality Particulate Matter Monitoring Report for PM10 – July 18 through 21, 2008

Friday July 18:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **29.1** ug/m3 and the maximum 1-hour was **35.8** ug/m3.

- In San Luis Obispo, the 24-hour average was **44** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **68** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **47.4** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **119** ug/m3

Saturday July 19:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **23.6** ug/m3 and the maximum 1-hour was **42.6** ug/m3.
- In San Luis Obispo, the 24-hour average was **38** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **62** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **26.4** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **72** ug/m3

Sunday July 20:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **13.9** ug/m3 and the maximum 1-hour was **19.4** ug/m3.
- In San Luis Obispo, the 24-hour average was **18** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **49** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **20.6** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **36** ug/m3.

Monday July 21:
- South County San Luis Obispo particulate **did not exceed** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The 24-hour average in Nipomo was **27** ug/m3 and the maximum 1-hour was **85.1** ug/m3.
- In San Luis Obispo, the 24-hour average was **11** ug/m3, **not exceeding** 50 ug/m3. SLO monitoring recorded a 1 hour maximum of **11** ug/m3.
- In North County San Luis Obispo, the 24-hour average was **20.6** ug/m3, **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **36** ug/m3.

Tuesday July 22:
- South County San Luis Obispo particulate is **currently not exceeding** the California heath-based standard for a day's 24-hour average of 50 micro grams per cubic meter (ug/m3) for particulate matter (PM10). The maximum 1-hour measured as of 6 am PDT was **24.4** ug/m3.
- In North County San Luis Obispo, the maximum 1-hour measured as of 6 am PDT is **not exceeding** 50 ug/m3. Monitoring recorded a 1 hour maximum of **5** ug/m3.

Please note that all data is not final and is preliminary.

Use the following index to assess the air quality based on the visibility in a given area:
- Face away from the sun. Determine visibility range by looking for targets that are at known distances (miles).
- The visible range is the point where even high-contrast objects disappear.
- After determining visibility in miles use the following Wildfire Smoke Visibility Index to assess air quality.
- Rule of Thumb – standing in downtown SLO – if you can't see Cerro San Luis Peak (Madonna Mountain) visibility is less than a mile. If you can't see Bishops Peak – visibility is less than 3 miles.

Characterization of Smoke Levels and Potential Health Effects

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
Good	10 miles and up	0 - 40	None expected	None
Moderate	6 to 9	41 - 80	Possible aggravation of heart or respiratory disease.	People with heart or lung disease should pay attention to symptoms.
Unhealthy for Sensitive Groups	3 to 5	81 - 175	Increasing likelihood of respiratory symptoms and aggravation of lung disease such as asthma.	People with heart or lung disease, the elderly, children and pregnant women should limit prolonged exertion and stay indoors when possible.
Unhealthy	1 ½ to 2½	176 - 300	Increased respiratory symptoms and aggravation of lung and heart diseases; possible respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid prolonged exertion and

Category	Approx. Visibility (Miles)	Particulate matter (1-hour average, ug/m3)	Potential Health Effects	Cautionary Statements
				stay indoors when possible; everyone else should limit prolonged exertion.
Very Unhealthy	1 to 1 ¼	301 - 500	Significant increase in respiratory symptoms and aggravation of existing lung and heart disease; increasing likelihood of respiratory effects in general population.	People with heart or lung disease, the elderly, children and pregnant women should avoid any outdoor activity; everyone else should avoid any outdoor exertion.
Hazardous	¾ mile or less	over 500	Serious aggravation of heart or lung disease, premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population	Everyone should avoid any outdoor activity; everyone should remain indoors whenever possible.

Indians Wildland Fire

Smoke Impacts to San Luis Obispo and Morro Bay on June 19 and 20, 2008

Data from:
http://www.inciweb.org/incident/1298

The Indians Fire which started on Sunday, June 8, 2008 was declared 100% contained on Thursday, July 10, 2008. The fire burned 81,378 acres and destroyed 2 structures.

KSBY TV San Luis Obispo County Coverage of Wildfire Event
June 24 – July 30 , 2008

From:

http://www.ksby.com/Global/story.asp?S=8550395

Tuesday, June 24, 2008

Reported by: Kelly Bush

A pair of fires is burning in Monterey County.

The Indians Fire is burning 10 miles west of King City. It has burned nearly 58,000 acres and is 66 percent contained. That fire was caused by an out-of-control campfire on June 8. Crews hope to have it fully surrounded by July 3.

Another fire a mile south of Big Sur has burned about 8,500 acres and is just three percent contained. There will be a public meeting for people in the area at 7:00 p.m. Tuesday at the Big Sur Visitor Center.

Governor Schwarzenegger tours one of two major Monterey County fires

Posted: June 25, 2008 05:17 PM PDT

Wednesday, June 25, 2008

Reported by: Tina Leonard

Two major fires are burning just to the north of the Central Coast in Monterey County.

The Indians Fire near King City is more than 70 percent contained. Almost 59,000 acres have burned and more than 400 hundred structures are threatened. It was started on June 8 by a campfire.

A 19,000-acre wildfire is also burning just south of Big Sur. It was sparked by lightning last Saturday. Governor Arnold Schwarzenegger toured that fire, called the Gallery Fire, Wednesday.

"Contingency plans for evacuation for Big Sur are being developed, shelters are available for that. And, of course, I'm very happy to say that there has been a great response to this fire," said Governor Schwarzenegger.

16 homes have been damaged or destroyed, and 500 more are still in danger.

Pair of fires still burning in Monterey County

Posted: June 26, 2008 06:39 PM PDT

Thursday, June 26, 2008

Reported by: Tina Leonard

Scenic Big Sur is still burning.

More than 23,000 acres of the Los Padres National Forest in Monterey County have gone up in smoke. The wildfire is just three percent contained. 16 homes have been damaged or destroyed, and almost 600 are in the line of fire.

Meanwhile, the Indians Fire burning near King City is still 71 percent contained. It has charred more than 58,000 acres.

Basin Complex Fire burns 26,000 acres, threatens hundreds of homes near Big Sur

Posted: June 27, 2008 04:29 PM PDT

Friday, June 27, 2008

Reported by: Emily Kiefer

A raging wildfire in Monterey County sends firefighters racing to stop it before it spreads to nearby communities.

The Basin Complex Fire is threatening the popular tourist town of Big Sur. It formed after the flames of two fires merged together Thursday in the Los Padres National Forest.

So far, it has burned more than 26,000 acres and is only three percent contained. 16 homes have burned, and hundreds more are in danger, forcing residents to be on alert.

"The weather changes, you know, where it's hot and sunny and the winds blowing - that'll change the whole picture, so I'm not secure until the fire is out in this area," said fire evacuee Dave Smiley.

Closer to the Central Coast, the Indians Fire continues its destruction just west of King City. Since it sparked June 8, it has burned nearly 60,000 acres and is 71 percent contained. More than 400 homes are still threatened nearby.

More than 1,400 fires burning in California

Posted: June 30, 2008 09:12 AM PDT

Monday, June 30, 2008

Reported by: Emily Kiefer

More than 1,400 fires scorch a path of destruction across the state.

One of the biggest of those fires is burning in Monterey County near the town of Big Sur.

Here is the latest on the Basin Complex Fire:

- More than 35,000 acres have burned since the fire began June 21.
- Fire crews say it's only 3 percent contained.
- More than 1,000 firefighters are working to get it under control.
- 16 structures have been destroyed, more than a thousand others are still threatened.

Elsewhere in the Los Padres National Forest firefighters make progress in their battle against the Indians Fire.

- The fire has burned nearly 61,000 acres.
- It's now 89 percent contained.
- Crews hope to have full containment as early as Thursday.
- The fire started June 8 by an escaped campfire.

Smoke invades San Luis Obispo

Posted: July 1, 2008 10:14 AM PDT
Updated: July 2, 2008 06:51 AM PDT

SMOKE INVADES SAN LUIS OBISPO

Posted July 1, 2008 10:14 AM PDT

Updated July 2, 2008 06:51 AM PDT

Tuesday, July 1, 2008

Reported by: Jill James

Smoke from the fires in Monterey County continues to make its way to San Luis Obispo County. The smoke seems to be worst in the San Luis Obispo area. According to Paso Robles resident Joe Rivera, the air isn't too smokey but he can see a thick blanket in the direction of San Luis Obispo. Action News reporter Stacy Daniel said the air around Pismo Beach and the Five Cities is clear in comparison.

The smoke is making its way down the coast from the Basin Complex Fire along Big Sur and the Indians Fire also in Monterey County. To see the latest map of the area of both of these fires, click here.

The San Luis Obispo County Air Pollution Control District (APCD) and the San Luis Obispo County Public Health Department ask residents along the Central Coast to take precautions. They confirm that the smoke and ash from these fires is affecting the air quality.

Officials urge residents to avoid strenuous outdoor activity and remain indoors as much as possible.

Some guidelines from the APCD:

- If you smell smoke, be cautious and use common sense to protect your family's health. Everyone, especially people with heart or lung disease (including asthma), older adults, and children, should limit time spent outdoors and avoid outdoor exercise.
- If you have symptoms of lung or heart disease that may be impacted by excessive smoke exposure, including repeated coughing, shortness of breath or difficulty breathing, wheezing, chest tightness or pain, palpitations, nausea or unusual fatigue or light-headedness, call your doctor and seek medical attention.

- When it is obvious that there is smoke in the air, County officials continue to recommend that even healthy adults and children avoid strenuous outdoor activity and remain indoors as much as possible. Levels of particulates in the smoke may be high enough that the potential exists for even healthy people to be affected.

According to the Centers for Disease Control and Prevention, smoke from wildfires is a mixture of gases and fine particles from burning trees and other plant materials. Smoke can hurt your eyes, irritate your respiratory system, and worsen chronic heart and lung diseases.

Smoke can cause:

- Coughing
- A scratchy throat
- Irritated sinuses
- Shortness of breath
- Chest pain
- Headaches
- Stinging eyes
- A runny nose
- Asthma exacerbations

If you have heart or lung disease, smoke might make your symptoms worse.

People who have heart disease might experience-

- Chest pain
- Rapid heartbeat
- Shortness of breath
- Fatigue

Smoke may worsen symptoms for people who have pre-existing respiratory conditions, such as respiratory allergies, asthma, and chronic obstructive pulmonary disease (COPD), in the following ways:

- Inability to breathe normally
- Cough with or without mucus
- Chest discomfort
- Wheezing and shortness of breath

When smoke levels are high enough, even healthy people may experience some of these symptoms.

We are keeping the statistics of these fires updated on our Fire Alert page. The Indians Fire is now 95 percent contained, although the Basin Complex Fire is still only 3 percent contained.

San Luis Obispo athletes put their eyes on the skies

Posted: July 1, 2008 11:19 PM PDT

Tuesday, July 1, 2008
Reported by: Kory Raftery

Ash from the various fires to the north of us can be seen on the Central Coast. Residents can smell the smoke in the air.

Fog isn't an unusual sight over the lights at Sinsheimer Stadium in San Luis Obispo. But with fires burning all over the state, the Blues and their athletic trainer Ian Elwood turn their eyes toward the skies to protect their lungs.

Elwood said, "The smoke from the fire is definitely causing some problems with certain athletes breathing."

Cal Poly pitcher said when conditions get bad, it forces the players off the field.

Theophilus said, "There's a couple of times we've tried to have practice up at Poly, so we've had to cancel practice or just do stuff indoors."

Athletes are at risk due to increased physical activity, but even fans can have trouble breathing when the air smells like a camp fire. The best defense, instead of rounding third and heading for home, just stay home when the air smells like it could be filled with smoke.

"I noticed actually a lot this morning," said Theophilus, indicating the smoke.

"It seems that in the mornings its been worse and its been clearing out as the day goes on." Elwood added.

Because conditions seem to be worst in the morning, San Luis Obispo County Air Pollution Control District advises doing work outdoors in the afternoon, or any time smoke levels are minimal.

Air quality advisories still in place in San Luis Obispo and Santa Barbara Counties

Posted: July 3, 2008 10:27 PM PDT

Thursday, July 3, 2008
Reported by: Stacy Daniel

The California fires are sending heavy amounts of smoke and ash into both San Luis Obispo and Santa Barbara counties.

Advisories have been issued in both areas. People with breathing problems like asthma, bronchitis or emphysema should limit their time outside.

Even people who don't normally have any sort of breathing condition have noticed the poor air quality.

"It's been a lot worse in the mornings. I notice every morning when I wake up and walk outside I can kind of taste it on my mouth," said Sacramento resident Andrew Mock.

To reduce your exposure, the American Lung Association recommends people remain indoors as much as possible, and keep doors, windows and fireplace dampers closed.

Mask distribution Saturday in Goleta, air advisories still in place across Central Coast

Posted: July 4, 2008 09:51 PM PDT

Friday, July 4, 2008

Reported by: Tina Leonard

Air advisories are in place in both San Luis Obispo and Santa Barbara counties Friday night.

Smoke from the Gap Fire and the hundreds of fires in California are chocking much of the Central Coast.

Folks are advised to be cautious and use common sense. If you see or smell smoke, stay indoors as much as possible.

Children, older adults, and those with heart and lung conditions need to take extra care.

If you are in the Goleta area and need a face mask to filter the smoke and ash, you can pick one up for free Saturday between 12:00 p.m. and 3:00 p.m. at the Camino Real Marketplace kiosk located between Borders and the movie theatre.

Blog keeps Big Sur residents informed on Basin Complex Fire, Governor Schwarzenegger proposes measures to fund firefighting

Posted: July 7, 2008 05:06 PM PDT

Monday, July 7, 2008

Reported by: Emily Kiefer, Courtney Meznarich

Cooler weather over the weekend helped firefighters make some progress on the Basin Complex Fire burning near Big Sur.

Fire crews estimate they now have it 18 percent contained. Crews were able to cut more fire lines Sunday to slow the spread of the flames.

Since it sparked June 21, it has burned more than 77,000 acres and destroyed 22 homes.

Some folks living in Big Sur are tired of waiting for official word on the fire, so they are taking matters into their own hands.

Stan Russell and Steve Harper are just two contributors to SurFire2008.org, a blog that updates Big Sur locals on rumors and information left out of official documents.

The bloggers also post U.S. Forest Service updates and volunteer opportunities.

Elsewhere in Monterey County, fire crews think they will still need a few more days to get control of the Indians Fire.

Previously, they had hoped to have the flames contained by Monday. That has now been pushed back to Thursday.

The fire has scorched more than 81,000 acres since it sparked from an escaped camp fire last month.

Governor Arnold Schwarzenegger proposes raising homeowners insurance rates by about $1.00 a month to help pay for firefighting costs.

"There's a tremendous need now. Because fire season lasts all year long, we need additional resources to protect lives and properties in the future," Governor Schwarzenegger said.

Monday morning, Governor Schwarzenegger toured areas damaged by a major fire in Humboldt County. The governor also ordered 400 more National Guard troops to join the 19,000 firefighters already battling fires in the state.

Nearly 2,000 fires started in the state over the past two weeks. They burned some 70 homes.

Now, there are about 300 active fires. But firefighters said the danger is not over yet.

"High pressure is moving in. It's going to increase temperatures, lower humidity in the next few days and there are some things we'd really like to have done before that happens," said Mark Savidge, public information officer for the Basin Complex Fire.

The wildfires have burned more than 800 square miles of land throughout California.

One firefighter died of a heart attack.

Basin Complex Fire now 23 percent contained, Indians Fire 97 percent contained

Posted: July 8, 2008 05:26 PM PDT

Tuesday, July 8, 2008

Reported by: Kelly Bush

A mandatory evacuation order is lifted for most of the coastline near Big Sur, as crews get some control over a wildfire there.

A DC-10 tanker plane is a welcome sight in the skies over Big Sur. It is being used to attack the flames that still threaten more than 2,000 structures.

The so-called Basin Complex Fire has charred nearly 80,500 acres. It is now 23

The owners of the famed Nepenthe Restaurant in Big Sur are guarding their property.

"If the moment came where there were 300 firefighters fighting the fire across the street from us, there's no question that I should just get the heck out of their way," said Tom Birmingham, co-owner of the Nepenthe Restaurant.

Also in Monterey County, the Indians Fire is 97 percent contained.

That fire is burning west of King City. It has covered more than 81,000 acres and destroyed two structures. The fire is expected to be contained by Thursday.

Basin Complex Fire now 27 percent contained, Indians Fire expected to be contained Thursday

Posted: July 9, 2008 04:49 PM PDT

Wednesday, July 9, 2008

Reported by: Kelly Bush

More than 300 fires are still burning in the state. Two are in Monterey County.

The Basin Complex Fire in Big Sur is now 27 percent contained. It has burned nearly 87,000 acres.

The Indians Fire burning west of King City has covered more than 81,000 acres. Crews expect to have that fire contained by Thursday.

Basin Complex Fire burns 90,000 acres, Indians Fire 100 percent contained, governor asks for more federal aid

Posted: July 10, 2008 04:13 PM PDT

Thursday, July 10, 2008

Reported by: Emily Kiefer

Governor Arnold Schwarzenegger is asking President Bush for more help to support the state's firefighting efforts.

The governor sent a letter to the president Wednesday asking for more federal hand crews and for out-of-state firefighters to train National Guard personnel.

Governor Schwarzenegger also hopes the president will help the U.S Forest Service reach maximum efficiency in putting out the state's fires.

Hot temperatures aren't slowing down firefighters battling the Basin Complex Fire near Big Sur.

The fire has consumed more than 90,000 acres and is currently 41 percent contained. Higher humidity levels and coastal fog are helping crews gain better control.

So far, the fire has destroyed 26 homes.

Crews hope to have it fully contained by July 30.

Elsewhere in the Los Padres National Forest, firefighters said Thursday they have the Indians Fire 100 percent contained, but crews will continue mopping up and patrolling along the northern perimeter.

The fire burned more than 81,000 acres after sparking from an escaped campfire on June 8.

Smoke advisory lifted for San Luis Obispo County as firefighters gain ground on Big Sur wildfire

Posted: July 22, 2008 04:24 PM PDT

Tuesday, July 22, 2008

Reported by: Tina Leonard

A smoke advisory for San Luis Obispo is lifted.

Smoke and ash from the almost 140,000-acre fire near Big Sur prompted the advisory weeks ago.

The fire in Monterey county is now 72 percent contained, lessening the amount of smoke blowing over the Central Coast. But the San Luis Obispo County Air Pollution Control District said if you smell or see smoke, you should still be careful and limit your exposure.

More Links

- Air Pollution: San Luis Obispo County
- Air Pollution: Santa Barbara County

Gap Fire almost reaches containment, Big Sur fire now completely contained

Posted: July 28, 2008 09:10 AM PDT

Monday, July 28, 2008

Reported by: Emily Kiefer

Firefighters near Goleta believe it won't be too much longer before they have the Gap Fire under control. Full containment is expected Monday night.

The fire has charred more than 9,400 acres during the last month.

47 fire personnel are still on-scene patrolling the area.

The cause of the fire remains under investigation.

The Basin Complex Fire near Big Sur is now 100 percent contained.

Firefighters took complete control Sunday night after a month-long battle with flames that burned nearly 163,000 acres in the Los Padres National Forest.

More than 500 firefighters will continue to monitor the area over the next few days.

Both Gap Fire and Basin Complex Fire now 100 percent contained

Posted: July 28, 2008 06:54 PM PDT

Monday, July 28, 2008

Reported by: Kelly Bush

The Gap Fire near Goleta is now contained as of 6:00 p.m. Monday.

The wildfire burned nearly 9,600 acres since it started on July 1. The fire cost about $21 million to fight.

Investigators said a person or people caused the fire, but it is not clear how.

The Basin Complex Fire near Big Sur was also contained as of 6:00 p.m. Sunday.

That fire was sparked by lightning on June 21. It covered nearly 163,000 acres and cost more than $77 million to fight.

Crews are still mopping up, and said drivers should be very careful when driving through the area.

Many campsites and trails have re-opened.

BASIN COMPLEX FIRE STATISTICS
Update: 2:15 p.m. Wednesday, July 30

- **Fire Information Phone Line:** (831) 796-1990
- **Information Specific to Palo Colorado area, call Mid Coast Fire Department:** (831) 626-1961
- **For up-to-date tourist information for the area:** visit the Big Sur Chamber of Commerce website at www.bigsurcalifornia.org or Monterey County Convention & Visitors Bureau website at www.montereyinfo.org
- **Acres Burned:** 162,818
- **Date Started:** June 21, 2008 at 12:56 p.m.
- **Cause:** Lightning
- **Percent Contained:** 100% on July 27 at 6:00 p.m.
- **County:** Monterey County
- **Fire location:** 15 miles NW of King City.
- **Structures destroyed:** 26 residences, 32 other
- **Injuries:** 9
- **Terrain/Vegetation/Difficulties:** Chaparral. (6 Feet) Timber and slash in higher areas. Heavy dead loading from sudden oak death in the Tan Oak.
- **CURRENT STATUS:** - The Basin Complex Fire, which started on June 21, was declared 100% contained as of 6:00 p.m. on Sunday, July 27, after having burned 162,818 acres.
- **CLOSURES:** All voluntary evacuations and road closures have been lifted by the Monterey County Sheriff's Department. Residents and visitors traveling through the area should continue to use caution though, as fire equipment and personnel may still be in the area.
  - With the exception of Kirk Creek, Plaskett Creek and Arroyo Seco Campgrounds, which will re-open on Friday, August 1, all National Forest lands within the Monterey Ranger District of the Los Padres National Forest, including roads and trails, will remain closed to public access until further notice. Several picnic areas on the Big Sur coast along Highway 1 including Pfeiffer Beach, Mill Creek, Sand Dollar Beach, Jade Cove Beach, Willow Creek and San Carpoforo Beach are currently open. Overnight camping is not permitted at these picnic sites. The use of wood campfires and charcoal barbecues is prohibited at any of the above mentioned campgrounds, picnic sites and throughout the entire Los Padres National Forest. Only portable stoves and lanterns using gas, jellied petroleum or pressurized liquid fuel are currently permitted.
  - Pfeiffer Big Sur State Park re-opened for camping on July 25. Julia Pfeiffer Burns State Park, Pfeiffer Big Sur State Park and Andrew Molera State Park were closed during various phases of the

Basin Complex Fire. Refunds for campers who had reserved campsites in Pfeiffer Big Sur State Park Campground have been authorized until July 24, 2008. While there are still significant areas of these parks that are closed because of fire damage, the majority of the visitor serving facilities were untouched by the fire. Valley View Trail in Pfeiffer Big Sur on the east side of Highway One and the trails on the west side of Highway 1 are open to the public as well as The Big Sur Lodge, the campground and the swimming holes within the campground.
- Julia Pfeiffer Burns State Park has re-opened the small parking area and the Waterfall Trail from the parking area to the overlook. All other park facilities east of Highway-1 will remain closed. "Ninety percent of our visitation to this park is due to this trail and the beauty it provides with the view of the waterfall and the Pacific Ocean," said Mat Fuzie, District Superintendent of California State Parks Monterey District. Park facilities west of Highway-1 in Julia Pfeiffer Burns State Park are open.
- Andrew Molera State Park has served as the Fire Camp and Incident Command Post for the Basin Complex Fire and is still serving in that capacity but to a much smaller extent.

- **WILDLIFE RESCUE:** The Basin Complex Fire has impacted habitat for many wild animals. However, these animals are adapted to living in this fire prone ecosystem. Most are able to move out of the way of approaching fire, finding shelter in caves, underground, and in moist areas. A small number may be injured and should be reported to the Society for Prevention of Cruelty to Animals (SPCA) for rescue and rehabilitation, www.SPCAmc.org or (831) 373-2631 or 422-4721 ext. 269

- **Costs to date:** $74.7 million