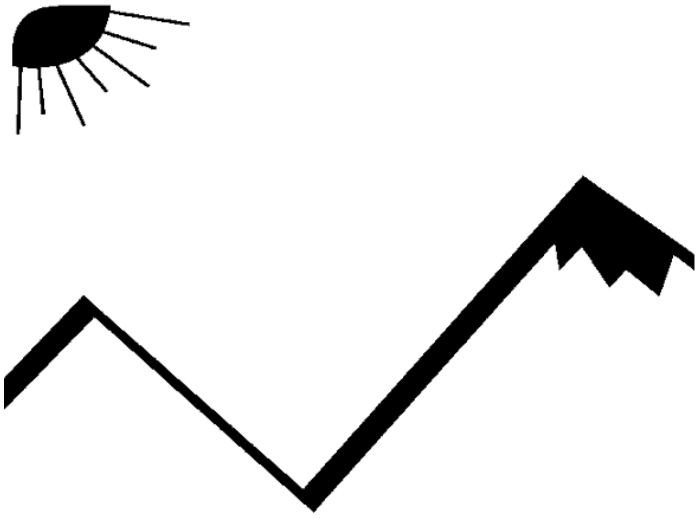
Exceptional Event Documentation

PM2.5
Fireworks
Fresno and Bakersfield, CA
July 4 and July 5, 2007



San Joaquin Valley Unified
Air Pollution Control District

February 22, 2008

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

PM2.5 concentrations exceeded the National Ambient Air Quality Standard (NAAQS) in the San Joaquin Valley Air Basin on July 4 and 5, 2007. This exceedance of the NAAQS meets the criteria for an exceptional event as defined by federal policies. This report demonstrates that without this exceptional event, there would not have been an exceedance of the PM2.5 NAAQS in Fresno, CA on July 4 and 5, 2007 and Bakersfield, CA on July 4, 2007.

PM2.5 concentrations increased significantly during the evening of July 4 due to fireworks emissions. PM2.5 concentrations remained very high into the early morning of July 5. Speciated PM2.5 data indicates concentrations of chemical compounds associated with fireworks emissions increased significantly during the event. Although a combination of several factors contributed to the total PM2.5 concentrations, the District concludes that the exceedance would not have occurred in the absence of emissions from fireworks.

Exceptional event documentation for an exceedance of the PM10 NAAQS on July 4, 2007 was submitted to the California Air Resources Board and the United States Environmental Protection Agency on January 16, 2008.

2. 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.

The EPA treats emissions due to fireworks displays in a manner similar to exceptional events. Some national and/or cultural traditions, such as July 4th Independence Day and the Chinese New Year have long included fireworks displays as important elements of their observances. While this issue is not specifically covered in CAA section 319, EPA believes that Congress did not intend to require EPA to consider air quality violations associated with such cultural traditions in regulatory determinations.

Fireworks displays can in some circumstances be potentially significant sources of air pollutant emissions. For this reason, reasonable precautions are taken to minimize exposures to emissions from fireworks displays. Such precautions may include alerting the public to the potential for short-term air quality impacts that may result from the discharge of fireworks at large displays.

The District concludes that the use of fireworks displays was integral to significant traditional July 4 events, and will flag air quality data associated with July 4 fireworks

events. In the official EPA database (AQS), PM10 data will be flagged with the "RH" flag, which indicates that fireworks emissions influenced the ambient data.

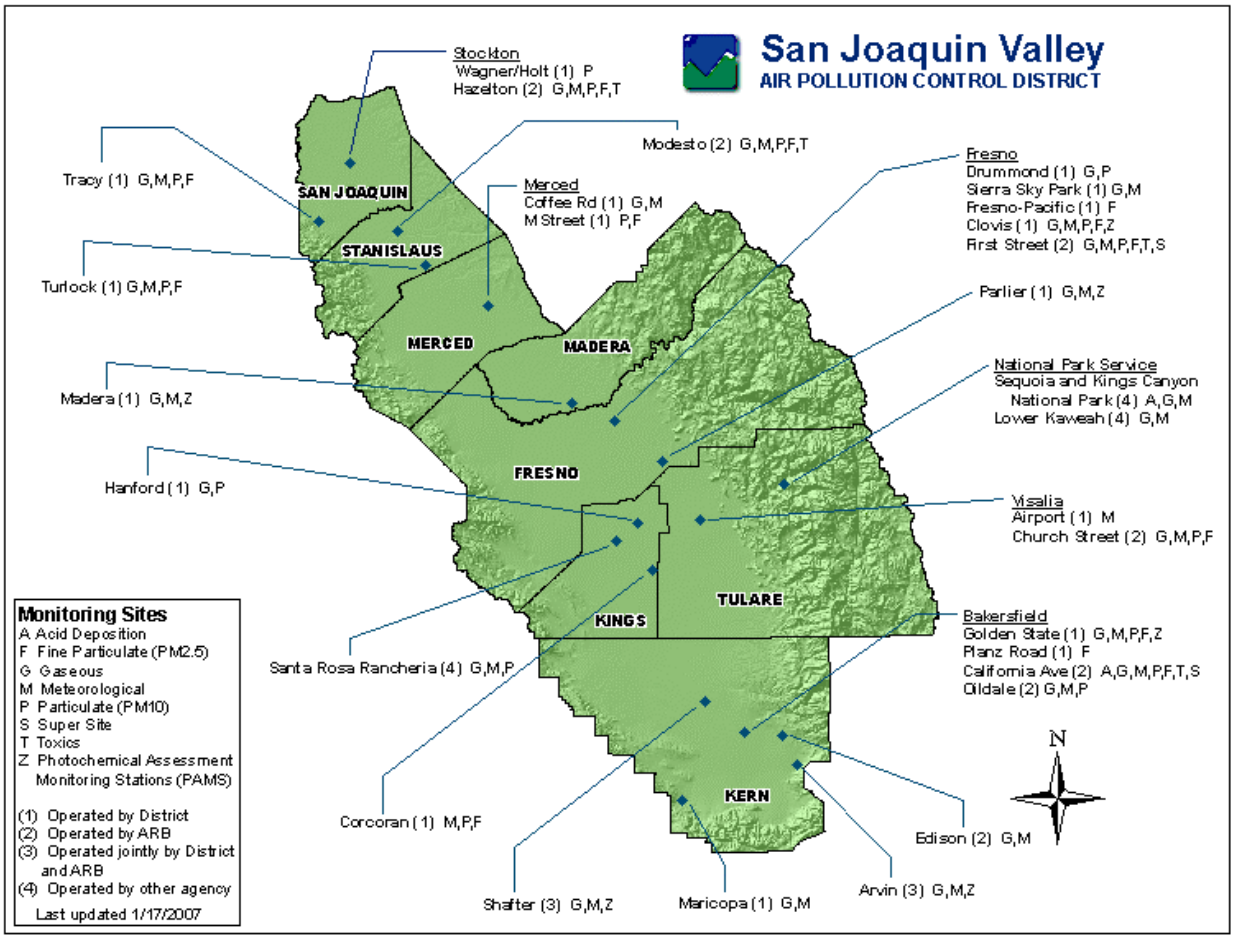
Data flagging serves multiple purposes. According to the 1986 U. S. Environmental Protection Agency (EPA) guidance document, *Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events*, knowledge and understanding of what data represent are critical in the overall air 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 July 4 and 5, 2007 exceedances will ensure that the data is not misinterpreted.

3. DESCRIPTION OF EXCEPTIONAL EVENT

3.1 PM2.5 Data Summary

On July 4 and 5, 2007, Federal Reference Method (FRM) samplers recorded concentrations in the San Joaquin Valley Air Basin in excess of the 24-hour PM2.5 NAAQS of 65 μg/m^3. The 24-hour averaged PM2.5 concentration reached 104 μg/m^3 at Fresno-First Street on July 4, 2007 and 71 μg/m^3 on July 5, 2007. On July 4, 2007, the 24-hour averaged PM2.5 concentration reached 72.3 μg/m^3 at Bakersfield-California Avenue. A map of San Joaquin Valley monitoring stations is provided in Figure 1.

Figure 1. San Joaquin Valley Air Basin monitoring stations.



The California Air Resources Board (CARB) collects Federal Reference Method filter-based 24-hour PM2.5 concentrations using R & P Model 2025 Sequential Samplers. PM2.5 concentrations recorded by filter-based samplers on July 2 to 8, 2007 are presented in Table 1. Table 1 indicates the PM2.5 concentrations increased significantly on July 4 and July 5.

Table 1. July 1 to 8, 2007 PM2.5 daily averages in μg/m^3 recorded by sequential filter samplers.

Station	Jul 1	Jul 2	Jul 3	Jul 4	Jul 5	Jul 6	Jul 7	Jul 8
Fresno - First Street	5	5	6	104	71	16	11	11
Bakersfield - California Ave.	NA	NA	13.2	72.3	25.9	16.2	12.3	11.4

NA - data is not listed in AQS database. Data source: AQS database (EPA).

Hourly PM2.5 concentrations are recorded by Beta Attenuation Mass (BAM) type monitors. EPA does not include air quality violations of the PM2.5 NAAQS recorded by the BAM monitors in regulatory determinations and NAAQS decisions. PM2.5 BAM data is used for air quality forecasting and to determine the daily Air Quality Index (AQI). In Bakersfield, BAM monitors are operated at the California Avenue air monitoring station (operated by CARB) and Golden State Highway air monitoring station (operated by the District).

Speciated PM2.5 data is collected every 3 days at the Fresno-First Street and Bakersfield-California monitoring stations by CARB. Data for over fifty PM2.5 species were extracted from the EPA AQS database and examined. Table 2 presents PM2.5 species sampled at the Fresno-First Street monitor that reported a significant increase in concentration on July 5, 2007.

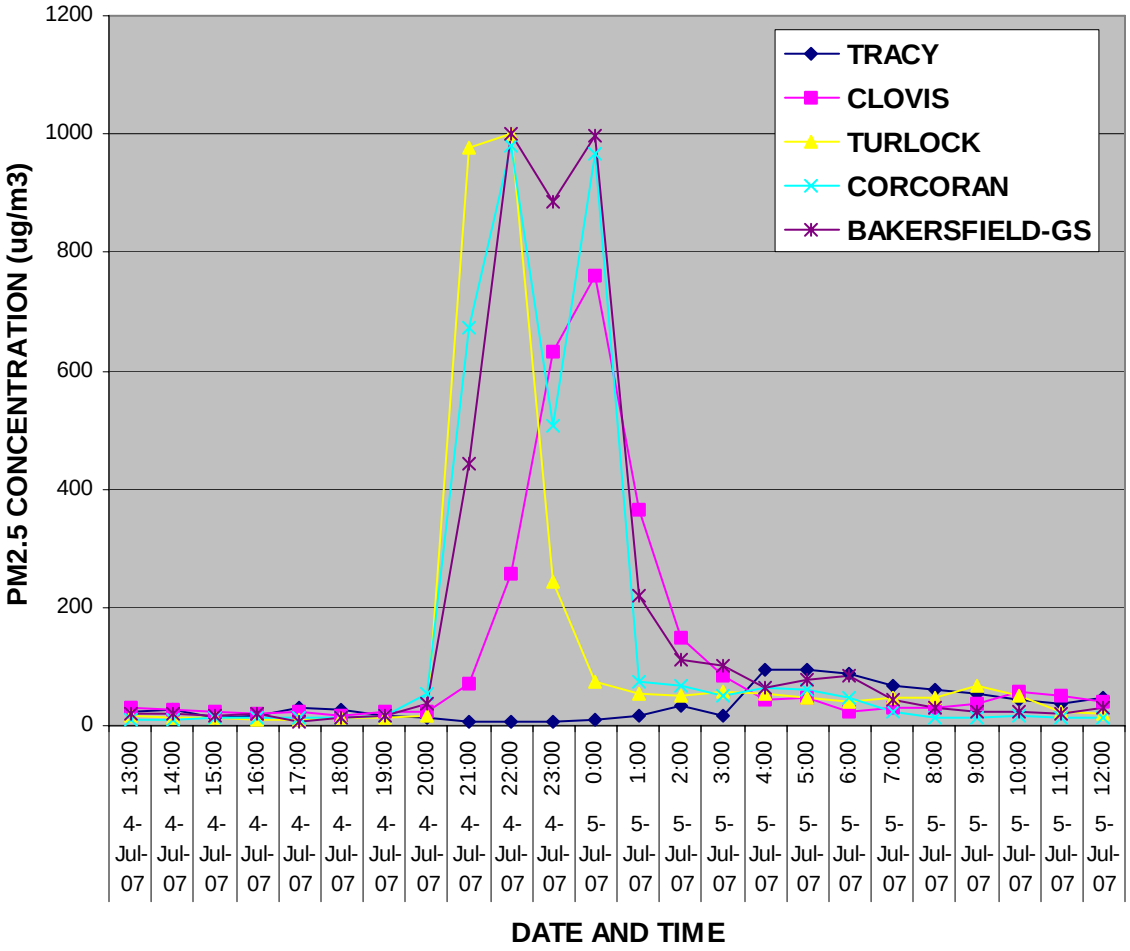
Table 2. PM2.5 concentration (nanograms per cubic meter) for species sampled at the Fresno-First Street monitor that reported a significant increase in concentration on July 5, 2007.

	June 29	July 2	July 5	July 8
Aluminum	16	31	882	31
Barium	6	6	880	5
Copper	2	2	587	3
Chlorine	4	4	2550	16
Iron	48	64	165	59
Lead	1	1	48	2
Manganese	1	1	28	1
Magnesium	6	6	1600	26
Potassium	48	75	16,200	77
Silicon	106	144	303	120
Strontium	1	1	274	1
Sulfur	384	254	5490	575
Titanium	3	3	48	2
Vanadium	2	2	71	2
Zinc	1	2	90	2

Concentration is reported in nanograms per cubic meter. Data source: AQS database (EPA).

3.2 Analysis of PM2.5 NAAQS Exceedance

In the central and southern San Joaquin Valley, PM2.5 concentrations increased significantly during the evening of July 4 due to fireworks emissions (see Figure 2 and 3). PM2.5 increased to very high concentrations during the evening of July 4, when fireworks are typically ignited.

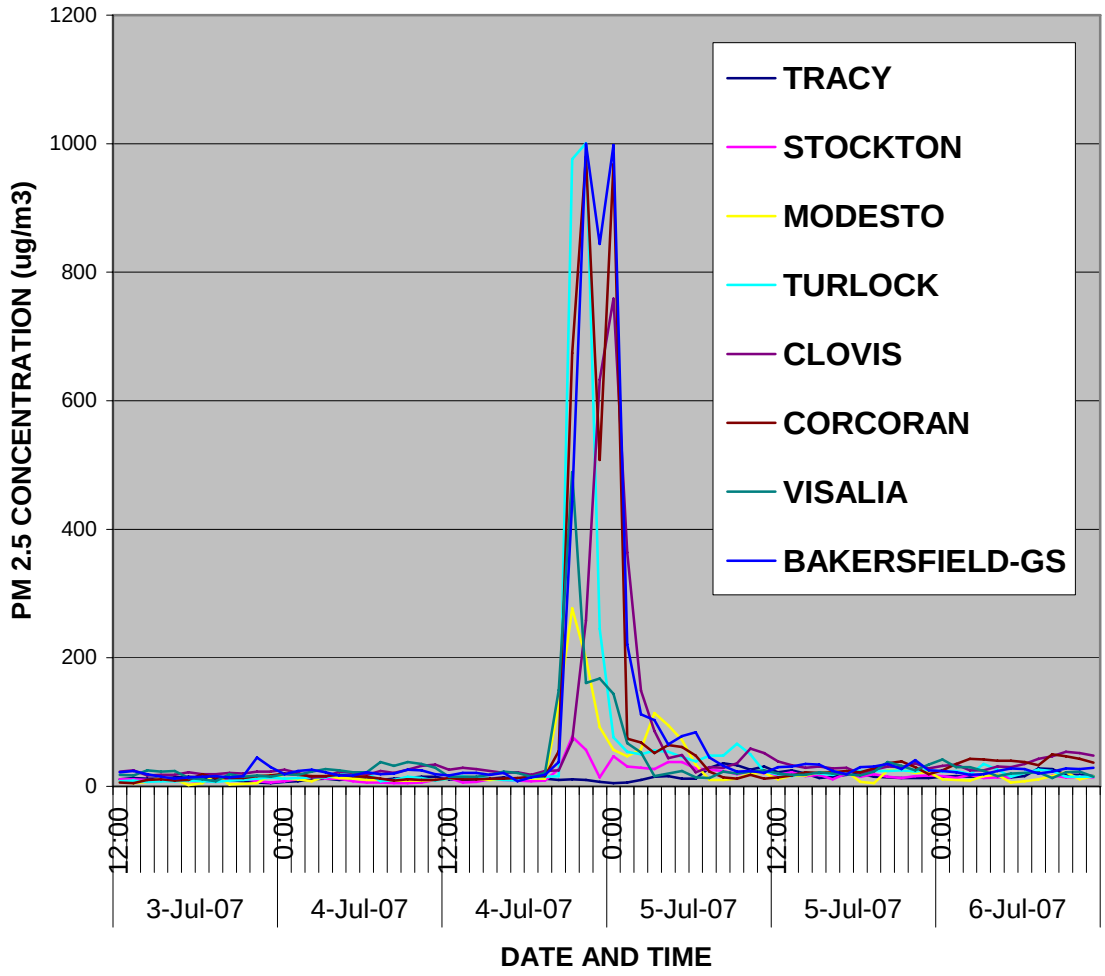


BAM data is identified by the ending time of the sample. Data is subject to revision. Bakersfield-GS denotes Bakersfield-Golden State Highway monitoring station.

Figure 2. PM2.5 measured by District BAM monitors on 4 and 5 July 2007.

Figure 2 presents plots of hourly PM2.5 from 1300 PST on July 4, 2007 to noon on July 5, 2007. At the Clovis, Turlock, Corcoran and Bakersfield-Golden State monitoring stations, PM2.5 concentrations reported in the hours before and after the fireworks event were significantly lower than during the fireworks event. In Tracy, PM2.5 concentrations were significantly lower than at the other District stations during the period when fireworks are typically ignited. The city of Tracy has a fireworks ban in place (see Tracy Municipal Code 3.04.010 - 3.04.170).

Figure 3 presents plots of PM2.5 from noon on July 3, 2007 to noon on July 6, 2007 to show that particulate concentrations for days before and after the fireworks event were significantly lower than during the fireworks event. It is apparent from these plots that fireworks had a significant effect on particulate concentration on the evening of July 4 and the morning of July 5. A similar trend is evident in the filter based particulate data presented in Table 1 and 2. PM2.5 was much lower on the monitoring days before and after July 4 and July 5.



Data is subject to revision. Bakersfield-GS denotes Bakersfield-Golden State Highway monitoring station. Hourly BAM PM2.5 data recorded during the fireworks event at the Fresno-First monitoring station was deemed invalid by CARB and is not included in this plot.

Figure 3. PM2.5 measured by District and CARB BAM monitors on 3, 4, 5 and 6 July 2007.

Large fireworks displays were staged in the Fresno metropolitan area, such as the display at Chukchansi Stadium in downtown Fresno, at Buchanan High School Stadium in Clovis and the Wild Water Adventure Park in Clovis. Winds in Fresno during the fireworks displays were mostly calm, as shown in Table 3, so that smoke remained in the metropolitan area. In addition, neighborhood scale fireworks displays likely produced a significant amount of smoke, which also remained in the neighborhoods. A listing of major fireworks displays in the central and southern San Joaquin Valley is provided in the appendix.

Table 3. Fresno wind direction and wind speed on July 4 and 5, 2007.

Day and Hour	Fresno Airport Wind Direction Wind Speed
July 4, 6 PM	WNW 8
July 4, 7 PM	WNW 7
July 4, 8 PM	W 7
July 4, 9 PM	W 5
July 4, 10 PM	CALM
July 4, 11 PM	CALM
MIDNIGHT	SE 5
July 5, 1 AM	CALM
July 5, 2 AM	SE 3
July 5, 3 AM	ESE 3
July 5, 4 AM	E 3
July 5, 5 AM	SE 3
July 5, 6 AM	CALM

MIDNIGHT is Midnight to 12:59:59 AM, Pacific Standard Time. Sustained wind speed listed in this table is a 10 minute average at the beginning of the hour, recorded by the National Weather Service. Weather data was obtained from the National Weather Service website (weather.gov). See Figure 1 for a map of wind measurement locations.

On the evening of July 4, a large fireworks display was presented at Bakersfield College (Turner, 2008), which is approximately 2 to 3 miles NE of the Bakersfield-Golden State Highway monitoring station. Winds at the time were light and from the NNW to NNE (see Table 4), allowing fireworks smoke to drift towards the Bakersfield monitoring stations. In addition, neighborhood scale fireworks displays likely produced a significant amount of smoke; with peak activity from about 8 PM to 11 PM. This event coincided with a period of stagnant conditions in the early morning hours of July 5, which resulted in PM2.5 concentrations remaining high into the early morning hours of July 5.

Table 4. July 4 and 5, 2007 PM2.5, wind direction and wind speed (mph).

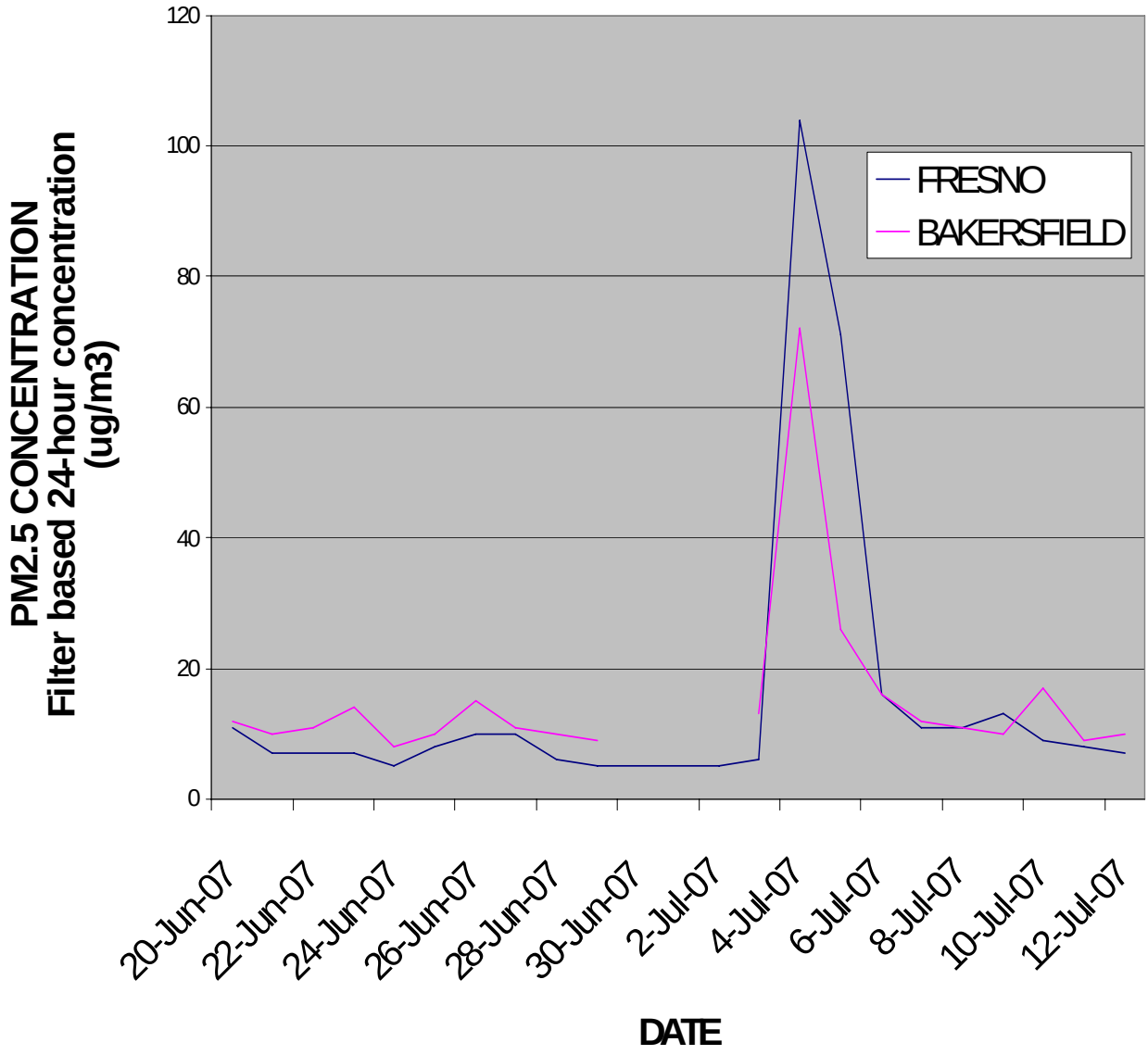
Day and Hour	Bakersfield PM2.5 $\mu g/m^3$	Bakersfield Meadows WD/WS	Corcoran PM2.5 $\mu g/m^3$	Hanford WD/WS	Tracy PM2.5 $\mu g/m^3$	Stockton WD/WS
July 4, 6 PM	14	WNW 9	15	NNW 9	9	NNW 13
July 4, 7 PM	18	NW 5	16	WNW 7	12	NNW 10
July 4, 8 PM	38	WNW 3	55	WNW 3	10	NW 13
July 4, 9 PM	443	NNW 3	674	CALM	11	WNW 12
July 4, 10 PM	1000	NNE 6	980	CALM	10	WNW 8
July 4, 11 PM	844	CALM	508	CALM	7	W 6
MIDNIGHT	998	ESE 3	968	CALM	5	WNW 3
July 5, 1 AM	221	E 3	74	CALM	6	ENE 7
July 5, 2 AM	112	E 5	68	CALM	10	ENE 6
July 5, 3 AM	103	CALM	52	CALM	15	CALM
July 5, 4 AM	65	CALM	64	CALM	16	CALM
July 5, 5 AM	78	CALM	61	CALM	12	CALM
July 5, 6 AM	84	CALM	48	CALM	12	CALM

MIDNIGHT is Midnight to 12:59:59 AM, Pacific Standard Time. WS = Wind speed (mph). WD = Wind direction. Data is preliminary and subject to revision. Sustained wind speed listed in this table is a 10 minute average at the beginning of the hour, recorded by the National Weather Service. Weather data was obtained from the National Weather Service website (weather.gov). BAM PM2.5 data in this table is identified by the end time of the sample. See Figure 1 for a map of station locations.

Profiler and surface meteorological data provided in the appendix indicates winds were weakest in the southern San Joaquin Valley and higher in the northern San Joaquin Valley and Sacramento Valley. The stagnant conditions in the central and southern San Joaquin Valley increased the potential for fireworks emissions to remain in city centers of the major metropolitan areas, such as Fresno and Bakersfield.

PM2.5 concentrations reported in Tracy are significantly lower than the central and southern San Joaquin Valley stations. This is likely due partly to the fireworks ban in Tracy and partly due to slightly higher winds during the evening of July 4 in the northern San Joaquin Valley (see Stockton meteorological data in Table 4).

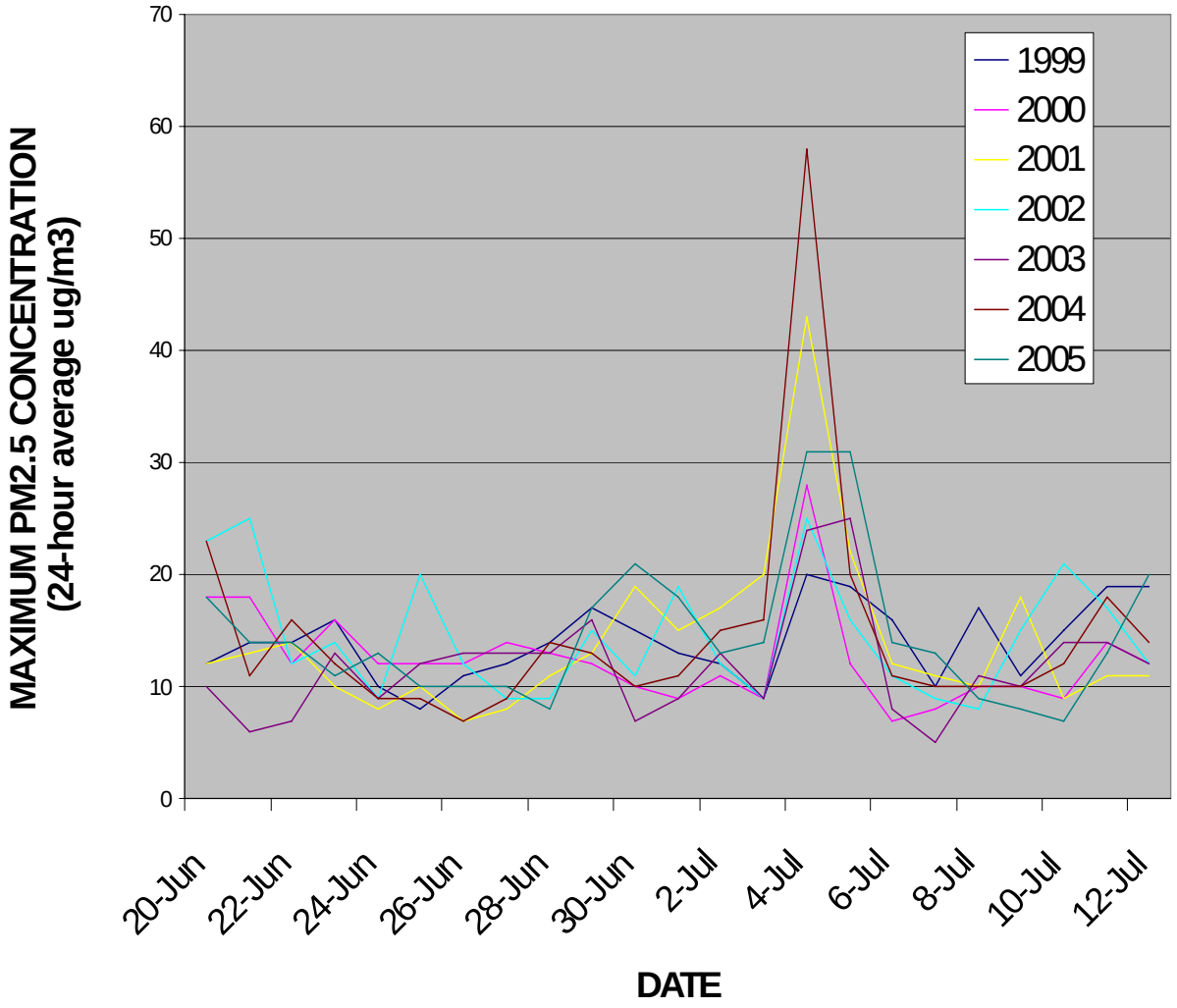
Figure 4 is a plot of filter based 24-hour PM2.5 concentrations in Fresno and Bakersfield measured on June 20 to July 12, 2007. A significant spike in the particulate concentration occurs on July 4 and 5, indicating fireworks smoke significantly influenced particulate concentrations.



Data is subject to revision.

Figure 4. Filter based 24-hour PM2.5 concentrations in the San Joaquin Valley Air Basin for June 20 to July 12, 2007.

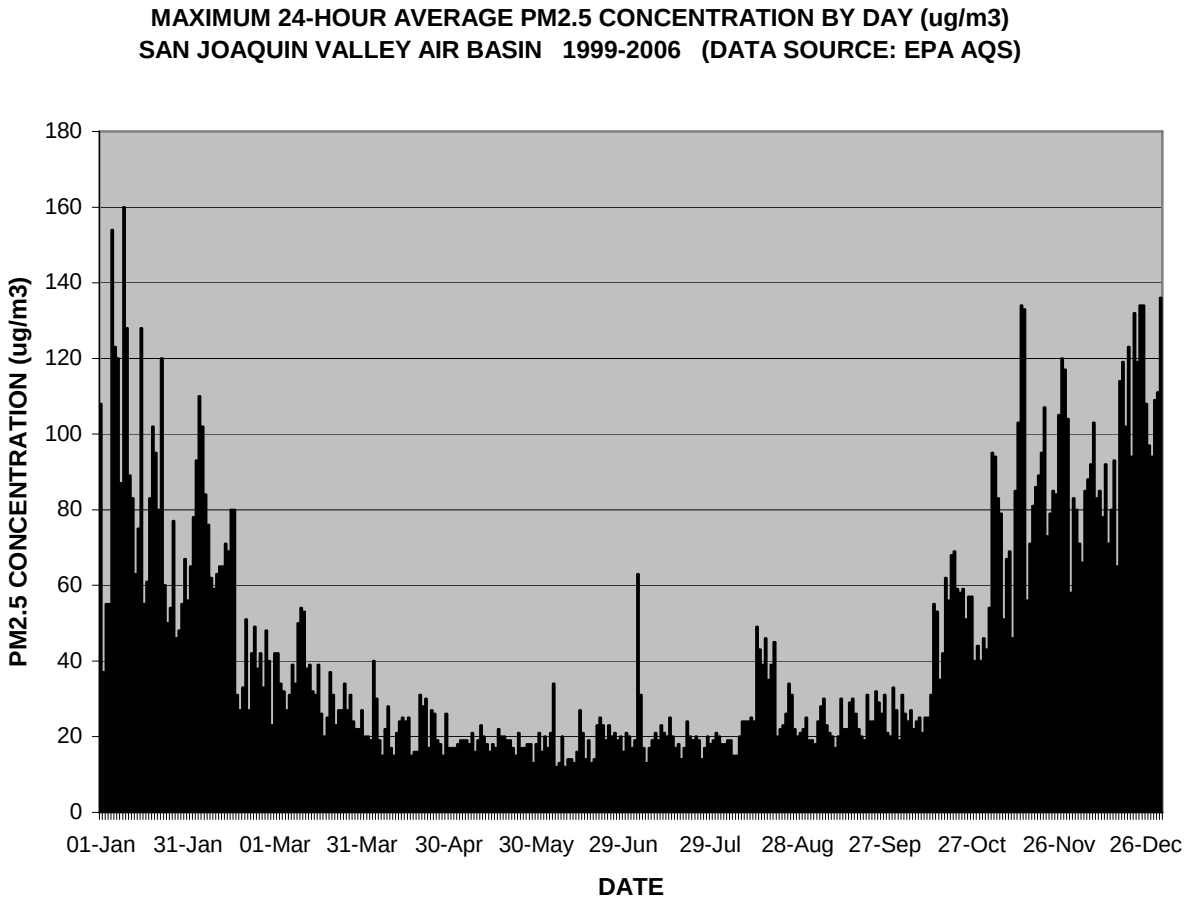
Figure 5 is a plot of maximum 24-hour averaged PM2.5 filter and continuous sampler concentrations in the District for years 1999 to 2005. The plot examines the period from June 20 to July 12. Once again, a significant spike in the particulate concentration occurs on July 4 and 5 in the 1999 to 2005 particulate data, indicating fireworks smoke influenced particulate concentrations on July 4 and 5 in past years.



Unofficial data from filter and continuous samplers - Data is subject to revision.

Figure 5. Maximum 24-hour averaged PM2.5 in the San Joaquin Valley Air Basin for years 1999 to 2005.

Figure 6 presents a plot of maximum 24-hour averaged PM2.5 filter samples in the District for years 1999 to 2006, which also includes a significant spike in the PM2.5 concentration on July 4 and 5.



Official filter data from EPA AQS data base.

Figure 6. Maximum filter based 24-hour PM2.5 concentration by day in the San Joaquin Valley Air Basin for years 1999 to 2006.

Speciated PM2.5 data presented in Table 2 indicates a significant increase in compounds that have been associated with fireworks emissions. Studies have associated fireworks emissions with increases in ambient concentrations of Aluminum, Barium, Copper, Iron, Lead, Manganese, Potassium, Strontium, Vanadium, and Zinc (Kulshrestha, 2004; Attri, 2005; Barman, 2007; Vecchi, 2007). Attri (2005) states that metal salts used to create sparkling colors include Copper Acetoarsenate (Blue), Copper Chloride (Turquoise), Barium Carbonate (Green), and Barium Chloride (Bright Green) and addition of Magnesium and Aluminum salts creates bright white sparkling light flashes. Barium, Copper, Lithium, Strontium, Manganese and Sodium salts may also be ingredients in fireworks. Vecchi (2007) found that Strontium is the best fireworks tracer. Analysis of the July 5 filter sampled at Fresno indicated that the concentration of Strontium was 274 times higher than the Strontium concentration on filter sample days (July 2 and July 8) prior to and after July 5.

4. PUBLIC NOTIFICATION AND EDUCATION

As stated in the EPA rule, States must assure that reasonable measures were taken to protect the public from the emissions created by the fireworks display. 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 fireworks displays.

The District issued a press release on July 3 to educate the public on the health concerns generated by fireworks emissions. A similar message was posted on the District website. A copy of these public notification and education products are provided in the appendix (section 7).

5. EXCEPTIONAL EVENT CRITERIA SUMMARY

The District demonstrated that the exceedance of the PM2.5 in Fresno, CA on July 4 and 5, 2007 and Bakersfield, CA on July 4, 2007 satisfied the following exceptional event criteria:

1) The event affected air quality.
   Figures 2 through 4 display the impact of fireworks emissions on air quality on July 4 and 5, 2007. PM2.5 concentrations in Bakersfield and Fresno were low the evening on July 4, when the PM2.5 rapidly increased to very high concentrations during the part of the evening when fireworks are typically ignited.

2) There is a clear causal connection between the exceedances and the claimed exceptional event.
   The causal connection was demonstrated by showing the dramatic increase in hourly PM2.5 concentrations that coincide with the fireworks event. Speciated data displayed a dramatic increase in compounds associated with fireworks emissions. The concentration of Strontium, a fireworks tracer, was 274 times higher during the fireworks event.

3) The event is associated with measured concentration in excess of normal historical fluctuations including background.
   Figure 5 and 6 demonstrates fireworks emissions have impacted air quality in past years, in a manner similar to the July 4 and 5, 2007 event. PM2.5 concentrations are typically higher than normal on July 4 and 5 due to fireworks emissions.

4) There would have been no exceedance "but for" the event.
   There are several indications that there would have been not been an exceedance of the PM2.5 NAAQS in Bakersfield on July 4 and 5, 2007 in the absence of fireworks emissions. Data presented in this report presents the impact of fireworks emissions on air quality on July 4 and 5. PM2.5 concentrations in Fresno and Bakersfield were low until 8 pm on July 4, 2007, when the PM2.5 rapidly increased to very high concentrations during the part of the evening when fireworks are typically ignited.

   The Tracy PM2.5 monitor reported very low PM2.5 concentrations (5 to 10 ug/m3) during the same time frame (July 4, from 9 to midnight, see Table 4) that the Bakersfield PM2.5 monitor reported extremely high PM2.5 concentrations (443 to 1000 ug/m3). The City of Tracy has a fireworks ban in place. Lower PM concentrations in Tracy are likely due partly to the fireworks ban and partly due to slightly higher winds during the evening of July 4 (which improves dispersion).

   Based on the data provided in this report, the District concludes that there would not have been an exceedance of the PM2.5 NAAQS in Fresno, CA on July 4 and 5, 2007 and Bakersfield, CA on July 4, 2007 without fireworks emissions.

6. REFERENCES

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7. APPENDIX - SUPPORTING DOCUMENTS

Press release issued July 3, 2007

-----Original Message-----
From: Janelle Schneider, *Public Information Representative,* San Joaquin Valley Air Pollution Control District
Sent: Tuesday, July 03, 2007 8:54 AM
Subject: July 4 cautionary statement

The following news release was issued today to media Valley-wide.

San Joaquin Valley Air Pollution Control District

News Release, 07-03-07, For Immediate Release
TO: Local News, Health and Weather sections

Fireworks prompt caution

Celebrations may elevate air-pollution levels

Officials at the San Joaquin Valley Air Pollution Control District are reminding Valley residents that July 4 fireworks can temporarily increase air pollution and to take appropriate cautionary measures, as individual health conditions dictate.

"During prime time for fireworks displays [9-10 p.m.], we usually see increases in levels of particulate pollution," specifically, particles 10 microns and smaller (PM10) and even tinier particles (PM 2.5), said Shawn Ferreria, air-quality analyst for the Air District.

Although these levels typically dissipate by midnight, elevated pollution levels can last until morning, depending on meteorological conditions.

Particle pollution of 10 microns and smaller may be harmful to people with heart or lung disease, and children and elderly people are also more susceptible to consequences of high particulate levels. Residents of the eight-county air basin should keep their own health conditions in mind when viewing neighborhood fireworks displays or attending large fireworks shows

July 4 air-quality forecasts for each county will be available at 4:30 p.m. Tuesday at www.valleyair.org <http://www.valleyair.org> and by calling 1-800-SMOG INFO (766-4463).

The Valley Air District covers eight counties including San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the valley portion of Kern. For more information, visit <http://www.valleyair.org> or call the nearest District office: Modesto (209) 557-6400, Fresno (559) 230-6000 and Bakersfield (661) 326-6900.

On July 3, 2007, the following statement was posted on the home page of valleyair.org, the District website:

Fireworks and Air Quality

Celebrations may elevate air-pollution levels

Officials at the San Joaquin Valley Air Pollution Control District are reminding Valley residents that July 4 fireworks can temporarily increase air pollution and to take appropriate cautionary measures, as individual health conditions dictate.

"During prime time for fireworks displays (9-10 p.m. the July 4th evening), we usually see increases in levels of particulate pollution," specifically, particles 10 microns and smaller (PM10) and even tinier particles (PM 2.5), said Shawn Ferreria, air-quality analyst for the Air District.

Although these levels typically dissipate by midnight, elevated pollution levels can last until morning, depending on meteorological conditions.

Particle pollution of 10 microns and smaller may be harmful to people with heart or lung disease, and children and elderly people are also more susceptible to consequences of high particulate levels. Residents of the eight-county air basin should keep their own health conditions in mind when viewing neighborhood fireworks displays or attending large fireworks shows. Residents should contact their local government agency (either city or county) to determine the legality of fireworks in their area.

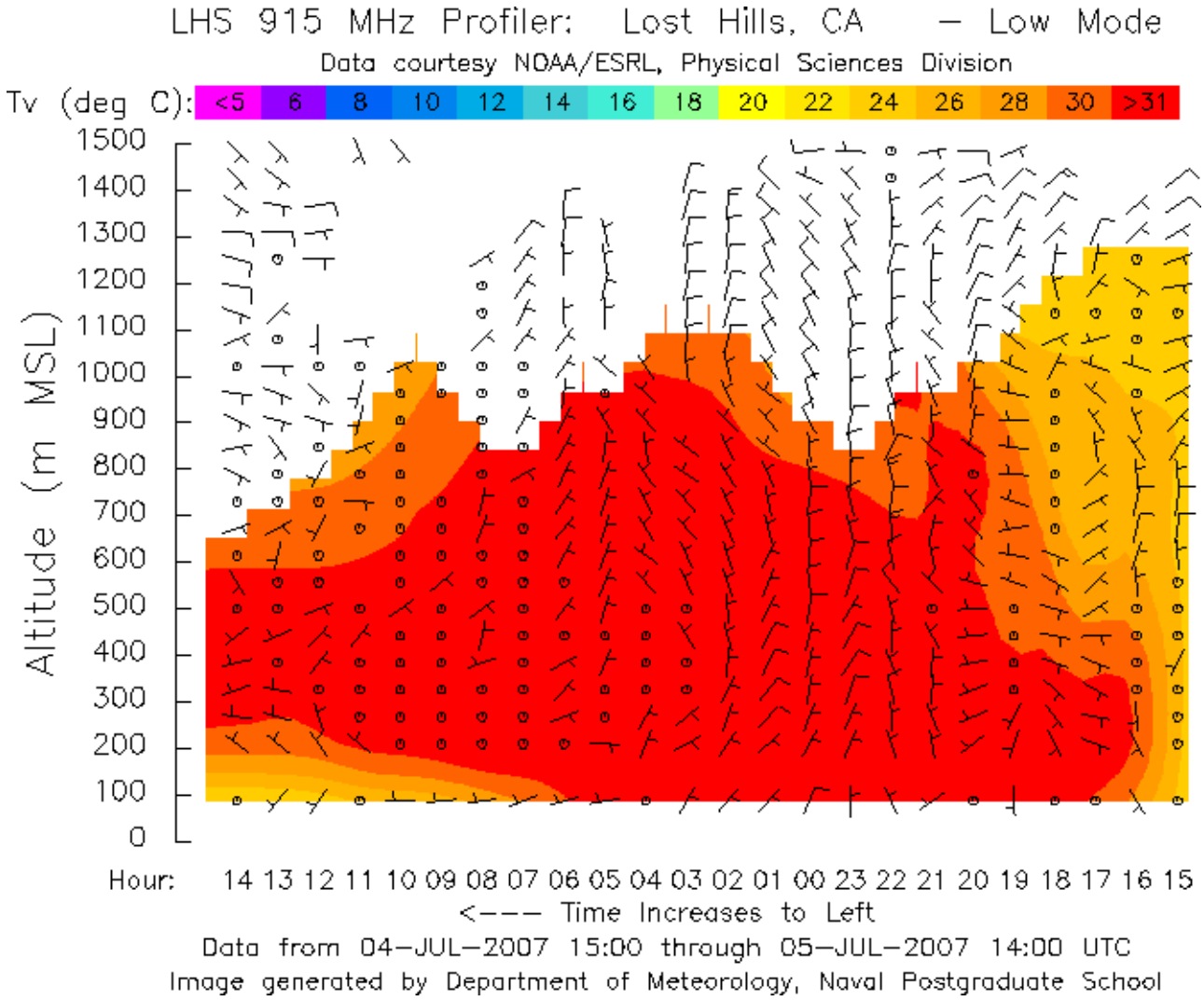
Children, elderly people and people with existing health conditions are especially susceptible to harmful health consequences of exposure to high levels of particulates. People with heart or lung diseases should follow their doctors' advice for dealing with episodes of unhealthy air quality.

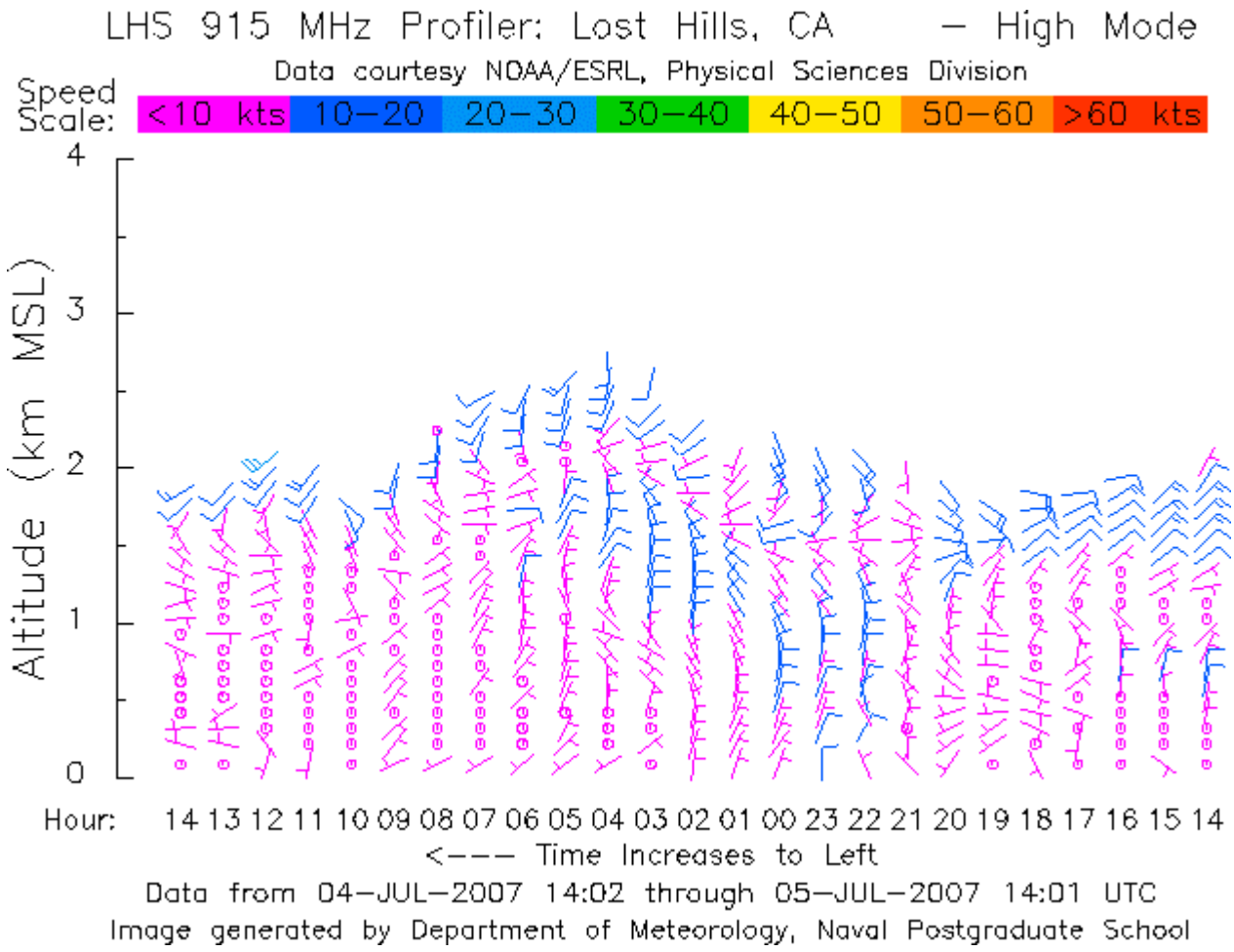
The Valley Air District covers eight counties including San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the valley portion of Kern. For more information call the nearest District office: Modesto (209) 557-6400, Fresno (559) 230-6000 and Bakersfield (661) 326-6900.

Profiler Data

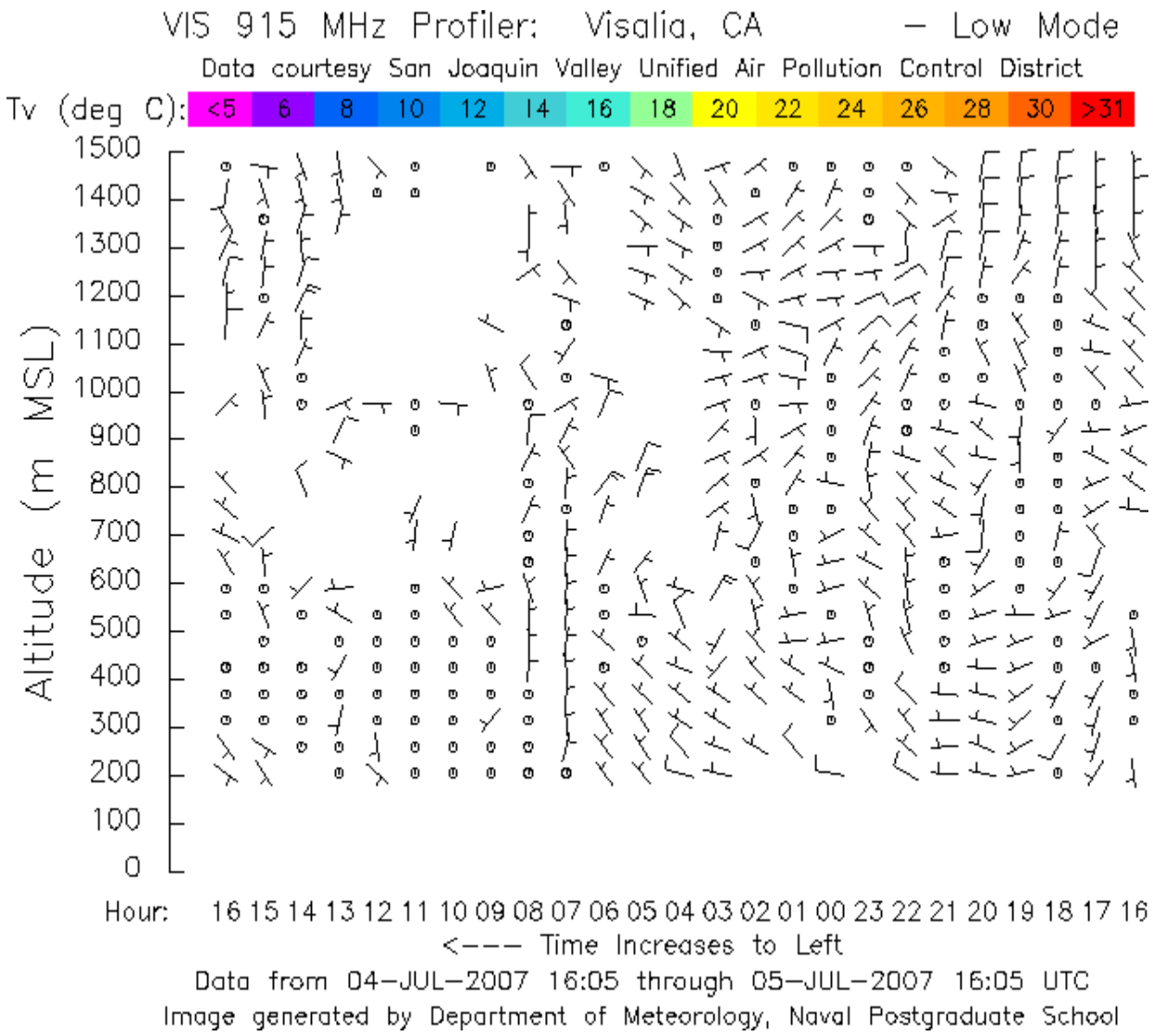
Time is in UTC (Coordinated Universal Time, also abbreviated with "Z" or "GMT") is also called Greenwich Mean Time (Mean Solar Time at the Royal Observatory in Greenwich, England). Greenwich Mean Time is eight hours ahead of Pacific Standard Time (PST) and seven hours ahead of Pacific Daylight Time (PDT). For example, 12 UTC or 12 Z is 4 AM PST or 5 AM PDT.

Wind barbs point in the direction "from" which the wind is blowing. A circle represents calm conditions. Flags (straight lines) attached at the end of the wind barbs indicate wind speed. Each short flag represents 5 knots, and each long flag represents 10 knots. A long flag and a short flag represent 15 knots, simply by adding the value of each flag together (10 knots + 5 knots = 15 knots). The color-coded speed scale is also provided on top of the "High Mode" plot. A triangular flag at the end of a wind barb represents a 50-knot wind.





This profile recorded at Lost Hills in Western Kern County indicates winds were light and variable (0 to 5 knots) in the first 500 meters above ground level from 03 UTC (Z) (8 PM PDT, July 4, 2007) through 14 UTC (Z) (7 AM PDT, July 5, 2007). 07 UTC (Z) corresponds to midnight.


VIS 915 MHz Profiler: Visalia, CA – Low Mode
Data courtesy San Joaquin Valley Unified Air Pollution Control District
Tv (deg C): <5 6 8 10 12 14 16 18 20 22 24 26 28 30 >31
Altitude (m MSL)
1500
1400
1300
1200
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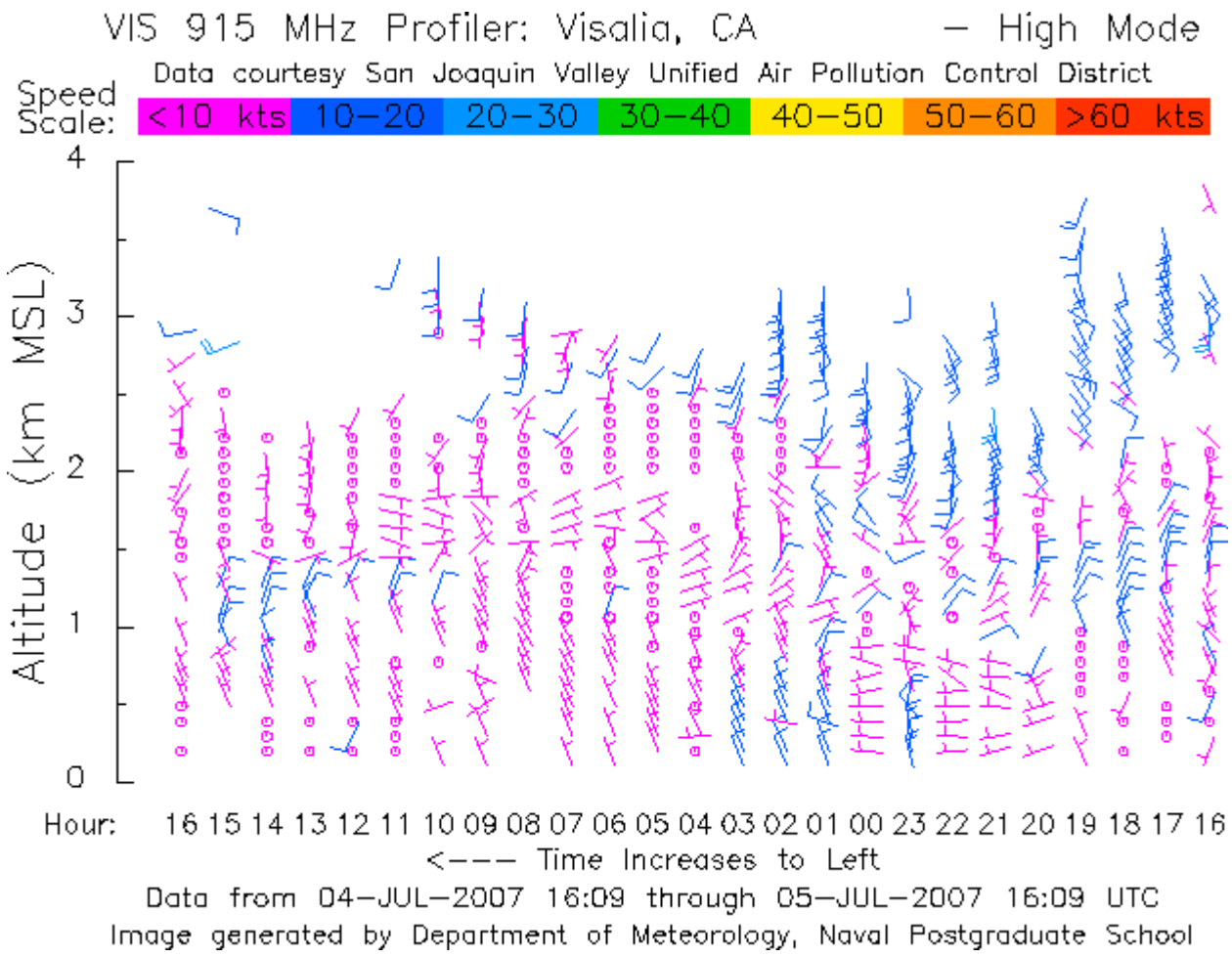
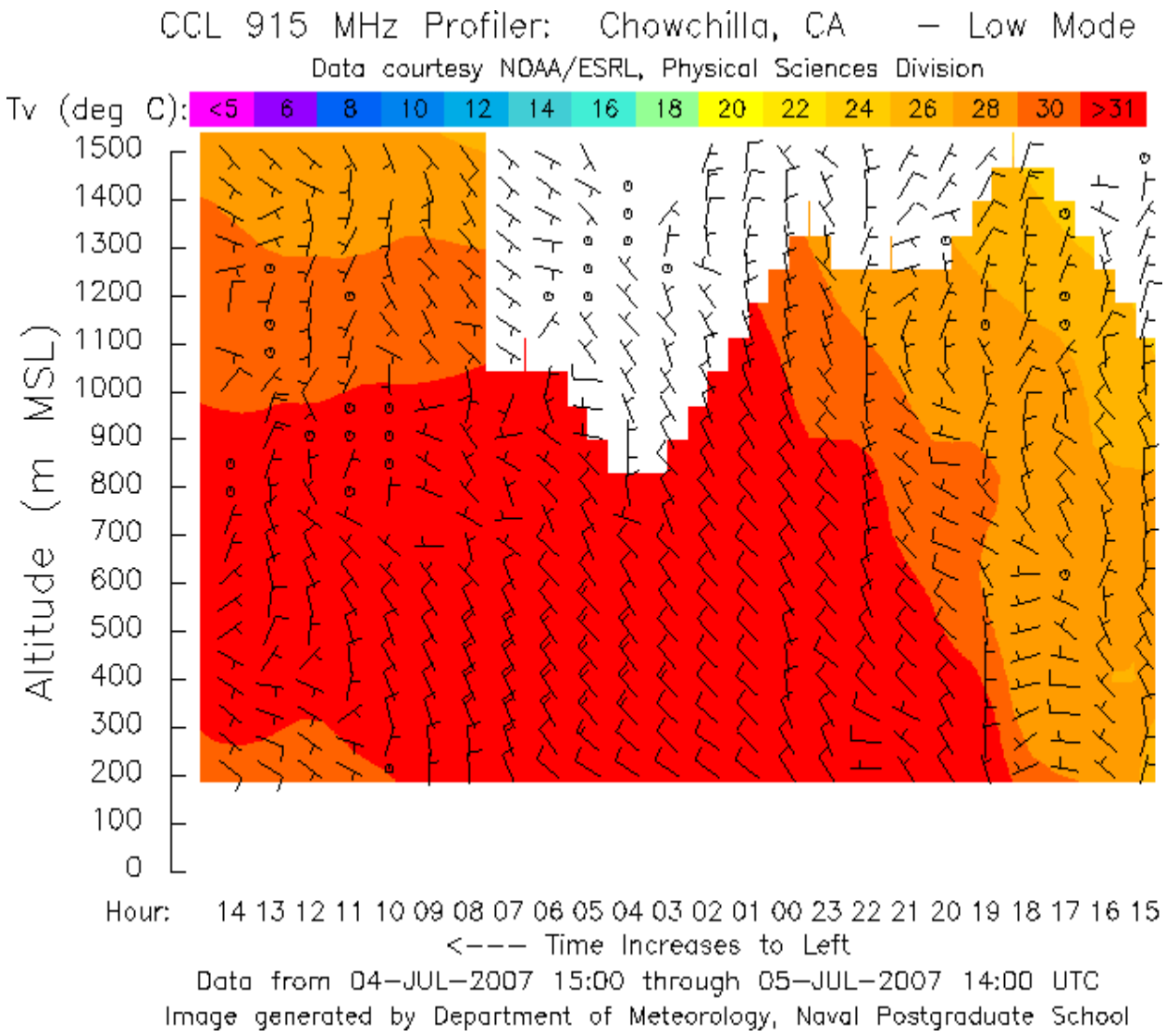
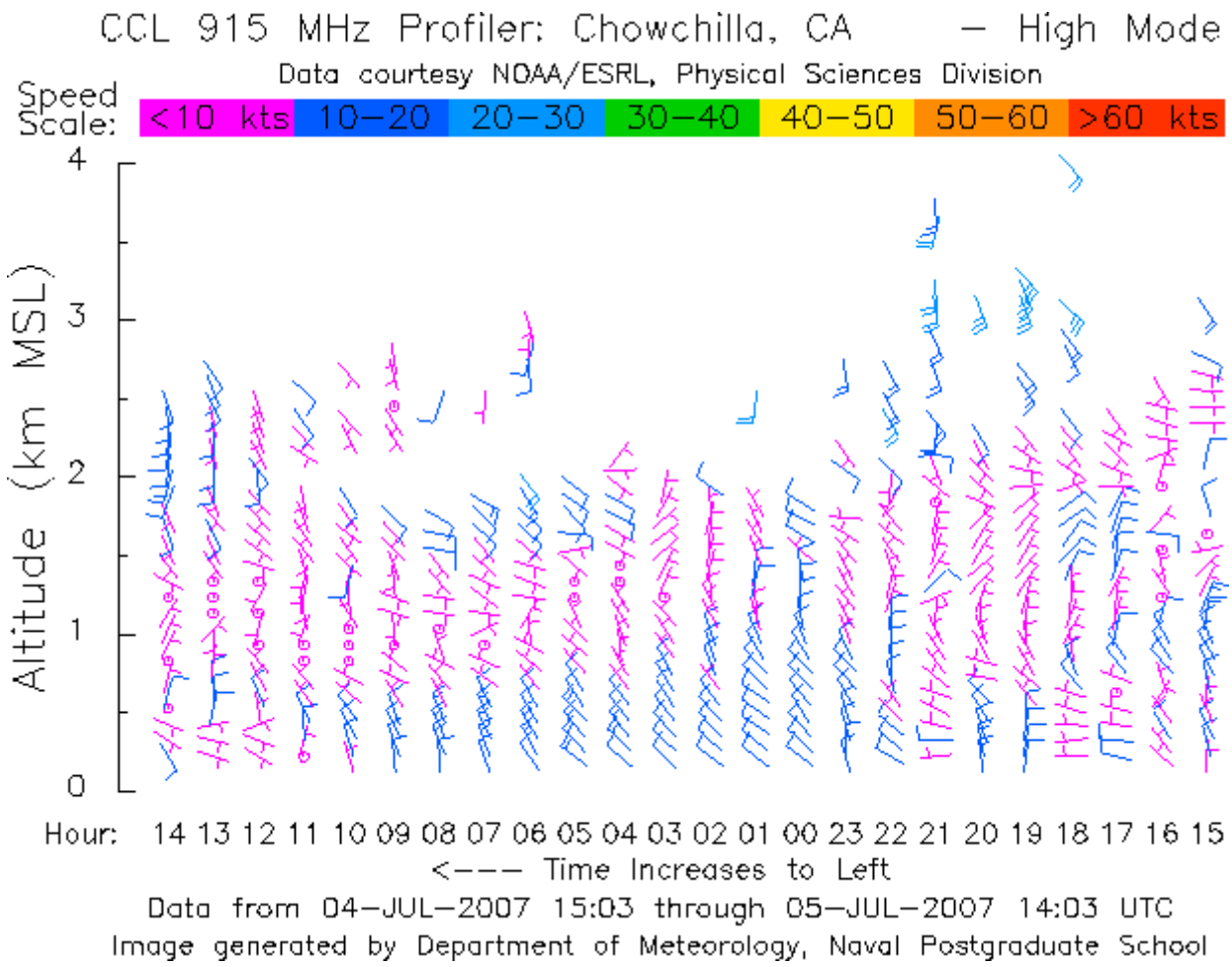
100
0
Hour: 16 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 00 23 22 21 20 19 18 17 16
<--- Time Increases to Left
Data from 04-JUL-2007 16:05 through 05-JUL-2007 16:05 UTC
Image generated by Department of Meteorology, Naval Postgraduate School

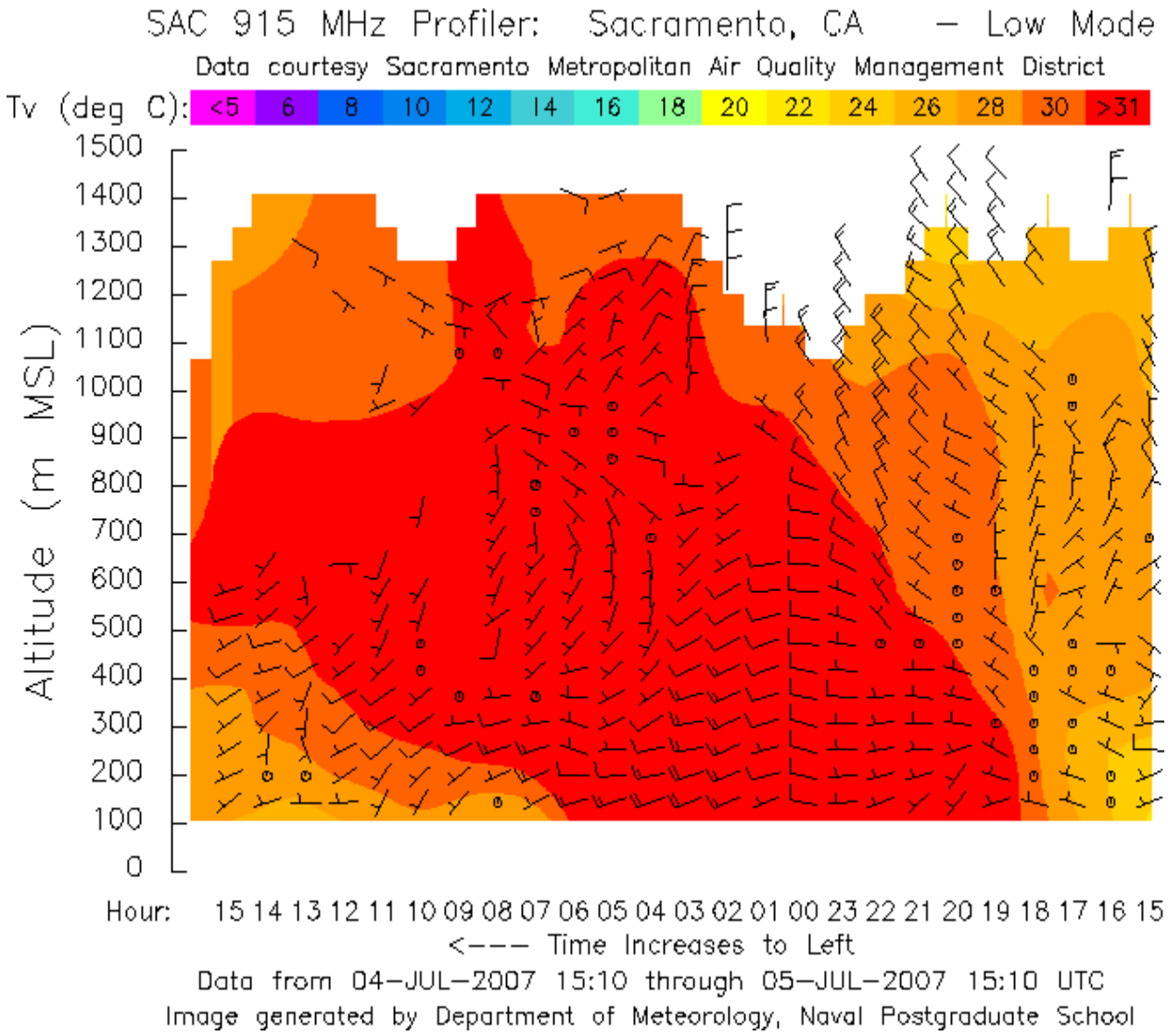


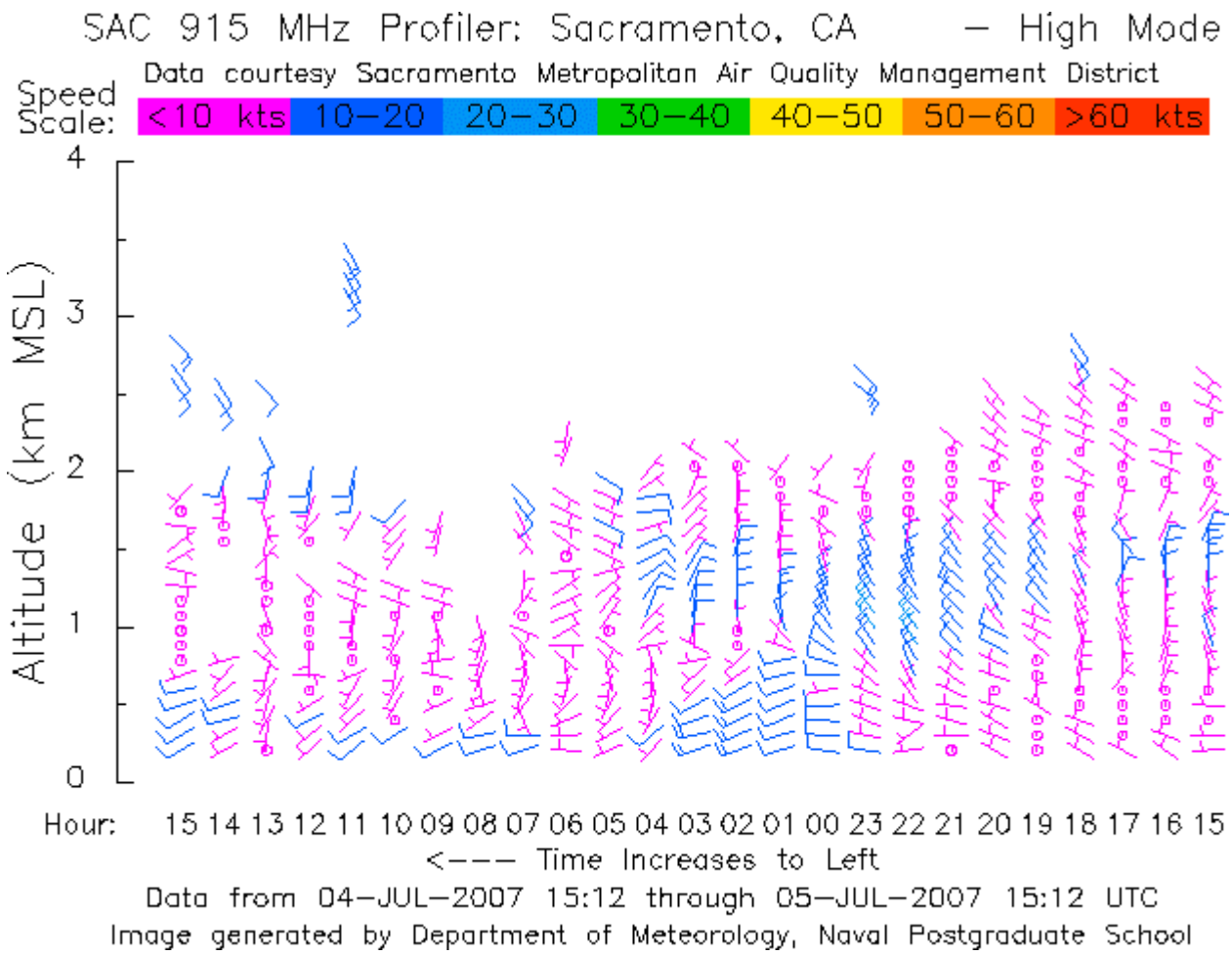
This profile recorded at Visalia in Tulare County indicates winds were mostly light (0 to 5 knots) in the first 500 meters above ground level from 04 UTC (Z) (9 PM PDT, July 4, 2007) through 16 UTC (Z) (9 AM PDT, July 5, 2007). 07 UTC (Z) corresponds to midnight.


CCL 915 MHz Profiler: Chowchilla, CA – Low Mode
Data courtesy NOAA/ESRL, Physical Sciences Division
Tv (deg C): <5 6 8 10 12 14 16 18 20 22 24 26 28 30 >31
Altitude (m MSL)
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Hour: 14 13 12 11 10 09 08 07 06 05 04 03 02 01 00 23 22 21 20 19 18 17 16 15
<--- Time Increases to Left
Data from 04-JUL-2007 15:00 through 05-JUL-2007 14:00 UTC
Image generated by Department of Meteorology, Naval Postgraduate School



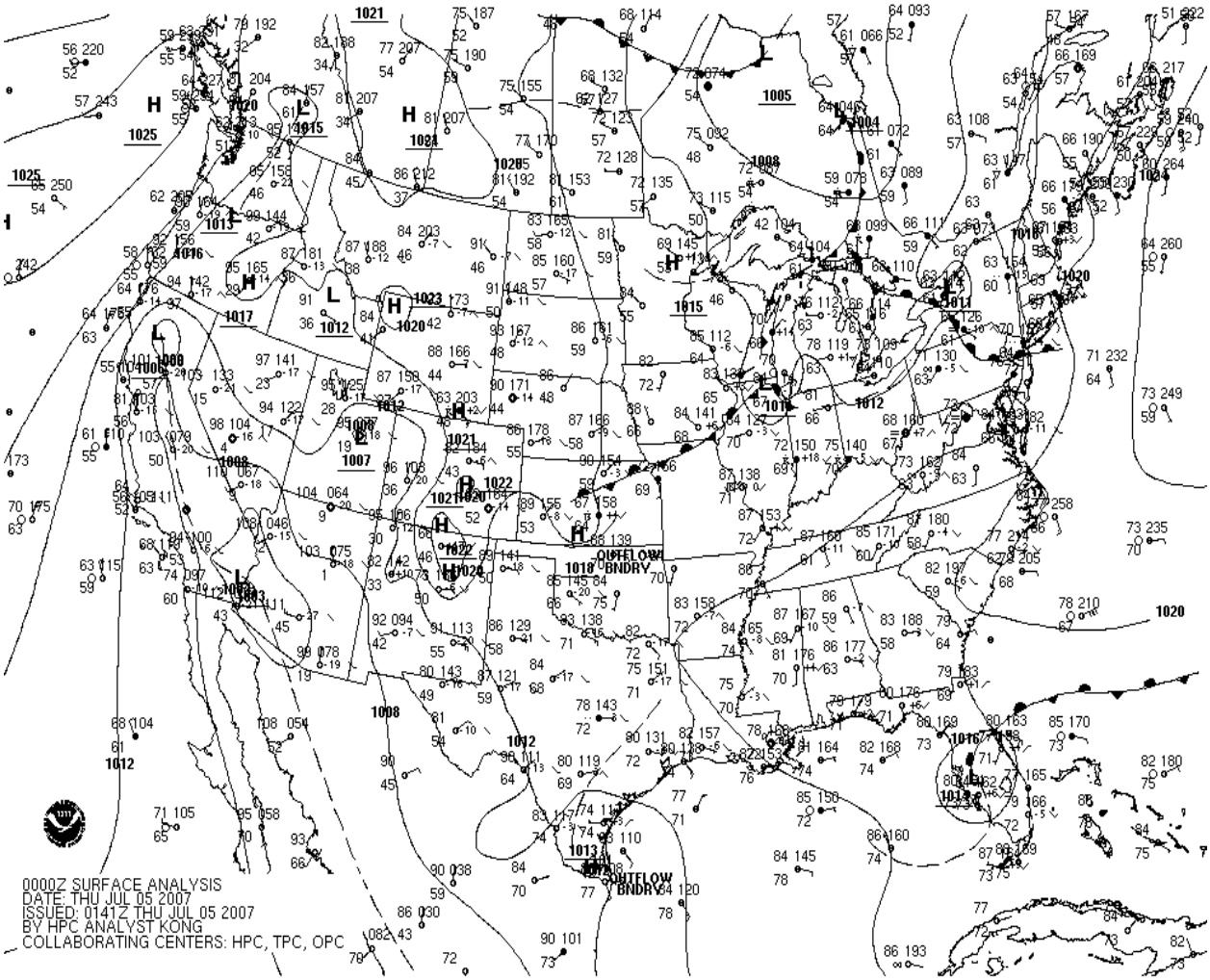
This profile recorded at Chowchilla in Madera County indicates winds were mostly from the N to NW at 10 knots in the first 500 meters above ground level from 02 UTC (Z) (7 PM PDT, July 4, 2007) through 09 UTC (Z) (2 AM PDT, July 5, 2007). 07 UTC (Z) corresponds to midnight. Winds were 20 knots from the NW during hour 05 UTC (Z) (10 PM PDT, July 4, 2007).


SAC 915 MHz Profiler: Sacramento, CA – Low Mode
Data courtesy Sacramento Metropolitan Air Quality Management District
Tv (deg C): <5 6 8 10 12 14 16 18 20 22 24 26 28 30 >31
Altitude (m MSL)
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Hour: 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 00 23 22 21 20 19 18 17 16 15
<--- Time Increases to Left
Data from 04-JUL-2007 15:10 through 05-JUL-2007 15:10 UTC
Image generated by Department of Meteorology, Naval Postgraduate School

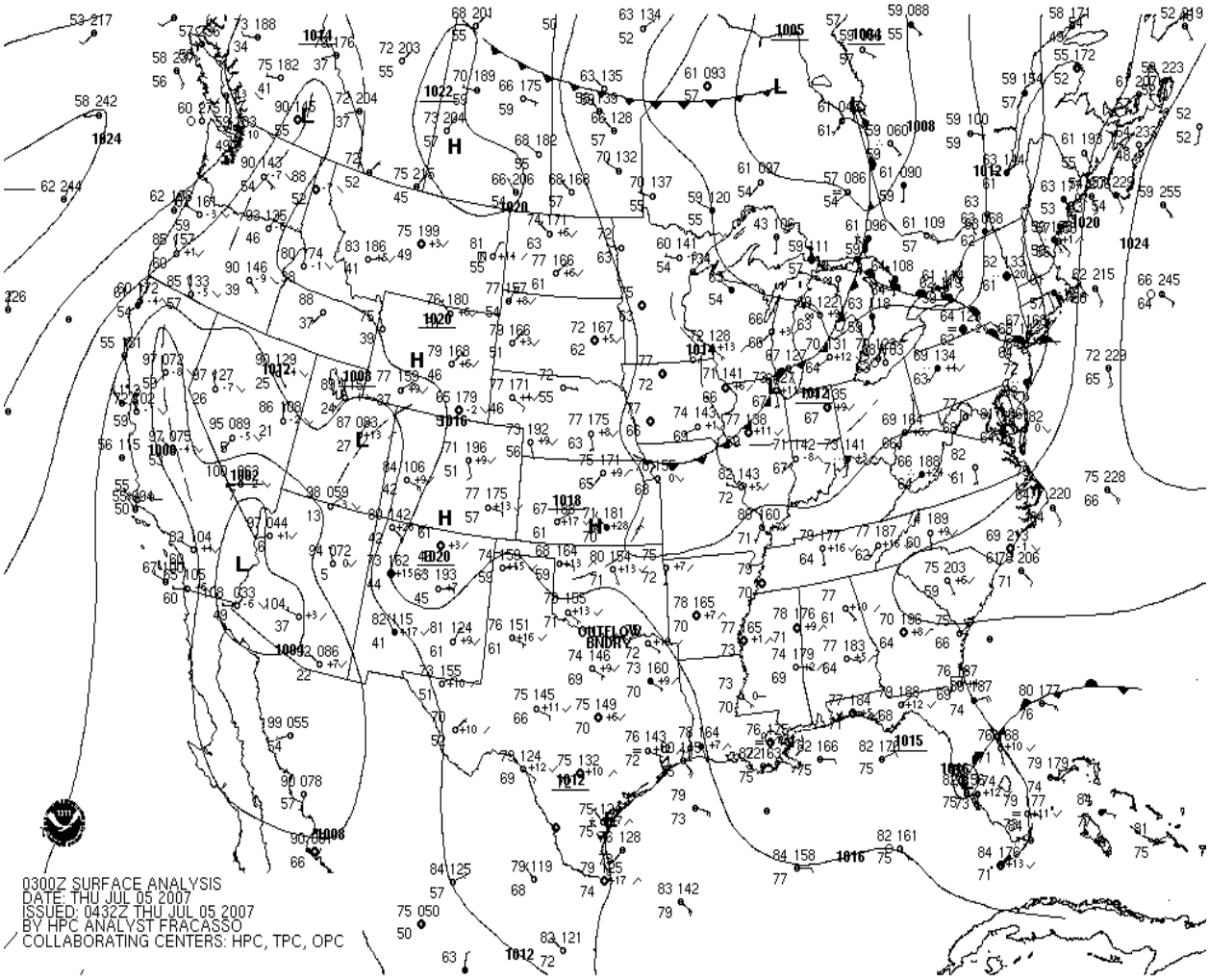


This profile recorded at Sacramento indicates winds were mostly from the WSW at 5 to 15 knots in the first 500 meters above ground level from 02 UTC (Z) (7 PM PDT, July 4, 2007) through 08 UTC (Z) (1 AM PDT, July 5, 2007). 07 UTC (Z) corresponds to midnight. A delta breeze was evident from 00 UTC (Z) (5 PM PDT, July 4, 2007) through 03 UTC (Z) (8 PM PDT, July 4, 2007).

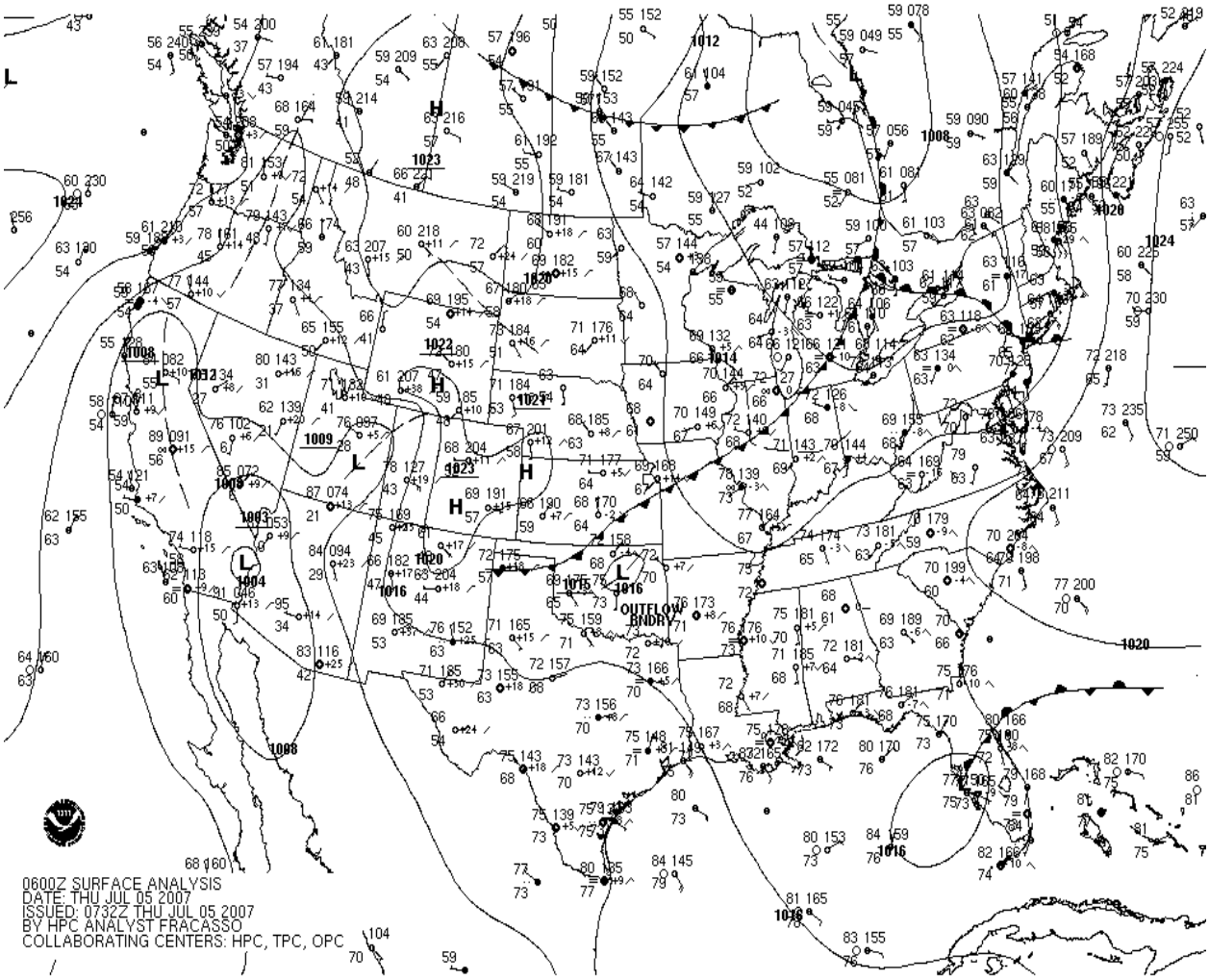
Surface Weather Maps



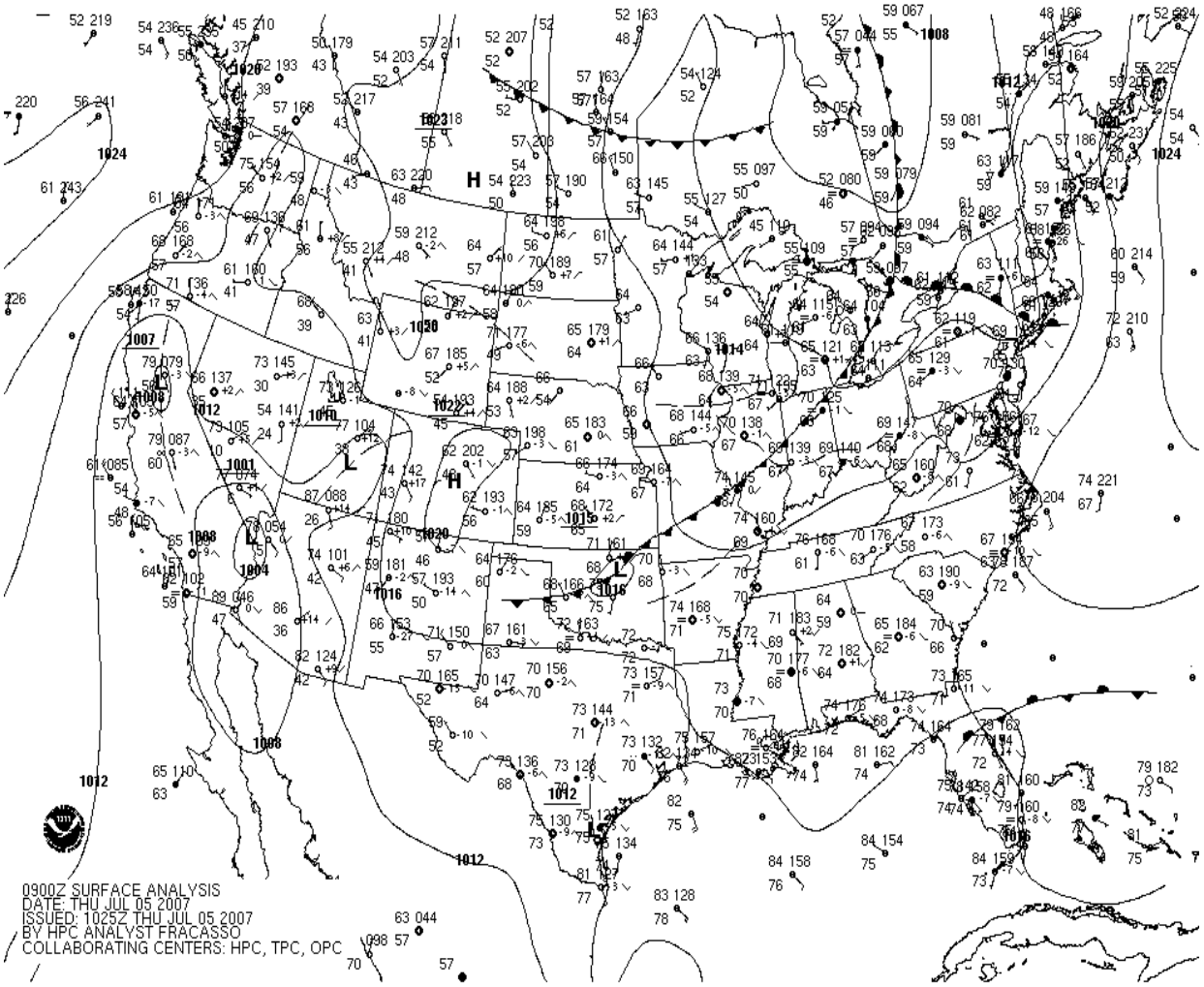
Surface weather map for 5 PM PDT on July 4, 2007. A thermal trough of low pressure is centered over the Central Valley of California. Stagnant conditions are evident in the San Joaquin Valley.



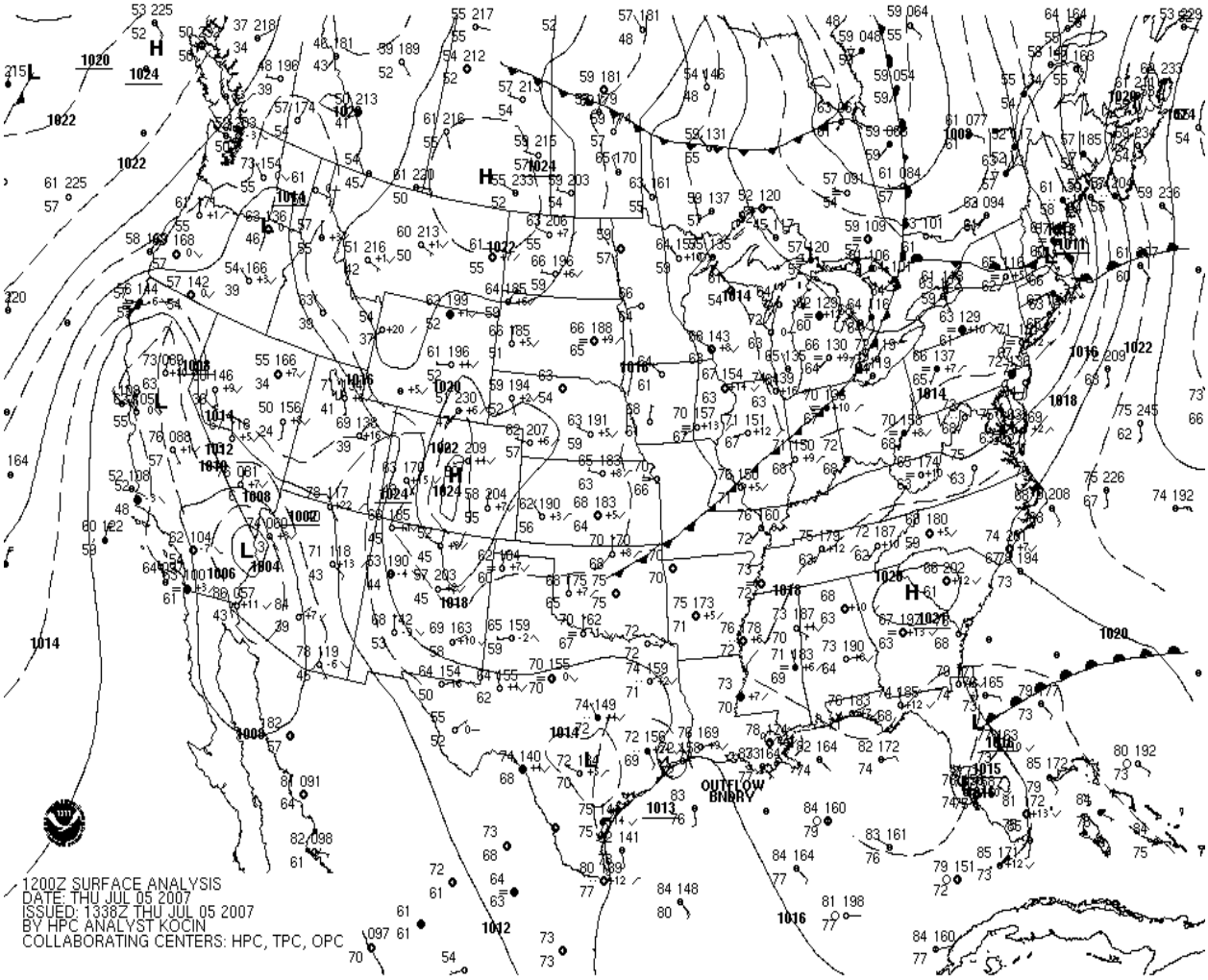
Surface weather map for 8 PM PDT on July 4, 2007.



Surface weather map for 11 PM PDT on July 4, 2007.



Surface weather map for 2 AM PDT on July 5, 2007.



Surface weather map for 5 AM PDT on July 5, 2007.

Surface Weather Observations

Station locations are provided in Figure 1.

Data source: National Weather Service website, weather.gov

Key:

T = Temperature (F)
DP = Dew Point (F)
RH = Relative Humidity (%)
WD = Wind Direction
WS = Wind Speed (mph)
VIS = Visibility (miles)
Wx = Weather
CLOUDS = Cloud cover (see cloud cover key below)
Pressure = Surface Pressure in mb and inches of Hg and Altimeter setting
Min Max Temp = Periodic Minimum Maximum Temperature (F)
Flag = Data Quality Control Flag
Precip = Precipitation, in inches, T = Trace (< 0.01 inch)

G = Wind Gust (mph)
15G25 = 15 mph sustained wind with gust to 25 mph
HZ = Haze
BLDU = Blowing Dust
BR = Light Fog
RA = Moderate Rain (- denotes light, + denotes heavy, no sign denotes moderate)
N = North
E = East
S = South
W = West

Cloud cover and height of cloud base
CLR = Clear
FEW = Few, 1-2 octas (1/8 to 2/8 of sky covered)
SCT = Scattered, 3-4 octas
BKN = Broken, 5-7 octas
OVC = Overcast, 8 octas

Example:

OVC010CB = Specifies cloud amount, height of cloud base and cloud type. This example is decoded as sky is OVERCAST, 010 denotes a cloud base of 1000 feet, cloud type CB is cumulonimbus.

Fresno, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS	Pressure			Min	Max	Temp	Flag
06 Jul 12:56 am	86	62	45	WNW	7	10.00		FEW180	1007.6	29.77	29.424		111	75	OK
05 Jul 11:56 pm	89	60	38	WNW	5	10.00		FEW180	1007.6	29.77	29.424				OK
05 Jul 10:56 pm	93	61	35	NW	3	10.00		SCT180	1007.4	29.77	29.424	111	93		OK
05 Jul 9:56 pm	95	57	28	WNW	5	10.00		SCT180	1007.1	29.76	29.414				OK
05 Jul 8:56 pm	98	56	25	WNW	3	10.00		SCT180	1006.6	29.74	29.394				OK
05 Jul 7:56 pm	105	48	15	W	8	10.00		SCT180	1005.9	29.72	29.375				OK
05 Jul 6:56 pm	110	43	11	NNW	3	10.00		FEW060 SCT180	1005.5	29.71	29.365				OK
05 Jul 5:56 pm	109	44	12	NW	3	10.00		FEW060 SCT200	1005.7	29.72	29.375				OK
05 Jul 4:56 pm	109	47	13	VRBL	3	10.00		FEW060 SCT200	1006.1	29.73	29.384	110	95		OK
05 Jul 3:56 pm	109	49	14	NNW	6	10.00		FEW060 SCT200	1006.5	29.74	29.394				OK
05 Jul 2:56 pm	108	53	17	WSW	7	10.00		FEW060 SCT200	1007.3	29.76	29.414				OK
05 Jul 1:56 pm	106	52	17	VRBL	3	10.00		FEW060 SCT200	1007.8	29.78	29.434				OK
05 Jul 12:56 pm	102	53	20	CALM		10.00		FEW060 SCT200	1008.4	29.80	29.454				OK
05 Jul 11:56 am	99	55	23	SSW	5	10.00		FEW200	1009.1	29.82	29.474				OK
05 Jul 10:56 am	96	57	27	S	5	**6.00**	**HZ**	FEW200	1009.4	29.83	29.483	96	75		OK
05 Jul 9:56 am	92	58	32	SSE	6	7.00		FEW200	1009.5	29.83	29.483				OK
05 Jul 8:56 am	88	55	33	ESE	6	10.00		FEW200		29.83	29.483				OK
05 Jul 7:56 am	84	51	32	SSE	3	10.00		FEW200	1009.5	29.82	29.474				OK
05 Jul 6:56 am	79	55	44	CALM		10.00		CLR	1009.5	29.82	29.474				OK
05 Jul 5:56 am	76	57	52	CALM		9.00		CLR	1009.2	29.82	29.474				OK
05 Jul 4:56 am	76	57	52	SE	3	10.00		CLR	1008.8	29.81	29.464	89	76		OK
05 Jul 3:56 am	79	58	49	E	3	10.00		CLR	1008.6	29.80	29.454				OK
05 Jul 2:56 am	79	60	52	ESE	3	**6.00**	**HZ**	CLR	1008.8	29.81	29.464				OK
05 Jul 1:56 am	79	60	52	SE	3	**4.00**	**HZ**	CLR	1008.7	29.80	29.454				OK
05 Jul 12:56 am	82	59	46	CALM		7.00		CLR	1008.8	29.81	29.464			104	70 OK
04 Jul 11:56 pm	84	58	41	SE	5	**5.00**	**HZ**	CLR	1009.1	29.81	29.464				OK
04 Jul 10:56 pm	89	56	33	CALM		**4.00**	**HZ**	CLR	1009.1	29.81	29.464	104	89		OK
04 Jul 9:56 pm	91	55	30	CALM		**4.00**	**HZ**	CLR	1008.8	29.81	29.464				OK
04 Jul 8:56 pm	93	54	27	W	5	10.00		FEW200	1007.9	29.78	29.434				OK
04 Jul 7:56 pm	97	53	23	W	7	10.00		FEW200	1007.5	29.77	29.424				OK
04 Jul 6:56 pm	101	50	18	WNW	7	10.00		FEW200	1007.3	29.76	29.414				OK
04 Jul 5:56 pm	103	48	16	WNW	8	10.00		FEW120 SCT200	1007.4	29.76	29.414				OK
04 Jul 4:56 pm	103	50	17	NW	9	10.00		FEW120 SCT200	1007.9	29.78	29.434	103	90		OK
04 Jul 3:56 pm	101	50	18	WNW	8	10.00		FEW120 SCT200	1008.4	29.79	29.444				OK
04 Jul 2:56 pm	101	52	20	NW	9	10.00		CLR	1009.2	29.82	29.474				OK
04 Jul 1:56 pm	99	52	21	VRBL	6	10.00		CLR	1009.9	29.84	29.493				OK
04 Jul 12:56 pm	97	51	21	S	7	10.00		CLR	1010.5	29.85	29.503				OK
04 Jul 11:56 am	93	53	26	ESE	6	10.00		CLR	1011.1	29.87	29.523				OK
04 Jul 10:56 am	90	55	31	S	5	10.00		CLR	1011.4	29.88	29.533	90	70		OK
04 Jul 9:56 am	86	55	35	SSE	8	8.00		CLR	1011.7	29.89	29.543				OK
04 Jul 8:56 am	82	54	38	ESE	6	10.00		CLR	1012.1	29.90	29.553				OK
04 Jul 7:56 am	77	56	48	CALM		10.00		CLR	1012.4	29.91	29.563				OK
04 Jul 6:56 am	72	57	59	CALM		10.00		CLR	1012.2	29.91	29.563				OK
04 Jul 5:56 am	71	56	59	CALM		10.00		CLR	1012.0	29.90	29.553				OK
04 Jul 4:56 am	72	55	55	CALM		10.00		CLR	1011.6	29.89	29.543	83	72		OK
04 Jul 3:56 am	73	55	53	CALM		10.00		CLR	1011.7	29.89	29.543				OK

Bakersfield, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUD	Pressure			Min	Max	Temp	Flag
06 Jul 12:54 am	90	45	21	NNW	8	10.00		CLR	1008.4	29.80	29.264			108 78	OK
05 Jul 11:54 pm	92	48	22	N	6	10.00		CLR	1007.8	29.79	29.254				OK
05 Jul 10:54 pm	93	55	28	NW	6	10.00		CLR	1007.7	29.79	29.254	108	93		OK
05 Jul 9:54 pm	94	58	30	NW	3	10.00		CLR	1007.1	29.77	29.235				OK
05 Jul 8:54 pm	98	55	24	NW	3	10.00		CLR	1006.4	29.75	29.215				OK
05 Jul 7:54 pm	102	61	26	NNW	5	10.00		CLR	1005.9	29.73	29.195				OK
05 Jul 6:54 pm	105	61	24	WNW	7	10.00		CLR	1005.7	29.73	29.195				OK
05 Jul 5:54 pm	106	57	20	NW	8	10.00		CLR	1005.5	29.72	29.185				OK
05 Jul 4:54 pm	108	50	15	WNW	12	10.00		CLR	1006.0	29.73	29.195	108	97		OK
05 Jul 3:54 pm	107	57	20	NW	12	10.00		CLR	1006.2	29.74	29.205				OK
05 Jul 2:54 pm	106	57	20	WNW	7	10.00		CLR	1006.9	29.76	29.225				OK
05 Jul 1:54 pm	102	56	21	W	7	10.00		CLR		29.78	29.245				OK
05 Jul 12:54 pm	101	54	21	CALM		10.00		CLR	1008.1	29.80	29.264				OK
05 Jul 11:54 am	100	53	21	WSW	7	10.00		CLR	1008.6	29.81	29.274				OK
05 Jul 10:54 am	98	53	22	VRBL	6	10.00		CLR	1009.0	29.82	29.284	98	78		OK
05 Jul 9:54 am	94	52	24	VRBL	3	10.00		CLR	1009.2	29.83	29.294				OK
05 Jul 8:54 am	90	52	28	CALM		10.00		CLR		29.84	29.304				OK
05 Jul 7:54 am	88	51	28	SSE	5	10.00		CLR	1009.3	29.83	29.294				OK
05 Jul 6:54 am	83	51	33	CALM		10.00		CLR	1009.1	29.83	29.294				OK
05 Jul 5:54 am	80	51	37	CALM		9.00		CLR	1008.7	29.81	29.274				OK
05 Jul 4:54 am	80	55	42	CALM		10.00		CLR	1008.4	29.81	29.274	90	80		OK
05 Jul 3:54 am	81	52	37	CALM		10.00		CLR	1008.4	29.80	29.264				OK
05 Jul 2:54 am	81	51	35	CALM		10.00		CLR	1008.4	29.80	29.264				OK
05 Jul 1:54 am	87	51	29	E	5	10.00		CLR	1008.6	29.81	29.274				OK
05 Jul 12:54 am	85	51	31	E	3	10.00		CLR	1008.8	29.82	29.284			100 71	OK
04 Jul 11:54 pm	89	52	28	ESE	3	10.00		CLR	1009.1	29.82	29.284				OK
04 Jul 10:54 pm	91	54	29	CALM		**5.00**	**HZ**	CLR	1009.1	29.83	29.294	99	89		OK
04 Jul 9:54 pm	91	52	27	NNE	3	10.00		CLR	1008.9	29.82	29.284				OK
04 Jul 8:54 pm	94	53	25	NNW	3	10.00		CLR	1008.4	29.80	29.264				OK
04 Jul 7:54 pm	97	51	21	WNW	3	10.00		CLR	1008.1	29.79	29.254				OK
04 Jul 6:54 pm	98	51	21	NW	5	10.00		CLR	1007.7	29.78	29.245				OK
04 Jul 5:54 pm	99	52	21	WNW	9	10.00		CLR	1007.6	29.78	29.245				OK
04 Jul 4:54 pm	99	51	20	WNW	9	10.00		CLR	1007.9	29.79	29.254	100	88		OK
04 Jul 3:54 pm	98	51	21	WNW	10	10.00		CLR	1008.3	29.80	29.264				OK
04 Jul 2:54 pm	98	52	21	WNW	9	10.00		CLR	1008.8	29.82	29.284				OK
04 Jul 1:54 pm	96	50	21	W	8	10.00		CLR	1009.6	29.84	29.304				OK
04 Jul 12:54 pm	94	50	23	CALM		10.00		CLR	1010.3	29.86	29.323				OK
04 Jul 11:54 am	91	49	24	VRBL	6	10.00		CLR	1010.8	29.87	29.333				OK
04 Jul 10:54 am	88	49	26	CALM		10.00		CLR	1011.4	29.89	29.353	88	72		OK
04 Jul 9:54 am	85	49	29	SE	7	10.00		CLR	1011.9	29.90	29.363				OK
04 Jul 8:54 am	81	49	33	SSE	8	10.00		CLR	1012.3	29.92	29.382				OK
04 Jul 7:54 am	78	48	35	SE	8	10.00		CLR	1012.3	29.92	29.382				OK
04 Jul 6:54 am	76	50	40	CALM		10.00		CLR	1012.2	29.91	29.373				OK
04 Jul 5:54 am	74	50	43	CALM		10.00		CLR	1012.0	29.91	29.373				OK
04 Jul 4:54 am	73	49	43	CALM		10.00		CLR	1011.8	29.90	29.363	83	71		OK
04 Jul 3:54 am	74	45	36	ENE	3	10.00		CLR	1011.6	29.90	29.363				OK

Hanford, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS	Pressure			Min	Max	Temp	Flag
06 Jul 12:53 am	79	67	67	CALM		8.00		CLR	1007.8	29.77	29.518			107	66 OK
05 Jul 11:53 pm	80	70	71	CALM		8.00		CLR	1008.2	29.78	29.528				OK
05 Jul 10:53 pm	82	69	65	CALM		10.00		CLR	1007.3	29.75	29.498	107	82		OK
05 Jul 9:53 pm	85	66	53	CALM		10.00		CLR		29.75	29.498				OK
05 Jul 8:53 pm	91	64	41	CALM		10.00		CLR		29.73	29.478				OK
05 Jul 7:53 pm	100	62	29	W	5	10.00		CLR	1006.1	29.72	29.468				OK
05 Jul 6:53 pm	105	55	19	CALM		10.00		CLR	1005.9	29.71	29.458				OK
05 Jul 5:53 pm	106	59	22	NNE	5	10.00		CLR	1005.9	29.71	29.458				OK
05 Jul 4:53 pm	106	57	20	N	7	10.00		CLR	1006.2	29.72	29.468	106	94		OK
05 Jul 3:53 pm	105	59	22	NNE	5	8.00		CLR	1006.8	29.74	29.488				OK
05 Jul 2:53 pm	103	59	24	CALM		10.00		CLR	1007.5	29.76	29.508				OK
05 Jul 12:53 pm	101	62	28	CALM		8.00		CLR	1008.7	29.79	29.538				OK
05 Jul 11:53 am	98	61	30	SSE	6	7.00		CLR	1009.5	29.81	29.558				OK
05 Jul 10:53 am	94	60	33	SSE	5	8.00		CLR	1009.8	29.82	29.568				OK
05 Jul 9:53 am										29.83	29.578				OK
05 Jul 7:53 am	79	65	62	CALM		**4.00**	**HZ**	CLR	1009.7	29.82	29.568				OK
05 Jul 7:18 am	75	64	69	CALM		**3.00**	**HZ**	CLR		29.82	29.568				OK
05 Jul 6:53 am	72	64	76	CALM		**2.50**	**HZ**	CLR	1009.7	29.82	29.568				OK
05 Jul 5:53 am	67	63	87	CALM		**2.50**	**BR**	CLR	1009.4	29.81	29.558				OK
05 Jul 4:53 am	67	61	81	CALM		**6.00**	**HZ**	CLR	1009.1	29.80	29.548	78	67		OK
05 Jul 3:53 am	69	61	75	CALM		7.00		CLR	1008.7	29.79	29.538				OK
05 Jul 2:53 am	71	61	71	CALM		8.00		CLR	1009.0	29.80	29.548				OK
05 Jul 1:53 am	71	62	73	CALM		7.00		CLR	1009.0	29.80	29.548				OK
05 Jul 12:53 am	73	63	71	CALM		8.00		CLR	1009.2	29.80	29.548			102	62 OK
04 Jul 11:53 pm	74	64	71	CALM		9.00		CLR	1009.5	29.81	29.558				OK
04 Jul 10:53 pm	78	64	62	CALM		8.00		CLR	1009.3	29.81	29.558	102	77		OK
04 Jul 9:53 pm	81	63	54	CALM		10.00		CLR	1009.1	29.80	29.548				OK
04 Jul 8:53 pm	85	60	43	CALM		10.00		CLR	1008.5	29.78	29.528				OK
04 Jul 7:53 pm	97	53	23	WNW	3	10.00		CLR	1008.0	29.77	29.518				OK
04 Jul 6:53 pm	100	51	20	WNW	7	10.00		CLR	1007.7	29.76	29.508				OK
04 Jul 5:53 pm	101	51	19	NNW	9	10.00		CLR	1007.8	29.76	29.508				OK
04 Jul 4:53 pm	101	47	16	WNW	7	10.00		CLR	1008.4	29.78	29.528	102	87		OK
04 Jul 3:53 pm	101	53	20	NNW	8	10.00		CLR	1008.7	29.79	29.538				OK
04 Jul 2:53 pm	99	51	20	NNW	8	10.00		CLR	1009.4	29.81	29.558				OK
04 Jul 1:53 pm	97	54	24	NW	8	10.00		CLR	1010.2	29.83	29.578				OK
04 Jul 12:53 pm	94	51	24	NW	8	10.00		CLR	1011.1	29.86	29.607				OK
04 Jul 11:53 am	91	53	28	CALM		10.00		CLR	1011.6	29.88	29.627				OK
04 Jul 10:53 am	87	54	32	WNW	7	10.00		CLR	1011.9	29.88	29.627	87	63		OK
04 Jul 9:53 am	82	54	38	NNW	5	10.00		CLR	1012.2	29.89	29.637				OK
04 Jul 8:53 am	78	53	42	VRBL	6	10.00		CLR	1012.5	29.90	29.647				OK
04 Jul 7:53 am	74	54	50	WNW	7	10.00		CLR	1012.7	29.91	29.657				OK
04 Jul 6:53 am	69	53	57	W	5	10.00		CLR	1012.6	29.90	29.647				OK
04 Jul 5:53 am	66	55	68	W	3	10.00		CLR	1012.3	29.90	29.647				OK
04 Jul 4:53 am	63	57	81	CALM		10.00		CLR	1011.9	29.88	29.627	81	62		OK
04 Jul 3:53 am	65	57	76	CALM		10.00		CLR	1011.9	29.88	29.627				OK

Stockton, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS	Pressure			Precip		Min	Max	Temp	Flag
06 Jul 12:55 am	77	59	54	NE	7	10.00		CLR	1007.4	29.75	29.727					110	68 OK
05 Jul 11:55 pm	82	57	43	NE	7	10.00		CLR	1007.3	29.75	29.727						OK
05 Jul 10:55 pm	87	54	32	W	9	10.00		CLR	1007.1	29.74	29.717				110	86	OK
05 Jul 9:55 pm	89	57	34	WNW	10	10.00		CLR	1006.6	29.73	29.707						OK
05 Jul 8:55 pm	92	58	32	WNW	14	10.00		CLR	1006.7	29.73	29.707						OK
05 Jul 7:55 pm	101	48	17	NW	13	10.00		CLR	1006.1	29.71	29.687						OK
05 Jul 6:55 pm	107	51	16	NW	10	10.00		CLR	1005.9	29.71	29.687						OK
05 Jul 5:55 pm	108	46	13	WNW	9	10.00		CLR	1005.6	29.70	29.677						OK
05 Jul 4:55 pm	108	46	13	W	6	10.00		CLR	1006.0	29.71	29.687				109	96	OK
05 Jul 3:55 pm	107	52	16	VRBL	5	10.00		CLR	1006.7	29.73	29.707						OK
05 Jul 2:55 pm	106	53	18	NW	10	10.00		CLR	1007.1	29.74	29.717						OK
05 Jul 1:55 pm	104	56	20	WNW	8	10.00		CLR	1007.8	29.76	29.737						OK
05 Jul 12:55 pm	102	53	20	VRBL	6	10.00		CLR	1008.4	29.78	29.757						OK
05 Jul 11:55 am	100	54	22	VRBL	7	10.00		CLR	1008.8	29.79	29.767						OK
05 Jul 10:55 am	96	55	25	VRBL	3	10.00		CLR	1009.2	29.80	29.777	**0.01**	**0.01**		96	68	OK
05 Jul 9:55 am	91	57	32	NE	5	10.00		CLR	1009.4	29.81	29.787						OK
05 Jul 8:55 am	86	55	35	VRBL	3	10.00		CLR		29.82	29.797						OK
05 Jul 7:55 am	80	57	45	CALM		10.00		CLR	1009.3	29.81	29.787						OK
05 Jul 6:55 am	73	57	57	CALM		10.00		CLR	1009.0	29.80	29.777						OK
05 Jul 5:55 am	69	57	65	CALM		10.00		CLR	1008.7	29.79	29.767						OK
05 Jul 4:55 am	70	56	61	CALM		10.00		CLR	1008.3	29.78	29.757				86	69	OK
05 Jul 3:55 am	70	56	61	CALM		10.00		CLR	1008.0	29.77	29.747						OK
05 Jul 2:55 am	72	54	53	CALM		10.00		CLR	1007.9	29.77	29.747						OK
05 Jul 1:55 am	74	56	53	ENE	6	10.00		CLR	1007.9	29.77	29.747						OK
05 Jul 12:55 am	76	56	50	ENE	7	10.00		CLR	1007.8	29.76	29.737					106	62 OK
04 Jul 11:55 pm	83	54	37	WNW	3	10.00		CLR	1007.8	29.76	29.737						OK
04 Jul 10:55 pm	86	54	33	W	6	10.00		CLR	1008.1	29.77	29.747				106	85	OK
04 Jul 9:55 pm	87	56	35	WNW	8	10.00		CLR	1007.9	29.76	29.737						OK
04 Jul 8:55 pm	94	53	25	WNW	12	10.00		CLR	1007.5	29.75	29.727						OK
04 Jul 7:55 pm	99	49	19	NW	13	10.00		CLR	1007.3	29.75	29.727						OK
04 Jul 6:55 pm	104	54	19	NNW	10	10.00		CLR	1007.2	29.74	29.717						OK
04 Jul 5:55 pm	105	54	19	NNW	13	10.00		CLR	1007.2	29.74	29.717						OK
04 Jul 4:55 pm	106	52	17	NW	12G16	10.00		CLR	1007.7	29.76	29.737				106	89	OK
04 Jul 3:55 pm	106	49	15	W	9	10.00		CLR	1008.4	29.78	29.757						OK
04 Jul 2:55 pm	103	55	21	NW	10	10.00		CLR	1009.1	29.80	29.777						OK
04 Jul 1:55 pm	100	57	24	WNW	8	10.00		CLR	1009.7	29.82	29.797						OK
04 Jul 12:55 pm	96	56	26	W	7	10.00		CLR	1010.5	29.84	29.816						OK
04 Jul 11:55 am	92	55	29	CALM		10.00		CLR	1011.0	29.86	29.836						OK
04 Jul 10:55 am	89	52	28	VRBL	7	10.00		CLR	1011.2	29.86	29.836		**T**		89	62	OK
04 Jul 9:55 am	86	52	31	WNW	7	10.00		CLR	1011.6	29.88	29.856						OK
04 Jul 8:55 am	81	51	35	W	6	10.00		CLR	1012.0	29.89	29.866	**T**					OK
04 Jul 7:55 am	76	53	45	NNE	5	10.00		CLR	1012.2	29.89	29.866						OK
04 Jul 6:55 am	67	51	57	CALM		10.00		CLR	1012.2	29.89	29.866						OK
04 Jul 5:55 am	62	50	65	CALM		10.00		CLR	1012.0	29.89	29.866						OK
04 Jul 4:55 am	65	52	63	CALM		10.00		CLR	1011.4	29.87	29.846				79	64	OK
04 Jul 3:55 am	66	53	63	NE	5	10.00		CLR	1011.4	29.87	29.846						OK

Modesto, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS				Min	Max	Temp	Flag
06 Jul 12:53 am	86	56	36	NNE	6	10.00		CLR	1007.5	29.75	29.657		110	71	OK
05 Jul 11:53 pm	86	58	39	CALM		10.00		CLR	1007.2	29.75	29.657				OK
05 Jul 10:53 pm	91	57	32	NNE	3	10.00		CLR	1007.2	29.75	29.657	109	91		OK
05 Jul 9:53 pm	93	56	29	WNW	6	10.00		CLR	1006.8	29.73	29.637				OK
05 Jul 8:53 pm	101	55	22	WNW	8	10.00		CLR	1006.2	29.72	29.627				OK
05 Jul 7:53 pm	103	47	15	WNW	8	10.00		CLR	1006.1	29.71	29.617				OK
05 Jul 6:53 pm	107	49	15	NNW	7	10.00		CLR	1005.9	29.71	29.617				OK
05 Jul 5:53 pm	108	51	15	NW	10	10.00		CLR	1005.7	29.70	29.607				OK
05 Jul 4:53 pm	109	53	16	VRBL	5	10.00		FEW095	1006.0	29.71	29.617	110	97		OK
05 Jul 3:53 pm	108	51	15	W	6	10.00		FEW100	1006.7	29.73	29.637				OK
05 Jul 2:53 pm	108	54	17	NNW	8	10.00		CLR	1007.2	29.75	29.657				OK
05 Jul 12:53 pm	103	56	21	N	5	10.00		CLR	1008.4	29.78	29.687				OK
05 Jul 11:53 am	99	59	27	VRBL	3	10.00		CLR	1008.9	29.80	29.707				OK
05 Jul 10:53 am	97	57	27	N	5	10.00		CLR	1009.1	29.80	29.707	97	71		OK
05 Jul 9:53 am	93	56	29	VRBL	3	10.00		CLR	1009.2	29.81	29.717				OK
05 Jul 7:53 am	84	56	38	CALM		10.00		CLR	1009.3	29.81	29.717				OK
05 Jul 6:53 am	73	63	71	CALM		**5.00**	**HZ**	CLR	1009.0	29.80	29.707				OK
05 Jul 5:53 am	72	61	68	CALM		**4.00**	**HZ**	CLR	1008.7	29.79	29.697				OK
05 Jul 4:53 am	72	61	68	CALM		**6.00**	**HZ**	CLR	1008.4	29.78	29.687	88	72		Caution
05 Jul 3:53 am	74	61	64	CALM		8.00		CLR	1008.1	29.77	29.677				OK
05 Jul 2:53 am	75	61	62	CALM		8.00		CLR	1008.0	29.77	29.677				OK
05 Jul 1:53 am	76	60	58	CALM		8.00		CLR	1008.1	29.77	29.677				OK
05 Jul 12:53 am	83	57	41	CALM		10.00		CLR	1008.0	29.77	29.677		106	65	OK
04 Jul 11:53 pm	84	57	40	CALM		7.00		CLR	1008.1	29.77	29.677				OK
04 Jul 10:53 pm	88	57	35	NW	3	**5.00**	**HZ**	CLR	1008.1	29.77	29.677	106	88		OK
04 Jul 9:53 pm	92	56	30	NNW	7	9.00		CLR	1008.0	29.77	29.677				OK
04 Jul 8:53 pm	93	60	34	NW	7	10.00		CLR	1007.5	29.75	29.657				OK
04 Jul 7:53 pm	100	56	23	NNW	8	10.00		CLR	1007.3	29.75	29.657				OK
04 Jul 6:53 pm	104	54	19	NW	9	10.00		CLR	1007.2	29.75	29.657				OK
04 Jul 5:53 pm	105	47	14	NNW	10	10.00		CLR	1007.4	29.75	29.657				OK
04 Jul 4:53 pm	105	50	16	NW	14	10.00		CLR	1007.8	29.76	29.667	105	89		OK
04 Jul 3:53 pm	104	50	17	N	8	10.00		CLR	1008.6	29.79	29.697				OK
04 Jul 2:53 pm	103	51	18	NNW	9	10.00		CLR	1009.2	29.80	29.707				OK
04 Jul 1:53 pm	100	55	23	W	6	10.00		CLR	1009.9	29.83	29.737				OK
04 Jul 12:53 pm	96	56	26	NNW	6	10.00		CLR	1010.5	29.84	29.746				OK
04 Jul 11:53 am	94	54	26	VRBL	6	10.00		CLR	1010.9	29.86	29.766				OK
04 Jul 10:53 am	89	52	28	VRBL	3	10.00		CLR	1011.2	29.86	29.766	90	65		OK
04 Jul 9:53 am	85	51	31	CALM		10.00		CLR	1011.7	29.88	29.786				OK
04 Jul 8:53 am	81	53	38	NW	3	10.00		CLR	1012.0	29.89	29.796				OK
04 Jul 7:53 am	78	52	40	N	6	10.00		CLR	1012.1	29.89	29.796				OK
04 Jul 6:53 am	72	54	53	CALM		10.00		CLR	1012.2	29.89	29.796				OK
04 Jul 5:53 am	66	56	70	CALM		10.00		CLR	1012.0	29.89	29.796				OK
04 Jul 4:53 am	68	56	65	CALM		10.00		CLR	1011.6	29.87	29.776	80	67		OK
04 Jul 3:53 am	69	55	61	CALM		10.00		CLR	1011.4	29.87	29.776				OK

Merced, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS	Pressure			Min	Max	Temp	Flag
06 Jul 12:53 am	78	58	50	WSW	5	10.00		CLR	1007.6	29.76	29.603			106 67	OK
05 Jul 11:53 pm	81	58	46	CALM		10.00		CLR	1007.2	29.75	29.593				OK
05 Jul 10:53 pm	82	55	40	W	9	10.00		CLR	1007.2	29.75	29.593	106	82		OK
05 Jul 9:53 pm	84	61	46	WSW	7	10.00		CLR	1006.9	29.74	29.583				OK
05 Jul 8:53 pm	92	64	40	WNW	3	10.00		CLR	1006.3	29.72	29.564				OK
05 Jul 7:53 pm	96	64	35	NW	7	10.00		CLR	1005.9	29.71	29.554				OK
05 Jul 6:53 pm	104	54	19	NW	6	10.00		CLR	1005.7	29.71	29.554				OK
05 Jul 5:53 pm	105	55	19	W	5	10.00		CLR	1005.5	29.70	29.544				OK
05 Jul 4:53 pm	105	52	17	SW	6	10.00		CLR	1005.8	29.71	29.554	106	94		OK
05 Jul 3:53 pm	105	51	17	W	6	10.00		CLR	1006.4	29.73	29.574				OK
05 Jul 2:53 pm	104	55	20	W	7	10.00		CLR	1007.0	29.74	29.583				OK
05 Jul 12:53 pm	100	53	21	W	7	10.00		FEW090	1008.2	29.78	29.623				OK
05 Jul 11:53 am	97	58	28	VRBL	3	10.00		CLR	1008.6	29.79	29.633				OK
05 Jul 10:53 am	95	51	23	CALM		10.00		CLR	1009.0	29.80	29.643	95	67		OK
05 Jul 9:53 am	87	61	42	VRBL	5	8.00		CLR	1009.3	29.81	29.653				OK
05 Jul 7:53 am	78	59	52	S	3	7.00		CLR	1009.1	29.81	29.653				OK
05 Jul 6:53 am	72	59	64	CALM		8.00		CLR	1008.9	29.80	29.643				OK
05 Jul 5:53 am	70	60	71	CALM		7.00		CLR	1008.7	29.79	29.633				OK
05 Jul 4:53 am	72	61	68	CALM		10.00		CLR	1008.2	29.78	29.623	79	68		OK
05 Jul 3:53 am	69	59	70	CALM		10.00		CLR	1008.1	29.78	29.623				OK
05 Jul 2:53 am	72	62	71	CALM		10.00		CLR	1007.9	29.77	29.613				OK
05 Jul 1:53 am	73	60	64	CALM		10.00		CLR	1008.1	29.78	29.623				OK
05 Jul 12:53 am	74	62	67	CALM		10.00		CLR	1008.2	29.78	29.623			103 62	OK
04 Jul 11:53 pm	77	64	64	CALM		10.00		CLR	1008.3	29.78	29.623				OK
04 Jul 10:53 pm	80	65	60	CALM		10.00		CLR	1008.3	29.78	29.623	103	80		OK
04 Jul 9:53 pm	85	61	45	CALM		10.00		CLR	1008.1	29.78	29.623				OK
04 Jul 8:53 pm	91	59	34	W	5	10.00		CLR	1007.3	29.75	29.593				OK
04 Jul 7:53 pm	93	60	34	WNW	6	10.00		CLR	1007.1	29.75	29.593				OK
04 Jul 6:53 pm	97	57	27	NW	8	10.00		CLR	1007.0	29.74	29.583				OK
04 Jul 5:53 pm	101	44	15	NW	12	10.00		CLR	1007.4	29.76	29.603				OK
04 Jul 4:53 pm	102	47	16	NNW	12	10.00		CLR	1007.7	29.76	29.603	102	86		OK
04 Jul 3:53 pm	100	51	20	NW	8	10.00		CLR	1008.3	29.78	29.623				OK
04 Jul 2:53 pm	100	49	18			10.00		CLR	1009.1	29.81	29.653				OK
04 Jul 1:53 pm	97	53	23	VRBL	3	10.00		CLR	1009.7	29.82	29.663				OK
04 Jul 12:53 pm	94	53	25	WSW	8	10.00		CLR	1010.3	29.84	29.683				OK
04 Jul 11:53 am	90	56	32	VRBL	5	10.00		CLR	1010.8	29.86	29.703				OK
04 Jul 10:53 am	87	51	29	W	6	10.00		CLR	1011.2	29.87	29.713	88	62		OK
04 Jul 9:53 am	84	50	31	WNW	6	10.00		CLR	1011.4	29.87	29.713				OK
04 Jul 8:53 am	80	52	38	N	7	10.00		CLR	1011.9	29.89	29.733				OK
04 Jul 7:53 am	73	54	51	N	3	10.00		CLR	1012.0	29.89	29.733				OK
04 Jul 6:53 am	67	55	66	CALM		10.00		CLR	1012.1	29.89	29.733				OK
04 Jul 5:53 am	63	54	72	CALM		10.00		CLR	1011.9	29.89	29.733				OK
04 Jul 4:53 am	63	54	72	W	3	10.00		CLR	1011.6	29.88	29.723	76	63		OK
04 Jul 3:53 am	64	55	73	CALM		10.00		CLR	1011.3	29.87	29.713				OK

Madera, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS	Pressure			Min	Max	Temp	Flag
06 Jul 12:53 am	81	58	46	NNW	5	10.00		CLR	1007.7	29.77	29.507			109 70	OK
05 Jul 11:53 pm	81	58	46	WNW	6	10.00		CLR	1007.4	29.76	29.497				OK
05 Jul 10:53 pm	83	62	49	NW	7	10.00		CLR	1007.4	29.76	29.497	108	83		OK
05 Jul 9:53 pm	87	67	51	WNW	8	10.00		CLR	1007.2	29.75	29.488				OK
05 Jul 8:53 pm	92	64	40	NNW	6	10.00		CLR	1006.6	29.74	29.478				OK
05 Jul 7:53 pm	99	64	32	W	7	10.00		CLR	1006.0	29.72	29.458				OK
05 Jul 6:53 pm	105	61	24	WNW	6	10.00		CLR	1005.8	29.71	29.448				OK
05 Jul 5:53 pm	107	58	20	WNW	6	10.00		CLR	1005.9	29.71	29.448				OK
05 Jul 4:53 pm	108	56	18	W	7	10.00		CLR	1006.0	29.72	29.458	109	93		OK
05 Jul 3:53 pm	107	55	18	W	7	10.00		CLR	1006.7	29.74	29.478				OK
05 Jul 2:53 pm	106	55	19	VRBL	3	10.00		CLR	1007.4	29.76	29.497				OK
05 Jul 12:53 pm	101	58	24	VRBL	5	10.00		CLR	1008.5	29.79	29.527				OK
05 Jul 11:53 am	98	61	30	WNW	6	10.00		CLR	1009.0	29.81	29.547				OK
05 Jul 10:53 am	93	64	39	SW	6	8.00		CLR	1009.3	29.82	29.557	94	71		OK
05 Jul 9:53 am	90	63	41	SSW	3	**4.00**	**HZ**	CLR	1009.5	29.82	29.557				OK
05 Jul 7:53 am	82	59	46	SE	6	**6.00**	**HZ**	CLR	1009.4	29.82	29.557				OK
05 Jul 6:53 am	75	58	55	CALM		**6.00**	**HZ**	CLR	1009.4	29.82	29.557				OK
05 Jul 5:53 am	72	57	59	E	5	8.00		CLR	1009.0	29.81	29.547				OK
05 Jul 4:53 am	72	57	59	CALM		9.00		CLR	1008.6	29.80	29.537	81	70		OK
05 Jul 3:53 am	73	59	61	CALM		7.00		CLR	1008.4	29.79	29.527				OK
05 Jul 2:53 am	74	60	62	CALM		**6.00**	**HZ**	CLR	1008.4	29.79	29.527				OK
05 Jul 1:53 am	77	59	54	E	3	**6.00**	**HZ**	CLR	1008.4	29.79	29.527				OK
05 Jul 12:53 am	75	60	60	CALM		10.00		CLR	1008.6	29.80	29.537			103 61	OK
04 Jul 11:53 pm	78	62	58	CALM		10.00		CLR	1008.7	29.80	29.537				OK
04 Jul 10:53 pm	81	62	53	CALM		10.00		CLR	1008.6	29.80	29.537	103	81		OK
04 Jul 9:53 pm	82	63	53	W	5	10.00		CLR	1008.4	29.79	29.527				OK
04 Jul 8:53 pm	84	62	48	W	5	10.00		CLR	1007.8	29.77	29.507				OK
04 Jul 7:53 pm	94	60	33	W	7	10.00		CLR	1007.5	29.76	29.497				OK
04 Jul 6:53 pm	100	57	24	WNW	7	10.00		CLR	1007.2	29.75	29.488				OK
04 Jul 5:53 pm	102	56	22	VRBL	6**G31**	10.00		CLR	1007.5	29.76	29.497				OK
04 Jul 4:53 pm	103	52	19	WNW	9	10.00		CLR	1008.0	29.78	29.517	103	89		OK
04 Jul 3:53 pm	102	51	18	WNW	10	10.00		CLR	1008.5	29.79	29.527				OK
04 Jul 2:53 pm	100	54	22	WNW	8	10.00		CLR	1009.4	29.82	29.557				OK
04 Jul 1:53 pm	97	55	25	NW	9	10.00		CLR	1010.1	29.84	29.577				OK
04 Jul 12:53 pm	95	55	26	W	8	10.00		CLR	1010.6	29.85	29.587				OK
04 Jul 11:53 am	92	54	28	VRBL	5	10.00		CLR	1011.1	29.87	29.607				OK
04 Jul 10:53 am	89	55	32	W	6	10.00		CLR	1011.4	29.88	29.617	89	61		OK
04 Jul 9:53 am	84	58	41	VRBL	3	10.00		CLR	1011.7	29.89	29.626				OK
04 Jul 8:53 am	80	55	42	CALM		10.00		CLR	1012.1	29.90	29.636				OK
04 Jul 7:53 am	74	56	53	CALM		10.00		CLR	1012.3	29.90	29.636				OK
04 Jul 6:53 am	68	56	65			10.00		CLR	1012.4	29.91	29.646				OK
04 Jul 5:53 am	62	55	78	CALM		10.00		CLR	1012.0	29.89	29.626				OK
04 Jul 4:53 am	65	56	73	CALM		10.00		CLR	1011.8	29.89	29.626	73	63		OK
04 Jul 3:53 am	64	55	73	CALM		10.00		CLR	1011.7	29.89	29.626				OK

Visalia, CA

Date/Time	T	DP	RH	WD	WS	VIS	Wx	CLOUDS	Pressure	Min	Max	Temp	Flag
05 Jul 7:15 am	75	64	69	CALM		8.00	CLR		29.82	29.512			OK
05 Jul 6:55 am	75	63	65	CALM		10.00	CLR		29.82	29.512			OK
05 Jul 6:35 am	72	63	73	CALM		8.00	CLR		29.82	29.512			OK
05 Jul 6:15 am	72	63	73	CALM		8.00	CLR		29.81	29.502			OK
05 Jul 5:55 am	72	63	73	CALM		8.00	CLR		29.81	29.502			OK
05 Jul 5:35 am	72	63	73	CALM		10.00	CLR		29.81	29.502			OK
05 Jul 5:15 am	72	63	73	CALM		10.00	CLR		29.81	29.502			OK
05 Jul 4:55 am	73	63	69	SE	5	10.00	CLR		29.80	29.492	81	72	OK
05 Jul 4:35 am	72	63	73	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 4:15 am	73	64	74	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 3:55 am	72	64	78	CALM		7.00	CLR		29.80	29.492			OK
05 Jul 3:35 am	73	64	74	CALM		9.00	CLR		29.79	29.482			OK
05 Jul 3:15 am	73	64	74	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 2:55 am	73	64	74	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 2:35 am	75	64	69	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 2:15 am	75	64	69	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 1:55 am	75	64	69	CALM		8.00	CLR		29.80	29.492			OK
05 Jul 1:35 am	75	64	69	ESE	3	8.00	CLR		29.80	29.492			OK
05 Jul 1:15 am	77	64	65	CALM		10.00	CLR		29.80	29.492			OK
05 Jul 12:55 am	75	64	69	CALM		10.00	CLR		29.81	29.502			OK
05 Jul 12:35 am	79	64	61	CALM		10.00	CLR		29.81	29.502			OK
05 Jul 12:15 am	79	64	61	CALM		10.00	CLR		29.81	29.502			OK
04 Jul 11:55 pm	79	64	61	CALM		7.00	CLR		29.81	29.502			OK
04 Jul 11:35 pm	79	64	61	CALM		**5.00**	CLR		29.81	29.502			OK
04 Jul 11:15 pm	81	64	58	E	3	**6.00**	CLR		29.81	29.502			OK
04 Jul 10:55 pm	79	66	65	ESE	3	10.00	CLR		29.81	29.502	100	79	OK
04 Jul 10:35 pm	81	66	62	CALM		10.00	CLR		29.81	29.502			OK
04 Jul 10:15 pm	82	66	58	CALM		10.00	CLR		29.81	29.502			OK
04 Jul 9:55 pm	82	66	58	CALM		10.00	CLR		29.81	29.502			OK
04 Jul 9:35 pm	84	66	55	CALM		10.00	CLR		29.80	29.492			OK
04 Jul 9:15 pm	86	64	49	CALM		10.00	CLR		29.79	29.482			OK
04 Jul 8:55 pm	88	63	43	WSW	3	10.00	CLR		29.78	29.472			OK
04 Jul 8:35 pm	90	63	41	WSW	3	10.00	CLR		29.78	29.472			OK
04 Jul 8:15 pm	90	63	41	W	5	10.00	CLR		29.77	29.462			OK
04 Jul 7:55 pm	93	63	36	W	6	10.00	CLR		29.76	29.453			OK
04 Jul 7:35 pm	95	63	35	W	5	10.00	CLR		29.76	29.453			OK
04 Jul 7:15 pm	97	63	33	W	6	10.00	CLR		29.76	29.453			OK
04 Jul 6:55 pm	97	65	35	W	7	10.00	CLR		29.76	29.453			OK
04 Jul 6:35 pm	99	65	33	W	7	10.00	CLR		29.75	29.443			OK
04 Jul 6:15 pm	100	61	28	WNW	8	10.00	CLR		29.75	29.443			OK
04 Jul 5:55 pm	100	61	28	WNW	8	10.00	CLR		29.75	29.443			OK
04 Jul 5:35 pm	100	61	28	W	9	10.00	CLR		29.76	29.453			OK
04 Jul 5:15 pm	100	63	29	WNW	7	10.00	CLR		29.76	29.453			OK
04 Jul 4:55 pm	100	61	28	NNW	8	10.00	CLR		29.77	29.462	100	84	100 63 O

FIREWORKS DISPLAY INFORMATION

Fireworks information obtained from the following websites is summarized below:

http://www.co.fresno.ca.us/4510/tourism/July4/1July4Index.htm

http://www.avhub.net/4thofJULYactivities.htm

Central and Southern San Joaquin Valley Major Fireworks Displays:

Western Kern County
Bakersfield, Bakersfield College, July 4, phone 661 326 3911
Lebec, Fort Tejon, July 4, phone 661 248 6692
Tehachapi, July 4, phone 661 822 2200
Arvin, July 4, phone 661 854 2127
Delano, Memorial Park, July 4, phone 661 725 2518

Tulare County
Exeter, July 4, phone 559 592 2919
Porterville, Jamison Stadium, July 4, phone 559 568 2556
Springville, July 4, phone 559 539 8225

Madera County
Madera, Madera County Fairgrounds
Bass Lake

Fresno County
Clovis
Coalinga
Fowler
Fresno
Kerman
Kingsburg
Orange Cove
Reedley
Sanger
Selma
Shaver Lake

Fresno County fireworks event details for 2007:

2007 INDEPENDENCE DAY ACTIVITIES SPARKLE IN FRESNO COUNTY

Across the region, Fresno County communities are hosting patriotic Independence Day Celebrations each with unique offerings. The festivities will begin on Saturday, June 23rd with a Star Spangled Review at Wild Water Adventure Park, followed with amazing Fireworks displays on the 3rd & 4th in eleven Fresno County communities, and wrapping up on July 7th with a Fireworks Display & Boat Parade in Shaver Lake.

Grizzlies Independence Day Fireworks Extravaganza

Enjoy a baseball game on America's birthday! Celebrate the USA with the best Fourth of July Extravaganza in the Valley as the Grizzlies host this annual fireworks display.

Date: Wednesday, July 4, 2007
Time: Baseball game begins at 6:05pm, fireworks follow
Location: Chukchansi Park, Downtown Fresno

16th Annual Star Spangled Revue

Enjoy the rides by day and then relax after dark for the biggest and best music, laser and fireworks show you have ever seen. Watch a fantastic LIVE music show, and then gaze at the sky aglow with spectacular fireworks and lasers choreographed to patriotic music!

Date: June 23, 24, 29 & 30; July 1, 2, 3 & 4, 2007
Time: Show Begins After Dark
Location: Wild Water Adventure Park, Clovis

Freedom Fest Fireworks

Don't miss the premier patriotic party in the Central Valley. Freedom Fest boasts one of the largest displays of pyrotechnics on the west coast. Also enjoy food and entertainment for all ages.

Date: July 4, 2007
Time: Gates open at 5:00pm, Entertainment begins at 6:00pm
Location: Buchanan High School, Clovis

July 4th Spectacular

This annual patriotic celebration includes live entertainment, food booths, and games for the kids, with fireworks completing the family fun!

Date: July 4th, 2007
Time: Gates open at 7:00pm
Location: Sanger High School Athletic Field, Sanger
Info: City of Sanger Parks & Recreation (559) 876-6300 x4

Fourth of July Celebration

Enjoy this family event featuring live entertainment, food booths, games and rides for all ages, and fireworks to celebrate the nation's birthday and honor the service of Veterans. Veterans may register to receive free admission and recognition at the event.

Date: July 4, 2007
Time: Gates open at 6pm; fireworks will begin at dark (approx 9pm)
Location: Fowler High School
Info: Fowler Parks & Recreation (559) 834-5486

Community Independence Day Celebration

Come out and enjoy the biggest fireworks display ever, with a children's carnival, food booths, live entertainment, honoring the nation's veterans and presentation of community spirit awards.

Date: July 3, 2007
Time: Gates open at 6:00pm
Location: Selma High School 's Staley Stadium (Thompson Ave, north of Floral)
Info: Selma Chamber of Commerce (559) 891-2235

Festivals of the American Spirit Fireworks Show

Celebrate the nation's independence and enjoy the charm of this rural city. Family fun, vendors, food, kids' activities, live entertainment, and fireworks!

Date: July 3, 2007

Time: Gates open at 6pm: Fireworks at 9pm

Location: Kerman High School Stadium

Info: Kerman Chamber of Commerce 559.846.6343

Independence Day Celebration

An annual special event celebrated with great music, delicious food, carnival rides and games, and fun for the whole family. The evening is topped off with beautiful colors filling the Kingsburg sky.

Date: July 3, 2007

Time: Gates open at 6pm

Location: Kingsburg High School - Athletic Bowl

Info: Kingsburg Chamber of Commerce (559) 897-1111

4th of July Fireworks Spectacular

This year marks Reedley's 56th annual 4th of July celebration. This old fashioned family event features music, food & beverage vendors, craft booths, and activities for all ages, all building up to the grand finale- fireworks.

Date: July 4, 2007

Time: **Gates open at 6:00pm, fireworks at dusk**

Location: Reedley High School

Info: Reedley Chamber of Commerce (559) 638-3548

Independence Day Celebration

Experience small town charm and enjoy a big city fireworks display. Bring lawn chairs & blankets to enjoy a spectacular fireworks display complete with food booths and music.

Date: July 3, 2007

Time: Food Booths begin at 5pm

Location: Victor Lopez Community Center

Info: Orange Cove Chamber of Commerce 559.626.5179

Independence Day Celebration

Enjoy live entertainment, hot dogs, snow cones, baked goods, glow in the dark accessories, raffles and an awesome display of fireworks!

Date: July 4, 2007

Time: Gates open at 6:30pm

Location: Coalinga (Sunset Street -area between Dawson & Bishop Elementary)

Info: Coalinga Chamber of Commerce (559) 935-2948

Independence Day Celebration & Boat Parade

The Boat Parade starts from both the Sierra and Shaver Lake Marinas. Boats, many decorated in a patriotic theme, tour the shore including a musical Party Boat to get the crowd involved in the celebration. Fireworks begin over the lake after the boats return to shore

Date: July 7, 2007

Time: Boat Parade begins at 6pm; fireworks after parade ends

Location: Shaver Lake

Info: Shaver Lake Chamber of Commerce (559) 841-3350