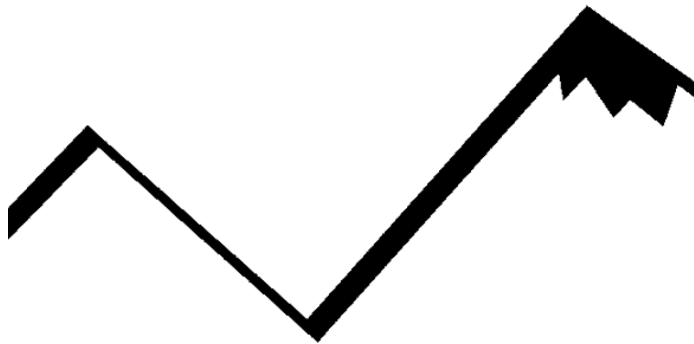
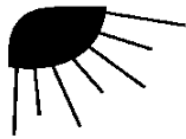


# Natural Event Documentation

Corcoran and Bakersfield, California  
October 25, 2006



San Joaquin Valley Unified  
Air Pollution Control District

April 23, 2007

**Prepared By**

Gary Arcemont, Air Quality Specialist/Meteorologist

**Reviewed By**

Scott Nester, Director of Planning  
Steve Shaw, Supervising Air Quality Specialist

*San Joaquin Valley Unified Air Pollution Control District  
1990 E. Gettysburg Avenue  
Fresno, California 93726*

*(559) 230-5800*

*[www.valleyair.org](http://www.valleyair.org)*

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## **1. SUMMARY**

PM10 exceedances recorded in the San Joaquin Valley on October 25, 2006 meet the criteria for natural events as defined by federal policies. Several factors contributed to the total PM10 concentrations. Monitoring stations in the Central San Joaquin Valley recorded gusty wind speeds to 45 mph during a time of year when the soils in the area were very dry and dust could be entrained into the atmosphere by high winds. This report demonstrates without the natural event, there would not have been an exceedance of the PM10 National Ambient Air Quality Standard on October 25, 2006.

A blowing dust event is comprised of entrainment of dust by high winds in the dust source area, and then deposition of dust in receptor areas with lower wind speeds. Once dust is suspended upwind of the monitoring stations, it can be carried downwind by winds that are below the dust entrainment wind speed threshold. The strongest winds and blowing dust was observed to north and west of Corcoran. The blowing dust was transported to the southeast where deposition occurred in Corcoran and Bakersfield and other parts of the Central and Southern San Joaquin Valley, where the wind speeds decreased, but continued to be much higher than normal.

The District investigated emission-generating activities during the episode, and found PM10 emissions for BACM controlled sources were approximately constant before, during and after the event. The District concludes that the PM10 exceedance would not have occurred without the wind-entrained dust event.

## **2. BACKGROUND**

The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Natural Events Action Plan (NEAP) for High Wind Events in the San Joaquin Valley Air Basin* in February 2006. The 1996 EPA memorandum, *Areas Affected by PM10 Natural Events*, describes the requirements for natural event data flagging as well as the requirements for a NEAP. The policy allows air quality data to be flagged so that it does not count toward an area's attainment status if it can be shown that there was a clear, causal relationship between the data and one of three categories of natural events: volcanic and seismic activity, unwanted wildland fires, and high wind events.

The purpose of this report is to demonstrate that there was a clear, causal relationship between the exceedance of the PM10 standard on October 25, 2006 in the San Joaquin Valley Air Basin and a high wind event, and demonstrate that without the high winds, PM10 would not have exceeded the standard. Although a combination of several factors contributed to the total PM10 concentrations, the District concludes that the exceedance would not have occurred in the absence of high winds.

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 October 25, 2006 exceedance will ensure that the data is not misinterpreted.



### **3. NEAP CRITERIA**

The NEAP requires the District, in consultation with California Air Resources Board (CARB) meteorologists, to declare a NEAP episode if the following criteria are met:

- 1. There has been no recent, measurable precipitation in the potential source region for fugitive dust**
- 2. The National Weather Service in Hanford and/or Sacramento has issued either a High Wind Warning, Wind Advisory, or Blowing Dust Advisory for certain parts of the San Joaquin Valley, and the predicted duration of high winds is sufficient to establish a NEAP episode**
- 3. The surface weather maps show a potential for high winds to occur in the near future.**
- 4. Strong winds exist higher in the atmosphere in conjunction with other weather phenomena that can drive the higher wind speeds closer to the surface**
- 5. The 24-hour average PM10 level is forecast to be above the National Ambient Air Quality Standard at one or more San Joaquin Valley sites.**

On October 25, 2006, all of the NEAP criteria were met:

Criteria 1. Precipitation had not been reported in the valley for ten days prior to the event. Precipitation was much below normal in the San Joaquin Valley for five months prior to the blowing dust event.

Criteria 2. The National Weather Service in Hanford issued a short-term forecast predicting areas of blowing dust would reduce visibility to 1 mile in some locations in the Central and Southern San Joaquin Valley.

Criteria 3 and Criteria 4. Strong winds were reported in the San Joaquin Valley Air Basin.

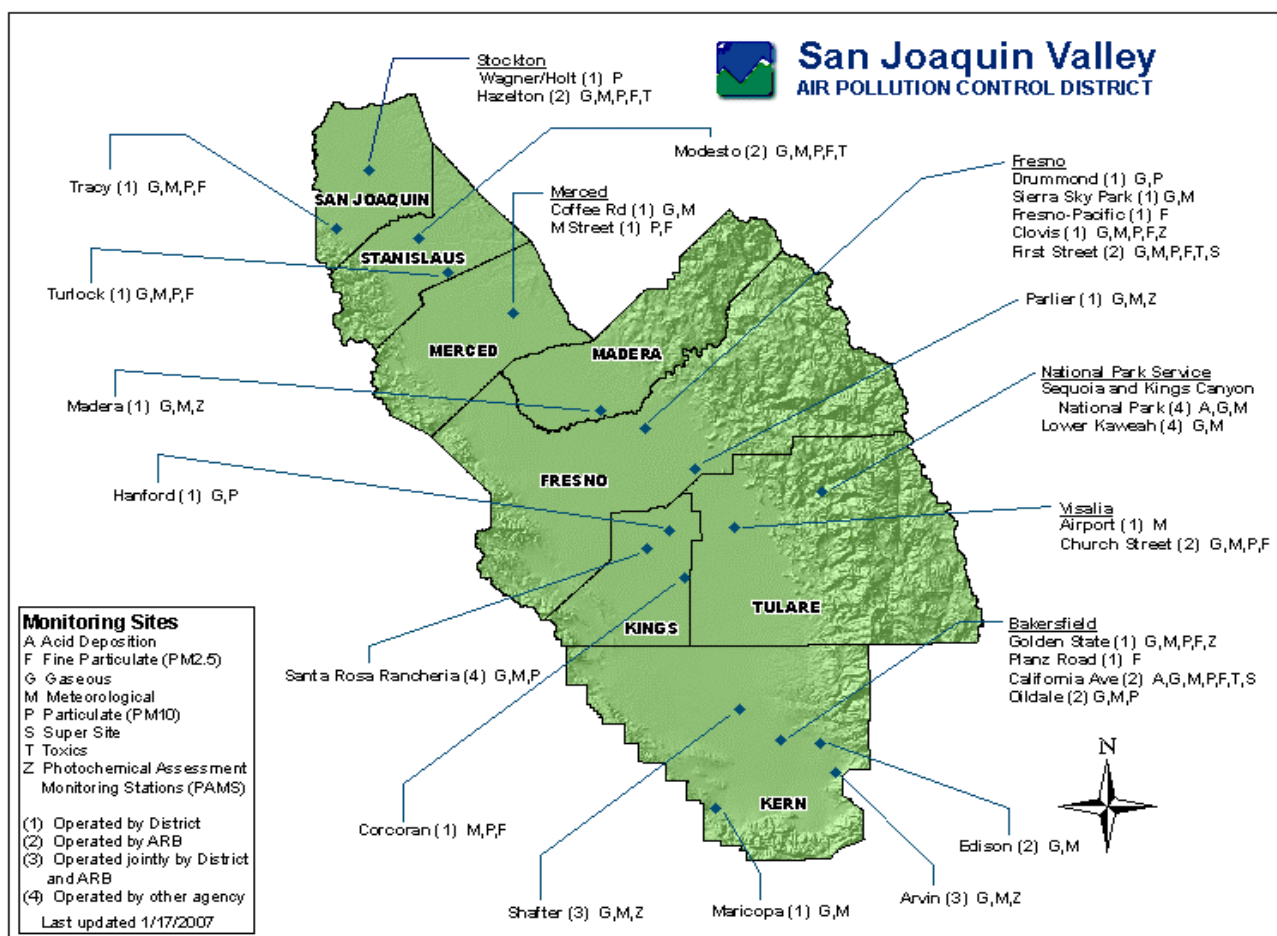
Criteria 5. The PM10 National Ambient Air Quality Standard (NAAQS) was exceeded at Bakersfield and Corcoran.

A press release was issued on October 25, 2006 with the goal of notifying the public of the natural event in order to protect public health. This press release is provided in the appendix.

#### 4. SUMMARY OF THE NATURAL EVENT

On October 25, 2006, PM10 samplers recorded concentrations in excess of the 24-hour NAAQS for PM10 in the San Joaquin Valley. The NAAQS is  $150 \mu\text{g}/\text{m}^3$  rounded to the nearest  $10 \mu\text{g}/\text{m}^3$ . A map of San Joaquin Valley monitoring stations is provided in Figure 1.

Figure 1. San Joaquin Valley PM10 monitors.



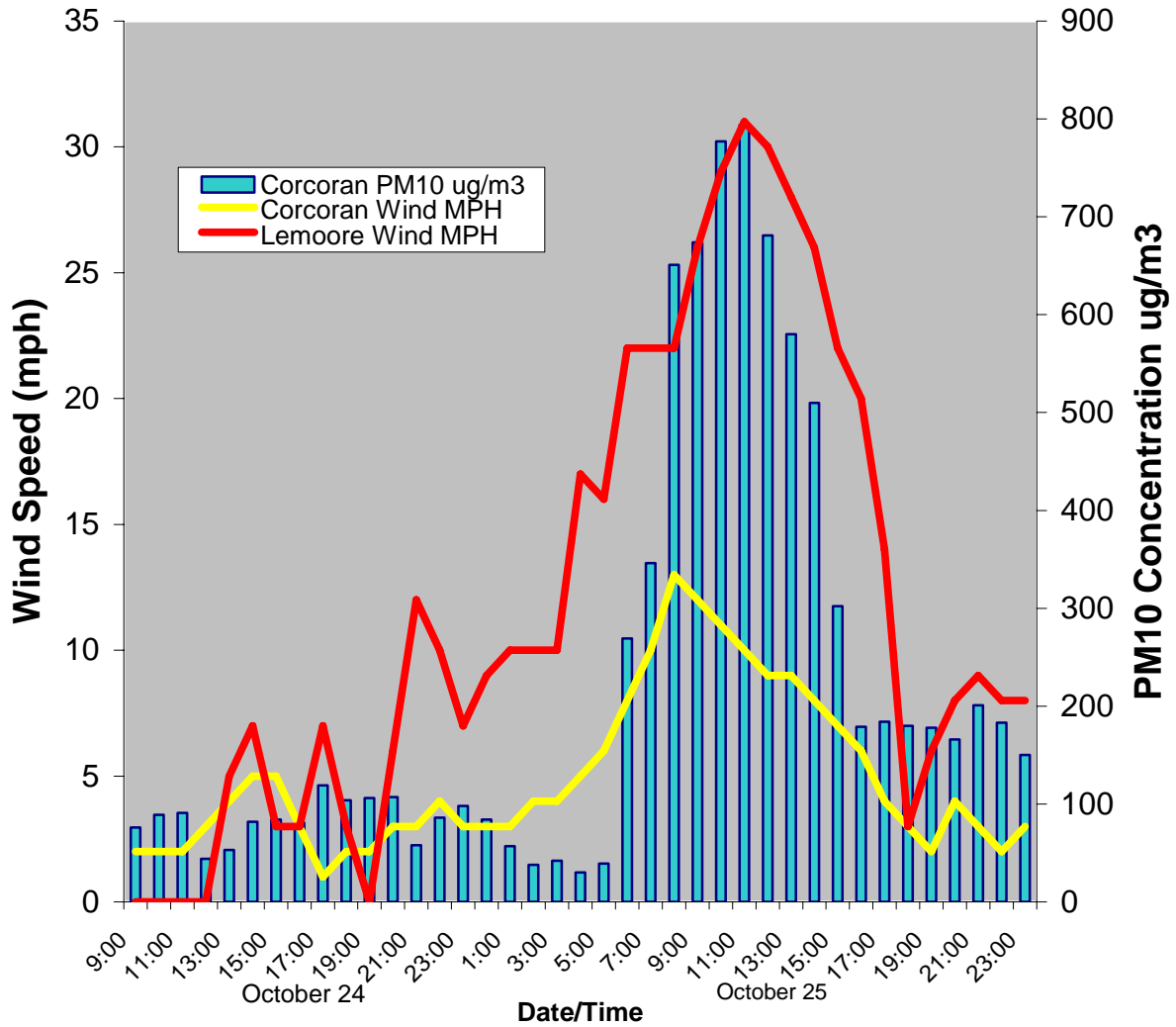
PM10 concentrations for continuous samplers are shown in Table 1. The PM10 concentration exceeded the NAAQS at Corcoran and Bakersfield-Golden State Highway on October 22. As shown in Table 1 and Figure 2, PM10 at Corcoran rapidly increased from  $39 \mu\text{g}/\text{m}^3$  at 5 AM to  $269 \mu\text{g}/\text{m}^3$  at 6 AM and continued rising to  $651 \mu\text{g}/\text{m}^3$  at 8 AM, coinciding with a significant increase in the wind speeds in the vicinity of Corcoran. A report for the San Joaquin Air Quality Study Agency (Bush, 2004)

concluded that winds at speeds at 8 m/s (17.6 mph) could be sufficient to entrain surface soil into the atmosphere.

**Table 1. October 25, 2006 PM10 and wind data for monitoring stations in the vicinity of Corcoran.**

Hour	Bakersfield PM10 ( $\mu\text{g}/\text{m}^3$ )	Corcoran PM10 ( $\mu\text{g}/\text{m}^3$ )	Kettleman Hills Wind Speed (mph) & Direction	Hanford Wind Speed (mph) & Direction	Lemoore Wind Speed (mph) & Direction	Corcoran Wind Speed (mph) Hr/Min Av
0	51	84	NW 12G16	NW 8	NW 9	3
1	59	57	NW 10G15	NNW 3	WNW 10	3
2	53	38	NW 12G15	NNW 6	NNW 10	4
3	38	42	NW 14G20	NW 13	NNW 10	4
4	44	30	NW 16G23	NNW 9	NW 17	5 M8
5	80	39	NW 16G21	NW 14	NW 16	6 M8
6	97	269	NNW 12G22	NW 13	NW 22	8 M11
7	89	346	NNW 11G21	NW 17G23	NNW 22G30	10 M14
8	88	651	NW 20G28	NNW 15	NNW 22G 32	13 M18
9	123	674	NNW 15G27	NW 17	NW 26G36	12 M17
10	148	777	NNW 19G32	NNW 18G30	NNW 29G39	11 M13
11	177	794	NNW 25G35	NNW 20G28	NW 31G37	10 M13
12	195	681	NNW 29G43	NNW 17G22	NW 30G40	9 M12
13	222	580	NNW 24G45	NNW 12G21	NNW 28G38	9 M12
14	415	510	N 25G34	N 12	NNW 26G35	8 M11
15	406	302	N 21G35	NW 9	NNW 22G31	7 M10
16	393	179	N 22G33	NW 12G18	NW 20G26	6 M9
17	416	184	N 15G28	N 8G16	NNW 14	4
18	403	180	N 9G22	NNW 8	N 3	3
19	382	178	N 10G14	NW 6	N 6	2
20	348	166	NW 12G15	WNW 5	NNW 8	4
21	143	201	NW 12G15	CALM	WNW 9	3
22	145	183	NW 11G16	W 3	NW 8	2
23	112	150	NW 10G15	CALM	WNW 8	3
<b>Avg.</b>	<b>193</b>	<b>304</b>				

Hour 0 is Midnight to 1 AM, Pacific Standard Time - For Kettleman Hills, Hanford, Lemoore: G = Hourly peak gust, Sustained wind is a 10 minute average at beginning of hour - For Corcoran, wind speed is an hourly average. M = Peak minute average for that hour



Corcoran wind speed is an hourly average. Lemoore wind speed is a 10 minute average at the beginning of the hour. 10 minute averaged wind speed may be higher than an hourly averaged wind speed at the same location.

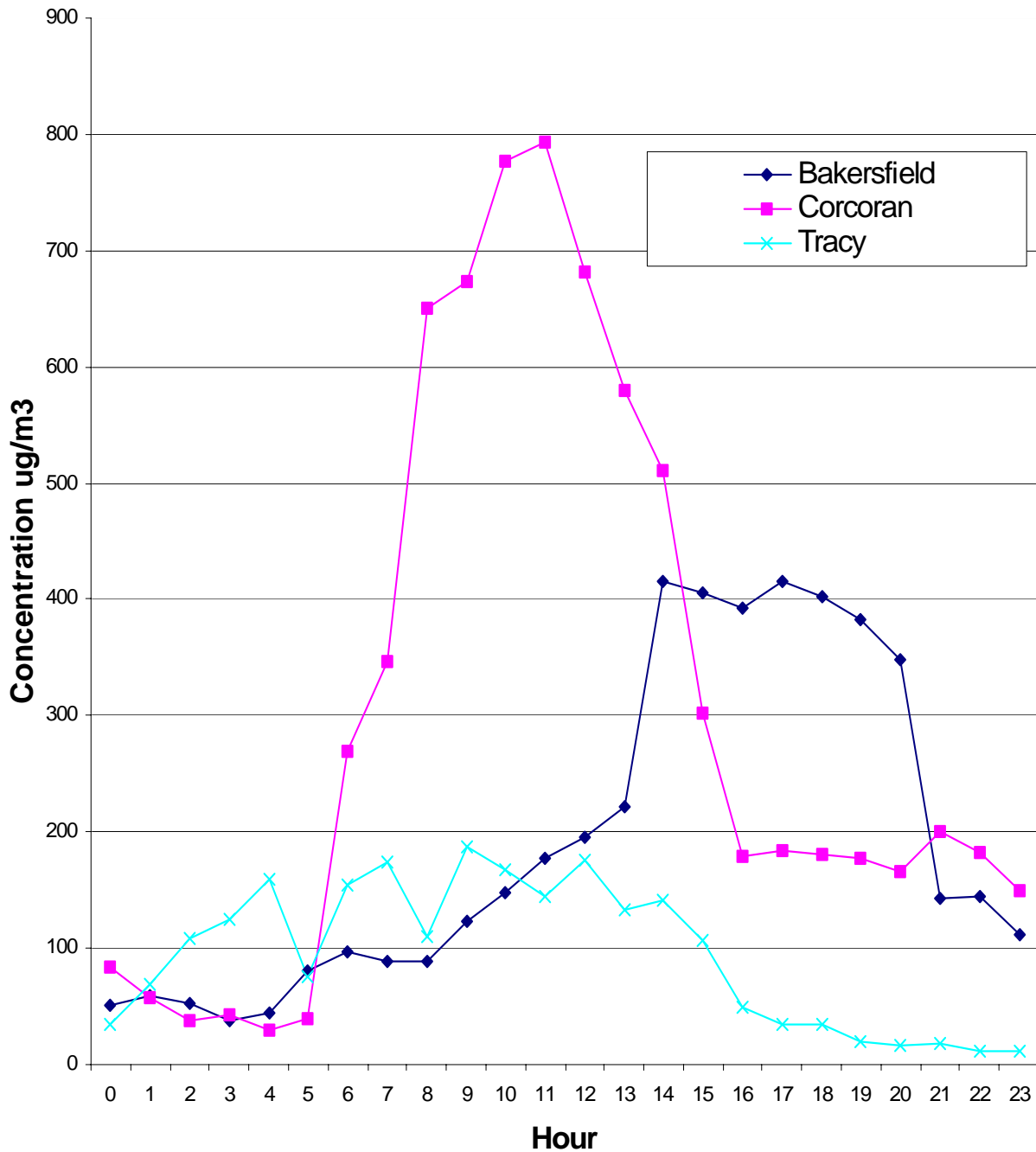
**Figure 2. Time series plot of Corcoran and Lemoore wind speed and Corcoran PM10 for October 24 and 25, 2006.**

Wind monitoring stations in the vicinity of Corcoran reported strong gusty winds from the northwest on October 25, 2006. A peak gust of 30 mph was reported at Hanford at 10 AM and a peak gust of 40 mph was reported at Lemoore at noon and 45 mph gust was reported at Kettleman Hills at 1 PM. Figure 3 is a map showing that these stations are

in the vicinity of Corcoran. Lemoore reported wind gusts of 30 mph or greater from 7 AM to 3 PM on October 25, 2006. Kettleman Hills reported wind gusts of 20 mph or greater from 3 AM to 6 PM. PM10 concentrations at Corcoran remained above 500  $\mu\text{g}/\text{m}^3$  for 7 hours (from hour 8 through hour 14).



Figure 3. Map of California, showing San Joaquin Valley Air Basin boundary in blue.



**Figure 4. Plot of PM10 on October 25, 2006**

As shown in Figure 4, the dust plume arrived later at Bakersfield and at a lower concentration, and remained above 300  $\mu\text{g}/\text{m}^3$  for 7 hours (from hour 14 through hour 20). PM10 dropped below 200  $\mu\text{g}/\text{m}^3$  by hour 16 at Corcoran and by hour 21 at Bakersfield. Figure 4 also demonstrates that the duration of the dust event was the same in Corcoran and Bakersfield.

PM10 remained in the 100 to 250  $\mu\text{g}/\text{m}^3$  range into the morning hours of October 26, 2006, as shown in Table 2, indicating that PM10 remained suspended after the winds decreased.

**Table 2. PM10 hourly averages for October 26, 2006. Preliminary data in  $\mu\text{g}/\text{m}^3$**

Hour	Bakersfield	Corcoran
0	154	157
1	146	143
2	145	146
3	127	147
4	126	161
5	118	175
6	179	194
7	216	232
8	217	115
9	196	66
10	187	53
11	136	92
12	98	92
13	82	128
14	79	133
15	59	115
16	72	126
17	128	152
18	121	151
19	50	145
20	72	161
21	102	147
22	97	124
23	93	130
<b>Avg.</b>	<b>125</b>	<b>137</b>

Hour 0 is Midnight to 1 AM, Pacific Standard Time

The District collects hourly PM10 concentrations using two types of PM10 monitors, Tapered Element Oscillating Microbalance (TEOM) type monitors and Beta Attenuation Mass (BAM) type monitors. EPA certifies TEOM type monitors to be equivalent to FRM monitors (EQPM-1090-079). EPA does not consider BAM monitors to be equivalent to FRM monitors. BAMs are used for forecasting purposes, but are not used for attainment determinations. Data recorded by continuous analyzers is presented Table 3, which



shows the increase in daily averaged PM10 data on October 25, 2006 due to the blowing dust event. PM10 concentrations remained high on October 26. Much lower PM10 concentrations are evident before the blowing dust event (October 20 to 24, 2006). Filter based measurements for October 20 and 26, 2006 are presented in Table 4. Filter based measurements were made every six days in October. The District will submit particulate data into the CARB database by the required deadline. The Santa Rosa Rancheria Tribal EPA operates the Santa Rosa Rancheria monitor. The October 26, 2006 sample at was invalidated by the Santa Rosa Rancheria Tribal EPA, due to construction dust emissions produced near the monitor.

**Table 3. PM10 daily averages in  $\mu\text{g}/\text{m}^3$  recorded by continuous analyzers.**

Station	Type	Oct 20	Oct 21	Oct 22	Oct 23	Oct 24	Oct 25	Oct 26
Tracy	TEOM	42	49	35	48	58	94	59
Corcoran	TEOM	72	74	68	79	85	304	137
Fresno - First	BAM	50	53	48	54	63	112	116
Bakersfield - Golden State	TEOM	59	43	32	63	63	193	125

**Table 4. PM10 daily averages in  $\mu\text{g}/\text{m}^3$  recorded by filter samplers (Federal Reference Method).**

Station	Oct 20	Oct 26
Stockton - Wagner Holt.	44	69
Stockton -Hazelton	74	82
Modesto	60	73
Turlock	70	88
Merced	52	94
Fresno- Drummond	64	59
Fresno- First St.	44	99
Clovis	45	104
Corcoran	83	140
Hanford	Malfunction	111
Santa Rosa Rancheria	112	157 Invalid - Construction
Visalia	70	132
Oildale	82	126
Bakersfield - Golden State Hwy.	67	116
Bakersfield -California Ave.	63	138



## **5. METEOROLOGICAL DATA**

The following meteorological information is presented to demonstrate that the NEAP meteorological flagging criteria were met.

### **Criteria 1 - No recent, measurable precipitation in the potential source region for fugitive dust**

Precipitation and temperature data is provided to demonstrate that the period preceding the blowing dust event was much drier and hotter than normal. Moisture content of soils is a very significant factor in a blowing dust event. Soils that have lower than normal moisture content during the driest time of the year would be more easily entrained by strong winds. The above normal temperatures dried soils to a greater degree than normal and below normal precipitation contributed to drier than normal soils. Soil and crop maps are provided for reference in the appendix.

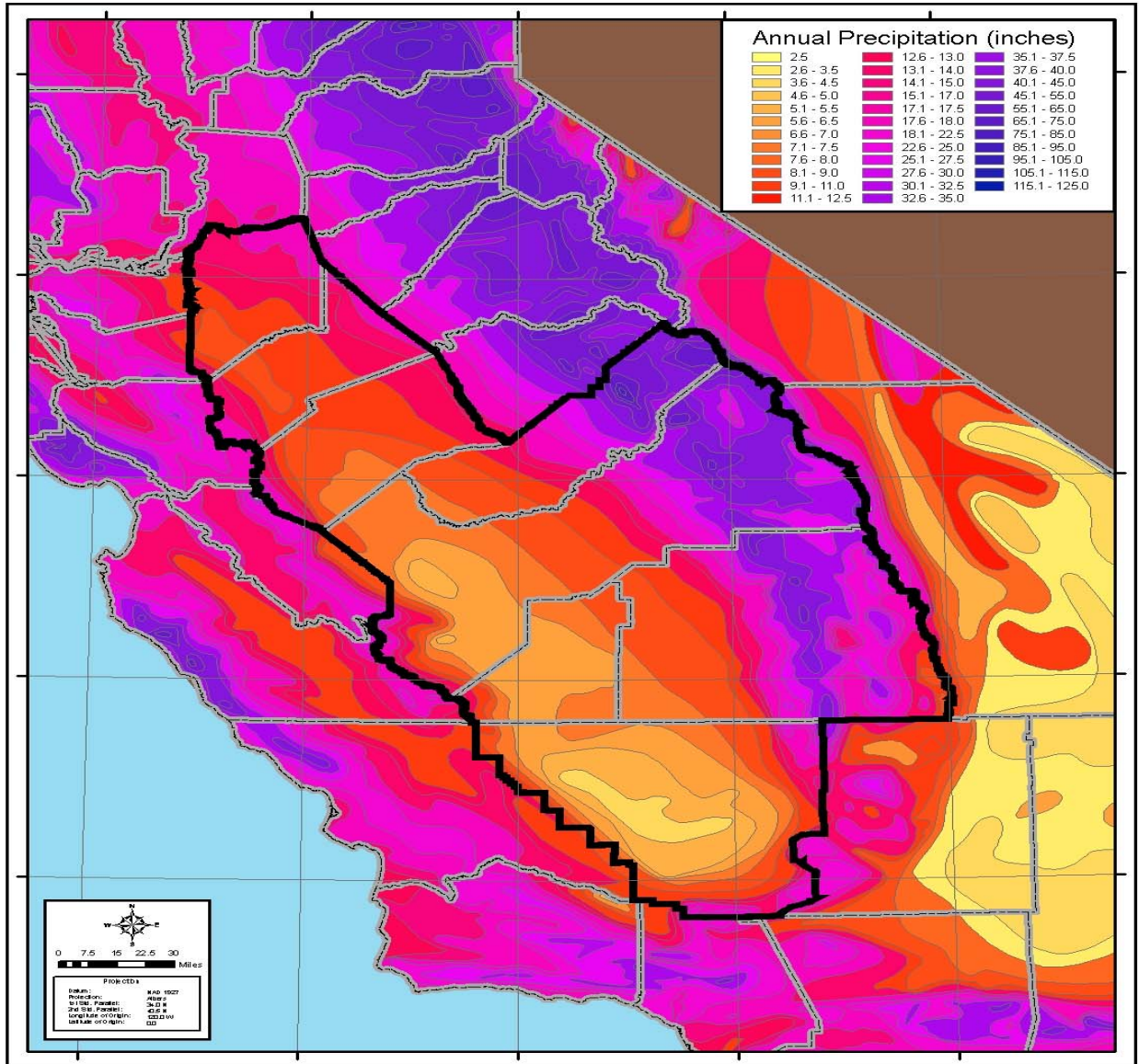
#### ***Precipitation***

There had been 11 consecutive days without measurable precipitation before the October 25, 2006 event. As shown in Table 5, precipitation was much below normal in

**Table 5. Days with precipitation recorded at Hanford, Bakersfield and Fresno for five months prior to October 25, 2006 (precipitation in inches).**

<b>Date</b>	<b>Hanford</b>	<b>Bakersfield</b>	<b>Fresno</b>
October 14, 2006	0.01	0	0
October 13, 2006	0.01	0.18	Trace
October 5, 2006	0.03	0	0.08
October 2, 2006	0.02	0.10	0
October 1, 2006	0.02	0.01	Trace
July 29, 2006	Trace	0	0
July 22, 2006	0	Trace	0
July 20, 2006	0	Trace	0
July 18, 2006	0	0	Trace
<b>Total precipitation May 25 to Oct 25, 2006</b>	<b>0.09</b>	<b>0.29</b>	<b>0.08</b>
<b>% of normal precipitation, June - October, 2006</b>	<b>15%</b>	<b>54%</b>	<b>9%</b>

the San Joaquin Valley for five months prior to the blowing dust event (9 to 54 percent of normal for June to October). Because the Southern San Joaquin Valley reported much below normal precipitation before the dust event, the soils were dry enough to become entrained into the atmosphere during the high winds. Figure 5 is a map of



**Figure 5. Central California annual precipitation in inches. The San Joaquin Valley Air Basin is outlined in black.**

annual precipitation for the San Joaquin Valley Air Basin. The map demonstrates that the west side of the Central and Southern San Joaquin Valley has the lowest annual precipitation of any area west of the Owens Valley, Mojave Desert and Antelope Valley. Since the west side of the valley has the lowest annual precipitation in the San Joaquin Valley, and the undisturbed soils, on the average, are drier than other parts of the valley. The 'west side of the valley' is well known locally as a source location of blowing dust events.

**Record summer heat**

Record heat dried the soils. The spring and summer of 2006 was extremely hot. Table 6 indicates that mean temperatures in Fresno and Bakersfield were above normal in every month from May 2006 to September 2006. Table 7 indicates that June through September is the hottest time of year with maximum temperatures above 90 degrees F. In the last half of July, record heat was recorded, which resulted in a large number of heat related deaths in the San Joaquin Valley. The National Weather Service monitoring stations at Hanford, Bakersfield and Fresno reported 14 days in a row with temperatures over 100 degrees F. Fresno reported five days in a row of 112 F or greater during the heat wave at the end of July. These data indicate that the hottest and driest time of year preceded the October 25 wind event, and that it was excessively hot in the spring and summer 2006.

**Table 6. Departure from average monthly temperature (degrees F).**

Month	Fresno	Bakersfield
May 2006	+ 3.1	+ 2.2
June 2006	+ 4.6	+ 3.5
July 2006	+ 6.4	+ 4.8
August 2006	+ 0.2	+ 0.3
September 2006	+ 1.2	+ 0.3

**Table 7. Average monthly maximum temperature (degrees F).**

Month	Fresno	Bakersfield
May 2006	83	84
June 2006	92	92
July 2006	98	99
August 2006	96	97
September 2006	91	91

Criteria 2 - The National Weather Service in Hanford has issued High Wind Warning, or Blowing Dust Advisory for parts of the San Joaquin Valley

The National Weather Service in Hanford, CA issued a short-term forecast at 9:13 AM on October 25, 2006 predicting blowing dust in the Central and Southern San Joaquin Valley (see Figure 6).

**Figure 6. Forecast issued by the National Weather Service in Hanford, CA on October 25, 2006.**

SHORT TERM FORECAST  
NATIONAL WEATHER SERVICE HANFORD CA  
913 AM PDT WED OCT 25 2006

CAZ089>092-251800-  
WEST CENTRAL SAN JOAQUIN VALLEY-EAST CENTRAL SAN JOAQUIN  
VALLEY-SOUTHWESTERN SAN JOAQUIN VALLEY-SOUTHEASTERN SAN  
JOAQUIN VALLEY-  
913 AM PDT WED OCT 25 2006

.NOW...NORTHWEST WINDS 10 TO 20 MPH WITH GUSTS TO 35 MPH MAINLY  
ON THE WEST SIDE OF THE VALLEY WILL CONTINUE THROUGH 1100 AM.  
AREAS OF BLOWING DUST WILL REDUCE VISIBILITY TO 1 MILE IN SOME  
LOCATIONS. MOTORISTS SHOULD USE CAUTION AND REDUCE SPEED  
WHEN ENCOUNTERING AREAS OF BLOWING DUST.

The National Weather Service and the San Joaquin Valley Unified Air Pollution Control District received reports of blowing dust in Avenal, Harris Ranch and Corcoran on October 25, 2006. Figure 7 is a map showing the location of Avenal, Harris Ranch and the Corcoran air monitoring station.





Figure 7. Map of Central California, showing Corcoran, Avenal and Harris Ranch.

**Criteria 3 and 4 - Strong winds**

As shown in Tables 8, 9, 10 and 11, strong gusty winds occurred in many parts of Central California during the October 25, 2006 event. In addition, the high winds persisted for many hours. The high wind event resulted in entrainment of dust followed by deposition of dust as the plume moved southeast through the San Joaquin Valley, from the West Central San Joaquin Valley to the Southern San Joaquin Valley.

During the blowing dust event, Lemoore reported sustained NW winds to 30 mph with gusts to 40 mph. Kettleman Hills, located on the west side of the San Joaquin Valley, reported gusts of 20 mph or greater from 3 AM to 6 PM on October 25, 2006.

**Table 8. Peak wind speeds for October 25, 2006, recorded by National Weather Service stations.**

Monitoring Station	Peak Gust (mph)	Peak Sustained Wind (mph)
Fairfield/Travis AFB	51	37
Sacramento	41	30
Stockton	26	21
Modesto	29	23
Merced	36	26
Madera	25	21
Fresno		14
Hanford	30	24
Lemoore	40	31
Visalia		13
Porterville		8
Bakersfield		12

(ASOS/AWOS: Gust is peak 3 second average, Sustained is 10 minute average)

**Table 9. Peak wind data for October 25, 2006, from Remote Automatic Weather Stations (RAWS).**

Monitoring Station	Peak Gust (mph)	Peak Sustained Wind (mph)
San Luis NWR	35	20
Santa Rita	30	17
Los Banos	29	20
Kettleman Hills	45	29
Bear Peak	35	27

(RAWS: Gust is hourly peak, Sustained is a 10 minute average)

**Table 10. Maximum hourly averaged wind data for October 25, 2006.**

Monitoring Station	Maximum Hourly Averaged Wind Speed (mph) on October 25, 2006	Maximum Minute Averaged Wind Speed (mph) on October 25, 2006
Tracy	19	23
Stockton	10	NA
Modesto	10	NA
Turlock	15	20
Merced	10	15
Madera	14	19
Fresno - First St.	9	NA
Clovis	11	15
Parlier	11	14
Corcoran	13	18
Maricopa	9	16
Bakersfield - Golden State Highway	8	11

Hourly averaged wind speed is typically much lower than peak gust

Data source: District and CARB

NA - Not Available

**Table 11. Hourly averaged wind data for October 25, 2006, from California Irrigation Management Information System (CIMIS) monitors in the Corcoran area.**

Monitoring Station	Location	Peak Hourly Averaged Wind Speed (mph)
Five Points	NW of Corcoran	24.2
Five Points SW	NW of Corcoran	16.8
Stratford	WNW of Corcoran	22.4
Kettleman	WSW of Corcoran	19.6
Alpaugh	SE of Corcoran, Between Corcoran and Bakersfield	13.5

Hourly averaged data is typically much lower than peak gust. Sensor height is 2m above ground level (AGL). Wind speed measured at 2 meters would typically be lower than wind speed measured at 10 meters at the same location.

Long-term wind monitoring data from the Department of Water Resources measured on the southwest side of the San Joaquin Valley indicates that hourly averaged winds above 13 mph hour occur 3.7 % of the time in Taft and winds above 16 mph occur 1.6% of the time in Wasco and 3.3 % of the time in Coalinga. These statistics indicate that windy conditions are rare in the southwestern part of the San Joaquin Valley, but do occur at times. Department of Water Resources extreme annual wind statistics indicates that the mean annual peak gust for Lemoore is 42 mph. For this event, the peak gust was 40 mph at Lemoore.

Wind monitoring sampling parameters

Wind monitoring sampling parameters vary with sensor height and sampling and averaging interval. To make a meaningful comparison of wind speed between locations, the wind monitoring should have consistent sampling height and averaging interval. Unfortunately, wind sensor heights and averaging periods vary with network and station, as presented in Table 12. Wind measurements for air quality monitoring are typically made at 10 meters above ground level.

Monitoring Network	Sensor Height (m)	'Sustained Wind' Definition	'Gust' Definition
District and CARB	10	Hourly or Minute Average.	Gust Not Reported
National Weather Service AWOS/ASOS	9 to 10	10-Minute Average.	3 Second Average
RAWS	6	10-Minute Average	Instantaneous Peak
CIMIS	2	Hourly Average	Gust Not Reported

**Table 12. Wind monitoring network sampling parameters.**

*Variation in wind speed averaging interval*

A comparison of shorter time scale and longer time scale wind measurements is provided in Table 13. The ratio of shorter time scale and longer time scale peak wind measurements was calculated using October 25, 2006 data presented in Tables 8, 9 and 10. This comparison indicates that maximum minute averaged wind speed collected on October 25, 2006 by the District and CARB was 40 percent higher than maximum hourly averaged wind speeds. Maximum three second averaged wind speeds were 30 percent higher than maximum 10 minute averaged National Weather Service data. Instantaneous peak wind speeds at RAWS stations were 56 percent higher than ten minute averaged wind speeds.



Monitoring Network	Ratio	Data Set	High	Low	Average
District and CARB	<u>Minute Average</u> Hourly Average	Table 10	1.78	1.21	1.40
National Weather Service AWOS/ASOS	<u>3-Second Average</u> 10-Minute Average	Table 8	1.39	1.19	1.30
RAWS	<u>Instantaneous Peak</u> 10-Minute Average	Table 9	1.77	1.30	1.56

**Table 13. Ratio of shorter time scale and longer time scale wind measurements**

As presented in these data comparisons, caution should be exercised when comparing wind statistics from different stations because hourly averaged wind speeds can be significantly lower than the peak gust. For example, the peak hourly averaged wind speed in Corcoran during hour 8 on October 25 was 13 mph and the peak minute averaged wind speed was 18 mph for that hour. Instantaneous peak wind gusts were likely much higher than the minute and hourly averaged wind speeds.

*Variation in wind speed with height*

Over a flat surface with no obstructions and a well-mixed atmosphere, wind speed typically varies logarithmically with height above ground (Department of Water Resources, 1978). This relationship can be modeled using the equation:

$$V_1 / V_2 = (Z_1 / Z_2)^p$$

where:

V = wind speed,

Z = height above ground,

p is approximately 0.143 for flat terrain and 0.4 for rough terrain,

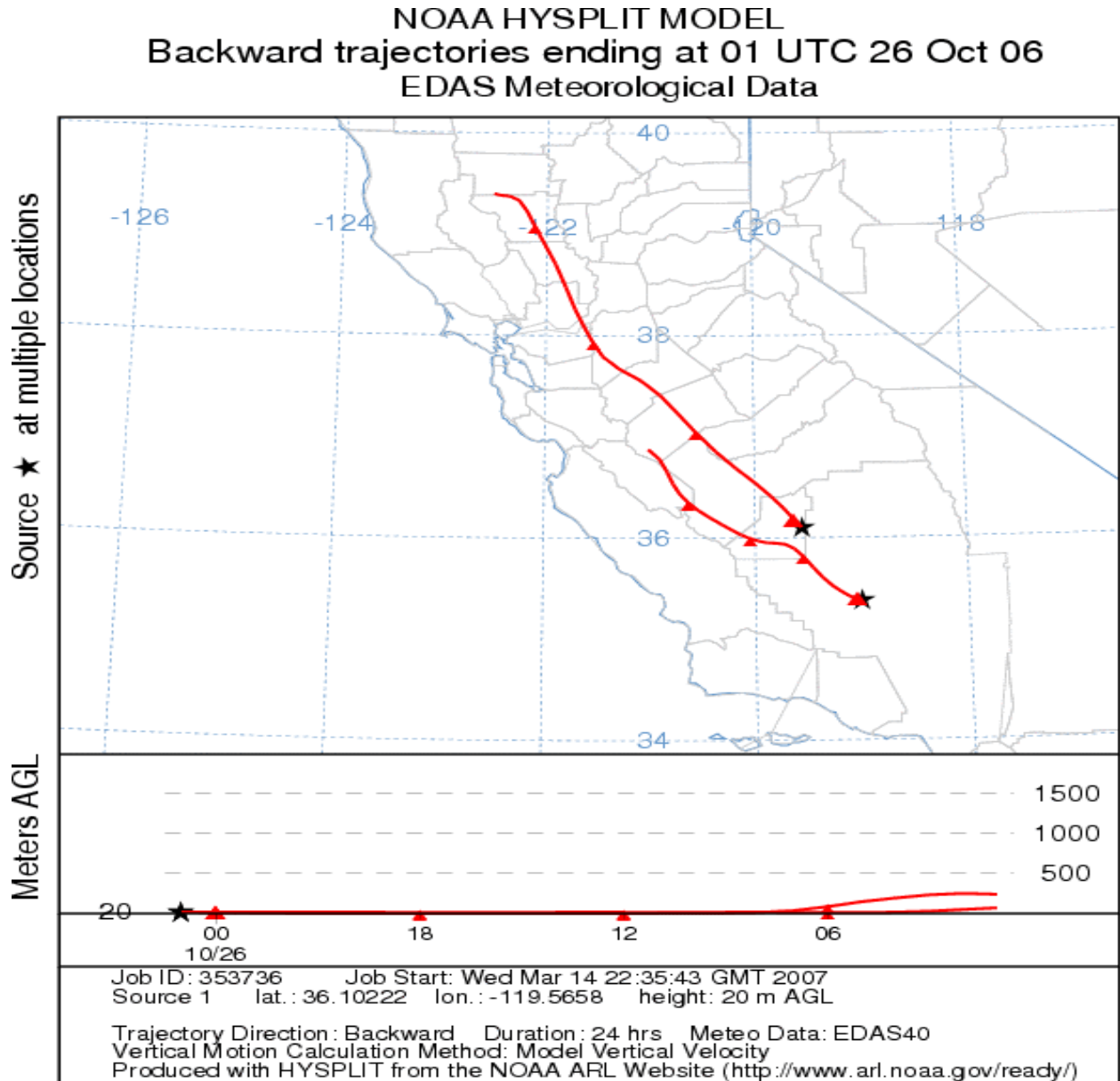
and the subscripts 1 and 2 denote two different sampling heights above ground level (AGL). It should be noted that there are some weather conditions where this equation is not representative of the vertical wind structure.

Using this equation, a wind speed of 13.5 mph at 2 meters AGL in flat terrain would be 16.9 mph at 10 meters AGL at the same location. This equation indicates wind speeds measured at 2 meters is typically much lower than wind speed measured at 10 meters at the same location

For example, the Alpaugh CIMIS station reported a peak hourly averaged wind speed of 13.5 mph at 2 meters AGL (see Table 11). Using the equation provided for flat terrain, the hourly averaged wind speed at 10 meters AGL would be 16.9 mph. If the minute averaged data was 40 % higher than hourly averaged data, as shown in Table 13, the peak minute average would be 23.7 mph. The instantaneous peak gust at 10 meters AGL at Alpaugh was likely higher than the minute average of 23.7 mph and higher than the 18 mph dust entrainment threshold.

**6. SOURCE-RECEPTOR RELATIONSHIP**

Figure 8 is a backward trajectory analysis using the NOAA Hysplit Numerical Model to examine the air parcel trajectory during the event.



**Figure 8. Backward trajectory for 5 PM PST on October 25, 2006, showing air parcel trajectories to the Corcoran and Bakersfield receptors during the blowing dust event.**

The blowing dust originated in the vicinity of Kings County or western Fresno County, based on observations of blowing dust at Avenal, Harris Ranch and Corcoran (see Figure 7), and strong gusty winds reported at Kettleman Hills, Hanford and Lemoore. The model trajectory takes the air parcel over Western Fresno County and Kings County, where the blowing dust was reported, to the Corcoran and Bakersfield particulate monitors. Winds were from the northwest during the blowing dust event, so the dust plume first influenced the Corcoran monitor and then traveled southeastward where it influenced the Bakersfield monitor several hours later, as shown in Figure 4. With time, the plume spread throughout the Central and Southern San Joaquin Valley, as evidenced by high PM10 at the Fresno-First Street monitor on October 25 and high PM10 reported by the continuous analyzers and the filter based measurements on October 26. The Northern San Joaquin Valley does not appear to have been as influenced by the dust plume as the Central and Southern regions.

The PM 2.5 to PM10 ratio was very small during the high PM10 event (the ratio was approximately 0.02 to 0.10), which is characteristic of a blowing dust event and indicates mostly coarse particulate was present.

## **7. EMISSIONS SOURCES AND ACTIVITY DATA**

The District has best available control measures (BACM) in place as described in the *2006 PM10 Plan*, the NEAP, and previous plans. Most notable among the District's dust controls are Regulation VIII (the fugitive dust rules, which were last amended in August 2004), and Conservation Management Practices (CMPs, District Rule 4550, adopted May 2004 and re-adopted August 2004), through which the District has CMPs on over three million acres of agricultural land in the San Joaquin Valley Air Basin.

On October 25, the Silver Prescribed Fire in Sequoia Kings Canyon National Park burned six acres producing 1.05 tons of PM10 and 0.94 tons of PM 2.5. This fire was about 50 miles west of Corcoran and about 75 miles north-northeast of Bakersfield, so this smoke would not have influenced Corcoran and Bakersfield.

Agricultural burning was permitted in the San Joaquin Valley on October 25, 2006 as part of the District's Smoke Management Allocation System (Rule 4103); however burning was not allowed in the Corcoran or Bakersfield burn zones. Smoke from agricultural burns and prescribed fire does not appear to have added any significant amount of PM10 to the samples recorded at Corcoran and Bakersfield.

District inspectors performed facility inspections on October 25. District staff did not observe any unusual emissions other than the blowing dust event on October 25. A summary of inspections is provided in the appendix. Based on reports from District field staff and from industry and agricultural operations, the District estimates that the anthropogenic emissions were approximately constant before, during and after the event, indicating the significant increase in PM10 concentrations was caused by the wind entrained dust. A summary of the dust and smoke related complaints in the Central and Southern San Joaquin Valley Air Basin is provided in Table 14.

<b>Location</b>	<b>Time Reported</b>	<b>Nature Of Complaint</b>
Kettleman City	8:49 AM	Fire Marshall reports burning grass.
Tulare	10:17 AM	Burn at farm contains plastics.
Bakersfield	1:30 PM	Dust caused by trucks at construction site.
Kerman	4:02 PM	Burn in front yard.
Panoche Road and I-5	10:50 PM	Burning without a permit. A Notice of Violation was issued.

**Table 14. Summary of dust-related complaints for October 25, 2006.**

## **8. REFERENCES**

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Analysis of Field Program Measurements, Final Report Contract 2002-06PM  
Technical & Business Systems, Inc., November 9, 2004  
<http://www.arb.ca.gov/airways/CRPAQS/DA/Final/TBFinalOverview.pdf>

Historical meteorological data, Mesowest, <http://www.met.utah.edu/mesowest/> ,

National Climatic Data Center, <http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms> , *Record Events*

## **9. APPENDIX**

### **9.1 Press Release and News Articles**

#### **PRESS RELEASE Issued late morning on October 25, 2006**

## **High winds prompt health warning**

### **Air pollution levels climbing; caution urged throughout the San Joaquin Valley**

Strong winds in many parts of the San Joaquin Valley have prompted local air-pollution officials to issue a health cautionary statement effective through 10 a.m. Thursday.

The winds are kicking up particulate matter ten microns and smaller, or PM10, which could pose a threat to public health.

“Depending on where you are and what the local conditions are like, the airborne dust and dirt could be at concentrations that are unhealthy,” said Gary Arcemont, a meteorologist for the Air District.

Air District employees in the field today have noted blowing dust in several parts of the Valley, and so residents throughout the Valley are urged to use caution.

Exposure to particle pollution can cause serious health problems, aggravate lung disease, cause asthma attacks and acute bronchitis, and increase risk of respiratory infections. In people with heart disease, short-term exposure to particle pollution has been linked to heart attacks and arrhythmias, according to the U.S. Environmental Protection Agency.

People with heart or lung diseases should follow their doctors’ advice for dealing with episodes of unhealthy air quality. Additionally, older adults and children should avoid prolonged exposure, strenuous activities or heavy exertion. Everyone else should reduce prolonged exposure, strenuous activities or heavy exertion.

On Feb. 16, 2006, the Valley Air District’s governing board approved a Natural Events Action Plan (NEAP) that outlines a protocol to inform the public when unusual natural events occur. The purpose of the plan is to identify and minimize public exposure to these unusual events. The full text of the NEAP is available online at [http://www.valleyair.org/Air\\_Quality\\_Plans/docs/NEAP.pdf](http://www.valleyair.org/Air_Quality_Plans/docs/NEAP.pdf).

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.

## NEWS ARTICLES

### **Wind gusts prompt air warning**

By Doane Yawger

Merced Sun-Star Thurs., Oct. 26, 2006

Winds were blustery in Merced County for much of the day Wednesday but did very little damage.

Peak wind gusts of 36 mph were recorded between 10 a.m. and 11 a.m. at Merced Municipal Airport and continued in the upper 20s until about 5 p.m., tapering off to 5 mph in the evening hours, according to the National Weather Service.

Strong winds in many parts of the San Joaquin Valley prompted local air-pollution officials to issue a health cautionary statement. The winds kicked up particulate matter 10 microns and smaller, or PM10, which could pose a threat to public health.

RoseMary Parga Duran, associate superintendent of the Merced City School District, said students were advised Wednesday not to run around too much and take it easy, especially those prone to asthma. No wind-related incidents were reported in Merced by elementary and high school officials.

A quick power outage disrupted lunchtime at Don Stowell Elementary School in South Merced but was resolved within a few minutes, Duran said.

Merced city public works crews had to pick up a few tree limbs knocked down by the winds but nothing overwhelming, according to public works official Gordon Gray.

Jeffrey Barlow, lead forecaster for the Hanford-based National Weather Service, said the winds were associated with a cold front that passed through Merced and kept Merced's high temperature at 73 degrees.

No wind-related auto accidents were reported Wednesday by Merced police or California Highway Patrol officers.

Gary Arcemont, a meteorologist for the San Joaquin Valley Air Pollution Control District, said district employees in the field noted blowing dust in several parts of the Valley.

Exposure to particle pollution can cause serious health problems, aggravate lung disease, cause asthma attacks and acute bronchitis, and increase risk of respiratory infections.

In people with heart disease, short-term exposure to particle pollution has been linked to heart attacks and arrhythmias, according to the U.S. Environmental Protection Agency.

### **Local briefs**

#### **Health warning issued for Valley**

The Fresno Bee, Thursday, October 26, 2006

Strong winds prompted local air pollution officials to issue a health warning for the central San Joaquin Valley through 10 a.m. today.

The San Joaquin Valley Air Pollution Control District said the winds are kicking up PM10 particulate matter, which are particles 10 microns and smaller. The airborne dust can pose a health threat, said meteorologist Gary Acremont.

Exposure to particle pollution can cause serious health problems, aggravate lung disease, cause asthma attacks and increase the risk of respiratory infections, according to the Environmental Protection Agency



## **Wild wind warning**

Modesto Bee, Thursday, October 26, 2006

High winds are kicking up dust and pollution throughout the San Joaquin Valley, as seen Wednesday on Carpenter Road above and below, prompting air district officials to issue a health warning. District employees have noted blowing dust in several parts of the valley and urge people to use caution though 10 a.m. today, a San Joaquin Valley Air Pollution District news release said. Depending on where you are, the wind could carry enough dust and dirt to be unhealthy, said Gary Arcemont, a meteorologist for the air district. Exposure to dust and other particle pollution can aggravate lung disease, cause asthma attacks and acute bronchitis, and increase the risk of respiratory infections. People with heart or lung diseases should follow doctors' advice for dealing with unhealthy air when dust is present, the district said.

Older adults and children should avoid prolonged exposure, strenuous activities or heavy exertion.

**EMAIL DISCUSSING PRESCRIBED FIRE**  
**Issued October 25, 2006 10:02 AM**

National Park Service  
Sequoia & Kings Canyon National Parks

Update on Silver Prescribed Fire

At the end of the day yesterday, fire crews finished igniting all but 10 acres of the 354-acre Silver Prescribed Fire in the Mineral King area of Sequoia National Park. The final acres will be ignited today and crews will remain in the area to patrol the burn.

Please contact me if you have any questions.

Jody Lyle  
Fire Information Officer  
559-565-3703

## 9.2 Inspections Summary

InspectorID	Date/Time	Activity	Units	Zip Code	City	County
842	10/25/2006 8:16	Required Compliance Inspection - Field	1	95307	Ceres	STANISLAUS
857	10/25/2006 8:16	ATC/PTO Startup - Field	1	95307	Ceres	STANISLAUS
857	10/25/2006 8:44	Required Compliance Inspection - Field	1	95358	Modesto	STANISLAUS
571	10/25/2006 9:19	Required Compliance Inspection - Field	1	95358	Modesto	STANISLAUS
733	10/25/2006 9:27	Required Compliance Inspection - Field	1	95358	Modesto	STANISLAUS
752	10/25/2006 9:44	Required Compliance Inspection - Field	1		Newman	STANISLAUS
859	10/25/2006 9:52	Follow-Up/Reinspections - Field	6	95366	Ripon	STANISLAUS
840	10/25/2006 9:52	Required Compliance Inspection - Field	1	95380	Turlock	STANISLAUS
503	10/25/2006 9:58	Follow-Up/Reinspections - Field	0	95380	Turlock	STANISLAUS
842	10/25/2006 10:14	Follow-Up/Reinspections - Field	1	93618	Dinuba	TULARE
833	10/25/2006 10:26	Follow-Up/Reinspections - Field	1	93221	Exeter	TULARE
571	10/25/2006 10:28	Required Compliance Inspection - Field	1	93221	Exeter	TULARE
733	10/25/2006 10:29	Source Test/Performance Test - Field	1	93323	Farmersville	TULARE
741	10/25/2006 10:41	Required Compliance Inspection - Field	1		Goshen	TULARE
857	10/25/2006 10:45	Other Compliance Inspection - Field	1		Lemon Cove	TULARE
859	10/25/2006 10:55	Follow-Up/Reinspections - Field	0	93247	Lindsay	TULARE
733	10/25/2006 11:07	Required Compliance Inspection - Field	4	93257	Porterville	TULARE
858	10/25/2006 11:19	Required Compliance Inspection - Field	1	93257	Porterville	TULARE
185	10/25/2006 11:19	Other Compliance Inspection - Field	0	93274	Tulare	TULARE

InspectorID	Date/Time	Activity	Units	Zip Code	City	County
833	10/25/2006 11:23	Follow-Up/Reinspections - Field	1	93292	Visalia	TULARE
506	10/25/2006 11:28	Required Compliance Inspection - Field	5		Visalia	TULARE
752	10/25/2006 11:29	Follow-Up/Reinspections - Field	1		Visalia	TULARE
571	10/25/2006 11:31	Compliance Assistance - Field	0		95340	
840	10/25/2006 11:48	Required Compliance Inspection - Field	1	95220	Acampo	
528	10/25/2006 12:08	District Conducted Testing - Field	0	93301	Bakersfield	
741	10/25/2006 12:15	Required Compliance Inspection - Field	0	93219	Earlimart	
100	10/25/2006 12:18	Required Compliance Inspection - Field	1		Livingston	
475	10/25/2006 12:28	Required Compliance Inspection - Field	1	95242	Lodi	
503	10/25/2006 12:29	Required Compliance Inspection - Field	2	95363	Patterson	
503	10/25/2006 12:30	Required Compliance Inspection - Field	1	95363	Patterson	
857	10/25/2006 12:30	Required Compliance Inspection - Field	1	95369	Snelling	
196	10/25/2006 12:43	Follow-Up/Reinspections - Field	0	93216		
196	10/25/2006 12:44	Follow-Up/Reinspections - Field	0	93219		
196	10/25/2006 12:48	Legal Action - Field Activity	0	93263		
7	10/25/2006 12:49	Compliance Inspections - Paperwork/Field		93274		
833	10/25/2006 12:54	Other Compliance Inspections - Paperwork/Field	0	93275		
840	10/25/2006 12:57	Other Compliance Inspections - Paperwork/Field		93275		
192	10/25/2006 13:07	District Conducted Testing - Field	0	93301		
482	10/25/2006 13:09	District Conducted Testing - Field	0	93312		

InspectorID	Date/Time	Activity	Units	Zip Code	City	County
526	10/25/2006 13:12	Compliance Inspections - Paperwork/Field	0	93611		
7	10/25/2006 13:14	Other Compliance Inspection - Field	1	93662		
857	10/25/2006 13:27	Compliance Inspections - Paperwork/Field	0	93720		
100	10/25/2006 13:28	Training - Paperwork/Field		93726		
842	10/25/2006 13:29	Training - Paperwork/Field	0	93726		
735	10/25/2006 13:29	Complaint Investigation - Field	1	95203		
859	10/25/2006 13:30	Other Compliance Inspections - Paperwork/Field	0	95301		
842	10/25/2006 13:38	Follow-up/Reinspections - Paperwork/Field	0	95307		
741	10/25/2006 13:43	Compliance Inspections - Paperwork/Field	0	95320		
859	10/25/2006 13:43	Complaint Investigation - Field	1	95330		
7	10/25/2006 13:45	Complaint - Paperwork/Field	1	95337		
100	10/25/2006 13:47	Follow-up/Reinspections - Paperwork/Field	0	95350		
842	10/25/2006 13:48	Follow-Up/Reinspections - Field	0	95350		
124	10/25/2006 13:52	Other Compliance Inspection - Field	0	95350		
733	10/25/2006 14:08	Complaint - Paperwork/Field	0	95351		
840	10/25/2006 14:11	Compliance Inspections - Paperwork/Field	0	95353		
859	10/25/2006 14:24	Required Compliance Inspection - Field	1	95358		
109	10/25/2006 14:25	Compliance Inspections - Paperwork/Field	4	95363		
124	10/25/2006 14:27	Complaint Investigation - Field	0	95376		
700	10/25/2006 14:28	Surveillance/Survey - Field	0	95380		
741	10/25/2006 14:29	Complaint - Paperwork/Field	3	95380		
859	10/25/2006 14:46	Follow-up/Reinspections -	0	95380		

InspectorID	Date/Time	Activity	Units	Zip Code	City	County
840	10/25/2006 14:47	Other Compliance Inspection - Field	0	95387		
176	10/25/2006 14:55	Required Compliance Inspection - Field	1			
733	10/25/2006 14:57	Complaint Investigation - Field	1			
859	10/25/2006 15:00	Other Compliance Inspection - Field	1			
571	10/25/2006 15:01	Other Compliance Inspections - Paperwork/Field	0			
528	10/25/2006 15:01	Complaint Investigation - Field	1			
100	10/25/2006 15:02	Complaint Investigation - Field	1			
857	10/25/2006 15:07	Complaint Investigation - Field	0			
833	10/25/2006 15:14	Complaint Investigation - Field	2			
733	10/25/2006 15:18	Complaint Investigation - Field	1			
100	10/25/2006 15:28	Complaint Investigation - Field	0			
571	10/25/2006 15:34	Other Compliance Inspection - Field	0			
840	10/25/2006 15:48	Complaint Investigation - Field	1			
124	10/25/2006 16:14	Complaint Investigation - Field	1			
196	10/25/2006 16:29	Supervision/Lead Duties - Field	201			
598	10/25/2006 16:30	Other Compliance Inspection - Field	1			
196	10/25/2006 16:30	Other Compliance Inspection - Field	1			
833	10/25/2006 16:33	Complaint Investigation - Field	0			
735	10/25/2006 16:45	Complaint Investigation - Field	1			
439	10/25/2006 16:57	Other Compliance Inspection - Field	1			
571	10/25/2006 16:57	Inspection - Field	1			

InspectorID	Date/Time	Activity	Units	Zip Code	City	County
439	10/25/2006 16:58	Complaint Investigation - Field	1			
439	10/25/2006 16:59	Other Compliance Inspection - Field	1			
842	10/25/2006 17:06	Other Compliance Inspection - Field	1			
857	10/25/2006 17:07	Legal Action - Field Activity	0			
859	10/25/2006 17:08	Compliance Inspections - Paperwork/Field	0			
109	10/25/2006 17:12	Follow-Up/Reinspections - Field				
595	10/25/2006 17:14	Other Compliance Inspections - Paperwork/Field	0			
528	10/25/2006 17:02	Other Compliance Inspection - Field	1			

### 9.3 Climate Summaries

#### BAKERSFIELD WSO AIRPORT, CALIFORNIA (040442)

##### Period of Record Monthly Climate Summary

Period of Record: 10/1/1937 to 12/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	57.4	63.6	68.8	75.8	84.2	92.1	98.6	96.6	90.9	80.7	67.3	57.9	77.8
Average Min. Temperature (F)	38.5	42.1	45.4	49.7	56.5	63.1	69.0	67.5	62.9	54.0	44.0	38.5	52.6
Average Total Precipitation (in.)	1.08	1.17	1.16	0.66	0.22	0.08	0.01	0.04	0.11	0.30	0.61	0.80	6.23
Average Total SnowFall (in.)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record:

Max. Temp.: 99.6% Min. Temp.: 99.6% Precipitation: 99.7% Snowfall: 92.4% Snow Depth: 92.2%

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Western Regional Climate Center, [wrcc@dri.edu](mailto:wrcc@dri.edu)



FRESNO WSO AIRPORT, CALIFORNIA (043257)

Period of Record Monthly Climate Summary

Period of Record: 7/ 1/1948 to 12/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	54.4	61.5	66.9	74.6	83.4	91.6	98.1	96.2	90.5	79.8	65.2	54.6	76.4
Average Min. Temperature (F)	37.6	40.6	43.7	47.8	54.1	60.2	65.4	63.7	59.3	50.9	42.2	37.2	50.2
Average Total Precipitation (in.)	2.13	1.88	1.94	1.00	0.37	0.15	0.01	0.01	0.17	0.53	1.17	1.58	10.94
Average Total SnowFall (in.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record:

Max. Temp.: 100% Min. Temp.: 100% Precipitation: 100% Snowfall: 91.2% Snow Depth: 91.3%

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Western Regional Climate Center, [wrcc@dri.edu](mailto:wrcc@dri.edu)

HANFORD 1 S, CALIFORNIA (043747)

Period of Record Monthly Climate Summary

Period of Record: 12/1/1927 to 12/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	54.4	61.5	67.6	75.3	83.7	91.0	97.4	95.7	90.1	80.4	66.2	55.2	76.6
Average Min. Temperature (F)	35.7	38.8	42.4	46.6	52.7	58.3	62.6	60.6	55.8	47.8	38.8	35.0	47.9
Average Total Precipitation (in.)	1.58	1.53	1.46	0.72	0.24	0.08	0.01	0.01	0.13	0.37	0.82	1.28	8.22
Average Total SnowFall (in.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record

Max. Temp.: 98.4% Min. Temp.: 98.1% Precipitation: 98.8% Snowfall: 98.2% Snow Depth: 98.2%

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Western Regional Climate Center, [wrcc@dri.edu](mailto:wrcc@dri.edu)

## 9.4 Surface Weather Data

### Key:

T = Temperature (F)  
 DP = Dew Point (F)  
 RH = Relative Humidity (%)  
 WD = Wind Direction  
 WS = Wind Speed (mph)  
 VIS = Visibility (miles)  
 Wx = Weather  
 SKY = Sky Conditions  
 PRESSURE = Surface Pressure in mb and inches of Hg and Altimeter setting  
 MN/MX T = Periodic Minimum Maximum Temperature (F)  
 FLAG = Data Quality Control Flag  
 Prec = Precipitation

G = Wind Gust (mph)  
 HZ = Haze  
 BLDU = Blowing Dust  
 RA = Rain  
 CLR = Clear  
 N = North  
 E = East  
 S = South  
 W = West

CIMIS Station Flag Legend		
A - Historical Average	I - Ignore	R - Far out of normal range
C or N - Not Collected	M - Missing Data	S - Not in service
H - Hourly Missing or Flagged Data	Q - Related Sensor Missing	Y - Moderately out of range
Conversion Factors		
Ly/day/2.065=W/sq.m	inches * 25.4 = mm	(F-32) * 5/9 = c
mph * 0.447 = m/s	mBars * 0.1 = kPa	--

**DATA FROM NATIONAL WEATHER SERVICE WEBSITE:**

**Weather Conditions for:**

Hanford, Hanford Municipal Airport, CA (KHJO)

Elev: 243 ft; Latitude: 36.31861; Longitude: -119.62889

Date/Time	T	DPRH	WD	WS	VIS	Wx	SKY	PRESSURE	MN/MX	T	Flag
25 Oct 11:50 pm	43	34	70	S	5	10.00	CLR	1020.4	30.13	29.876	OK
25 Oct 10:50 pm	47	35	63	CALM		10.00	CLR	1020.0	30.12	29.866	70 46 OK
25 Oct 9:50 pm	49	35	59	W	3	10.00	CLR	1019.5	30.10	29.846	OK
25 Oct 8:50 pm	55	30	38	CALM		10.00	CLR	1018.8	30.08	29.826	OK
25 Oct 7:50 pm	57	31	37	WNW	5	9.00	CLR	1018.6	30.08	29.826	OK
25 Oct 6:50 pm	60	30	32	NW	6	10.00	CLR	1017.9	30.06	29.806	OK
25 Oct 5:50 pm	67	27	22	NNW	8	9.00	CLR	1017.5	30.04	29.786	OK
25 Oct 4:50 pm	70	28	21	N	8G16	10.00	CLR	1017.3	30.04	29.786	72 62 OK
25 Oct 3:50 pm	71	28	20	NW	12G18	10.00	CLR	1017.5	30.04	29.786	OK
25 Oct 2:50 pm	72	28	19	NW	9	8.00	CLR	1017.4	30.04	29.786	OK
25 Oct 1:50 pm	69	29	22	N	12	8.00	CLR	1017.7	30.05	29.796	OK
25 Oct 12:50 pm	68	28	22	NNW	12G21	7.00	SCT018	1018.0	30.06	29.806	OK
25 Oct 12:00 pm	66	27	22	NW	17G22	5.00	HZ BKN016		30.08	29.826	OK
25 Oct 11:50 am	65	28	25	NNW	15G24	5.00	HZ SCT016	1018.7	30.08	29.826	OK
25 Oct 10:50 am	62	27	26	NNW	20G28	4.00	HZ CLR	1018.7	30.08	29.826	63 54 OK
25 Oct 10:00 am	61	27	27	NNW	18G30	6.00	HZ CLR		30.08	29.826	OK
25 Oct 9:50 am	59	26	28	NNW	24G29	2.50	HZ CLR	1018.7	30.08	29.826	OK
25 Oct 8:50 am	57	27	31	NW	17	7.00	CLR	1018.0	30.06	29.806	OK
25 Oct 7:50 am	55	30	38	NNW	15	10.00	CLR	1016.9	30.03	29.776	OK
25 Oct 6:50 am	55	39	55	NW	17G23	10.00	CLR	1016.2	30.00	29.746	OK
25 Oct 5:50 am	56	44	64	NW	13	10.00	CLR	1015.3	29.98	29.727	OK
25 Oct 4:50 am	56	44	64	NW	14	10.00	CLR	1014.9	29.97	29.717	66 52 OK
25 Oct 3:50 am	58	43	57	NNW	9	10.00	CLR	1014.4	29.95	29.697	OK
25 Oct 2:50 am	60	44	55	NW	13	10.00	CLR	1014.2	29.95	29.697	OK
25 Oct 1:50 am	52	44	74	NNW	6	9.00	CLR	1013.9	29.94	29.687	OK
25 Oct 12:50 am	59	45	60	NNW	3	10.00	CLR	1013.2	29.92	29.667	84 46 OK
24 Oct 11:50 pm	63	46	54	NW	8	10.00	CLR	1013.2	29.92	29.667	OK
24 Oct 10:50 pm	65	44	47	WNW	8	10.00	CLR	1012.7	29.91	29.657	83 63 OK
24 Oct 9:50 pm	66	43	43	NW	7	10.00	CLR	1012.2	29.89	29.637	OK
24 Oct 8:50 pm	64	46	52	NW	6	10.00	CLR	1011.5	29.87	29.617	OK
24 Oct 7:50 pm	63	48	58	WNW	3	9.00	CLR	1011.0	29.85	29.597	OK
24 Oct 6:50 pm	65	50	58	CALM		7.00	CLR	1010.1	29.82	29.568	OK

Lemoore, Naval Air Station, CA (KNLC)

Elev: 233 ft; Latitude: 36.30361; Longitude: -119.93806

Date/Time	T	DP	RH	WD	WS	VIS	Wx	SKY	PRESSURE	MN/MX T	Flag
26 Oct 1:55 am	46	25	43	CALM		10.00		CLR	1020.6 30.14 29.896		OK
26 Oct 12:55 am	45	21	38	W	3	10.00		CLR	1020.3 30.13 29.886	73 45	OK
25 Oct 11:55 pm	53	22	29	WNW	7	10.00		CLR	1019.9 30.12 29.876		OK
25 Oct 10:55 pm	51	24	35	WNW	8	10.00		CLR	1019.7 30.11 29.866	70 48	OK
25 Oct 9:55 pm	53	24	32	NW	8	10.00		CLR	1019.1 30.10 29.857		OK
25 Oct 8:55 pm	55	24	30	WNW	9	10.00		CLR	1018.7 30.09 29.847		OK
25 Oct 7:55 pm	57	26	30	NNW	8	10.00		CLR	1018.4 30.08 29.837		OK
25 Oct 6:55 pm	59	27	29	N	6	10.00		CLR	1017.8 30.06 29.817		OK
25 Oct 5:55 pm	63	26	24	N	3	10.00		CLR	1017.4 30.05 29.807		OK
25 Oct 4:55 pm	70	24	18	NNW	14	10.00		CLR	1017.1 30.04 29.797	73 67	OK
25 Oct 3:55 pm	71	24	17	NW	20G26	10.00		CLR	1017.1 30.04 29.797		OK
25 Oct 2:55 pm	72	23	16	NNW	22G31	7.00		CLR	1017.0 30.03 29.787		OK
25 Oct 1:55 pm	72	23	16	NNW	26G35	10.00		CLR	1016.9 30.03 29.787		OK
25 Oct 12:55 pm	71	24	17	NNW	28G38	10.00		CLR	1017.2 30.04 29.797		OK
25 Oct 11:55 am	68	23	18	NW	30G40	10.00		CLR	1018.0 30.06 29.817		OK
25 Oct 10:55 am	67	22	18	NW	31G37	10.00		CLR	1018.1 30.07 29.827	67 57	OK
25 Oct 9:55 am	63	22	21	NNW	29G39	10.00		CLR	1018.5 30.08 29.837		OK
25 Oct 8:55 am	60	23	24	NW	26G36	10.00		CLR	1018.1 30.07 29.827		OK
25 Oct 7:55 am	58	23	26	NNW	22G32	7.00		CLR	1016.9 30.03 29.787		OK
25 Oct 6:55 am	58	27	30	NNW	22G30	7.00		CLR	1015.9 30.00 29.757		OK
25 Oct 6:30 am	57	28	33	NNW	23	7.00		CLR	30.00 29.757		OK
25 Oct 5:55 am	59	34	39	NW	22	2.50	HZ	CLR	1015.5 29.99 29.747		OK
25 Oct 5:40 am	61	37	42	NW	22	2.50	HZ	CLR	29.98 29.737		OK
25 Oct 4:55 am	62	38	41	NW	16	10.00		CLR	1014.6 29.97 29.727	62 50	OK
25 Oct 3:55 am	58	41	53	NW	17	10.00		CLR	1014.2 29.95 29.708		OK
25 Oct 2:55 am	51	40	65	NNW	10	9.00		CLR	1014.3 29.95 29.708		OK
25 Oct 1:55 am	53	39	59	NNW	10	10.00		CLR	1013.9 29.94 29.698		OK
25 Oct 12:55 am	60	41	49	WNW	10	10.00		CLR	1012.8 29.91 29.668	86 46	OK
24 Oct 11:55 pm	57	41	55	NW	9	10.00		CLR	1012.9 29.91 29.668		OK
24 Oct 10:55 pm	61	41	48	WNW	7	10.00		CLR	1012.6 29.91 29.668	84 60	OK
24 Oct 9:55 pm	65	42	43	NW	10	10.00		CLR	1012.2 29.89 29.648		OK
24 Oct 8:55 pm	68	40	36	NW	12	9.00		CLR	1011.7 29.88 29.638		OK
24 Oct 7:55 pm	66	39	37	NNW	6	10.00		CLR	1010.9 29.85 29.608		OK
24 Oct 6:55 pm	71	41	34	CALM		10.00		FEW220	1010.0 29.83 29.588		OK
24 Oct 5:55 pm	77	41	28	NNE	3	10.00		SCT220	1009.5 29.81 29.568		OK
24 Oct 4:55 pm	84	42	23	NNE	7	10.00		SCT220	1009.3 29.81 29.568	86 73	OK

**Weather Conditions for:**

**KETTLEMAN HILLS, CA (KTLC1)**

Elev: 810 ft; Latitude: 36.0333; Longitude: -120.0569

Date/Time	T	DP	RH	WD	WS	PRESSURE			Prec	Flag		
26 Oct 1:05 am	59	18	20	NW	10G13	29.94	29.083	55	0	--	8.30	OK
26 Oct 12:05 am	61	18	19	NW	9G15	29.93	29.073	56	0	--	8.30	OK
25 Oct 11:05 pm	61	20	20	NW	10G15	29.92	29.063	57	0	--	8.30	OK
25 Oct 10:05 pm	61	22	22	NW	11G16	29.90	29.044	57	0	--	8.30	OK
25 Oct 9:05 pm	61	23	23	NW	12G15	29.89	29.034	57	0	--	8.30	OK
25 Oct 8:05 pm	61	25	25	NW	12G15	29.88	29.024	57	0	--	8.30	OK
25 Oct 7:05 pm	62	26	25	N	10G14	29.87	29.014	59	1	--	8.30	OK
25 Oct 6:05 pm	64	25	23	N	9G22	29.86	29.005	61	64	26%	8.30	
25 Oct 5:05 pm	68	25	20	N	15G28	29.85	28.995	68	244	46%	8.30	OK
25 Oct 4:05 pm	69	22	17	N	22G33	29.85	28.995	72	391	51%	8.30	OK
25 Oct 3:05 pm	70	23	17	N	21G35	29.85	28.995	77	556	59%	8.30	OK
25 Oct 2:05 pm	69	18	14	N	25G34	29.86	29.005	78	644	62%	8.30	OK
25 Oct 1:05 pm	70	17	13	NNW	24G45	29.87	29.014	80	669	64%	8.30	
25 Oct 12:05 pm	69	14	12	NNW	29G43	29.87	29.014	79	627	65%	8.30	OK
25 Oct 11:05 am	68	15	13	NNW	25G35	29.88	29.024	77	535	66%	8.30	OK
25 Oct 10:05 am	63	20	19	NNW	19G32	29.88	29.024	71	388	67%	8.30	OK
25 Oct 9:05 am	62	22	21	NNW	15G27	29.86	29.005	67	224	76%	8.30	OK
25 Oct 8:05 am	58	24	27	NW	20G28	29.82	28.966	59	47	--	8.30	OK
25 Oct 7:05 am	58	37	45	NNW	11G21	29.81	28.956	55	0	--	8.30	OK
25 Oct 6:05 am	65	36	34	NNW	12G22	29.77	28.917	63	0	--	8.30	OK
25 Oct 5:05 am	66	39	37	NW	16G21	29.77	28.917	63	0	--	8.30	OK
25 Oct 4:05 am	64	39	40	NW	16G23	29.76	28.907	62	0	--	8.30	OK
25 Oct 3:05 am	67	40	37	NW	14G20	29.76	28.907	64	0	--	8.30	OK
25 Oct 2:05 am	69	40	35	NW	12G15	29.75	28.897	66	0	--	8.30	OK
25 Oct 1:05 am	69	40	35	NW	10G15	29.72	28.868	66	0	--	8.30	OK
25 Oct 12:05 am	70	42	36	NW	12G16	29.72	28.868	67	0	--	8.30	OK
24 Oct 11:05 pm	70	43	37	NW	13G17	29.72	28.868	67	0	--	8.30	OK
24 Oct 10:05 pm	69	42	38	NW	14G24	29.71	28.858	67	0	--	8.30	OK
24 Oct 9:05 pm	72	42	34	NW	9G15	29.70	28.848	69	0	--	8.30	OK
24 Oct 8:05 pm	74	42	32	NW	3G04	29.69	28.839	69	0	--	8.30	OK
24 Oct 7:05 pm	75	41	30	SE	1G03	29.66	28.809	70	1	--	8.30	OK
24 Oct 6:05 pm	78	41	27	NNW	1G06	29.66	28.809	74	61	24%	8.30	OK
24 Oct 5:05 pm	82	42	24	NNE	5G10	29.66	28.809	83	233	43%	8.30	OK
24 Oct 4:05 pm	85	43	23	N	4G10	29.66	28.809	92	401	51%	8.30	OK
24 Oct 3:05 pm	84	43	24	NNE	6G10	29.66	28.809	97	539	57%	8.30	OK
24 Oct 2:05 pm	83	44	25	N	6G10	29.69	28.839	99	621	59%	8.30	OK
24 Oct 1:05 pm	81	44	27	NNE	5G12	29.73	28.878	100	642	61%	8.30	OK
24 Oct 12:05 pm	79	45	30	ENE	6G09	29.73	28.878	99	607	62%	8.30	OK
24 Oct 11:05 am	76	42	30	E	5G07	29.73	28.878	94	507	62%	8.30	

**Weather Conditions for:**

**SAN LUIS NWR, CA (SLWC1)**

Elev: 65 ft; Latitude: 37.1822; Longitude: -120.7939

Date/Time	T	DP	RH	WD	WS		Prec	Flag
25 Oct 11:30 pm	51	26	37	W	3G05	35 6 0	-- 0.00	OK
25 Oct 10:30 pm	52	24	33	W	4G08	42 6 0	-- 0.00	OK
25 Oct 9:30 pm	58	28	31	NW	7G12	52 6 0	-- 0.00	OK
25 Oct 8:30 pm	54	23	30	W	6G10	47 5 0	-- 0.00	OK
25 Oct 7:30 pm	56	25	30	WNW	6G09	47 5 0	-- 0.00	OK
25 Oct 6:30 pm	62	24	23	NW	6G17	57 5 22	19% 0.00	OK
25 Oct 5:30 pm	70	26	19	NW	12G20	69 5 153	37% 0.00	OK
25 Oct 4:30 pm	72	26	18	NW	13G24	75 5 324	48% 0.00	OK
25 Oct 3:30 pm	73	27	18	NW	14G25	79 5 442	51% 0.00	OK
25 Oct 2:30 pm	72	29	20	NW	18G28	79 6 554	56% 0.00	OK
25 Oct 1:30 pm	70	29	22	NW	20G34	79 6 635	62% 0.00	OK
25 Oct 12:30 pm	69	30	23	NW	18G29	78 6 629	64% 0.00	OK
25 Oct 11:30 am	66	29	25	NW	19G34	74 7 565	66% 0.00	OK
25 Oct 10:30 am	65	28	25	NW	18G35	72 8 444	68% 0.00	OK
25 Oct 9:30 am	62	28	27	NW	20G31	65 8 284	73% 0.00	OK
25 Oct 8:30 am	60	26	27	NW	17G26	60 9 93	109% 0.00	OK
25 Oct 7:30 am	57	25	29	NW	13G22	53 10 2	-- 0.00	OK
25 Oct 6:30 am	55	24	30	NW	9G24	51 10 0	-- 0.00	OK
25 Oct 5:30 am	58	24	27	NW	11G20	54 11 0	-- 0.00	OK
25 Oct 4:30 am	60	32	34	NNW	14G24	56 13 0	-- 0.00	OK
25 Oct 3:30 am	53	48	83	NW	8G12	49 16 0	-- 0.00	OK
25 Oct 2:30 am	51	46	83	WNW	4G06	41 15 0	-- 0.00	OK
25 Oct 1:30 am	54	50	85	NNW	4G07	47 13 0	-- 0.00	OK
25 Oct 12:30 am	54	50	86	NW	4G06	45 11 0	-- 0.00	OK
24 Oct 11:30 pm	56	50	81	WNW	4G05	47 10 0	-- 0.00	OK
24 Oct 10:30 pm	59	47	65	NW	2G06	48 9 0	-- 0.00	OK
24 Oct 9:30 pm	59	49	69	W	4G06	52 8 0	-- 0.00	OK
24 Oct 8:30 pm	62	46	55	W	4G07	54 7 0	-- 0.00	OK
24 Oct 7:30 pm	65	47	52	NW	5G09	60 6 0	-- 0.00	OK
24 Oct 6:30 pm	69	42	38	NW	6G09	65 6 25	20% 0.00	OK
24 Oct 5:30 pm	79	43	28	NNW	5G09	77 6 153	36% 0.00	OK
24 Oct 4:30 pm	83	45	26	N	5G09	86 5 290	43% 0.00	OK
24 Oct 3:30 pm	84	44	25	NNW	4G07	89 5 438	50% 0.00	OK
24 Oct 2:30 pm	85	48	28	NNE	3G07	96 6 573	58% 0.00	OK
24 Oct 1:30 pm	82	52	36	N	4G17	97 6 621	60% 0.00	OK
24 Oct 12:30 pm	78	47	33	SW	4G08	94 7 617	63% 0.00	OK
24 Oct 11:30 am	77	49	37	N	3G06	90 10 548	64% 0.00	OK
24 Oct 10:30 am	71	49	46	E	3G05	79 11 431	66% 0.00	OK

**Weather Conditions for:**

**LOS BANOS, CA (SLRC1)**

Elev: 350 ft; Latitude: 37.0547; Longitude: -121.0531

Date/Time	T	DP	RH	WD	WS	PRESSURE	Flag
25 Oct 11:00 pm	57	27	32	SSW		29.97 29.602 48 7 0 -- 0.33	OK
25 Oct 10:00 pm	57	27	32	SW		29.96 29.592 49 7 0 -- 0.33	OK
25 Oct 9:00 pm	57	27	31	SSE	G02	50 7 0 -- 0.33	OK
25 Oct 8:00 pm	60	33	36	NE	G04	50 7 0 -- 0.33	OK
25 Oct 7:00 pm	60	32	34	ENE	2G09	29.93 29.562 54 7 0 -- 0.33	OK
25 Oct 6:00 pm	65	28	25	NNE	7G14	61 6 7 3% 0.33	OK
25 Oct 5:00 pm	72	35	26	N	12G15	79 6 158 28% 0.33	OK
25 Oct 4:00 pm	72	34	25	N	16G23	79 6 326 42% 0.33	OK
25 Oct 3:00 pm	72	36	27	N	17G29	79 5 461 49% 0.33	OK
25 Oct 2:00 pm	72	37	28	N	20G27	29.94 29.572 79 5 563 55% 0.33	OK
25 Oct 1:00 pm	70	34	26	NNE	15G27	29.96 29.592 78 4 604 59% 0.33	OK
25 Oct 12:00 pm	69	33	26	N	16G24	29.97 29.602 79 7 598 65% 0.33	OK
25 Oct 11:00 am	69	34	27	N	18G24	29.99 29.622 76 7 525 69% 0.33	OK
25 Oct 10:00 am	67	27	22	N	G29	29.99 29.622 72 5 408 78% 0.33	OK
25 Oct 9:00 am	67	26	21	NNW	G15	29.96 29.592 71 7 253 107% 0.33	OK
25 Oct 8:00 am	61	23	23	NNW	G17	55 8 89 -- 0.33	OK
25 Oct 7:00 am	58	25	28	SSE	G03	29.91 29.542 50 8 0 -- 0.33	OK
25 Oct 6:00 am	60	30	32	NW	G03	29.90 29.532 51 9 0 -- 0.33	OK
25 Oct 5:00 am	63	54	72	SE		29.89 29.523 55 9 0 -- 0.33	OK
25 Oct 4:00 am	58	44	59	W	G03	29.87 29.503 52 9 0 -- 0.33	OK
25 Oct 3:00 am	59	49	69	WSW		29.86 29.493 53 9 0 -- 0.33	OK
25 Oct 2:00 am	60	52	75	SSW	3G09	29.86 29.493 54 9 0 -- 0.33	Suspect
25 Oct 1:00 am	61	50	66	WSW	G11	29.84 29.473 57 9 0 -- 0.33	OK
25 Oct 12:00 am	62	52	70	SSW	1G12	29.82 29.453 56 9 0 -- 0.33	OK
24 Oct 11:00 pm	62	54	75	WSW	5G11	29.83 29.463 58 9 0 -- 0.33	OK
24 Oct 10:00 pm	62	53	72	WSW	G07	29.81 29.443 59 9 0 -- 0.33	OK
24 Oct 9:00 pm	62	50	65	SSW	5G07	29.78 29.414 58 8 0 -- 0.33	OK
24 Oct 8:00 pm	66	50	57	W	1G10	29.78 29.414 63 8 0 -- 0.33	Suspect
24 Oct 7:00 pm	68	49	51	WNW	G12	29.77 29.404 65 7 0 -- 0.33	OK
24 Oct 6:00 pm	74	51	44	NNW		29.73 29.364 72 7 9 3% 0.33	OK
24 Oct 5:00 pm	79	52	39	N		29.74 29.374 85 6 148 26% 0.33	OK
24 Oct 4:00 pm	82	55	40	NNE		29.73 29.364 91 6 306 39% 0.33	OK
24 Oct 3:00 pm	81	54	39	NNE		29.73 29.364 93 6 386 41% 0.33	OK
24 Oct 2:00 pm	80	51	37	E		29.75 29.384 94 6 536 52% 0.33	OK
24 Oct 1:00 pm	81	55	41	NE		29.78 29.414 95 6 580 57% 0.33	OK



**Weather Conditions for:**

Visalia, Visalia Municipal Airport, CA (KVIS)

Elev: 295 ft; Latitude: 36.31667; Longitude: -119.4

Date/Time	T	DP	RH	WD	WS	VIS	WX	PRESSURE	MN/MX T	Flag
25 Oct 11:55 pm	52	39	62	ESE	5	10.00	CLR	30.12	29.809	OK
25 Oct 11:35 pm	54	37	54	SSE	6	10.00	CLR	30.13	29.819	OK
25 Oct 11:15 pm	54	37	54	SSE	3	10.00	CLR	30.12	29.809	OK
25 Oct 10:55 pm	52	37	58	SW	3	10.00	CLR	30.11	29.800	70 48 OK
25 Oct 10:35 pm	48	37	66	E	5	10.00	CLR	30.11	29.800	OK
25 Oct 10:15 pm	54	37	54	CALM		10.00	CLR	30.10	29.790	OK
25 Oct 9:55 pm	52	37	58	CALM		10.00	CLR	30.10	29.790	OK
25 Oct 9:35 pm	55	36	47	CALM		10.00	CLR	30.10	29.790	OK
25 Oct 9:15 pm	55	36	47	CALM		10.00	CLR	30.09	29.780	OK
25 Oct 8:55 pm	54	36	50	CALM		10.00	CLR	30.09	29.780	OK
25 Oct 8:35 pm	55	37	51	CALM		10.00	CLR	30.08	29.770	OK
25 Oct 8:15 pm	55	37	51	NE	3	10.00	CLR	30.08	29.770	OK
25 Oct 7:55 pm	57	34	41	CALM		10.00	CLR	30.07	29.760	OK
25 Oct 7:35 pm	61	34	36	N	3	10.00	CLR	30.06	29.750	OK
25 Oct 7:15 pm	61	36	39	NW	7	10.00	CLR	30.06	29.750	OK
25 Oct 6:55 pm	61	37	42	NW	5	10.00	CLR	30.05	29.740	OK
25 Oct 6:35 pm	64	36	34	WNW	6	10.00	CLR	30.04	29.730	OK
25 Oct 6:15 pm	64	36	34	NW	7	10.00	CLR	30.04	29.730	OK
25 Oct 5:55 pm	68	34	28	NNW	8	10.00	CLR	30.04	29.730	OK
25 Oct 5:35 pm	70	36	28	NW	8	10.00	CLR	30.04	29.730	OK
25 Oct 5:15 pm	70	37	31	N	6	10.00	CLR	30.03	29.720	OK
25 Oct 4:55 pm	70	36	28	NW	10	10.00	CLR	30.03	29.720	72 61 82 52 OK
25 Oct 4:35 pm	70	37	31	NW	10	10.00	CLR	30.03	29.720	OK
25 Oct 4:15 pm	72	36	27	NNW	12	10.00	CLR	30.04	29.730	OK
25 Oct 3:55 pm	72	37	29	NNW	13	10.00	CLR	30.03	29.720	OK
25 Oct 3:35 pm	72	39	31	NW	8	10.00	CLR	30.04	29.730	OK
25 Oct 3:15 pm	70	37	31	NW	7	9.00	CLR	30.04	29.730	OK
25 Oct 2:55 pm	70	37	31	WNW	8	10.00	CLR	30.04	29.730	OK
25 Oct 2:35 pm	70	37	31	W	3	10.00	CLR	30.04	29.730	OK
25 Oct 2:15 pm	70	37	31	WNW	5	10.00	CLR	30.04	29.730	OK
25 Oct 1:55 pm	68	36	30	N	8	10.00	CLR	30.04	29.730	OK
25 Oct 1:35 pm	66	36	32	N	5	9.00	CLR	30.05	29.740	OK
25 Oct 1:15 pm	66	36	32	NNW	5	10.00	CLR	30.06	29.750	OK
25 Oct 12:55 pm	66	36	32	NNW	5	9.00	CLR	30.06	29.750	OK
25 Oct 12:35 pm	64	36	34	NW	9	10.00	CLR	30.07	29.760	OK
25 Oct 11:55 am	63	36	36	WNW	7	10.00	CLR	30.08	29.770	OK
25 Oct 11:35 am	63	37	39	NW	8	10.00	CLR	30.09	29.780	OK
25 Oct 11:15 am	63	39	42	WNW	10	10.00	CLR	30.08	29.770	OK
25 Oct 10:55 am	61	37	42	N	10	10.00	CLR	30.08	29.770	61 52 OK

**Weather Conditions for:**

**Bakersfield, Meadows Field Airport, CA (KBFL)**

Elev: 509 ft; Latitude: 35.43361; Longitude: -119.05667

Date/Time	T	DP	RH	WD	WS	VIS	Wx	SKY	PRESSURE	MN/MX T	Flag	
25 Oct 11:50 pm	56	32	40	ESE	3	8.00	CLR	1020.2	30.13	29.589	OK	
25 Oct 10:50 pm	58	31	36	ESE	3	7.00	CLR	1020.1	30.13	29.589	69 57 OK	
25 Oct 9:50 pm	59	30	33	CALM		6.00	HZ	CLR	1019.5	30.11	29.570	OK
25 Oct 8:50 pm	58	29	33	VRBL	5	5.00	HZ	CLR	1018.5	30.09	29.550	OK
25 Oct 7:50 pm	62	29	28	N	5	6.00	HZ	CLR	1018.1	30.08	29.540	OK
25 Oct 6:50 pm	66	29	25	NW	3	5.00	HZ	CLR	1017.3	30.05	29.511	OK
25 Oct 5:50 pm	67	28	23	NW	5	5.00	HZ	CLR	1017.0	30.04	29.501	OK
25 Oct 4:50 pm	69	27	21	WNW	3	7.00	CLR	1017.0	30.04	29.501	70 63 OK	
25 Oct 3:50 pm	70	27	20	NW	7	4.00	HZ	CLR	1016.9	30.04	29.501	OK
25 Oct 2:50 pm	69	25	19	VRBL	7	6.00	HZ	CLR	1016.9	30.04	29.501	OK
25 Oct 1:50 pm	68	27	21	VRBL	6	10.00	CLR	1017.4	30.05	29.511	OK	
25 Oct 12:50 pm	68	27	21	WNW	12	10.00	CLR	1018.1	30.08	29.540	OK	
25 Oct 11:50 am	66	33	29	W	12	10.00		1018.4	30.09	29.550	OK	
25 Oct 10:50 am	63	36	37	WNW	9	10.00	CLR	1018.7	30.09	29.550	63 52 OK	
25 Oct 9:50 am	61	41	48	NW	10	6.00	HZ	CLR	1018.4	30.09	29.550	OK
25 Oct 9:15 am	61	43	51	NW	13	6.00	HZ	CLR	30.08	29.540	OK	
25 Oct 9:00 am	59	43	55	W	6	1.75	HZ	CLR	30.07	29.530	OK	
25 Oct 8:50 am	58	42	55	CALM		7.00	CLR	1017.9	30.07	29.530	OK	
25 Oct 7:50 am	54	42	64	E	6	7.00	CLR	1016.9	30.04	29.501	OK	
25 Oct 6:50 am	56	41	57	ESE	5	10.00	CLR	1016.3	30.03	29.491	OK	
25 Oct 5:50 am	55	39	55	CALM		9.00	CLR	1015.6	30.00	29.461	OK	
25 Oct 4:50 am	55	38	52	CALM		10.00	CLR	1014.8	29.98	29.442	64 51 OK	
25 Oct 3:50 am	51	38	61	NW	6	10.00	CLR	1014.4	29.97	29.432	OK	
25 Oct 2:50 am	60	42	51	E	5	10.00	CLR	1013.7	29.95	29.412	OK	
25 Oct 1:50 am	57	39	51	NNW	3	10.00	CLR	1013.5	29.94	29.402	OK	
25 Oct 12:50 am	61	39	44	CALM		10.00	CLR	1012.8	29.92	29.382	85 54 OK	
24 Oct 11:50 pm	63	39	41	N	3	10.00	CLR	1012.5	29.91	29.373	OK	
24 Oct 10:50 pm	63	40	43	CALM		10.00	CLR	1012.2	29.90	29.363	82 62 OK	
24 Oct 9:50 pm	66	39	37	CALM		10.00	CLR	1011.7	29.89	29.353	OK	
24 Oct 8:50 pm	67	39	36	CALM		10.00	CLR	1010.9	29.87	29.333	OK	
24 Oct 7:50 pm	69	38	32	NNE	6	10.00	CLR	1010.3	29.85	29.313	OK	
24 Oct 6:50 pm	73	38	28	NNE	5	10.00	CLR	1009.7	29.83	29.294	OK	
24 Oct 5:50 pm	78	39	25	NNW	6	10.00	CLR	1009.2	29.82	29.284	OK	
24 Oct 4:50 pm	82	37	20	WNW	7	10.00	CLR	1009.3	29.82	29.284	85 74 OK	
24 Oct 3:50 pm	83	37	19	NW	9	10.00	CLR	1009.2	29.82	29.284	OK	
24 Oct 2:50 pm	84	36	18	NW	9	10.00	CLR	1009.3	29.82	29.284	OK	
24 Oct 1:50 pm	83	34	17	WNW	8	10.00	CLR	1009.8	29.84	29.304	OK	
24 Oct 12:50 pm	81	36	20	VRBL	3	8.00	CLR	1010.6	29.86	29.323	OK	
24 Oct 11:50 am	79	31	17	CALM		10.00	CLR	1011.4	29.89	29.353	OK	

**Weather Conditions for:**

Fresno, Fresno Air Terminal, CA (KFAT)

Elev: 331 ft; Latitude: 36.78000; Longitude: -119.71944

Date/Time	T	DP	RH	WD	WS	VIS	SKY	PRESSURE	MN/MX T	Flag
25 Oct 11:55 pm	52	35	52	ESE	5	10.00	CLR	1020.1 30.13 29.781		OK
25 Oct 10:55 pm	54	34	47	SSE	3	10.00	CLR	1019.5 30.11 29.761	70 54	OK
25 Oct 9:55 pm	58	31	36	CALM		10.00	CLR	1019.0 30.09 29.741		OK
25 Oct 8:55 pm	59	32	36	CALM		10.00	CLR	1018.5 30.08 29.731		OK
25 Oct 7:55 pm	63	30	29	CALM		10.00	CLR	1018.2 30.07 29.721		OK
25 Oct 6:55 pm	66	28	24	WSW	3	10.00	CLR	1017.7 30.06 29.711		OK
25 Oct 5:55 pm	68	25	19	WNW	6	10.00	CLR	1017.1 30.04 29.691		OK
25 Oct 4:55 pm	70	24	18	NW	8	10.00	FEW180	1016.9 30.04 29.691	72 61	OK
25 Oct 3:55 pm	70	25	18	WNW	14	10.00	FEW180	1017.0 30.04 29.691		OK
25 Oct 2:55 pm	70	26	19	NW	12	10.00	CLR	1017.1 30.04 29.691		OK
25 Oct 1:55 pm	69	29	22	WNW	10	10.00	CLR	1017.3 30.05 29.701		OK
25 Oct 12:55 pm	67	32	27	NNW	12	10.00	CLR	1017.9 30.07 29.721		OK
25 Oct 11:55 am	64	31	29	NW	10	7.00	CLR	1018.4 30.08 29.731		OK
25 Oct 10:55 am	62	29	28	WNW	9	10.00	CLR	1018.4 30.08 29.731	62 51	OK
25 Oct 9:55 am	57	31	37	WNW	13	10.00	CLR	1018.3 30.07 29.721		OK
25 Oct 8:55 am	55	35	47	NW	13	10.00	CLR	1017.7 30.06 29.711		OK
25 Oct 7:55 am	52	40	63	NW	13	10.00	CLR	1016.6 30.03 29.682		OK
25 Oct 6:55 am	52	44	74	WNW	9	10.00	CLR	1015.7 30.00 29.652		OK
25 Oct 5:55 am	53	43	69	NNW	5	10.00	CLR	1014.9 29.98 29.632		OK
25 Oct 4:55 am	55	43	64	NW	9	10.00	CLR	1014.5 29.97 29.622	67 54	OK
25 Oct 3:55 am	57	43	59	NW	9	10.00	CLR	1013.9 29.95 29.602		OK
25 Oct 2:55 am	56	43	62	WNW	7	10.00	CLR	1014.1 29.96 29.612		OK
25 Oct 1:55 am	60	43	53	NW	6	10.00	CLR	1013.6 29.94 29.592		OK
25 Oct 12:55 am	57	44	62	NW	7	10.00	CLR	1013.1 29.93 29.583	84 53	OK
24 Oct 11:55 pm	61	43	52	CALM		10.00	CLR	1012.7 29.91 29.563		OK
24 Oct 10:55 pm	67	43	42	NW	8	10.00	CLR	1012.5 29.91 29.563	83 65	OK
24 Oct 9:55 pm	65	44	47	WNW	8	10.00	FEW180	1011.7 29.88 29.533		OK
24 Oct 8:55 pm	69	43	39	WNW	8	10.00	SCT180	1011.5 29.88 29.533		OK
24 Oct 7:55 pm	71	44	38	W	5	10.00	FEW180	1010.9 29.86 29.513		OK
24 Oct 6:55 pm	75	43	32	WNW	3	10.00	FEW180 SCT250	1010.0 29.83 29.483		OK
24 Oct 5:55 pm	80	39	23	NNW	5	10.00	SCT200 SCT250	1009.4 29.82 29.474		OK
24 Oct 4:55 pm	83	39	21	NW	3	9.00	FEW090 SCT200	1009.4 29.82 29.474	84 72	OK
24 Oct 3:55 pm	84	38	19	NW	8	10.00	FEW090 BKN200	1009.6 29.83 29.483		OK
24 Oct 2:55 pm	82	41	23	VRBL	3	7.00	FEW090 SCT200	1009.9 29.83 29.483		OK
24 Oct 1:55 pm	81	41	24	W	6	7.00	FEW200	1010.6 29.85 29.503		OK
24 Oct 12:55 pm	78	43	29	S	5	7.00	FEW200	1011.4 29.88 29.533		OK
24 Oct 11:55 am	76	41	29	SSW	6	7.00	FEW200	1012.1 29.90 29.553		OK
24 Oct 10:55 am	71	40	32	SSE	5	7.00	FEW200	1012.4 29.91 29.563	72 53	OK

**Weather Conditions for:**

Madera, Madera Municipal Airport, CA (KMAE)

Elev: 253 ft; Latitude: 36.98667; Longitude: -120.11083

Date/Time	T	DP	RH	WD	WS	VIS	Wx	SKY	PRESSURE	MN/MX	T	Flag
25 Oct 11:50 pm	48	31	51	CALM		10.00	CLR		1019.7 30.12	29.855		OK
25 Oct 10:50 pm	49	33	54	CALM		10.00	CLR		1019.1 30.10	29.835	72 48	OK
25 Oct 9:50 pm	50	33	52	CALM		10.00	CLR		1018.7 30.08	29.815		OK
25 Oct 8:50 pm	52	32	46	W	3	7.00	CLR		1018.3 30.07	29.805		OK
25 Oct 7:50 pm	55	34	45	WNW	3	4.00	HZ	CLR	1017.9 30.06	29.795		OK
25 Oct 6:50 pm	61	30	31	WNW	7	5.00	HZ	CLR	1017.3 30.05	29.785		OK
25 Oct 5:50 pm	67	27	22	W	6	3.00	HZ	CLR	1016.9 30.04	29.775		OK
25 Oct 5:45 pm	68	27	21	WNW	7	2.50	HZ	CLR	30.03	29.765		OK
25 Oct 4:50 pm	72	25	17	WNW	13	3.00	HZ	CLR	1016.8 30.03	29.765	72 63	OK
25 Oct 3:50 pm	72	25	17	WNW	13	3.00	HZ	CLR	1016.8 30.03	29.765		OK
25 Oct 2:50 pm	72	26	18	NNW	21G25	6.00	HZ	CLR	1017.0 30.04	29.775		OK
25 Oct 1:50 pm	69	27	21	NW	16G24	6.00	HZ	CLR	1017.6 30.05	29.785		OK
25 Oct 12:50 pm	68	26	21	NW	15	8.00	CLR		1018.1 30.07	29.805		OK
25 Oct 11:50 am	66	28	24	NW	14G23	5.00	HZ	CLR	1018.3 30.08	29.815		OK
25 Oct 10:50 am	63	28	27	NW	18	6.00	HZ	CLR	1018.5 30.08	29.815	63 48	OK
25 Oct 9:50 am	58	29	33	NW	16G23	7.00	CLR		1018.3 30.08	29.815		OK
25 Oct 8:50 am	55	28	35	NW	13	7.00	CLR		1018.0 30.07	29.805		OK
25 Oct 7:50 am	51	32	48	NW	13	6.00	HZ	CLR	1016.7 30.03	29.765		OK
25 Oct 6:50 am	49	40	71	NW	6	6.00	HZ	CLR	1016.0 30.01	29.746		OK
25 Oct 5:50 am	48	43	83	W	6	3.00	HZ	CLR	1015.4 29.99	29.726		OK
25 Oct 4:50 am	54	45	72	WNW	7	7.00	CLR		1014.6 29.97	29.706	59 50	OK
25 Oct 3:50 am	52	43	71	NW	6	9.00	CLR		1014.4 29.96	29.696		OK
25 Oct 2:50 am	54	44	69	WNW	6	7.00	CLR		1014.2 29.96	29.696		OK
25 Oct 1:50 am	54	45	72	NW	5	7.00	CLR		1013.9 29.95	29.686		OK
25 Oct 12:50 am	58	45	62	NW	6	8.00	CLR		1013.4 29.93	29.666	85 48	OK
24 Oct 11:50 pm	55	45	69	W	3	8.00	CLR		1012.7 29.91	29.646		OK
24 Oct 10:50 pm	58	45	62	WNW	7	8.00	CLR		1012.7 29.91	29.646	83 57	OK
24 Oct 9:50 pm	60	45	57	WNW	7	9.00	CLR		1012.2 29.89	29.626		OK
24 Oct 8:50 pm	66	46	49	CALM		10.00	CLR		1011.3 29.87	29.607		OK
24 Oct 7:50 pm	67	45	45	NW	5	4.00	HZ	CLR	1011.0 29.86	29.597		OK
24 Oct 6:50 pm	69	46	44	WNW	7	5.00	HZ	CLR	1010.0 29.83	29.567		OK
24 Oct 5:50 pm	78	43	29	NNW	5	9.00	CLR		1009.4 29.81	29.547		OK
24 Oct 4:50 pm	83	41	23	WNW	5	6.00	HZ	CLR	1009.2 29.81	29.547	85 72	OK
24 Oct 3:50 pm	83	37	19	NW	8	10.00	CLR		1009.6 29.82	29.557		OK
24 Oct 2:50 pm	83	42	24	CALM		7.00	CLR		1009.8 29.83	29.567		OK
24 Oct 1:50 pm	81	43	26	CALM		5.00	HZ	CLR	1010.4 29.85	29.587		OK
24 Oct 12:50 pm	80	46	30	VRBL	3	5.00	HZ	CLR	1011.3 29.87	29.607		OK
24 Oct 11:50 am	76	46	35	SSW	3	5.00	HZ	CLR	1012.0 29.89	29.626		OK
24 Oct 10:50 am	71	44	38	ESE	5	6.00	HZ	CLR	1012.4 29.90	29.636	71 48	OK

**Weather Conditions for:**

Merced, Merced Municipal Airport, CA (KMCE)

Elev: 154 ft; Latitude: 37.28306; Longitude: -120.50778

Date/Time	T	DP	RH	WD	WS	VIS	Wx	SKY	PRESSURE	MN/MX	T	Flag
25 Oct 11:50 pm	45	27	49	SSE	3	10.00		CLR	1019.3 30.10	29.942		OK
25 Oct 10:50 pm	47	26	44	CALM		10.00		CLR	1018.8 30.09	29.932	71 46	OK
25 Oct 9:50 pm	50	26	39	CALM		10.00		CLR	1018.2 30.07	29.912		OK
25 Oct 8:50 pm	54	26	34	NNW	5	10.00		CLR	1017.7 30.05	29.892		OK
25 Oct 7:50 pm	62	24	23	WNW	6	10.00		CLR	1017.5 30.05	29.892		OK
25 Oct 6:50 pm	64	24	22	WNW	8	10.00		CLR	1017.0 30.03	29.872		OK
25 Oct 5:50 pm	68	22	17	NW	10G18	10.00		CLR	1016.5 30.02	29.862		OK
25 Oct 4:50 pm	71	21	15	NW	15	10.00		CLR	1016.4 30.02	29.862	73 62	OK
25 Oct 3:50 pm	72	21	15	NW	16G23	10.00		CLR	1016.3 30.02	29.862		OK
25 Oct 2:50 pm	72	23	16	NW	17G23	9.00		CLR	1016.6 30.03	29.872		OK
25 Oct 1:50 pm	69	23	17	NW	18G26	9.00		CLR	1017.7 30.06	29.902		OK
25 Oct 12:50 pm	67	25	20	NNW	18G28	10.00		CLR	1018.2 30.07	29.912		OK
25 Oct 11:50 am	64	25	23	NNW	23G32	10.00		CLR	1017.9 30.06	29.902		OK
25 Oct 10:50 am	62	24	23	NNW	26G36	8.00		CLR	1018.0 30.07	29.912	63 53	OK
25 Oct 9:50 am	59	25	27	NNW	26G36	5.00	HZ	CLR	1017.9 30.06	29.902		OK
25 Oct 8:50 am	56	26	31	NNW	17G30	9.00		CLR	1017.4 30.05	29.892		OK
25 Oct 7:50 am	53	25	33	NNW	14	10.00		CLR	1016.5 30.02	29.862		OK
25 Oct 6:50 am	54	25	32	NNW	16	9.00		CLR	1016.0 30.01	29.852		OK
25 Oct 5:50 am	55	27	34	NW	20G25	9.00		CLR	1015.2 29.98	29.822		OK
25 Oct 4:50 am	56	40	55	NW	14G22	10.00		CLR	1015.0 29.98	29.822	61 54	OK
25 Oct 3:50 am	57	45	64	NW	9	10.00		CLR	1014.7 29.97	29.812		OK
25 Oct 2:50 am	58	44	60	NW	13	10.00		CLR	1014.5 29.96	29.803		OK
25 Oct 1:50 am	60	42	51	NW	10	10.00		CLR	1014.0 29.95	29.793		OK
25 Oct 12:50 am	58	43	57	NNW	8	10.00		CLR	1013.4 29.93	29.773	83 49	OK
24 Oct 11:50 pm	55	42	62	NW	6	10.00		CLR	1013.1 29.92	29.763		OK
24 Oct 10:50 pm	58	41	53	CALM		10.00		CLR	1012.2 29.90	29.743	82 58	OK
24 Oct 9:50 pm	63	42	46	WNW	3	10.00		CLR	1012.0 29.89	29.733		OK
24 Oct 8:50 pm	65	42	43	NW	8	10.00		CLR	1011.2 29.86	29.703		OK
24 Oct 7:50 pm	69	41	36	NNW	8	10.00		CLR	1010.7 29.85	29.693		OK
24 Oct 6:50 pm	72	42	34	NNW	12	10.00		CLR	1010.2 29.84	29.683		OK
24 Oct 5:50 pm	76	41	29	NW	6	10.00		CLR	1009.5 29.81	29.653		OK
24 Oct 4:50 pm	82	40	22	NNW	8	10.00		CLR	1009.1 29.80	29.643	83 70	OK
24 Oct 3:50 pm	82	37	20	NW	9	10.00		CLR	1009.3 29.81	29.653		OK
24 Oct 2:50 pm	81	39	22	W	3	10.00		CLR	1009.6 29.82	29.663		OK
24 Oct 1:50 pm	80	40	24	CALM		9.00		CLR	1010.3 29.84	29.683		OK
24 Oct 12:50 pm	77	42	29	CALM		6.00	HZ	CLR	1011.0 29.86	29.703		OK
24 Oct 11:50 am	75	43	32	SSE	3	7.00		CLR	1011.8 29.88	29.723		OK

**Weather Conditions for:**

**SANTA RITA, CA (SRTC1)**

Elev: 5000 ft; Latitude: 36.3478; Longitude: -120.5978

Date/Time	T	DP	RH	WD	WS					Flag
26 Oct 3:40 am	51	-14	6	N	6G12	47	1	--	22.79	OK
26 Oct 2:40 am	51	-14	6	N	5G14	47	1	--	22.79	OK
26 Oct 1:40 am	49	-7	9	NW	9G24	46	1	--	22.79	OK
26 Oct 12:40 am	46	2	16	NW	16G24	43	2	--	22.79	OK
25 Oct 11:40 pm	46	5	18	NW	16G29	43	3	--	22.79	OK
25 Oct 10:40 pm	45	6	20	NW	17G30	43	3	--	22.79	OK
25 Oct 9:40 pm	45	6	20	NW	16G25	42	3	--	22.79	Caution
25 Oct 8:40 pm	44	7	21	NW	12G21	42	2	--	22.79	Caution
25 Oct 7:40 pm	45	4	18	NW	9G23	43	1	--	22.79	Caution
25 Oct 6:40 pm	48	-2	12	NW	13G23	45	16	24%	22.79	Caution
25 Oct 5:40 pm	52	-21	4	NW	9G23	50	185	49%	22.79	Caution
25 Oct 4:40 pm	55	-19	4	NW	6G18	56	386	60%	22.79	Caution
25 Oct 3:40 pm	56	-2	9	NW	6G24	60	557	65%	22.79	Caution
25 Oct 2:40 pm	57	-13	5	NW	7G17	65	679	69%	22.79	Caution
25 Oct 1:40 pm	59	-16	4	WSW	4G16	68	742	71%	22.79	Caution
25 Oct 12:40 pm	54	-16	5	NNW	7G23	63	737	73%	22.79	Caution
25 Oct 11:40 am	54	-12	6	WNW	8G20	58	668	74%	22.79	Caution
25 Oct 10:40 am	54	-20	4	WNW	6G28	60	539	76%	22.79	Caution
25 Oct 9:40 am	49	-23	4	NW	22G35	51	363	81%	22.79	Caution
25 Oct 8:40 am	49	-29	3	NW	15G28	49	160	107%	22.79	OK
25 Oct 7:40 am	49	-10	8	NW	17G27	47	11	--	22.79	OK
25 Oct 6:40 am	50	-5	10	NW	13G26	47	1	--	22.79	OK
25 Oct 5:40 am	49	20	31	NW	13G23	46	1	--	22.79	OK
25 Oct 4:40 am	50	23	34	NW	12G22	47	0	--	22.79	OK
25 Oct 3:40 am	50	28	42	NW	13G19	48	0	--	22.79	OK
25 Oct 2:40 am	53	22	29	WNW	3G09	49	0	--	22.79	OK
25 Oct 1:40 am	55	22	28	NNW	3G07	51	0	--	22.79	OK
25 Oct 12:40 am	56	22	27	NNW	3G06	51	0	--	22.79	OK
24 Oct 11:40 pm	55	23	29	NW	6G11	51	0	--	22.79	OK
24 Oct 10:40 pm	53	26	35	WNW	6G07	48	0	--	22.79	OK
24 Oct 9:40 pm	56	27	32	W	2G04	49	0	--	22.79	OK
24 Oct 8:40 pm	56	29	35	ENE	4G04	51	0	--	22.79	OK
24 Oct 7:40 pm	56	27	33	NNW	1G07	51	0	--	22.79	OK
24 Oct 6:40 pm	56	25	30	W	5G07	52	17	23%	22.79	OK
24 Oct 5:40 pm	65	28	25	NNW	2G07	61	176	46%	22.79	OK
24 Oct 4:40 pm	68	30	24	ESE	3G06	69	366	56%	22.79	OK
24 Oct 3:40 pm	72	29	20	NW	3G08	76	528	61%	22.79	OK
24 Oct 2:40 pm	70	29	22	E	4G12	79	642	64%	22.79	OK



**Weather Conditions for:**

**MT. DIABLO, CA (MDAC1)**

Elev: 3849 ft; Latitude: 37.8672; Longitude: -121.9011

Date/Time	T	DP	RH	WD	WS	Pressure	Flag
26 Oct 10:15 am	52	-1	11	NNE	30G35	30.27 26.306 58 5 422 76% 0.11	OK
26 Oct 9:15 am	52	3	13	N	38G48	30.24 26.279 52 5 233 83% 0.11	OK
26 Oct 8:15 am	48	9	20	N	44G57	30.18 26.226 49 5 44 -- 0.11	OK
26 Oct 7:15 am	47	7	19	N	45G56	30.18 26.226 48 5 0 -- 0.11	OK
26 Oct 6:15 am	47	7	19	N	48G61	30.15 26.199 47 5 0 -- 0.11	OK
26 Oct 5:15 am	48	8	19	N	48G63	30.14 26.190 49 5 0 -- 0.11	OK
26 Oct 4:15 am	50	7	17	N	49G66	30.13 26.181 50 5 0 -- 0.11	OK
26 Oct 3:15 am	51	6	16	N	49G65	30.11 26.163 49 5 0 -- 0.11	OK
26 Oct 2:15 am	51	3	14	N	50G63	30.11 26.163 52 5 0 -- 0.11	OK
26 Oct 1:15 am	52	7	16	N	47G59	30.10 26.155 52 5 0 -- 0.11	OK
26 Oct 12:15 am	53	8	16	N	44G59	30.12 26.172 52 5 0 -- 0.11	OK
25 Oct 11:15 pm	51	8	17	N	44G58	30.13 26.181 52 5 0 -- 0.11	OK
25 Oct 10:15 pm	52	7	16	N	48G61	30.12 26.172 51 5 0 -- 0.11	OK
25 Oct 9:15 pm	52	4	14	N	44G55	30.13 26.181 51 5 0 -- 0.11	OK
25 Oct 8:15 pm	52	4	14	N	43G54	30.12 26.172 53 5 0 -- 0.11	OK
25 Oct 7:15 pm	52	4	14	N	41G51	30.11 26.163 52 5 0 -- 0.11	OK
25 Oct 6:15 pm	54	6	14	N	39G49	30.10 26.155 54 5 82 39% 0.11	OK
25 Oct 5:15 pm	54	7	15	N	38G51	30.10 26.155 58 5 283 57% 0.11	OK
25 Oct 4:15 pm	54	7	15	N	42G52	30.11 26.163 56 5 443 61% 0.11	OK
25 Oct 3:15 pm	52	6	15	N	39G51	30.10 26.155 59 5 621 69% 0.11	OK
25 Oct 2:15 pm	50	6	16	N	44G55	30.11 26.163 57 5 713 72% 0.11	OK
25 Oct 1:15 pm	49	5	16	N	50G61	30.15 26.199 55 5 735 73% 0.11	OK
25 Oct 12:15 pm	50	4	15	N	45G59	30.11 26.163 54 5 702 75% 0.11	OK
25 Oct 11:15 am	50	3	14	N	43G56	30.10 26.155 55 5 596 76% 0.11	OK
25 Oct 10:15 am	48	6	18	N	43G58	30.11 26.163 50 5 437 78% 0.11	OK
25 Oct 9:15 am	46	1	15	N	43G58	30.10 26.155 50 5 243 85% 0.11	OK
25 Oct 8:15 am	47	0	14	N	42G57	29.05 25.218 47 5 49 -- 0.11	Caution
25 Oct 7:15 am	46	-2	13	N	42G54	30.06 26.119 47 5 0 -- 0.11	Caution
25 Oct 6:15 am	48	-2	12	N	48G68	30.05 26.110 46 5 0 -- 0.11	OK
25 Oct 5:15 am	46	-1	14	N	44G63	30.04 26.101 46 5 0 -- 0.11	OK
25 Oct 4:15 am	50	-3	11	N	40G62	30.04 26.101 48 5 0 -- 0.11	OK
25 Oct 3:15 am	50	-3	11	N	42G60	30.07 26.128 51 5 0 -- 0.11	OK
25 Oct 2:15 am	52	-1	11	N	34G56	30.05 26.110 51 6 0 -- 0.11	OK
25 Oct 1:15 am	56	34	44	N	27G42	30.05 26.110 55 6 0 -- 0.11	Caution
25 Oct 12:15 am	59	34	39	N	21G32	30.06 26.119 57 6 0 -- 0.11	Caution
24 Oct 11:15 pm	59	31	35	N	19G27	30.04 26.101 58 5 0 -- 0.11	Caution
24 Oct 10:15 pm	61	31	32	N	11G18	30.03 26.092 60 5 0 -- 0.11	Caution
24 Oct 9:15 pm	62	-14	4	NNW	11G13	30.02 26.083 61 4 0 -- 0.11	Caution
24 Oct 8:15 pm	64	-13	4	NW	9G15	30.01 26.074 61 5 0 -- 0.11	Caution

**Weather Conditions for:**

Modesto, Modesto City-County-Sham Field, CA (KMOD)

Elev: 95 ft; Latitude: 37.62417; Longitude: -120.95056

Date/Time	T	DP	RH	WD	WS	VIS	Wx	SKY	PRESSURE	MN/MX	T	Flag
26 Oct 12:50 am	56	25	30	WNW	6	10.00		CLR	1019.2	30.10	30.006	75 55 OK
25 Oct 11:50 pm	59	24	26	WNW	10	10.00		CLR	1019.0	30.09	29.996	OK
25 Oct 10:50 pm	59	24	26	WNW	12	10.00		CLR	1018.6	30.08	29.986	73 58 OK
25 Oct 9:50 pm	61	24	24	WNW	10	10.00		CLR	1018.2	30.07	29.976	OK
25 Oct 8:50 pm	63	24	23	WNW	13	10.00		CLR	1018.0	30.06	29.966	OK
25 Oct 7:50 pm	64	24	22	WNW	15	10.00		CLR	1017.7	30.05	29.956	OK
25 Oct 6:50 pm	67	24	20	W	13	10.00		CLR	1017.0	30.03	29.936	OK
25 Oct 5:50 pm	69	22	17	WNW	17	10.00		CLR	1016.8	30.03	29.936	OK
25 Oct 4:50 pm	73	21	14	NW	23G29	10.00		CLR	1016.4	30.01	29.916	75 64 OK
25 Oct 3:50 pm	72	21	15	NW	18G23	10.00		CLR	1016.8	30.03	29.936	OK
25 Oct 2:50 pm	74	23	15	WNW	16	10.00		CLR	1017.3	30.04	29.946	OK
25 Oct 1:50 pm	74	22	14	NW	17G28	6.00	HZ	CLR	1017.9	30.06	29.966	OK
25 Oct 12:50 pm	71	25	18	NNW	16G23	8.00		CLR	1018.7	30.08	29.986	OK
25 Oct 11:50 am	67	26	21	WNW	15G24	9.00		CLR	1019.4	30.10	30.006	OK
25 Oct 10:50 am	64	27	24	WNW	20	10.00		CLR	1019.8	30.12	30.026	64 55 OK
25 Oct 9:50 am	60	27	28	WNW	15	10.00	FEW090		1019.9	30.12	30.026	OK
25 Oct 8:50 am	57	28	33	W	16	10.00		CLR	1019.6	30.11	30.016	OK
25 Oct 7:50 am	55	27	34	WNW	18	10.00		CLR	1018.4	30.07	29.976	OK
25 Oct 6:50 am	56	26	31	WNW	18	10.00		CLR	1017.6	30.05	29.956	OK
25 Oct 5:50 am	57	25	29	WNW	15	10.00		CLR	1016.8	30.03	29.936	OK
25 Oct 4:50 am	57	28	33	WNW	15	10.00		CLR	1016.3	30.02	29.926	63 57 OK
25 Oct 3:50 am	58	37	46	WNW	16	10.00		CLR	1016.0	30.01	29.916	OK
25 Oct 2:50 am	59	48	67	WNW	14	10.00		CLR	1015.6	29.99	29.896	OK
25 Oct 1:50 am	58	46	65	NW	9	10.00		CLR	1014.9	29.97	29.876	OK
25 Oct 12:50 am	60	45	57	NW	10	10.00		CLR	1014.3	29.96	29.866	84 47 OK
24 Oct 11:50 pm	60	43	53	NNW	7	10.00		CLR	1013.7	29.93	29.836	OK
24 Oct 10:50 pm	63	44	50	NW	6	10.00		CLR	1012.9	29.91	29.816	81 62 OK
24 Oct 9:50 pm	65	44	47	CALM		10.00		CLR	1012.1	29.89	29.796	OK
24 Oct 8:50 pm	64	43	46	WNW	8	10.00		CLR	1011.6	29.87	29.776	OK
24 Oct 7:50 pm	69	41	36	WNW	6	10.00		CLR	1011.0	29.86	29.766	OK
24 Oct 6:50 pm	74	41	31	NNW	9	10.00		CLR	1010.8	29.85	29.756	OK
24 Oct 5:50 pm	78	40	26	NW	10	10.00		CLR	1010.2	29.83	29.737	OK
24 Oct 4:50 pm	81	40	23	NW	10	10.00		CLR	1009.8	29.82	29.727	84 70 OK
24 Oct 3:50 pm	83	43	25	NW	10	10.00	FEW090		1009.8	29.82	29.727	OK
24 Oct 2:50 pm	83	40	22	VRBL	6	10.00		CLR	1010.0	29.83	29.737	OK
24 Oct 1:50 pm	80	43	27	VRBL	6	10.00		CLR	1010.5	29.84	29.746	OK
24 Oct 12:50 pm	79	43	28	NW	7	10.00		CLR	1011.4	29.87	29.776	OK
24 Oct 11:50 am	75	41	29	WNW	3	10.00		CLR	1012.3	29.89	29.796	OK



**Weather Conditions for:**

**Stockton, Stockton Metropolitan Airport, CA (KSCK)**

Elev: 30 ft; Latitude: 37.88972; Longitude: -121.22361

Date/Time	T	DP	RH	WD	WS	VIS	SKY	PRESSURE	MN/MX T	Flag
26 Oct 5:55 am	40	28	62	CALM		10.00	CLR	1021.6 30.17 30.146		OK
26 Oct 4:55 am	42	28	57	S	3	10.00	CLR	1021.2 30.16 30.136	54 41	OK
26 Oct 3:55 am	44	27	51	NNW	3	10.00	CLR	1020.4 30.14 30.116		OK
26 Oct 2:55 am	45	28	51	WSW	6	10.00	CLR	1020.2 30.13 30.106		OK
26 Oct 1:55 am	51	26	38	WNW	7	10.00	CLR	1019.6 30.11 30.086		OK
26 Oct 12:55 am	52	26	36	W	10	10.00	CLR	1019.0 30.10 30.076	76 46	OK
25 Oct 11:55 pm	51	27	39	WSW	12	10.00	CLR	1018.9 30.09 30.066		OK
25 Oct 10:55 pm	54	25	32	WNW	9	10.00	CLR	1018.7 30.08 30.056	72 50	OK
25 Oct 9:55 pm	53	27	36	W	9	10.00	CLR	1018.4 30.08 30.056		OK
25 Oct 8:55 pm	56	26	31	W	6	10.00	CLR	1018.0 30.06 30.036		OK
25 Oct 7:55 pm	62	24	23	NW	9	10.00	CLR	1017.6 30.05 30.026		OK
25 Oct 6:55 pm	65	24	21	NW	15	10.00	CLR	1017.1 30.04 30.016		OK
25 Oct 5:55 pm	69	22	17	NW	14	10.00	CLR	1016.9 30.03 30.006		OK
25 Oct 4:55 pm	72	22	15	NW	18G23	10.00	CLR	1017.1 30.04 30.016	76 66	OK
25 Oct 3:55 pm	75	21	13	NW	18G26	10.00	CLR	1017.0 30.04 30.016		OK
25 Oct 2:55 pm	75	20	13	NNW	22	10.00	CLR	1017.2 30.04 30.016		OK
25 Oct 1:55 pm	74	22	14	NW	15G24	10.00	CLR	1018.5 30.08 30.056		OK
25 Oct 12:55 pm	73	24	16	NNW	20G25	8.00	CLR	1019.0 30.09 30.066		OK
25 Oct 11:55 am	70	25	18	NW	21	7.00	CLR	1019.4 30.11 30.086		OK
25 Oct 10:55 am	66	27	23	NNW	16G24	10.00	CLR	1019.5 30.11 30.086	66 46	OK
25 Oct 9:55 am	62	28	27	NW	12	10.00	CLR	1019.9 30.12 30.096		OK
25 Oct 8:55 am	57	28	33	NW	14	10.00	CLR	1019.7 30.12 30.096		OK
25 Oct 7:55 am	53	28	38	WNW	12	10.00	CLR	1018.9 30.09 30.066		OK
25 Oct 6:55 am	54	27	35	WNW	15	10.00	CLR	1018.0 30.07 30.046		OK
25 Oct 5:55 am	49	28	44	W	7	10.00	CLR	1017.3 30.04 30.016		OK
25 Oct 4:55 am	54	25	32	WNW	10	8.00	CLR	1017.0 30.03 30.006	60 50	OK
25 Oct 3:55 am	58	26	29	NNW	16	9.00	CLR	1016.0 30.01 29.986		OK
25 Oct 2:55 am	60	32	35	NNW	21	10.00	CLR	1015.9 30.00 29.976		OK
25 Oct 1:55 am	58	48	70	NW	13	10.00	CLR	1015.4 29.99 29.966		OK
25 Oct 12:55 am	56	43	62	N	6	10.00	CLR	1014.4 29.96 29.936	83 46	OK
24 Oct 11:55 pm	57	46	67	NNW	8	10.00	CLR	1013.9 29.94 29.916		OK
24 Oct 10:55 pm	59	43	55	NW	7	10.00	CLR	1012.9 29.91 29.886	79 59	OK
24 Oct 9:55 pm	59	43	55	WNW	8	10.00	CLR	1012.1 29.89 29.866		OK
24 Oct 8:55 pm	62	45	53	W	6	10.00	CLR	1011.5 29.87 29.846		OK
24 Oct 7:55 pm	63	40	43	W	7	10.00	CLR	1011.3 29.87 29.846		OK
24 Oct 6:55 pm	70	41	35	NW	3	10.00	CLR	1010.5 29.84 29.816		OK
24 Oct 5:55 pm	76	40	27	NNW	10	10.00	CLR	1010.4 29.84 29.816		OK
24 Oct 4:55 pm	79	38	23	NW	9	10.00	CLR	1010.1 29.83 29.807	83 71	OK

**CIMIS STATIONS:** Alpaugh - San Joaquin Valley - Station 203

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	9.2	53.8	65	42.4	3.5	219.8	65.5
	0200	0.00	0.00	0	9.3	53.8	65	42.5	3.2	229.0	65.1
	0300	0.00	0.00	0	8.8	51.9	67	41.3	3.4	236.5	64.6
	0400	0.00	0.00	0	8.7	49.8	72	41.0	2.3	243.2	64.2
	0500	0.00	0.00	0	8.2	46.0	78	39.4	2.8	196.1	63.9
	0600	0.00	0.00	0	8.0	44.4	80	38.7	2.8	193.7	63.5
	0700	0.00	0.00	68	8.3	47.8	73	39.7	2.3	276.8	63.1
	0800	0.00	0.00	384	7.7	53.9	54	37.9	4.5	315.9	62.7
	0900	0.01	0.00	742	5.1	60.9	28	27.3	13.5	340.8	62.3
	1000	0.02	0.00	1017	4.9	63.5	25	26.6	13.1	344.0	62.2
	1100	0.02	0.00	1155	4.8	65.8	22	26.2	13.4	339.0	62.5
	1200	0.02	0.00	1241	4.9	68.3	21	26.8	12.4	344.3	63.2
	1300	0.02	0.00	1188	4.9	69.4	20	26.8	11.8	335.6	64.3
	1400	0.02	0.00	1005	5.1	71.2	19	27.5	10.5	345.6	65.2
	1500	0.01	0.00	753	5.2	71.8	20	28.0	10.6	346.1	65.8
	1600	0.01	0.00	455	4.9	70.9	19	26.7	10.1	340.7	66.5
	1700	0.00	0.00	143	5.2	67.0	23	28.1	5.2	325.7	66.8
	1800	0.00	0.00	3	5.0	59.0	30	27.3	3.5	302.1	66.7
	1900	0.00	0.00	0	5.6	54.6	38	29.7	3.5	302.1	66.2

Stratford - San Joaquin Valley - Station 15

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	8.3	56.8	53	39.7	4.0	334.3	63.1
	0200	0.00	0.00	0	8.2	54.8	56	39.4	4.0	352.6	62.7
	0300	0.00	0.00	0	7.9	50.7	63	38.6	3.7	317.2	62.4
	0400	0.00	0.00	0	8.3	57.0	52	39.6	8.0	338.4	62.1
	0500	0.00	0.00	0	7.6	61.9	40	37.5	11.4	335.3	61.7
	0600	0.01	0.00	0	5.7	59.6	32	30.1	16.2	339.9	61.5
	0700	0.01	0.00	42	4.1	58.8	24	22.5	20.3	344.8	61.3
	0800	0.01	0.00	310	3.6	60.1	20	19.0	19.5	340.4	61.1
	0900	0.02	0.00	606	3.6	62.0	19	19.2	22.4	339.9	61.0
	1000	0.02	0.00	859	3.5	65.0	16	18.4	21.6	340.1	61.0
	1100	0.02	0.00	1027	3.4	68.0	14	17.8	19.9	337.2	61.2
	1200	0.02	0.00	1098	3.6	69.9	14	19.2	17.2	343.3	61.5
	1300	0.02	0.00	1072	3.7	71.3	14	19.7	15.2	331.5	62.1
	1400	0.02	0.00	953	3.5	72.1	13	18.3	16.0	339.7	62.6
	1500	0.02	0.00	716	3.5	71.9	13	18.5	16.9	347.7	63.1
	1600	0.01	0.00	416	3.6	70.6	14	19.6	13.3	351.8	63.4
	1700	0.01	0.00	137	3.9	68.2	16	21.1	8.0	4.8	63.5
	1800	0.00	0.00	4	4.3	62.3	23	23.7	5.7	10.9	63.5
	1900	0.00	0.00	0	4.7	57.1	30	25.8	3.5	299.6	63.3

Kettleman - San Joaquin Valley - Station 21

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	9.1	64.0	45	42.0	3.6	247.4	63.2
	0200	0.00	0.00	0	8.8	63.7	44	41.2	3.6	272.3	63.1
	0300	0.00	0.00	0	8.9	56.5	57	41.5	2.0	231.0	62.9
	0400	0.00	0.00	0	8.6	55.3	57	40.5	1.9	199.2	62.7
	0500	0.00	0.00	0	8.3	55.3	56	39.8	1.9	198.8	62.4
	0600	0.00	0.00	0	8.2	54.5	56	39.3	1.3	241.3	62.1
	0700	0.00	0.00	34	7.4	55.2	50	36.7	5.3	337.7	61.8
	0800	0.01	0.00	273	4.9	60.4	28	26.8	9.4	322.2	61.5
	0900	0.01	0.00	778	4.3	64.5	21	23.4	12.2	335.2	61.3
	1000	0.02	0.00	1082	3.9	67.8	17	21.2	16.2	333.9	61.2
	1100	0.03	0.00	1288	3.4	71.7	13	17.9	17.9	335.0	61.3
	1200	0.03	0.00	1389	3.4	73.3	12	18.1	19.6	341.3	61.4
	1300	0.03	0.00	1380	3.7	74.1	13	19.6	17.2	339.9	61.7
	1400	0.03	0.00	1219	3.9	73.9	14	20.9	17.7	342.4	61.9
	1500	0.02	0.00	921	3.8	73.0	14	20.8	18.8	339.2	62.2
	1600	0.01	0.00	258	4.6	70.9	18	25.0	14.6	347.9	62.3
	1700	0.01	0.00	67	4.7	67.8	20	25.8	8.8	353.0	62.4
	1800	0.00	0.00	3	5.1	63.2	26	27.5	2.4	299.1	62.4
	1900	0.00	0.00	0	5.2	59.2	30	28.1	3.3	247.5	62.3

FivePoints - San Joaquin Valley - Station 2

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	8.7	59.3	51	41.0	5.9	294.0	66.9
	0200	0.00	0.00	0	8.5	57.6	53	40.5	5.5	326.3	66.8
	0300	0.00	0.00	0	8.2	56.4	53	39.5	9.9	323.6	66.8
	0400	0.00	0.00	0	8.2	60.6	45	39.3	10.0	304.9	66.7
	0500	0.00	0.00	0	7.1	60.5	40	35.9	13.2	318.2	66.6
	0600	0.01	0.00	0	5.1	58.4	31	27.7	16.3	322.9	66.5
	0700	0.01	0.00	48	4.3	57.8	26	23.5	17.6	326.3	66.4
	0800	0.01	0.00	373	4.1	59.7	24	22.4	18.7	323.3	66.3
	0900	0.02	0.00	756	4.3	62.0	23	23.5	22.6	322.4	66.3
	1000	0.02	0.00	1066	4.1	65.3	19	22.5	24.2	310.5	66.2
	1100	0.03	0.00	1283	4.3	67.9	18	23.4	23.4	314.8	66.1
	1200	0.03	0.00	1402	4.6	69.4	19	25.2	22.2	330.1	66.0
	1300	0.03	0.00	1383	4.7	69.9	19	25.6	22.4	326.2	65.9
	1400	0.03	0.00	1221	4.7	70.8	18	25.6	21.7	325.4	65.9
	1500	0.02	0.00	906	5.0	70.7	20	27.2	17.7	330.2	65.9
	1600	0.01	0.00	536	5.3	69.5	21	28.5	13.1	342.4	65.9
	1700	0.01	0.00	175	5.2	67.0	23	27.8	10.3	349.6	65.9
	1800	0.00	0.00	7	5.0	61.8	27	27.1	4.9	339.8	65.8
	1900	0.00	0.00	0	4.4	57.3	27	23.8	5.1	301.2	65.8

Shafter/USDA - San Joaquin Valley - Station 5

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	-- M	1	10.6	51.1	83	46.1	1.1	-- N	-- N
	0200	0.00	-- M	1	10.2	49.1	86	45.1	1.7	-- N	-- N
	0300	0.00	-- M	1	10.0	48.0	88	44.7	1.4	-- N	-- N
	0400	0.00 R	-- M	1	10.0	47.4	90	44.6	1.0	-- N	-- N
	0500	0.00	-- M	1	9.8	46.2	92	44.0	1.2	-- N	-- N
	0600	0.00	-- M	1	9.6	45.6	92	43.5	1.2	-- N	-- N
	0700	0.00	-- M	5	9.5	45.3	92	43.2	1.5	-- N	-- N
	0800	0.00	-- M	167	10.1	46.8	93	44.9	1.0	-- N	-- N
	0900	0.01	-- M	565	11.9	57.7	73	49.1	3.8	-- N	-- N
	1000	0.01	-- M	931	8.9	62.2	46	41.4	6.2	-- N	-- N
	1100	0.02	-- M	1199	7.4	64.7	36	36.9	5.7	-- N	-- N
	1200	0.02	-- M	1379	6.9	68.0	30	35.1	4.9	-- N	-- N
	1300	0.02	-- M	1359	6.5	69.5	26	33.6	6.2	-- N	-- N
	1400	0.02	-- M	1262	6.7	71.7	25	34.2	4.4	-- N	-- N
	1500	0.01	-- M	980	6.8	72.5	25	34.6	4.3	-- N	-- N
	1600	0.01	-- M	644	6.9	72.2	26	35.1	4.0	-- N	-- N
	1700	0.00	-- M	288	7.3	69.7	30	36.6	3.0	-- N	-- N
	1800	0.00	-- M	43	8.9	63.8	44	41.4	1.4	-- N	-- N

Firebaugh/Telles - San Joaquin Valley - Station 7

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	9.5	57.8	58	43.1	3.7	314.7	64.1
	0200	0.00	0.00	0	9.8	56.4	63	43.9	3.2	301.1	63.9
	0300	0.00	0.00	0	9.7	56.3	63	43.8	3.8	305.0	63.7
	0400	0.00	0.00	0	8.7	59.1	51	41.0	7.1	312.6	63.6
	0500	0.00	0.00	0	6.2	58.0	38	32.3	6.8	321.4	63.4
	0600	0.00	0.00	0	5.6	56.5	36	29.8	6.8	326.7	63.2
	0700	0.00	0.00	25	5.2	56.2	34	28.1	8.8	326.9	63.0
	0800	0.01	0.00	204	5.1	59.8	29	27.8	11.4	334.0	62.8
	0900	0.01 Y	0.08	680	5.4 Y	61.7	29 Y	28.8 Y	13.2	327.3	62.6
	1000	0.02	0.00	946	5.6	63.8	27	29.6	13.8	325.7	62.4
	1100	0.02	0.00	1137	5.5	65.2	26	29.5	14.4	326.5	62.2
	1200	0.02	0.00	1203	5.7	67.4	25	30.1	13.8	329.3	62.1
	1300	0.02	0.00	1137	5.8	69.3	24	30.9	12.9	332.8	62.0
	1400	0.02	0.00	983	5.6	70.8	22	29.7	12.3	336.9	62.0
	1500	0.01	0.00	720	5.3	71.7	20	28.5	11.7	342.1	62.0
	1600	0.01	0.00	408	5.2	70.1	21	28.1	11.1	339.8	62.0
	1700	0.01	0.00	60	5.3	68.3	22	28.5	9.2	339.4	62.1
	1800	0.01	0.00	3	5.5	65.6	26	29.5	9.6	342.0	62.1
	1900	0.00	0.00	0	5.6	62.3	29	29.6	6.2	336.6	62.0

Parlier - San Joaquin Valley - Station 39

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	10.7	50.3	86	46.4	1.2	261.2	64.0
	0200	0.00	0.00	0	10.7	50.2	86	46.2	2.0	0.3	63.6
	0300	0.00	0.00	0	10.2	49.2	86	45.1	1.8	351.6	63.2
	0400	0.00	0.00	0	9.8	47.2	89	44.0	1.4	123.1	62.9
	0500	0.00	0.00	0	9.5	46.1	90	43.2	1.0	110.5	62.6
	0600	0.00	0.00	0	9.2	45.4	88	42.2	1.6	256.7	62.2
	0700	0.00	0.00	43	9.0	44.8	89	41.8	1.5	230.2	61.9
	0800	0.00	0.00	300	10.2	51.2	79	45.0	4.7	309.5	61.6
	0900	0.01	0.00	586	8.7	55.5	58	40.8	8.9	314.3	61.3
	1000	0.01	0.00	845	8.0	58.3	48	38.7	7.5	311.4	61.2
	1100	0.01	0.00	1020	7.6	61.3	41	37.4	7.4	313.0	61.3
	1200	0.01	0.00	1101	7.9	64.2	38	38.4	5.7	324.1	61.5
	1300	0.01	0.00	1072	8.4	66.9	37	40.0	5.7	330.8	61.9
	1400	0.01	0.00	939	8.5	68.6	35	40.2	6.6	316.4	62.3
	1500	0.01	0.00	712	7.5	70.1	30	37.2	8.1	324.2	62.8
	1600	0.01	0.00	431	6.6	69.8	27	34.0	6.4	323.0	63.1
	1700	0.00	0.00	142	6.7	68.0	29	34.2	4.3	312.9	63.2
	1800	0.00	0.00	3	8.0	60.9	44	38.6	2.3	333.8	63.3
	1900	0.00	0.00	0	9.1	54.3	63	42.0	1.4	38.9	63.2



Los Banos - San Joaquin Valley - Station 56

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	11.0	54.5	76	47.1	4.7	309.8	60.9
	0200	0.00	0.00	0	10.2	53.2	73	45.0	4.8	280.9	60.7
	0300	0.00	0.00	0	9.9	54.5	68	44.2	8.5	299.0	60.6
	0400	0.01	0.00	0	5.5	58.8	33	29.6	14.5	317.0	60.5
	0500	0.01	0.00	0	4.5	58.0	27	24.3	15.4	314.3	60.3
	0600	0.00	0.00	0	4.3	55.9	28	23.7	11.6	312.1	60.1
	0700	0.01	0.00	42	4.5	56.1	29	24.6	13.0	308.0	59.9
	0800	0.01	0.00	353	4.7	58.3	28	25.7	18.5	311.3	59.7
	0900	0.02	0.00	690	4.9	60.2	27	26.4	19.6	307.8	59.5
	1000	0.02	0.00	976	4.9	62.9	25	26.8	19.3	305.8	59.4
	1100	0.02	0.00	1156	5.1	64.6	25	27.7	19.1	303.5	59.4
	1200	0.03	0.00	1237	5.2	66.9	23	28.1	20.4	308.3	59.5
	1300	0.03	0.00	1194	5.3	68.7	22	28.6	21.0	303.2	59.6
	1400	0.02	0.00	1010	5.0	70.2	20	26.9	20.5	312.4	59.9
	1500	0.02	0.00	803	4.8	70.2	19	26.3	17.5	308.8	60.1
	1600	0.01	0.00	513	5.0	69.7	20	27.0	13.3	306.4	60.2
	1700	0.01	0.00	175	5.4	67.6	23	28.9	10.7	301.8	60.3
	1800	0.00	0.00	6	5.5	62.2	29	29.2	8.2	310.4	60.4
	1900	0.00	0.00	0	5.3	57.9	32	28.3	5.8	307.0	60.4

Modesto - San Joaquin Valley - Station 71

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	9.8	47.7	87	44.0	2.8	301.2	58.7
	0200	0.00	0.00	0	9.8	51.0	77	44.0	6.4	291.5	58.5
	0300	0.00	0.00	0	6.3	57.4	39	32.9	10.6	291.4	58.3
	0400	0.00	0.00	0	4.7	56.5	30	25.8	9.1	292.2	58.2
	0500	0.00	0.00	0	4.7	53.9	33	25.6	7.3	286.0	58.0
	0600	0.00	0.00	0	5.0	53.8	35	26.9	10.2	284.2	57.9
	0700	0.00	0.00	40	5.0	53.0	37	27.2	9.2	282.4	57.8
	0800	0.00	0.00	331	5.8	53.9	41	30.6	7.8	277.3	57.7
	0900	0.01	0.00	666	5.8	58.2	35	30.8	10.3	290.7	57.6
	1000	0.01	0.00	927	6.0	61.4	32	31.6	11.1	300.6	57.5
	1100	0.02	0.00	1103	5.9	64.6	28	31.2	12.2	309.6	57.5
	1200	0.02	0.00	1198	5.7	67.6	25	30.3	13.8	323.1	57.6
	1300	0.02	0.00	1038	5.6	69.8	22	29.7	13.2	324.5	57.8
	1400	0.02	0.00	1071	5.3	70.1	21	28.7	13.9	314.9	57.9
	1500	0.02	0.00	875	5.2	71.0	20	27.8	13.3	315.7	58.1
	1600	0.01	0.00	534	5.1	69.8	20	27.6	12.6	320.4	58.3
	1700	0.01	0.00	191	5.0	66.0	23	27.2	10.2	313.2	58.4
	1800	0.00	0.00	7	4.9	62.3	25	26.5	8.0	294.0	58.5
	1900	0.00	0.00	0	4.6	61.3	25	25.2	8.2	289.4	58.4

Fresno State - San Joaquin Valley - Station 80

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	9.3	56.3	60	42.5	5.1	283.2	66.7
	0200	0.00	0.00	0	8.8	55.1	59	41.2	2.9	295.6	66.6
	0300	0.00	0.00	0	8.9	54.1	62	41.4	4.2	284.9	66.5
	0400	0.00	0.00	0	9.0	53.7	64	41.7	5.8	277.2	66.4
	0500	0.00	0.00	0	8.9	52.3	66	41.5	5.4	289.6	66.2
	0600	0.00	0.00	0	9.2	51.4	71	42.3	5.4	278.9	66.1
	0700	0.00	0.00	57	8.7	50.2	70	40.9	6.4	270.8	66.0
	0800	0.00	0.00	358	7.2	52.0	55	36.2	9.0	295.2	65.9
	0900	0.01	0.00	704	6.3	55.1	43	32.8	10.6	288.1	65.8
	1000	0.01	0.00	993	6.0	58.7	36	31.7	9.3	285.8	65.7
	1100	0.02	0.00	1193	6.2	62.4	32	32.2	8.9	289.0	65.7
	1200	0.02	0.00	1286	6.5	64.9	31	33.5	8.0	288.5	65.6
	1300	0.02	0.00	1250	6.3	67.9	27	32.6	7.8	292.1	65.6
	1400	0.02	0.00	1099	5.4	69.0	22	28.9	9.8	284.0	65.7
	1500	0.01	0.00	845	5.1	69.5	21	27.6	8.8	283.4	65.8
	1600	0.01	0.00	514	5.0	69.4	20	27.1	7.3	274.3	65.9
	1700	0.00	0.00	162	5.0	67.9	21	27.1	4.2	270.7	66.0
	1800	0.00	0.00	4	5.7	61.2	31	30.2	2.6	227.6	66.0
	1900	0.00	0.00	0	5.9	57.7	36	31.3	2.2	114.3	66.1

Westlands - San Joaquin Valley - Station 105

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	7.3	57.9	45	36.6	5.2	269.9	60.5
	0200	0.00	0.00	0	7.2	55.5	48	36.0	6.1	279.7	60.3
	0300	0.00	0.00	0	7.7	55.8	51	37.9	6.0	253.7	60.0
	0400	0.00	0.00	0	7.3	54.8	49	36.3	7.8	274.7	59.7
	0500	0.00	0.00	0	5.8	59.3	34	30.7	12.5	287.4	59.4
	0600	0.00	0.00	0	4.5	57.6	28	24.5	11.4	280.4	59.1
	0700	0.00	0.00	48	4.2	54.7	29	22.9	8.0	273.9	58.8
	0800	0.01	0.00	332	4.3	57.7	26	23.5	10.0	283.6	58.5
	0900	0.01	0.00	626	4.2	62.5	22	22.7	16.1	296.0	58.2
	1000	0.02	0.00	887	4.3	64.5	21	23.4	17.3	298.1	58.1
	1100	0.02	0.00	1075	4.3	66.7	19	23.6	17.7	297.3	58.1
	1200	0.02	0.00	1165	4.4	68.1	19	24.0	17.5	293.0	58.3
	1300	0.02	0.00	1124	4.7	69.6	19	25.8	16.0	293.2	58.7
	1400	0.02	0.00	953	4.7	70.9	18	25.7	14.1	299.2	59.1
	1500	0.02	0.00	716	4.5	71.2	17	24.4	14.0	305.9	59.4
	1600	0.01	0.00	433	4.2	70.8	16	22.8	12.1	303.9	59.6
	1700	0.01	0.00	165	4.3	68.2	18	23.4	9.4	294.7	59.7
	1800	0.00	0.00	5	4.0	61.9	21	21.8	5.2	280.6	59.6
	1900	0.00	0.00	0	4.1	59.5	23	22.1	5.4	264.4	59.4

Arvin-Edison - San Joaquin Valley - Station 125

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	9.5	53.8	67	43.2	3.0	91.6	70.7
	0200	0.00	0.00	0	8.8	54.8	60	41.1	2.9	91.5	70.6
	0300	0.00	0.00	0	9.0	54.2	63	41.8	1.8	73.6	70.5
	0400	0.00	0.00	0	8.8	52.9	65	41.3	2.2	85.2	70.4
	0500	0.00	0.00	0	9.1	53.6	65	42.2	3.0	183.6	70.3
	0600	0.00	0.00	0	9.5	59.1	55	43.2	8.2	203.1	70.2
	0700	0.00	0.00	54	9.2	59.1	54	42.4	6.5	199.6	70.1
	0800	0.00	0.00	322	10.1	60.7	56	44.9	4.1	308.6	69.9
	0900	0.01	0.00	644	10.1	62.5	52	44.9	9.4	234.3	69.6
	1000	0.01	0.00	918	9.8	63.9	48	44.0	7.8	244.8	68.8
	1100	0.02	0.00	1114	8.9	66.4	40	41.6	7.5	230.8	68.2
	1200	0.02	0.00	1205	8.1	66.6	36	39.1	9.2	233.2	67.8
	1300	0.02	0.00	1168	6.6	67.2	29	33.9	7.2	246.3	67.7
	1400	0.02	0.00	1028	5.9	69.0	25	31.3	4.5	212.7	68.0
	1500	0.01	0.00	786	5.2	70.6	20	27.9	4.0	229.2	68.5
	1600	0.01	0.00	465	4.6	70.9	18	25.1	3.5	255.0	69.0
	1700	0.00	0.00	135	4.6	69.8	19	25.3	2.1	278.1	69.5
	1800	0.00	0.00	3	5.0	61.3	27	27.1	3.3	101.9	69.8
	1900	0.00	0.00	0	3.5	61.3	19	18.7	3.5	111.3	70.0

Madera - San Joaquin Valley - Station 145

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	10.8	54.8	74	46.7	4.6	295.4	63.6
	0200	0.00	0.00	0	10.4	55.8	68	45.6	5.6	296.7	63.4
	0300	0.00	0.00	0	10.1	55.0	69	44.9	4.6	301.3	63.2
	0400	0.00	0.00	0	10.5	54.6	72	45.9	6.1	293.4	63.0
	0500	0.00	0.00	0	10.4	51.2	81	45.5	4.7	272.5	62.8
	0600	0.00	0.00	0	8.0	51.8	61	38.8	6.8	301.2	62.7
	0700	0.00	0.00	26	6.2	51.5	47	32.2	7.3	305.9	62.5
	0800	0.00	0.00	274	5.8	52.9	42	30.7	7.4	300.3	62.3
	0900	0.01	0.00	603	5.7	56.5	37	30.4	9.4	300.2	62.2
	1000	0.01	0.00	882	5.6	59.8	32	30.0	10.0	302.5	62.2
	1100	0.02	0.00	1086	5.5	63.1	28	29.5	9.5	313.5	62.2
	1200	0.02	0.00	1203	5.6	65.4	26	29.6	11.2	305.4	62.3
	1300	0.02	0.00	1192	5.5	67.1	24	29.6	10.5	313.0	62.5
	1400	0.02	0.00	1061	5.4	68.6	23	29.0	10.6	318.0	62.7
	1500	0.01	0.00	797	5.2	70.3	21	28.2	9.2	311.0	62.9
	1600	0.01	0.00	489	5.0	70.9	19	27.0	8.2	308.6	63.1
	1700	0.01	0.00	182	5.1	68.9	21	27.5	7.1	301.0	63.2
	1800	0.00	0.00	9	6.1	61.0	33	32.1	2.4	254.7	63.3
	1900	0.00	0.00	0	6.5	56.2	42	33.4	2.8	266.7	63.2

Merced - San Joaquin Valley - Station 148

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	8.4	53.1	61	40.1	2.6	322.0	63.0
	0200	0.00	0.00	0	8.5	53.0	62	40.2	4.6	322.5	62.8
	0300	0.00	0.00	0	9.2	55.7	61	42.3	7.9	315.3	62.6
	0400	0.00	0.00	0	9.4	53.8	67	43.0	5.5	316.2	62.4
	0500	0.00	0.00	0	6.9	53.2	50	35.1	9.4	319.6	62.3
	0600	0.00	0.00	0	5.6	51.3	43	29.9	9.6	327.7	62.1
	0700	0.00	0.00	46	4.9	50.6	39	26.8	7.5	340.5	61.9
	0800	0.01	0.00	336	4.7	53.5	34	25.8	7.9	338.6	61.7
	0900	0.01	0.00	662	4.8	56.8	31	26.2	12.3	336.7	61.5
	1000	0.02	0.00	960	4.9	60.6	27	26.7	15.9	330.7	61.3
	1100	0.02	0.00	1167	4.8	63.2	24	26.1	13.5	328.3	61.2
	1200	0.02	0.00	1247	4.9	65.4	23	26.4	12.7	339.5	61.2
	1300	0.02	0.00	1203	4.8	67.5	21	26.1	12.2	333.0	61.4
	1400	0.02	0.00	1046	4.6	70.3	18	25.1	12.7	328.7	61.6
	1500	0.02	0.00	808	4.4	71.5	17	23.9	13.6	320.8	61.7
	1600	0.01	0.00	492	4.3	70.8	17	23.7	11.0	319.0	61.9
	1700	0.01	0.00	160	4.5	68.0	19	24.5	8.5	309.5	62.0
	1800	0.00	0.00	4	4.6	62.4	24	25.1	4.2	297.5	62.0
	1900	0.00	0.00	0	5.2	56.3	34	28.1	1.9	320.0	62.0

Tracy - San Joaquin Valley - Station 167

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	7.9	60.4	44	38.6	5.3	273.5	59.8
	0200	0.00	0.00	0	7.1	59.1	41	35.7	7.3	292.0	59.6
	0300	0.00	0.00	0	4.3	59.3	25	23.4	7.4	276.5	59.4
	0400	0.00	0.00	0	3.9	57.1	25	21.3	6.3	268.4	59.2
	0500	0.00	0.00	0	4.1	55.6	27	22.4	7.6	273.9	59.0
	0600	0.00	0.00	0	4.2	54.3	29	23.0	7.4	276.3	58.8
	0700	0.00	0.00	20	4.5	54.3	31	24.6	7.7	284.0	58.6
	0800	0.00	0.00	220	5.1	56.6	33	27.6	8.0	304.5	58.3
	0900	0.01	0.00	498	5.3	59.6	30	28.6	9.4	316.9	58.1
	1000	0.01	0.00	750	5.2	63.3	26	28.2	13.6	322.2	58.0
	1100	0.02	0.00	923	5.2	66.0	24	27.8	13.4	327.5	57.9
	1200	0.02	0.00	1035	5.1	68.5	21	27.6	13.3	325.8	57.9
	1300	0.02	0.00	988	4.3	69.9	17	23.5	15.9	326.8	58.0
	1400	0.02	0.00	928	4.4	70.5	17	23.9	15.4	324.8	58.0
	1500	0.02	0.00	739	4.2	71.5	16	23.0	14.7	324.9	58.1
	1600	0.01	0.00	465	4.4	70.7	17	23.8	13.4	321.0	58.2
	1700	0.01	0.00	179	4.2	68.8	17	22.7	8.5	300.5	58.3
	1800	0.00	0.00	8	3.9	64.7	19	21.4	6.9	285.1	58.4
	1900	0.00	0.00	0	3.6	62.3	19	19.3	7.2	269.7	58.5



Delano - San Joaquin Valley - Station 182

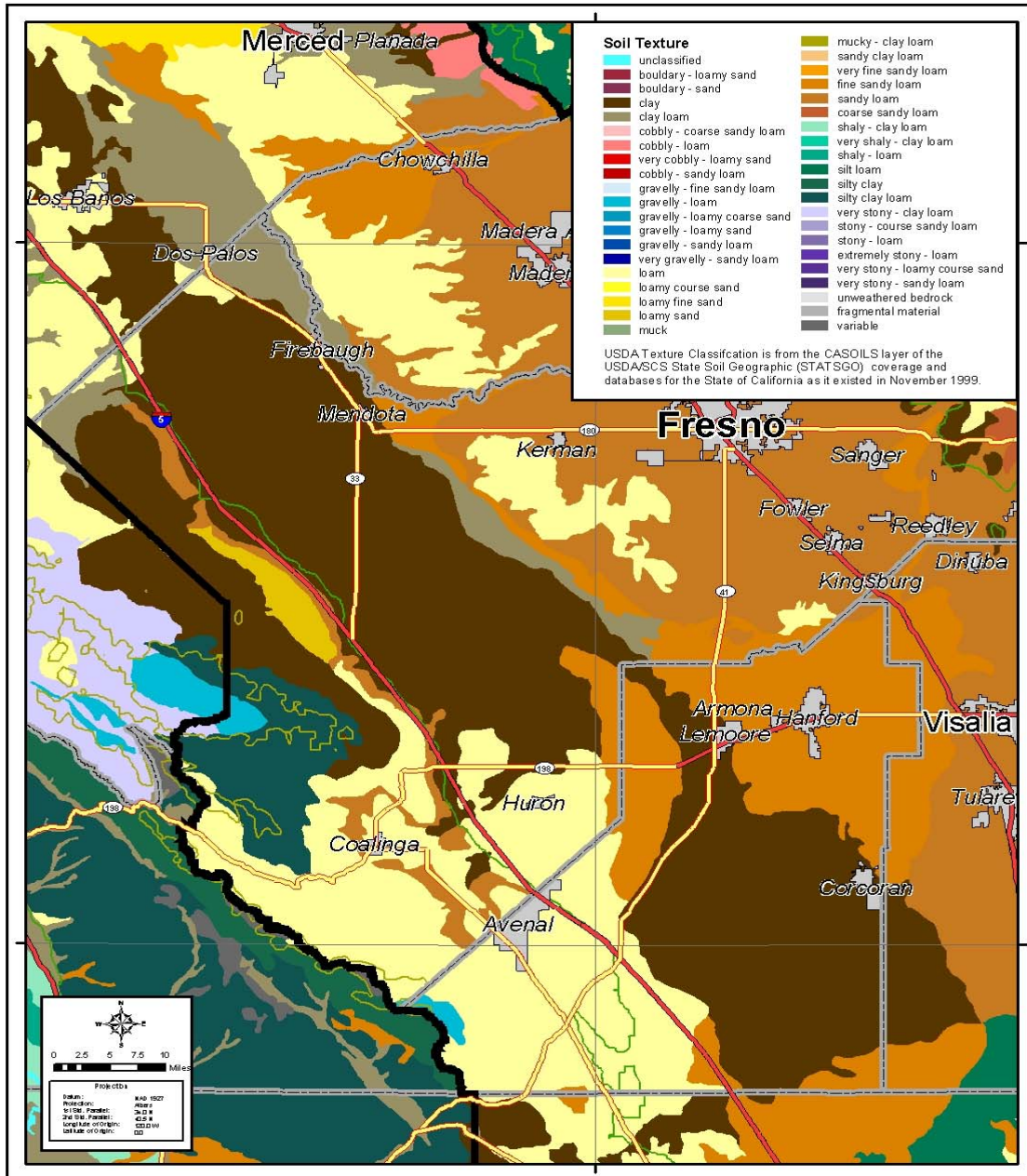
Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	10.8	51.3	84	46.6	1.8	131.3	64.9
	0200	0.00	0.00	0	10.6	52.2	79	46.0	2.1	195.4	64.6
	0300	0.00	0.00	0	9.8	51.9	74	44.1	2.0	197.5	64.3
	0400	0.00	0.00	0	9.4	48.0	82	42.8	2.1	113.9	64.0
	0500	0.00	0.00	0	9.4	46.6	87	42.9	2.0	128.0	63.7
	0600	0.00	0.00	0	9.2	46.1	87	42.3	2.3	121.9	63.4
	0700	0.00	0.00	58	9.5	47.4	85	43.1	1.6	147.4	63.1
	0800	0.00	0.00	318	10.0	54.5	69	44.6	3.2	257.3	62.8
	0900	0.01	0.00	617	7.3	58.9	43	36.5	6.7	310.9	62.5
	1000	0.01	0.00	864	6.5	61.8	34	33.4	6.0	309.8	62.3
	1100	0.01	0.00	1016	6.4	64.0	31	33.0	5.4	302.8	62.2
	1200	0.02	0.00	1111	6.5	66.2	30	33.5	5.9	306.4	62.2
	1300	0.01	0.00	1082	6.8	68.2	29	34.5	5.1	292.2	62.3
	1400	0.01	0.00	909	6.6	70.1	26	34.0	5.4	305.7	62.6
	1500	0.01	0.00	671	6.7	71.7	25	34.4	4.7	320.4	63.0
	1600	0.01	0.00	387	6.8	71.3	26	34.7	3.7	322.9	63.3
	1700	0.00	0.00	107	7.2	68.6	30	35.9	2.1	339.8	63.6
	1800	0.00	0.00	3	8.3	61.2	45	39.8	1.3	121.8	63.8
	1900	0.00	0.00	1	8.6	56.7	55	40.7	1.2	117.8	63.9

Five Points South West - San Joaquin Valley - Station 190

Date	Hour	ETo (in)	Precip (in)	Sol Rad (Ly/day)	Vapor Pressure (mBars)	Air Temp (°F)	Rel Hum (%)	Dew Point (°F)	Wind Speed (MPH)	Wind Dir (0-360)	Soil Temp (°F)
10/25/2006	0100	0.00	0.00	0	8.7	59.0	51	41.0	3.4	277.8	62.7
	0200	0.00	0.00	0	8.3	56.4	54	39.8	3.2	300.5	62.6
	0300	0.00	0.00	0	8.5	58.8	50	40.5	5.4	305.4	62.5
	0400	0.00	0.00	0	7.9	61.5	42	38.4	5.4	288.6	62.3
	0500	0.00	0.00	0	6.9	60.7	38	35.1	10.9	312.0	62.2
	0600	0.00	0.00	0	5.4	57.7	33	29.0	9.3	309.3	62.1
	0700	0.01	0.00	56	4.1	58.7	24	22.2	11.4	313.8	62.0
	0800	0.01	0.00	335	4.0	60.9	22	21.5	11.6	306.5	61.9
	0900	0.01	0.00	639	4.1	63.5	20	22.1	13.8	310.5	61.7
	1000	0.02	0.00	852	3.7	67.0	16	20.0	16.2	303.9	61.6
	1100	0.02	0.00	1014	3.8	69.8	15	20.6	14.7	308.9	61.5
	1200	0.02	0.00	1100	3.6	71.6	14	19.5	14.2	303.7	61.5
	1300	0.02	0.00	1084	4.0	71.7	15	21.8	15.7	312.8	61.5
	1400	0.02	0.00	940	4.4	71.7	17	24.1	16.8	316.3	61.6
	1500	0.02	0.00	704	4.6	71.7	17	25.3	14.2	309.6	61.7
	1600	0.01	0.00	404	4.7	71.2	18	25.4	11.9	312.2	61.9
	1700	0.01	0.00	117	4.8	68.0	21	26.3	8.8	319.3	62.0
	1800	0.00	0.00	3	4.9	61.2	27	26.7	4.9	310.7	62.1

## 9.5 Soil and Crop Maps

### Soil Map of area northwest of Corcoran





Crop Map of area northwest of Corcoran

