# VI. FUMIGATION OF CONIFER SEEDLINGS WITH OZONE AND SULFUR DIOXIDE MIXTURES IN OUTDOOR OPEN-TOP CHAMBERS

## PURPOSE

Pollutant mixtures transported from the Bakersfield-Oildale area to downwind areas are expected to contain relatively low concentrations of sulfur dioxide along with ozone (Duckworth and Crowe, 1979). There is no evidence to explain how important montane tree species may react to pollutant mixtures. Therefore, several single and mixed gas fumigations of conifer seedlings were carried out to investigate possible ozone-sulfur dioxide interactions at concentrations similar to those monitored at remote sites east of Bakersfield-Oildale.

Two objectives were defined for the fumigation experiments. First, the effects of single and mixed gas treatments on dry weight of the shoots and roots of recently germinated conifer seedlings were examined in two experiments. Second, we included in the first of these experiments two- to three-year-old Pinus ponderosa and P. Jeffreyi and six-month-old Sequoiadendron giganteum (giant Sequoia) seedlings, in order to determine the types of symptoms that may appear on secondary foliage that is similar to that of adult trees. The designs and durations of the fumigation experiments are shown in Table VI-1.

Table VI-1. Design Characteristics and Durations of Single and Mixed Ozone and Sulfur Dioxide Fumigations of Conifer Seedlings

| Inclusive Dates | Total Days | Fumigation Days | Exposure/ Fumigation Day | Plant Material | Single Gases ($O_3$ (pphm)) | Single Gases ($SO_2$ (pphm)) | Single Gases Chamber Replications | Combined Gases ($O_3$+$SO_2$ (pphm)) | Combined Gases Chamber Replications |
|---|---|---|---|---|---|---|---|---|---|
| 2/18/82 | 97 | 64 | 7.5 | Recently germinated seedlings: *P. ponderosa* | 0 | 0 | 2 | - | - |
| to | | | | | 10 | | 1 | 10 + 5 | 1 |
| 5/26/82 | | | | *P. jeffreyi* | 20 | | 1 | 10 + 10 | 1 |
| | | | | *S. giganteum* | | 5 | 1 | 20 + 5 | 1 |
| | | | | | | 10 | 1 | 20 + 10 | 1 |
| 4/1/82 | 63 | 51 | 7.5 | 2- to 3-year-old seedlings: | 0 | 0 | 2 | - | - |
| to | | | | *P. ponderosa* | 10 | | 1 | 10 + 5 | 1 |
| 6/2/82 | | | | *P. jeffreyi* | 20 | | 2 | 10 + 10 | 1 |
| | | | | 4-month-old seedlings: | 30 | | 1 | 10 + 20 | 1 |
| | | | | *S. giganteum* | 40 | | 1 | 20 + 5 | 1 |
| | | | | | | 5 | 1 | 20 + 10 | 1 |
| | | | | | | 10 | 1 | 20 + 20 | 2 |
| | | | | | | 15 | 1 | | |
| | | | | | | 20 | 2 | | |
| | | | | | | 25 | 1 | | |
| 11/16/82 | 145 | 92 | 7.0 | Recently germinated | 0 | 0 | 4 | - | - |
| to | | | | seedlings: | 10 | | 2 | 10 + 5 | 2 |
| 4/11/83 | | | | *P. ponderosa* | 20 | | 2 | 10 + 10 | 2 |
| | | | | *P. jeffreyi* | | 5 | 2 | 20 + 5 | 2 |
| | | | | *P. sabiniana* | | 10 | 2 | 20 + 10 | 2 |
| | | | | *S. giganteum* | | | | | |

## PROCEDURES

### Processing and Germination of Pine Seed in Preparation for the Fumigations Starting February 18, 1982 and November 16, 1982

Activities included extraction of conifer seed from cones collected in the Greenhorn District of the Sequoia National Forest in 1981 and 1982. The separation of sound seed from defective or insect parasitized seed was accomplished by flotation methods. Defective ponderosa and jeffrey pine seeds were floated in 70% ethanol. Defective Pinus sabiniana (digger pine) seeds were floated in water. Ponderosa and jeffrey pine seeds were soaked for 30 minutes in 30% hydrogen peroxide and placed on moist filter paper in petri dishes for germination at 24°C. Germination was slower than expected. During a three- to six-week period, the germinating seeds were removed daily and placed in other petri dishes held at 5°C.

In preparation for the seedling fumigation beginning February 18, 1982, we followed the recommended procedure of cutting away a small portion of the narrow end of the digger pine seed coat in order to stimulate germination. The seeds were stored under moist conditions at 5-10°C for 30 days. Digger pine seeds were sown in flats placed in the greenhouse and later in a growth chamber at a warmer temperature. Some difficulties were encountered. An infestation of root gnats (Mycetophilidae) developed suddenly in the greenhouse. Their appearance is similar to the harmless fungus gnats that normally inhabit the surfaces of soil mixes high in organic matter, so no precautions were taken against them. Larvae invaded the exposed endosperm and embryo of the digger seeds, and many were destroyed in spite of subsequent drenches with insecticide. As a result, there were an insufficient number of seedlings available for the first

fumigation experiment. Even without the insect problem, digger pine seeds are quite difficult to germinate on a predictable basis (Griffin, 1962). After considerable experimentation with different durations and concentrations of hydrogen peroxide treatments of digger pine seed, we found a combination that improved the germination of seed collected in the autumn of 1982.

Giant sequoia was substituted for digger pine in the fumigation starting February 18, 1982. This species was selected because it is a highly valued species in the Sequoia-Kings Canyon National Parks, and little is known about the sensitivity of the seedling stage to air pollutants. A bulk seed lot was available from the Institute of Forest Genetics at Placerville, California. Seeds germinated abundantly on moist paper towels with a minimum of pretreatment. For the fumigation beginning November 16, 1982, sequoia seed were obtained from six groves in the Sequoia-Kings Canyon National Parks, namely, Atwell Mill, Redwood Meadow, Garfield Grove, Redwood Mountain, Giant Forest and Muir Grove. Seed from the Placerville source was used again. At the beginning of each fumigation, the sequoia seedlings were between 1.0-1.5 cm high. The cotyledonary needles were free from the seed and between 1.0-1.5 cm long. Primary needles were beginning to form and were between 0.0-0.8 cm in length.

In preparation for the fumigation beginning February 18, 1982, all seedlings were planted in a steam sterilized (160-180 C for 3 hr) 1:1 mix of vermiculite and peat moss amended with 1 gm of hydrated lime per liter of soil mix. The containers for recently germinated seedlings were plastic "pine cells," 8-1/2 in. high by 1-1/2 in. in diameter. These seedlings were not fertilized during the first two to three weeks after planting, but were fertilized weekly thereafter with a balanced nutrient

solution. A portable drip system for applying equal amounts of nutrient solution to each container was fabricated specially for this purpose. The transport of the system from chamber to chamber turned out to be difficult and time consuming.

For the second fumigation of newly germinated seedlings, beginning November 6, 1982, the nutrient addition was handled differently. A complete nutrient mix was blended into the steam sterilized vermiculite-peat moss mix. Two weeks after planting, seedlings were top dressed with Osmocote$^{TM}$ time-release granules, 14-14-14 (NPK) at 0.27 gm per container. Later in the fumigation seedlings received a balanced nutrient solution through a 1:100 proportioner during watering. There were a total of two applications between January 21 and March 17. The electrical conductivity of the leachate from selected containers was monitored, and it remained within acceptable limits.

During warm, rainless periods, the plants were watered twice weekly. Only occasional watering was required during periods of intermittent rain and cool temperatures.

## Procurement and Planting Ponderosa, Jeffrey Pines and Giant Sequoia for the Fumigation beginning April 1, 1982

In late December 1981, we obtained about 700 each of bare root one-year-old ponderosa pines and two-year-old jeffrey pines. We were given permission to remove the plants from the nursery beds at the U. S. Forest Service Placerville nursery. This precaution was followed to prevent smaller plants from being culled, as is the usual practice during packing. This was done to obtain a better representation of the species natural population. In mid-January 1982, seedlings were removed from cold

storage (1°C) and planted in the same 50-50 vermiculite-peat moss mix used for small seedlings. Containers were 4 in.$^2$ at the top and 14 in. high. A galvanized wire screen was placed in the semi-open bottom of each container. The pine seedlings were kept in an air conditioned greenhouse at the Riverside Fire Laboratory of the Pacific Southwest Forest and Range Experiment Station until April 1 when both species had new secondary needles that had grown to about 50% of their expected final length. S. giganteum seedlings were obtained by seeding a bulk source of seed from the Institute of Forest Genetics in clay pots in December 1981. In January and February 1982 seedlings were transplanted to the 4 x 14 in. containers. In late March 1982 all plants were transferred to the fumigation chambers.

**Fumigation Facility**

Each of the three experiments indicated in Table VI-1 were done in the California Air Resources Board's 20 open-top chamber facility during the winter and spring months. Chambers are grouped in four rows with five in each row. Each chamber has a filtered air intake, independent gas delivery and pollutant monitoring system. Fumigations were scheduled for 7.5 hours day$^{-1}$, 6 days week$^{-1}$ but were halted when rain or foggy conditions prevailed.

A nearby building houses the pollutant generating and monitoring equipment. Ozone was generated by passing tank oxygen through an OREC$^{TM}$ silent discharge ozone generator. Oxygen flow remained constant and ozone output was controlled by regulating voltage into the generator. Sulfur dioxide was metered from a heated cylinder (33 C) into a stainless steel mixing tank where it was diluted with compressed air previously dried with

a heatless air dryer. Each gas passed through flowmeters and Teflon lines to the fumigation chambers, where it was mixed with charcoal-filtered air. Concentration of gases in the chambers were sampled by an automatic sequencing system every six minutes. Ozone was monitored by a Dasibi 1003-AH $O_3$ analyzer and $SO_2$ was monitored by a Teco Series 43 $SO_2$ analyzer. Both instruments were calibrated by the California Air Resources Board, Division of Technical Services. Temperature and relative humidity were monitored in two chambers and outside between two chambers with wet-dry thermocouples. Rainfall amount and pH were recorded at the site beginning February 24, 1983. Solar radiation, cal $cm^{-2}$ $min^{-1}$, was also recorded.

## Evaluation of Visible Injury Symptoms

Plants were inspected for injury symptoms at weekly intervals (November 20, 1982 to February 22, 1983) or a final visual inspection of seedlings was made prior to harvest. Percentage of the total leaf area or percentage of the total population with injury symptoms was recorded for each plant of each species. Injury symptoms were categorized in terms of increasing injury severity: chlorotic mottle, tip necrosis, spotting necrosis, necrotic bands, distal necrosis, basal necrosis, red discoloration and purple discoloration. The age of affected needles, cotyledonary, primary or older, was also recorded.

## Harvesting Procedure

Seedlings were harvested March 21, 1983 following the last visible injury inspection. The shoot of each seedling, including needles and main

stem, was severed at the soil line and desiccated at 70° C for three days. Soil was washed from the corresponding root systems, and they were processed like the shoots. Shoots and roots were weighed on ARBOR™ top-loading balances with accuracy to 1 milligram.

### Experimental Design and Data Analysis

The experiments with newly germinated seedlings conducted from 2/18/82 to 5/26/82 and 11/16/82 to 4/11/83, respectively, were designed to determine if single and mixed gas treatments have significantly different effects on root and shoot growth. The secondary goal was to describe the visible symptoms resulting from several concentrations of single and mixed gases. The first of these experiments (2/18/82 to 5/26/82) was used to explore the concentration range in which effects might be observed. The second experiment, 11/16/82 to 4/11/83, used the same concentrations as the first except that each pollutant treatment was replicated in two chambers and controls were replicated in four chambers. Both experiments were 3 x 3 factorial designs (Table VI-1).

The experiment with one- to two-year-old ponderosa and Jeffrey pines and three- to four-month-old giant sequoia seedlings was intended to determine the concentrations of single and mixed gases which might cause visible injury to secondary (adult) needles of pines and primary leaves of giant sequoia. Furthermore, the kinds of symptoms were described. The design included ozone alone in the range of 10 to 40 pphm and sulfur dioxide alone at 5 to 25 pphm. Mixed gas treatments formed a 4 x 4 factorial design (Table VI-1).

The SAS, GLM package was used for the analysis of variance of all experiments. In two experiments, there were equal numbers of plants per

treatment and in two others the numbers were unequal, requiring that the balanced and unbalanced GLM versions be applied (Table VI-2).

Table VI-2. Number of Within-Chamber Replications and the Types of Statistical Analyses Required

| Fumigation Dates | Species | No. of Plants per Treatment | ANOVA | Mean Separation |
|---|---|---|---|---|
| 2/18/82 to 5/26/82 | P. ponderosa<br>P. jeffreyi<br>S. giganteum | 30-40<br>30-40<br>30-40 | SAS, Inc. GLM (unbalanced) | Bonferroni[a] t-test |
| 4/1/82 to 6/2/82 | P. ponderosa<br>P. jeffreyi<br>S. giganteum | 30<br>30<br>30 | SAS, Inc. GLM (balanced) | LSD for Pairs |
| 11/16/82 to 4/11/83 | P. ponderosa<br>P. jeffreyi<br>P. sabiniana | 20<br>20<br>20 | SAS, Inc. GLM (balanced) | LSD for Pairs |
| 11/16/82 to 3/17/83 | S. giganteum (6 groves) | 12-20 | SAS, Inc. GLM (unbalanced) | Bonferroni t-test |

[a]With Satterthwaite's approximation for comparison of variances.

Synergistic (greater-than-additive) additive and antagonistic (less-than-additive) effects of mixtures of pollutant gases were evaluated for the experiment conducted from 11/16/82 to 4/11/83 by calculating the difference from control for the top dry weight (TDW) and root dry weight (RDW) of plants exposed to the gas mixtures. The general formula to compare single and mixed gas treatments was:

$\Delta$ Single and Mixed Gas Treatments =

$$(\text{Control} - O_3 \cdot SO_2) - (\text{Control} - O_3 + \text{Control} - SO_2)$$

## RESULTS

### Fumigation of Recently Germinated Conifer Seedlings, February 18 to May 26, 1982

Conditions During Fumigation

On February 23, 1982, the sixth day of the fumigation, the pollutant generators were accidentally left on during the night when the chamber ventilation system was normally off. This accident was the result of a simple misunderstanding about who would turn off the equipment at the end of the day. An evaluation was subsequently made of every seedling in each chamber after several days of filtered air treatment. At concentrations of single and mixed gases of 10 pphm or less, there was no significant visible injury. Injury was present on a few seedlings in two mixtures, namely 5 pphm $SO_2$ + 20 pphm $O_3$ and 10 pphm $SO_2$ + 20 pphm $O_3$. Injured seedlings were replaced.

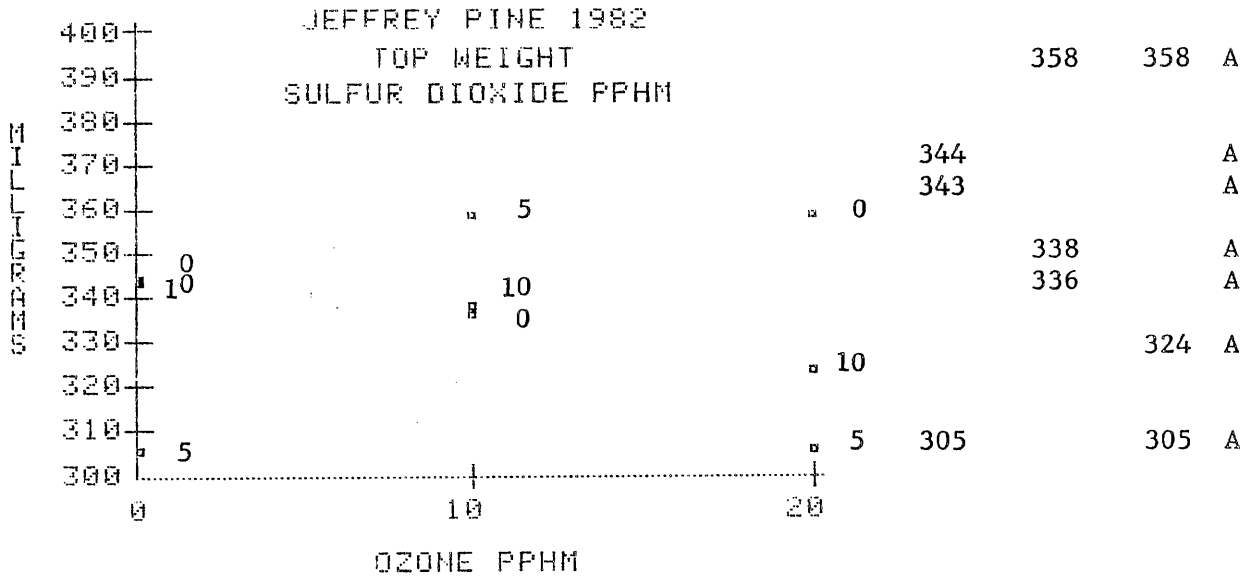
After consultation with the CARB Project Officer, the fumigation was restarted on March 10, 1982 excluding those treatments that had received severe injury, namely any single or mixed gas treatment equal to or greater than 30 pphm ozone and 15 pphm sulfur dioxide (see Table VI-1). An agreement was reached to evaluate the results of the truncated experimental design with an understanding that the experiment would be repeated in 1982-83.

On May 26, 1982 the seedlings were removed from the chambers to a filtered air greenhouse where the top and root harvest was completed.

**Preliminary Ozone and Sulfur Dioxide Fumigation of Recently Germinated Ponderosa Pine, Jeffrey Pine and Giant Sequoia Fumigated from February 18, 1982 to May 26, 1982**

The results of a preliminary fumigation of Jeffrey Pine Ponderosa Pine and Giant Sequoia with single or mixed gas treatments, including 0, 5 and 10 pphm $SO_2$ and 0, 10 and 20 pphm $O_3$ are presented in Figures VI-1a, 1b and 1c. The effects observed for jeffrey and ponderosa pine are questionable because of the accidental incident of overnight exposure to pollutants when there was no air flow in the chambers. A new cohort of giant sequoia seedlings was added after the accidental exposure, so the effects observed on that group are valid. Both the TDW and RDW of giant sequoia showed significant ($p < 0.05$) differences from control. The TDW was significantly less than the control for two single gas treatments (10 pphm $SO_2$ and 20 pphm $O_3$) and all four of the combined gas treatments (5 and 10 pphm $SO_2$ plus 10 and 20 pphm $O_3$). The same response was observed in giant sequoia RDW. The changes in RDW were of a larger magnitude than those in TDW.

The results (Figure VI-1a, 1b and 1c) of the fumigation done from February 18, 1982 to May 26, 1982 were used primarily for selecting pollutant concentrations and combinations of concentrations to be used in the second fumigation (November 16, 1982 to April 11, 1983) of recently germinated seedlings. Preliminary results suggested that significant effects may appear with 5 or 10 pphm sulfur dioxide mixed with 10 or 20 pphm ozone. The concentrations chosen for the second experiment, beginning November 16, 1982 were centered around these values, and there were two chamber replications.



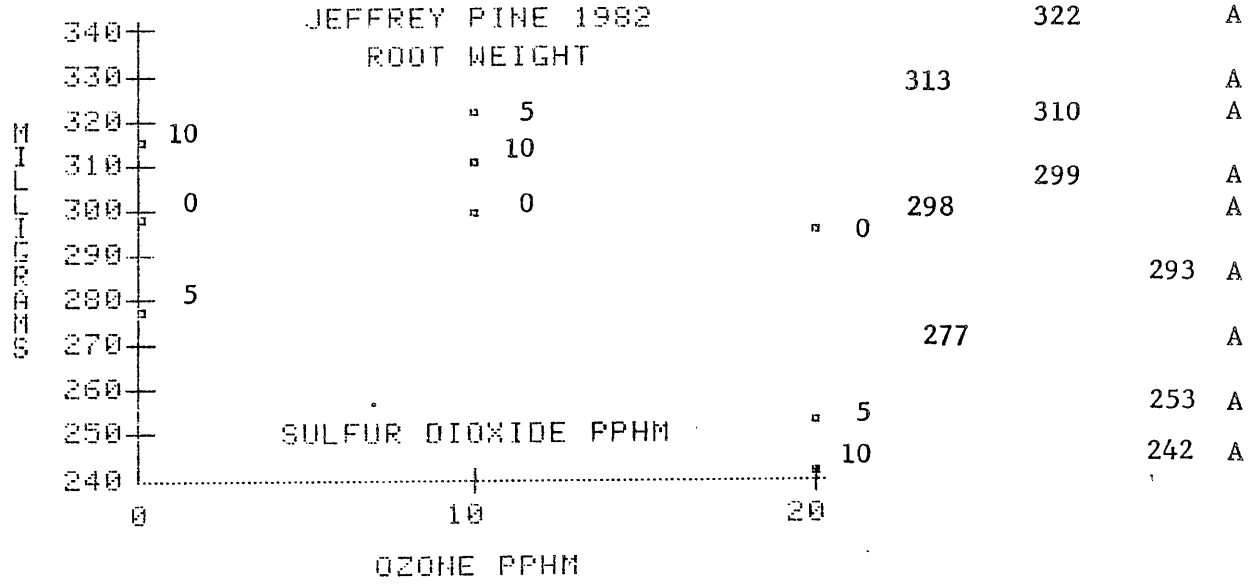
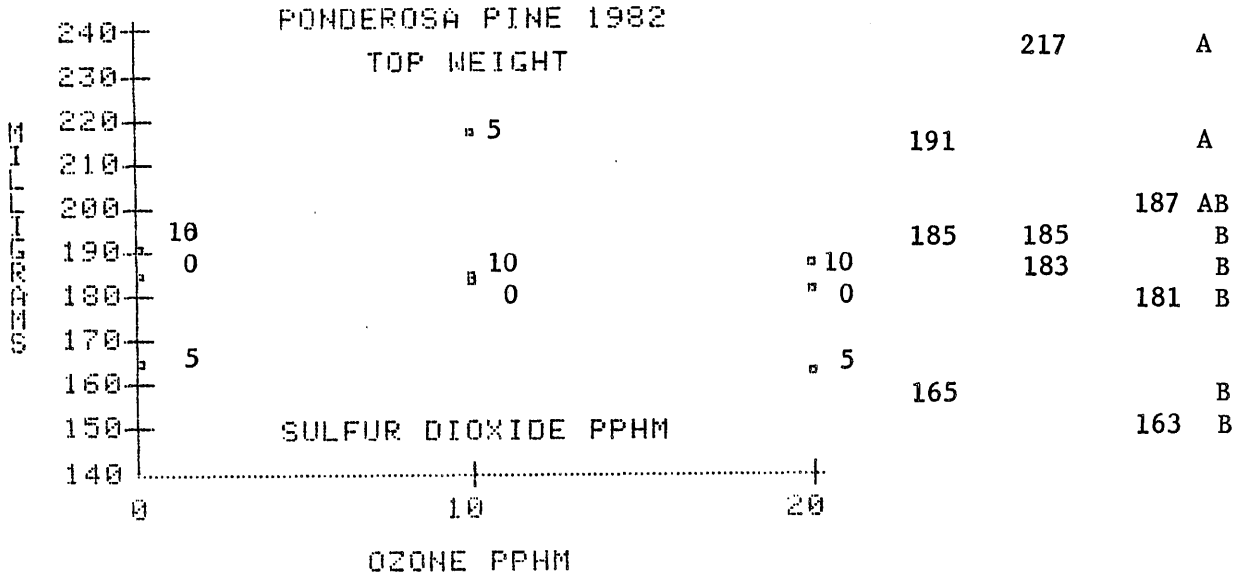




Figure VI-1a. Preliminary single and mixed ozone and sulfur dioxide fumigation of recently germinated conifer seedlings extending from February 18, 1982 to May 26, 1982 to determine concentration ranges where effects on top and root growth may be expected to occur.



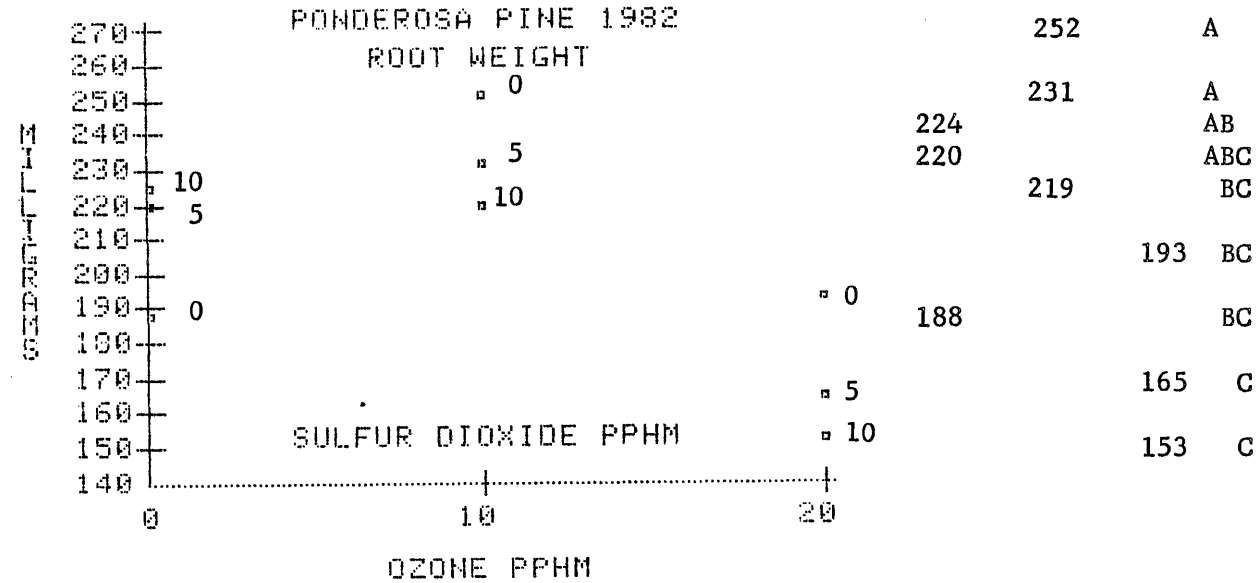
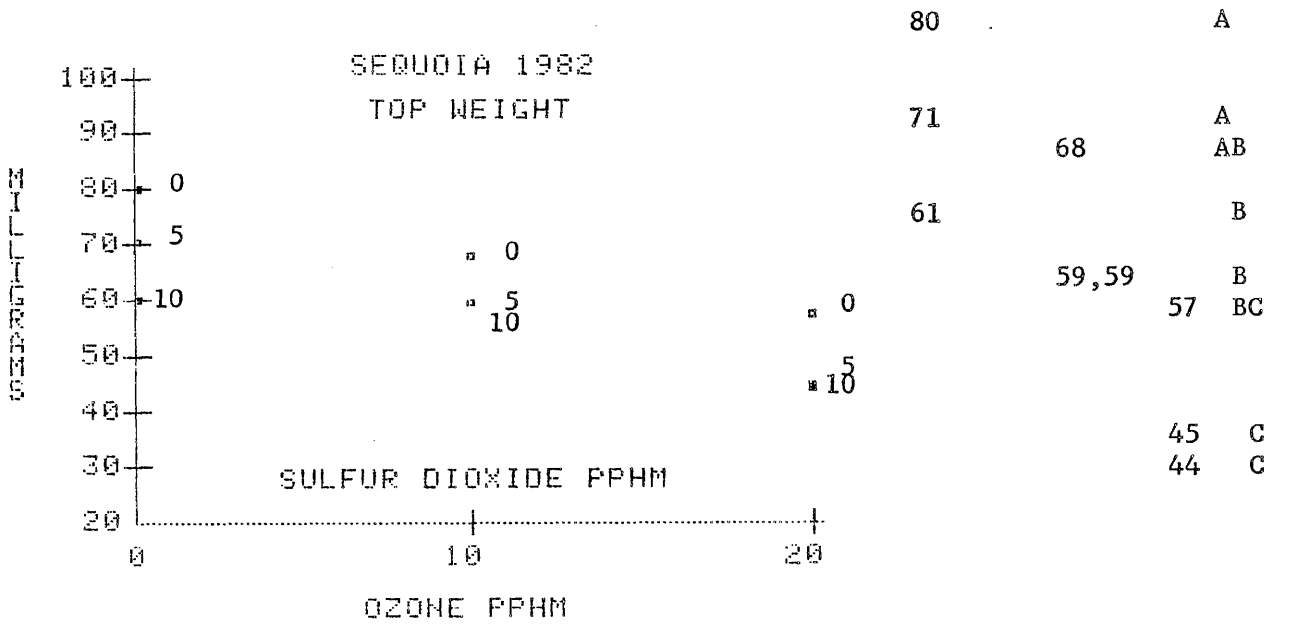




Figure VI-1b. Preliminary single and mixed ozone and sulfur dioxide fumigation of recently germinated conifer seedlings extending from February 18, 1982 to May 26, 1982 to determine concentration ranges where effects on top and root growth may be expected to occur.



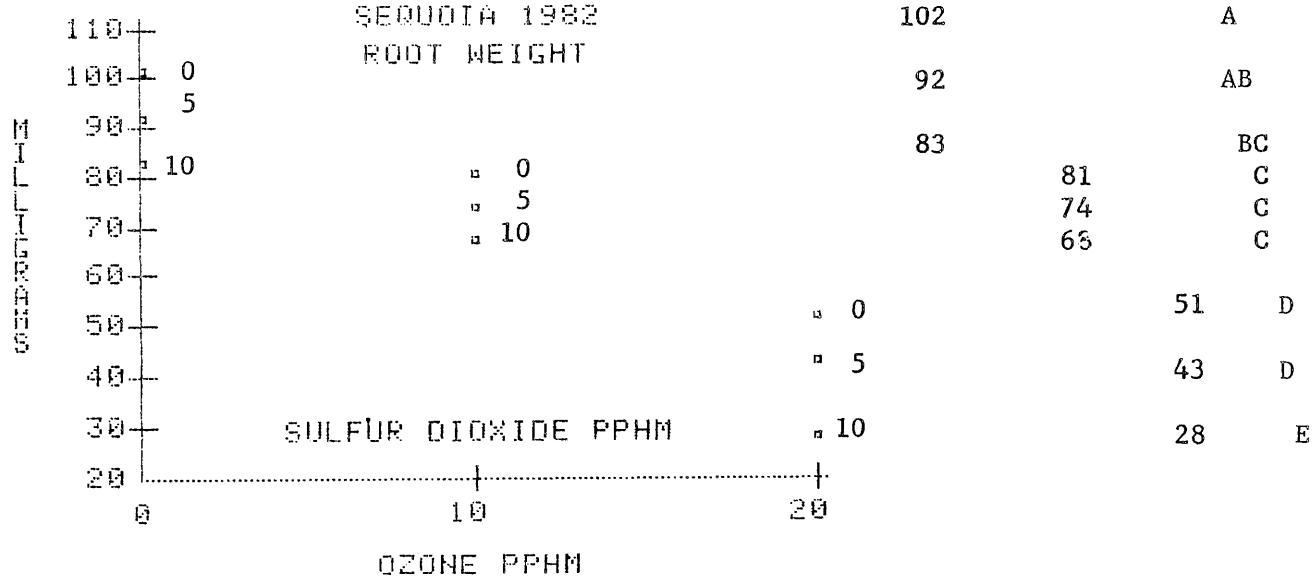




Figure VI-1c. Preliminary single and mixed ozone and sulfur dioxide fumigation of recently germinated conifer seedlings extending from February 18, 1982 to May 26, 1982 to determine concentration ranges where effects on top and root growth may be expected to occur.

## Ozone and Sulfur Dioxide Effects on Recently Germinated Ponderosa, Jeffrey, and Digger Pines Fumigated from November 16, 1982 to April 11, 1983

### Conditions During Fumigation

The planned seven-hour daily duration of fumigation was achievable only during periods of fair weather. The daily fumigation duration for each day of the November through April period was recorded along with the daily maximum air temperature (Appendix 4). In November only four of 14 days permitted a full day of fumigation; the remaining days were either very cloudy and cool or rainy. On November 30 a violent wind ripped the Teflon film from the upper section of almost all chambers. The seedlings were protected from any physical damage by the remaining Teflon film. The period December 1 to 19 was required to rebuild the chambers. During this period the seedlings were protected in several chambers that received the least damage and were provided with carbon-filtered air during daylight hours. The seedlings were placed back in their original chambers and fumigation resumed on December 20.

The remainder of the fumigation period was characterized by fair weather during the first three weeks of January, the 9th to the 24th of February and the 8th to the 16th of March. The intervening rainy periods produced more rain than the long-term average for that period. The rain amounts and the pH for some rain events are shown in Appendix 4. The unweighted mean pH was 5.1; this level of acidity has not been associated with plant injury.

The pattern of dose resulting from intermittent fumigations, determined by the frequency of rainy and fair weather days, was analogous to typical pollution episodes in the summer. The fair weather periods were similar to the irregularly spaced incidents of high pollution in the

summer and the rainy periods may correspond to summer weather with low air pollution. This dose pattern may be a more realistic exposure because it is similar to fluctuating pollutant concentrations under natural conditions (Wallner and Fong, 1982).

Evaluation of Visible Injury and Growth of Tops and Roots

The visible injury symptoms on recently germinated pines at the end of the experiment (April 11, 1983) are summarized in Table VI-3. Digger pine showed very slight chlorotic mottle at 20 pphm ozone with heavier chlorotic mottle and occasional necrosis from gas mixtures involving 5 or 10 pphm sulfur dioxide with 20 pphm ozone. Necrosis symptoms were common on ponderosa pine at 5 and 10 pphm $SO_2$ with 10 and 20 pphm $O_3$, singly and in combination. Jeffrey pine was more resistant to visible injury; obvious injury appeared as a chlorotic mottle with some necrosis at concentrations of 20 pphm $O_3$ with and without 5 and 10 pphm $SO_2$. Jeffrey pines exposed to filtered air showed slight tip necrosis. There is reason to suspect that the cool, generally moist conditions during the fumigation may have induced a slight iron deficiency. Foliar applications of chelated iron during the last one-third of the fumigation seemed to correct a lemon-yellow chlorosis of the new primary needles.

TDW and RDW results are examined in order to address the following questions: (1) How much variation was due to chambers and how much due to plants (Table VI-4)? (2) Was there a pattern of interaction among treatment means for either single gases or gas mixtures for pines (Figure VI-2a and VI-2b) and giant sequoia seedlings (one bulk seed lot and six groves) from the Sequoia-Kings Canyon National Park (Figure VI-3a and VI-3g)?

Table VI-3. Visible Injury to Ponderosa, Jeffrey and Digger Pines Exposed to Ozone and Sulfur Dioxide Singly and in Combination from November 16, 1982 to April 11, 1983

| Species | Injury Symptoms[a,b] | Concentrations [$SO_2$ - $O_3$] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-0 | 5-0 | 10-0 | 0-10 | 5-10 | 10-10 | 0-20 | 5-20 | 10-20 |
| | | Percent of the Population Exhibiting a Particular Symptom | | | | | | | | |
| Digger pine | NVI | | | | 100 | | 100 | | | |
| | SN | | | 2.5 | | | | | | |
| | WLC | 1.3 | 7.5 | | | 2.5 | | | | |
| | CM | | | | | | | 2.5 | | 20.0 |
| | CM-CB | | | | | | | | 17.5 | |
| Jeffrey pine | SN | 42.5 | | | | | | | | |
| | SNTN | | 15 | 22.5 | | | | | 42.5 | |
| | DN | | | | 26.5 | | | | | |
| | CM | | | | | | | 25.0 | | 25.0 |
| | TN | | | | | 20.0 | 17.5 | | | |
| Ponderosa pine | SN | 7.5 | | | | | | | | |
| | DN | | 12.5 | 42.5 | | | | | | |
| | TN | | | | 20 | 17.5 | | | | |
| | CM | | | | | | 25.0 | 30.0 | | 40.0 |
| | SNTN | | | | | | | | 50.0 | |

[a]Most common symptom on primary needles.

[b]WLC = whole leaf chlorosis, SN = spotty necrosis, DN = distal necrosis, TN = tip necrosis, NVI = no visible injury, CM = chlorotic mottle, CB = chlorotic banding.

Table VI-4. Comparison of Amounts of Variation Due to Chamber and Plant Replications

| Species | Sources of Variation | | | |
|---|---|---|---|---|
| | TDW | | RDW | |
| | Chambers (%) | Plants (%) | Chambers (%) | Plants (%) |
| Digger | 37.3 | 62.7 | 57.7 | 42.3 |
| Ponderosa | 64.5 | 35.5 | 60.6 | 39.4 |
| Jeffrey | 43.3 | 56.7 | 25.3 | 74.7 |
| Mean | 48.4 | 51.6 | 47.8 | 52.1 |

The relative amounts of variation in treatment means ($\bar{X}$) due to chambers and plants were calculated from the mean error sum of squares and chamber sum of squares in the ANOVA tables. Let $S^2$ denote the variance of the within-chamber random component and $S_c^2$ denote the variance of the between-chamber component.

Then:

$$S_c^2 = \left(\frac{\text{chamber SS} - S^2}{\text{chamber DF}}\right)/n$$

, from the expected value of the chamber SS, and:

$$V(\bar{X}) = S_c^2/c + S^2/n_c$$

= variance due to between-chamber variation + variance due to plant variation within chambers

In this experiment the number of chambers (c) is 2, and the number of plants per chamber (n) is 20. Chamber and plant variation were summed and the sum was divided into both sources of variation to obtain percents attributable to each (Table VI-4). The mean values suggest that the amounts of variation due to chambers and plants are approximately equal, however, there is some inconsistency because TDW for Ponderosa Pine and RDW for Jeffrey Pine do not follow the same pattern as the others.

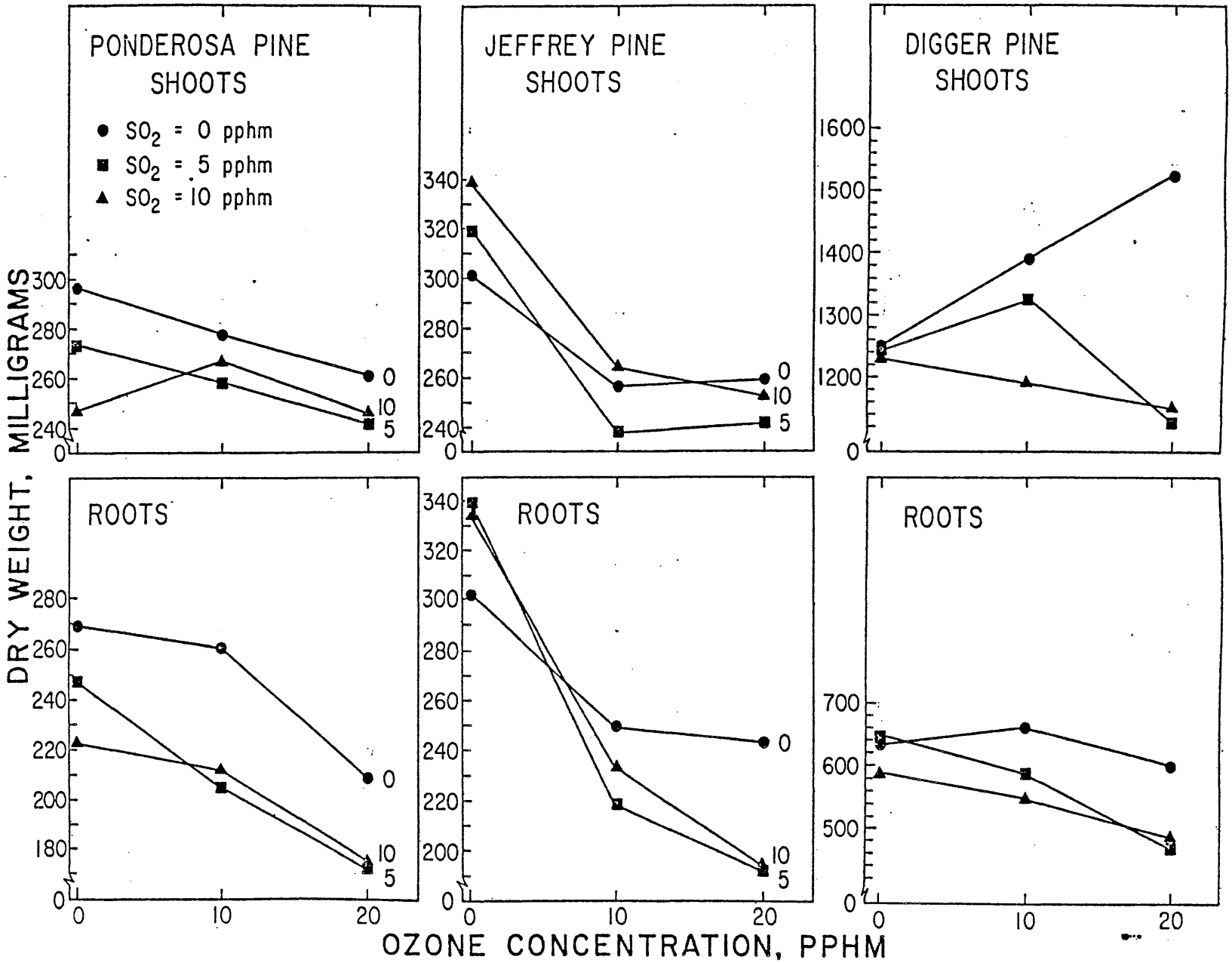



Figure VI-2a. Effects of single and mixed ozone and sulfur dioxide fumigation on recently germinated ponderosa, jeffrey and digger pine seedlings exposed from November 16, 1982 to April 11, 1983.

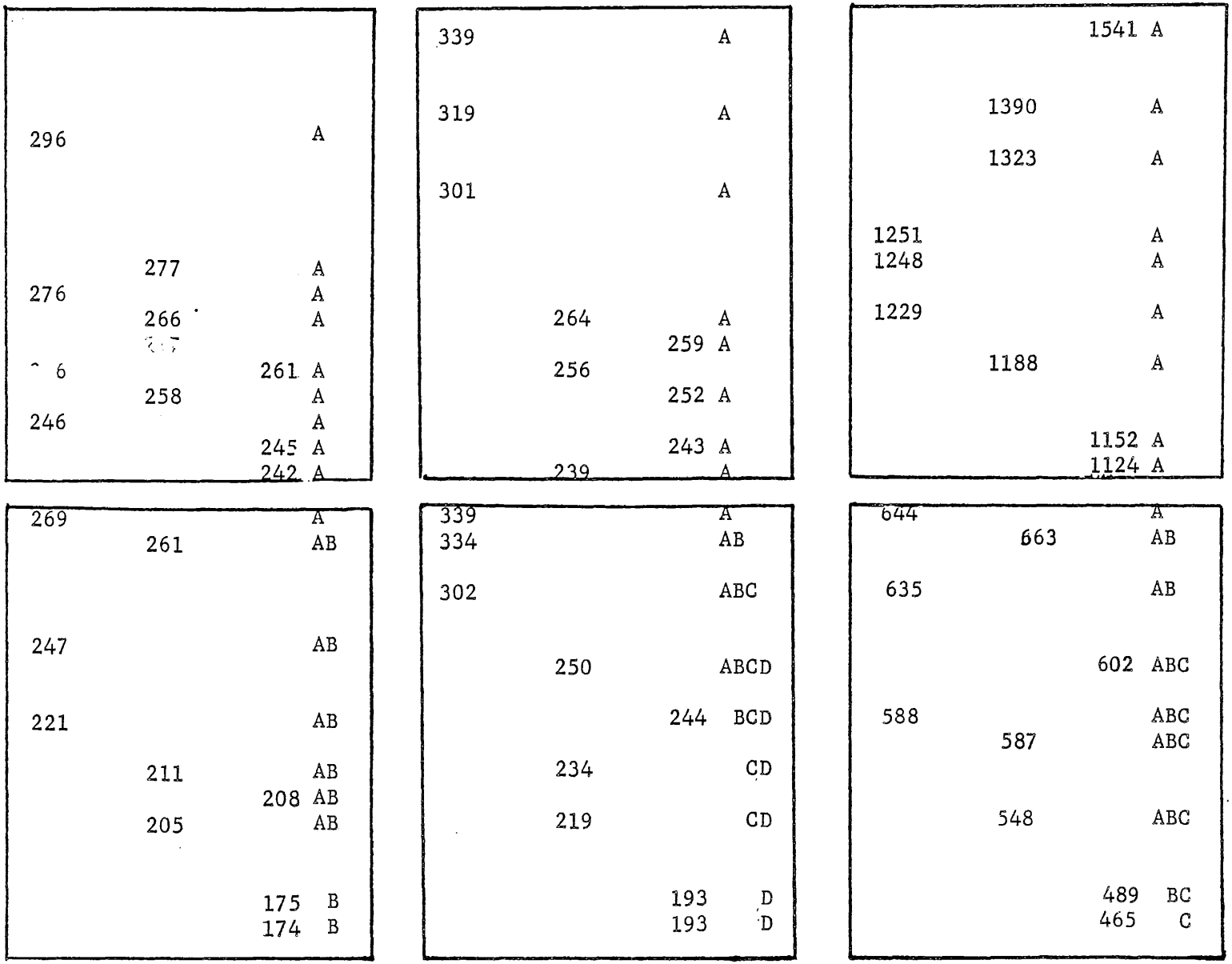
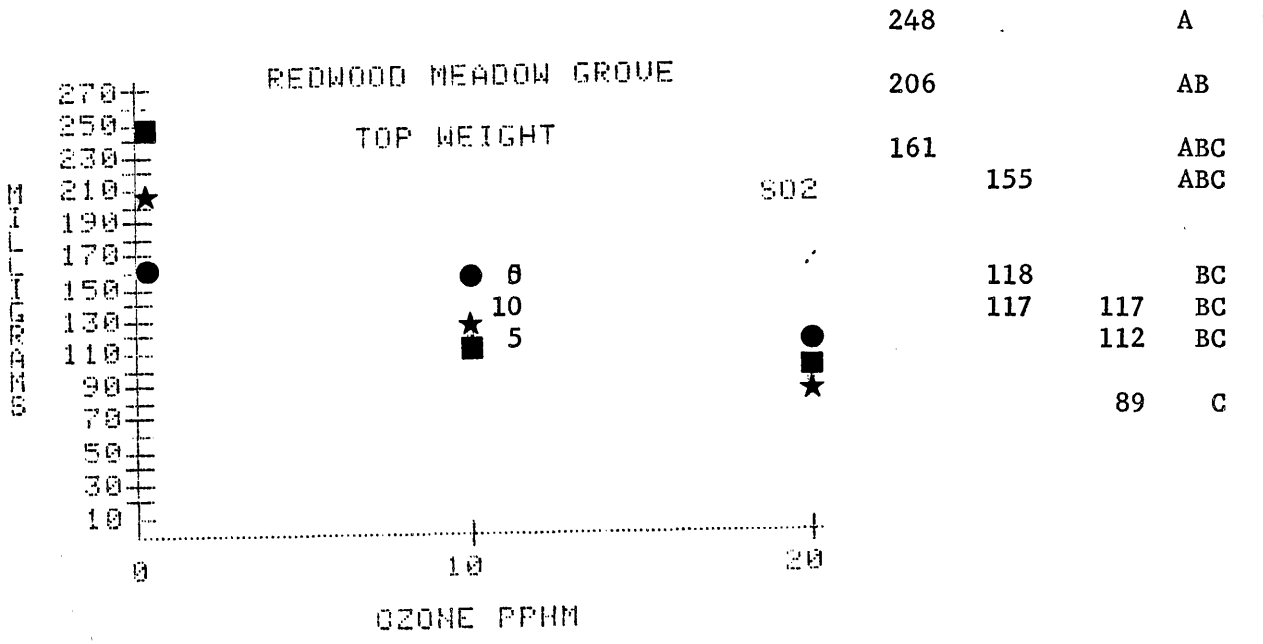



Figure VI-2b. Mean separation,data indicated in Figure VI-2a.



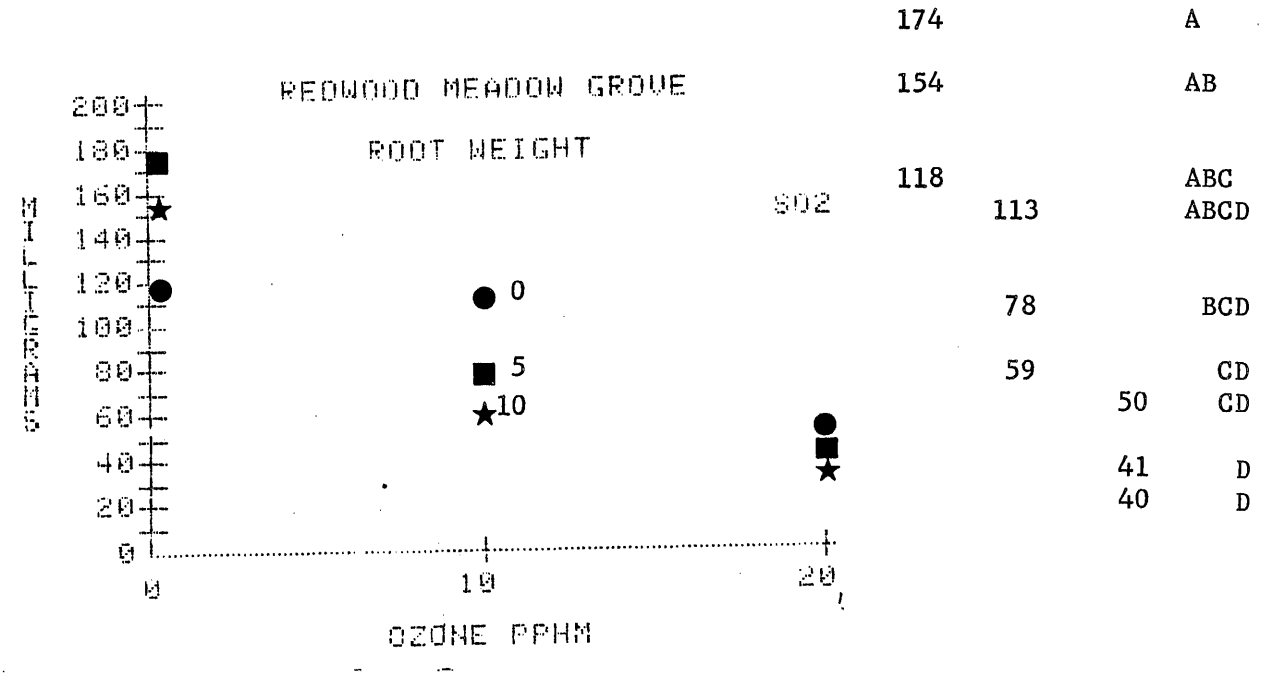




Figure VI-3a. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.

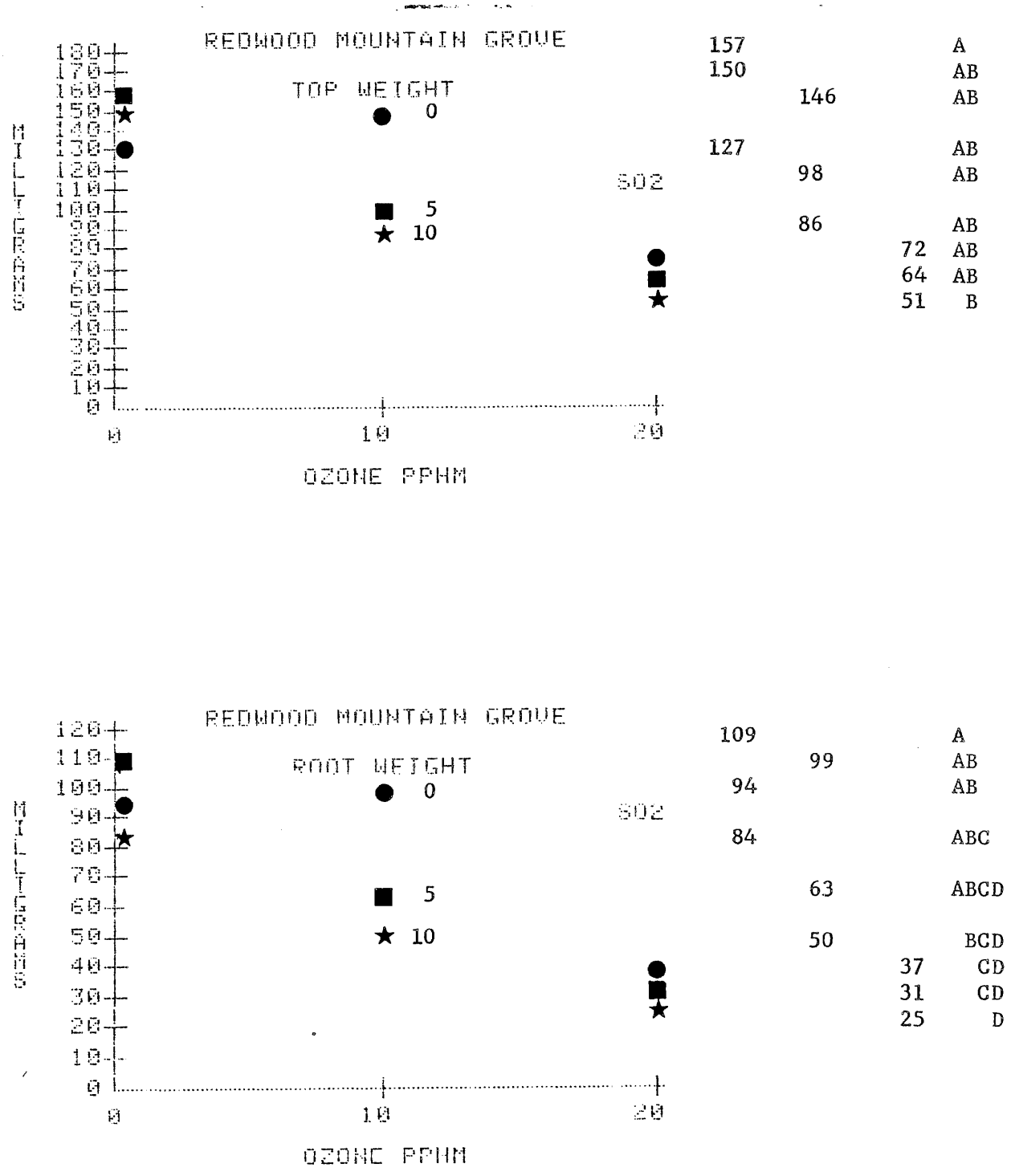
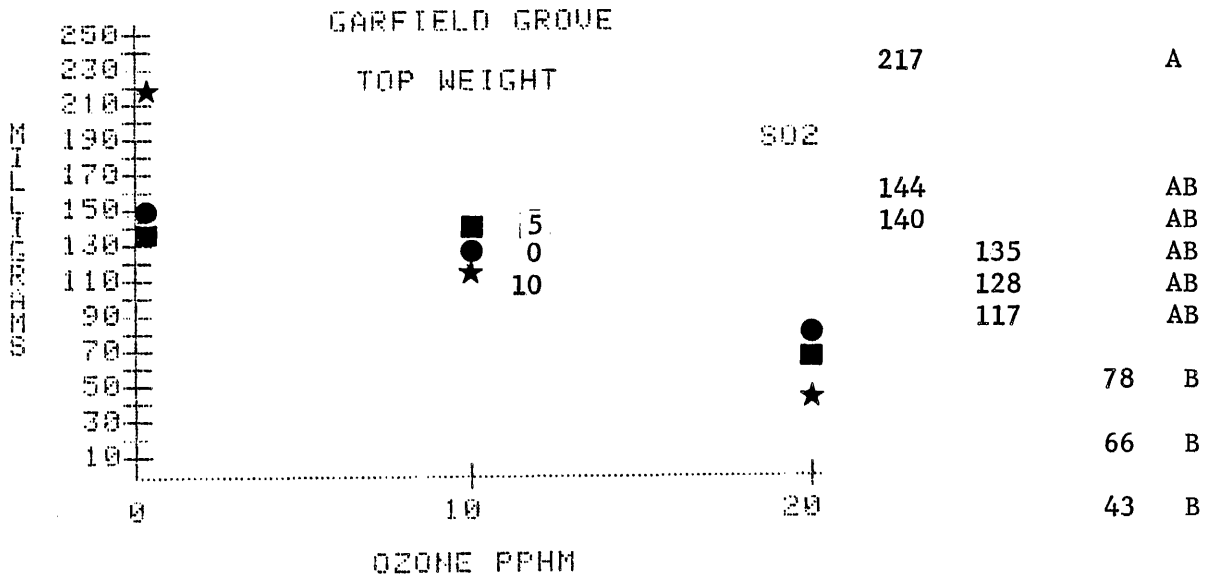



Figure VI-3b. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.



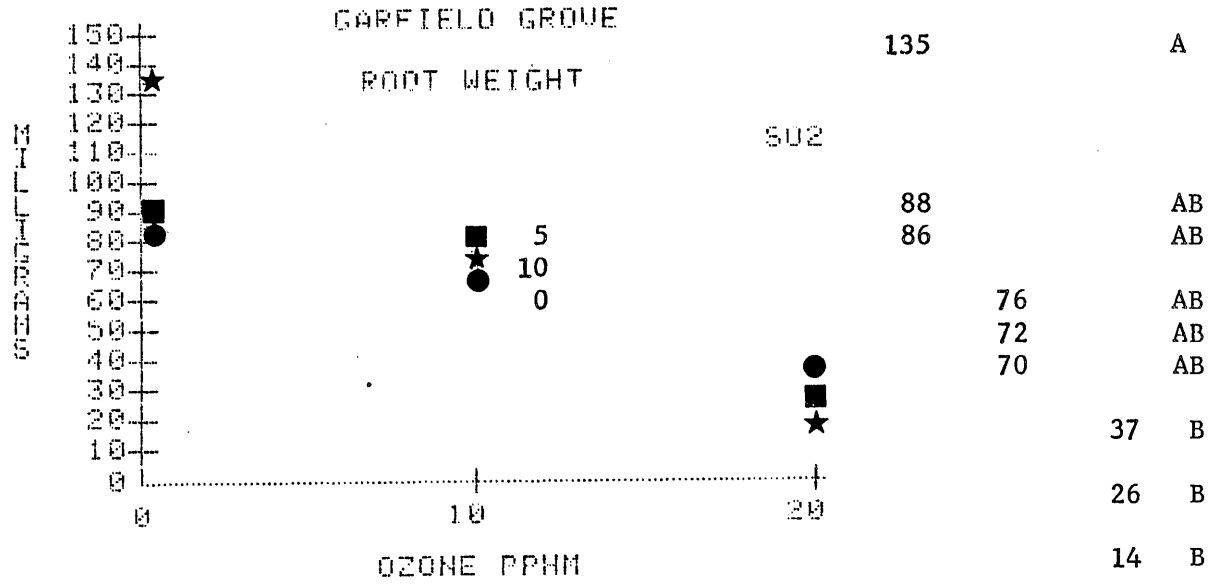
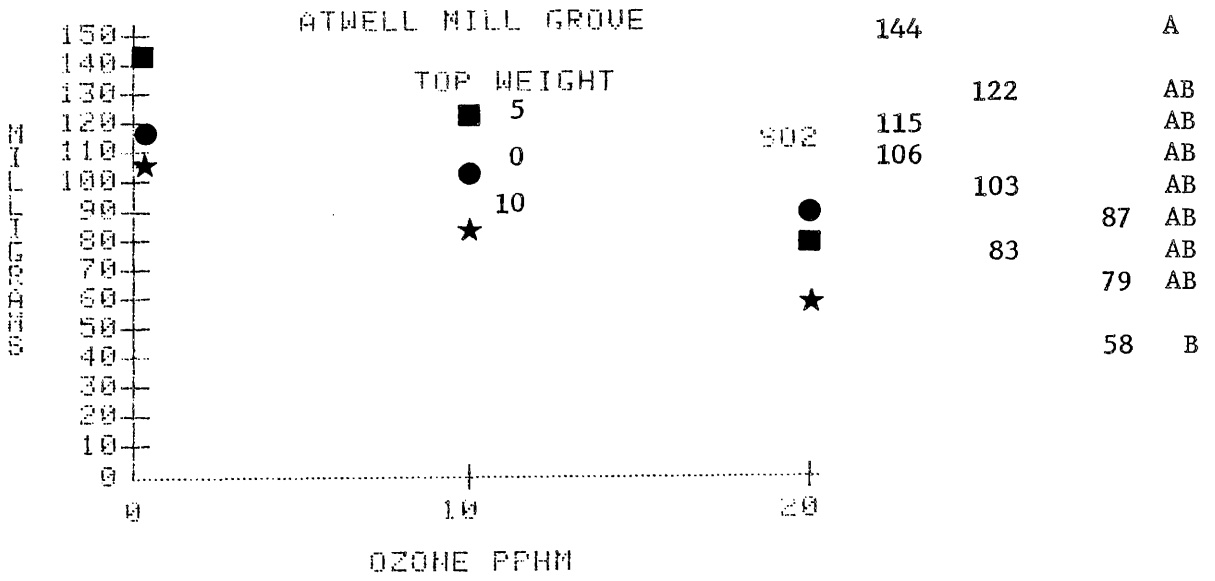




Figure VI-3c. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.



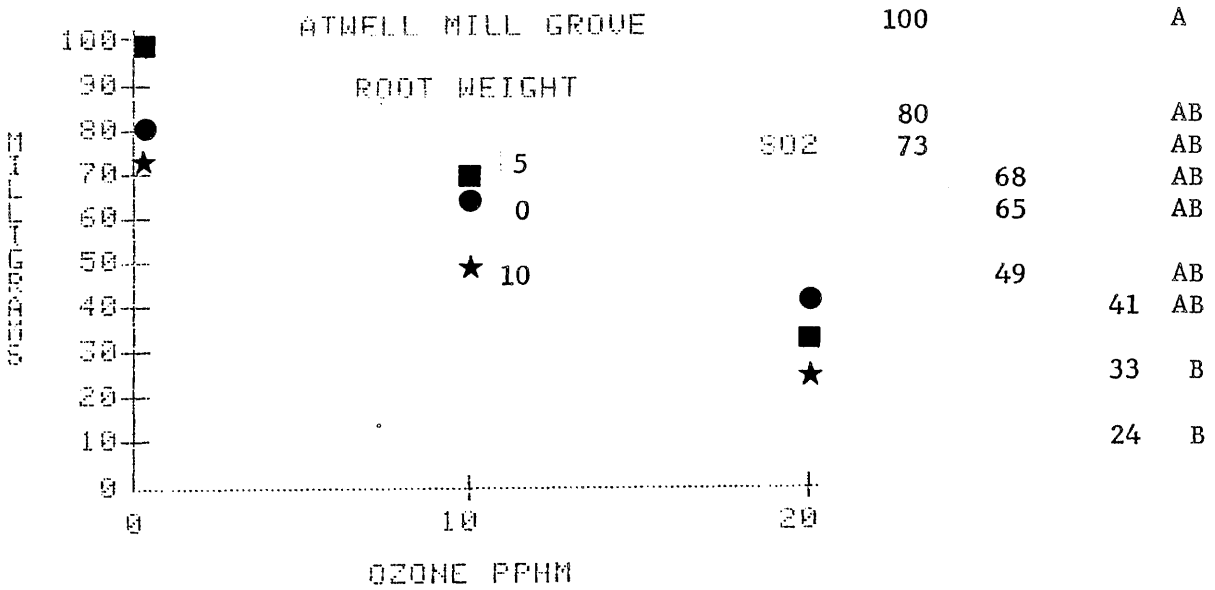
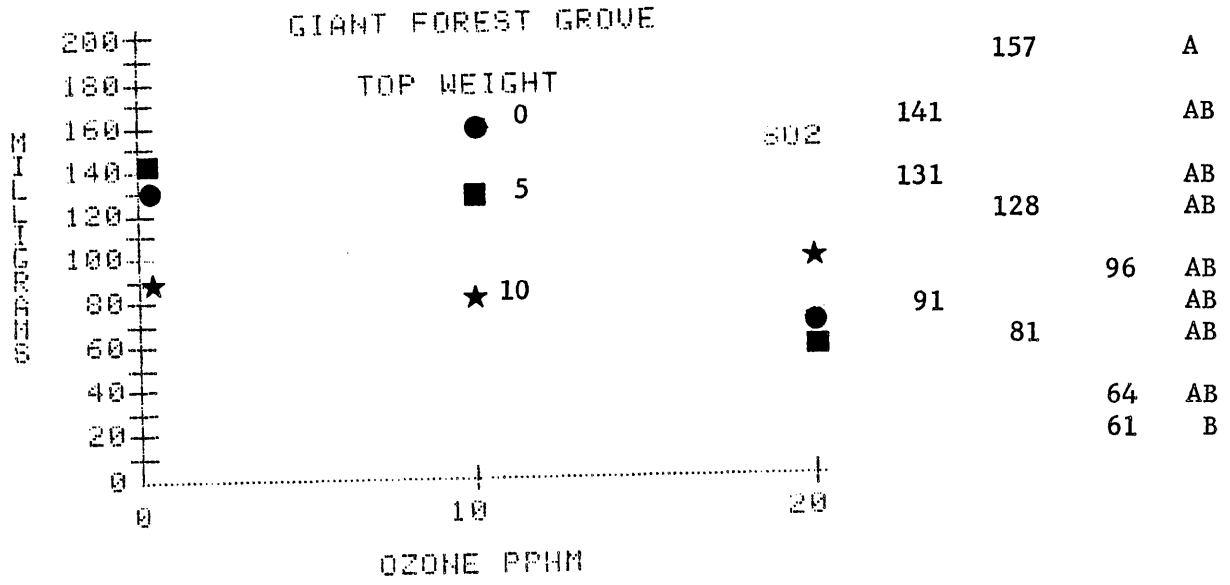




Figure VI-3d. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.



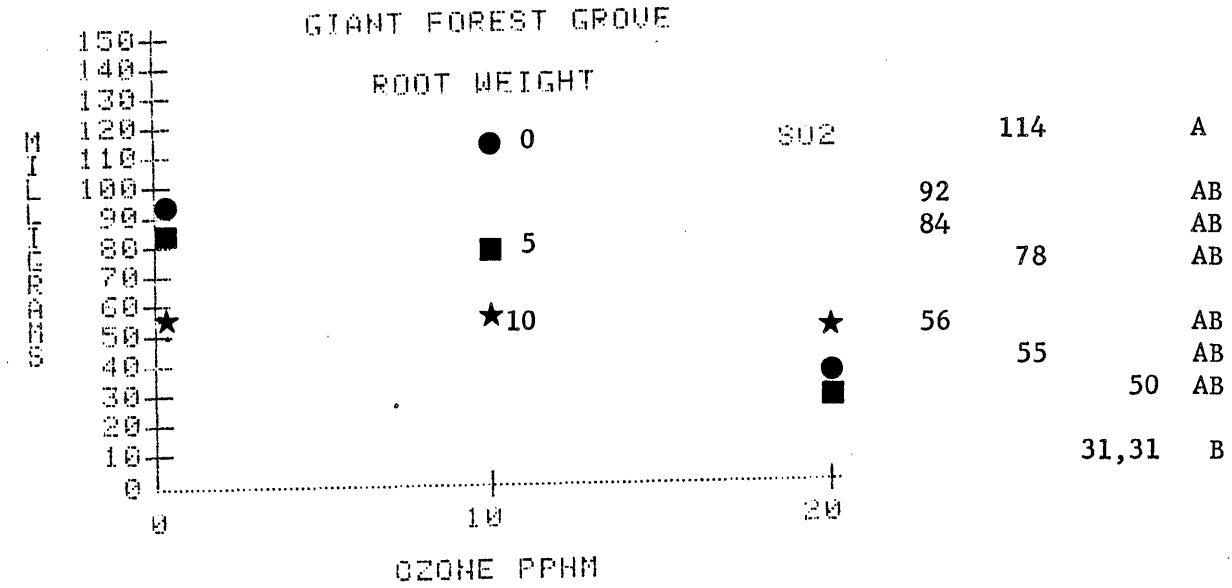
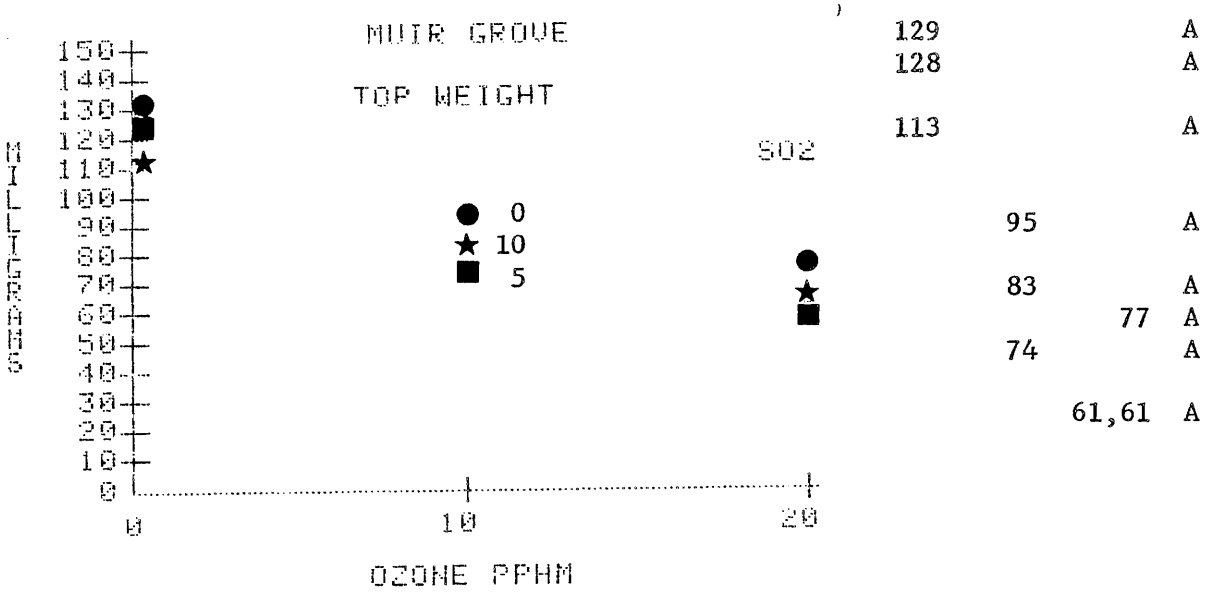




Figure VI-3e. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.



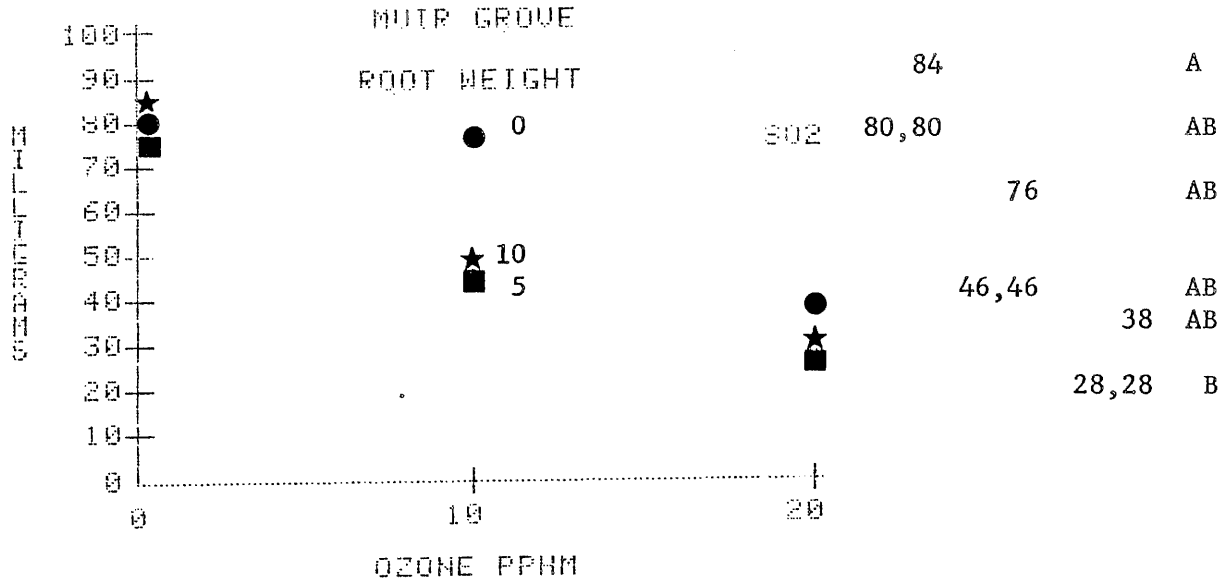
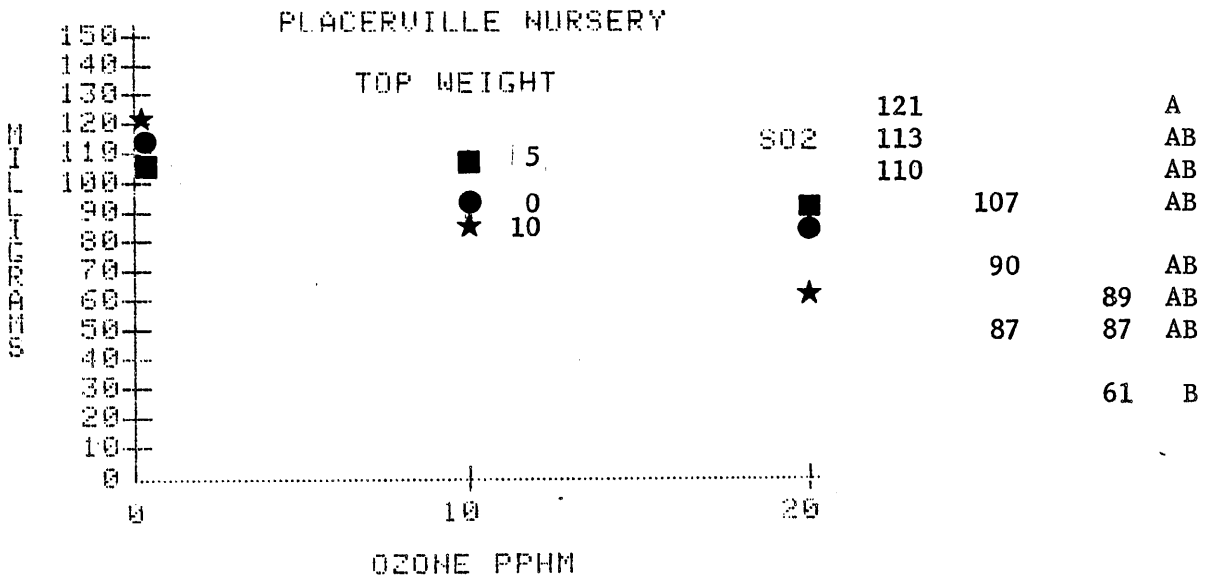




Figure VI-3f. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.



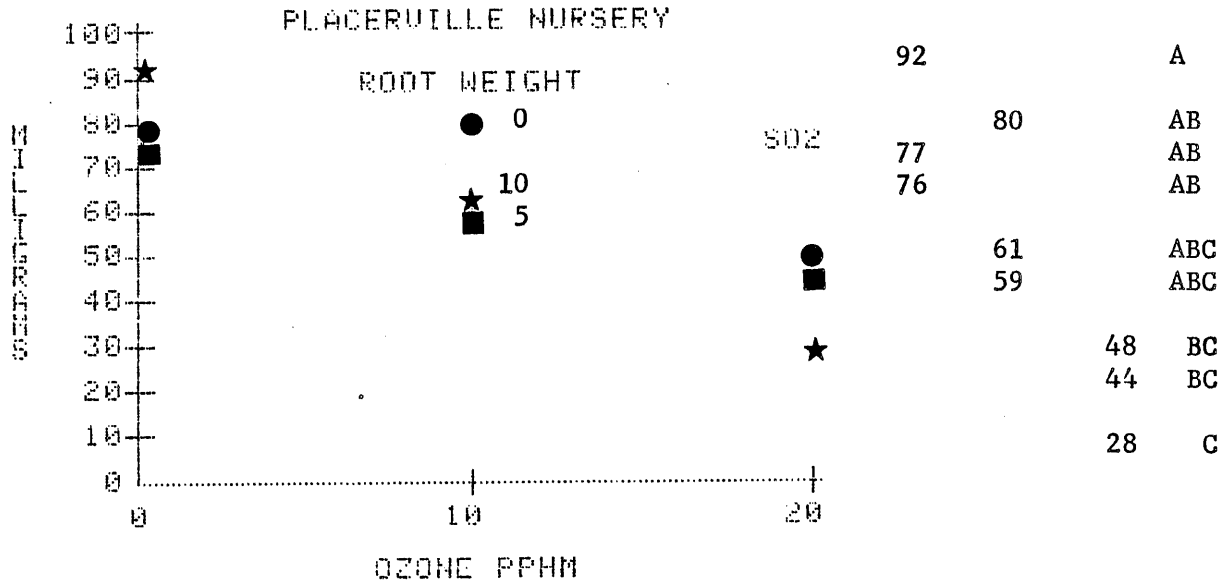




Figure VI-3g. Top and root weights of giant sequoia seedlings from different seed sources following exposure to ozone and sulfur dioxide singly and in combination from November 16, 1982 to April 11, 1983.

The single and mixed gas treatment means for the 3 pine species (Figure VI-2a and VI-2b) show that the TDW is not significantly ($p > 0.05$) different for any species. Even in the absence of significance, the TDW trends suggest that pollutant mixtures depress TDW more than single pollutants. The RDW for both ponderosa and jeffrey pine mirrored the TDW trend and several of the pollutant mixtures produced significant differences ($p < 0.05$) between the 5 pphm $SO_2$ treatment and the 5-20 mixture. The F value (Table VI-5) for the $SO_2*O_3$ interaction were not significant except for Jeffrey Pine RDW.

An apparent stimulation of the TDW of digger pines exposed to 20 pphm ozone was an unexpected result. The stimulation of TDW was not paralleled by the RDW response at 20 pphm ozone. This result suggests a compensating

Table VI-5 Tests for the Interaction of Sulfur Dioxide and Ozone ($SO_2*O_3$) in TDW and RDW Changes

| F Values and Probability of Significance | Species | | |
|---|---|---|---|
| | Digger Pine | Ponderosa Pine | Jeffrey Pine |
| | TDW | | |
| F | 1.99 | 0.45 | 0.60 |
| PR>F | NS[a] | NS | NS |
| | RDW | | |
| F | 1.78 | 0.36 | 2.82 |
| PR>F | NS | NS | 0.10 |

[a]Not significant

response in TDW that may not have been sustainable if exposure time was increased. The single gas treatments with 5 or 10 pphm $SO_2$ suggested stimulation of TDW for jeffrey pine and of RDW for jeffrey pine and digger pine, but these responses were not significant ($p > 0.05$).

## Ozone and Sulfur Dioxide Effects on Recently Germinated Giant Sequoia Fumigated from November 16, 1982 to April 11, 1983

### Evaluation of Visible Injury on Sequoia Seedlings

At the start of the fumigation (November 17, 1983), sequoia seedlings were two to three weeks old and free from any visible injury symptoms. A final visual evaluation was made on March 21, 1983, approximately 30 days after the termination of weekly visual inspections. This evaluation, on a plant-to-plant basis for each grove, recorded the percent foliar injury for each grove (Table VI-6). Standard deviations of the mean percent visible injury were high in all treatments due to the extreme variation in plant-to-plant response. Typically, larger plants showed more visible injury than did smaller plants. On the basis of percent foliar injury, the greatest injury occurred at 0-20, 5-20 and 10-20 pphm sulfur dioxide-ozone (Table VI-6). Generally the addition of 5 and 10 pphm sulfur dioxide with 20 pphm ozone appeared to increase mean visible injury to plants from Giant Forest, Atwell Mill, Redwood Meadow, Placerville, Garfield Grove and Muir Grove (Table VI-6). Percent visible injury at pollutant concentrations below 10 pphm sulfur dioxide-10 pphm ozone was generally low and usually confined to several individual plants of apparently higher pollutant sensitivity. Most seedlings were not visibly injured unless ozone was present. However, a few seedlings from Garfield Grove, Atwell Mill, Muir Grove and Redwood Mountain were visibly injured by sulfur dioxide alone (Table VI-6).

Table VI-6. Foliar Injury on Five-Month-Old Giant Sequoias from Different Seed Sources.

| Seed Source | Pollutant Concentrations ($SO_2$-$O_3$) pphm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0-0 | 5-0 | 10-0 | 0-10 | 5-10 | 10-10 | 0-20 | 5-20 | 10-20 |
| | Percent Visible Injury[a] | | | | | | | | |
| Placerville | 0.0 | 0.0 | 0.0 | 2.3 | 0.2 | 2.2 | 8.6 | 11.0 | 20.3 |
| Atwell Mill | 0.0 | 0.0 | 3.7 | 0.6 | 2.5 | 0.7 | 12.9 | 21.8 | 21.8 |
| Redwood Meadow | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 1.2 | 14.0 | 26.2 | 20.7 |
| Garfield Grove | 0.0 | 0.5 | 0.9 | 1.6 | 0.6 | 5.5 | 12.9 | 20.5 | 15.4 |
| Redwood Mountain | 0.0 | 1.0 | 1.2 | 2.1 | 0.7 | 1.4 | 12.2 | 12.6 | 18.1 |
| Giant Forest | 0.0 | 0.0 | 0.0 | 0.03 | 0.5 | 0.9 | 5.9 | 15.2 | 14.7 |
| Muir Grove | 0.0 | 0.1 | 0.0 | 0.9 | 1.3 | 4.4 | 14.0 | 17.2 | 19.1 |
| Grand Mean | 0.0 | 0.2 | 0.8 | 1.1 | 0.9 | 2.3 | 11.5 | 17.8 | 18.6 |
| SD (±) | | 0.4 | 1.4 | 0.9 | 0.8 | 1.9 | 3.0 | 5.4 | 2.7 |

[a]Exposed to Sulfur Dioxide and Ozone in Open-Top Chambers from November 16, 1982 to March 21, 1983.
[b]Percentage of Total Leaf Area with Visible Injury Symptoms was Evaluated on a Per Plant Basis.

Seedlings from Garfield Grove and Redwood Mountain were sensitive to visible injury from a wider range of pollutant concentrations (Table VI-6), but the greatest amount of injury, at 10 pphm sulfur dioxide-20 pphm ozone, was not more than observed in other groves. Seedlings from Giant Forest were the least sensitive to visible injury.

Injury symptoms to plants from all seed sources did not appear until more than two weeks after the beginning of the experiment, and injury at concentrations below 20 pphm ozone were not observed until 12 weeks after the fumigation began. Additionally, percent foliar injury in treatments

with 20 pphm ozone was generally lower in progeny from Giant Forest compared to other groves (Table VI-6).

By far the most common injury symptom observed in seedlings from all groves was a purple-red discoloration of older secondary, primary and cotyledonary needles. Necrotic symptoms were also common but accounted for only a small percentage of the total foliar injury.

Analysis of Top and Root Dry Weights of Sequoia Seedlings

Following analysis of variance, significant differences in mean top dry weight (TDW) and root dry weight (RDW) for each treatment were investigated using the Bonferroni t-test. This method is appropriate for an unbalanced analysis of variance and is more conservative than Duncan's multiple range test. Therefore, the results in Figures VI-3a to VI-3g may represent biologically significant differences (i.e., substantial differences) in many cases where there was not statistically significant ($p < 0.05$) differences. For example, the TDW for Placerville seedlings was reduced by 50% when the 10-0 (10 pphm sulfur dioxide-0 pphm ozone) and 10-20 treatments are compared, but this difference was not significant.

This indicates a large range of variability of response to pollutants within each population.

Both TDW and RDW of seedlings receiving 5 and 10 pphm sulfur dioxide alone tended to be as high or higher than the filtered air control for all but one grove (Giant Forest), but the differences were not significant ($p < 0.05$). However, when 5 and 10 pphm sulfur dioxide were combined with 10 or 20 pphm ozone, substantial or significant reductions in TDW and RDW often occurred (Figures VI-3a to VI-3g).

For all groves, the largest decreases in RDW were found in one of the treatments with 20 pphm ozone; the order of increasing effect was usually

0-20, 5-20 and 10-20 pphm. The differences between these treatments were never statistically significant ($p < 0.05$), but the trend suggests a possible minor synergism between pollutants resulting in greater-than-additive decrease of RDW, e.g., Redwood Mountain, Garfield Grove, Atwell Mill, and Placerville (Figures VI-3b, VI-3c, VI-3d, and VI-3g, respectively).

For TDW the 20 pphm ozone treatments, with and without 5 and 10 pphm $SO_2$, generally resulted in the most weight decrease for three seed sources (Garfield, Placerville and Redwood Mountain), but for the four remaining seed sources (Atwell Mill, Redwood Meadow, Giant Forest and Muir), the 10-10 treatment caused more growth loss than one of the 0-20, 5-20 or 10-20 treatments. As with RDW, there was no significant difference between the three or four treatments causing the most reductions in growth, but a small greater-than-additive interaction is clearly present, since the combination of 10 and 20 pphm ozone with 5 or 10 pphm sulfur dioxide usually caused a greater reduction in growth than 10 or 20 pphm ozone alone. This is especially evident for Redwood Meadow and Redwood Mountain (Figures VI-3a and VI-3b). Statistically significant reductions in TDW occurred mainly between the 5 and 10 pphm sulfur dioxide treatments and the combination of 20 pphm ozone with 5 and 10 pphm sulfur dioxide. The progeny from Redwood Mountain and Giant Forest had a substantially, but not significantly, larger mean TDW and RDW in the 0-10 treatment than the 0-0 treatment. It is feasible that some growth stimulus may result from slight ozone injury or some effect of the chamber itself may have been responsible.

The means of all treatments combined at each grove showed that the overall TDW ranged from 96 to 140 mg, while RDW ranged from 58 to 88 mg (Table VI-7). Seedlings from Redwood Meadow were the most vigorous in

Table VI-7. The Mean Top Dry Weight (TDW) and Root Dry Weight (RDW) and Root-Shoot Ratios of All Seedlings in All Treatments for Each Giant Sequoia Seed Source

| Seed Source | Mean TDW (mg) | Mean RDW (mg) | Root-Shoot Ratio | TDW Reduction (% Reduction)[a] | RDW Reduction |
|---|---|---|---|---|---|
| Placerville | 96.3 | 62.0 | 0.64 | 45.9 | 64.0 |
| Atwell Mill | 99.4 | 58.5 | 0.59 | 49.5 | 70.5 |
| Redwood Meadow | 140.2 | 88.1 | 0.63 | 44.9 | 66.2 |
| Garfield Grove | 118.4 | 66.3 | 0.56 | 69.5 | 80.3 |
| Redwood Mountain | 113.0 | 71.3 | 0.63 | 60.4 | 73.6 |
| Grant Forest | 114.1 | 71.0 | 0.62 | 53.1 | 63.1 |
| Muir Grove | 94.2 | 58.0 | 0.62 | 53.0 | 65.0 |
| Mean | 110.8 | 67.9 | 0.61 | 53.8 | 69.0 |
| SD (±) | 16.1 | 10.4 | 0.03 | 8.7 | 6.3 |

[a]Maximum percentage reduction of dry weight comparing 0-0 (control) with the lowest treatment mean (20-5 or 20-10 pphm $O_3$-$SO_2$).

both top and root growth. Seedlings from Placerville, Atwell Mill and Muir Grove were the least vigorous, while seedlings from Garfield, Redwood Mountain and Giant Forest Groves exhibited an intermediate growth response (Table VI-7). TDW and RDW differed from grove to grove, but the root-shoot ratio was similar for all groves. For all seed sources, the means of the maximum reductions in TDW and RDW were 53.8 ± 8.7 and 69.0 ± 6.3% relative to the respective controls (0-0). Consequently, root growth was affected the most. It is not likely that site characteristics at the different groves are in any way related to seedling response. The vigor of seedling growth, regardless of pollutant treatment, may have been influenced by the age of cones collected from the forest floor and the temperature and moisture conditions prior to collection.

## Fumigation of Conifers with Secondary Foliage

Visible Injury to Secondary Needles of Two- to Three-Year-Old Pines and Four-Month-Old Giant Sequoia for the Fumigation Ending June 2, 1982

The visible injury response of each species, expressed as percentage of leaf area (Table VI-8), indicated that the greatest injury to ponderosa and jeffrey pines resulted from 20 pphm ozone + 20 pphm sulfur dioxide and from 40 pphm ozone. For sequoia, the 40 pphm ozone caused the most injury followed by mixtures of 10 and 20 pphm $O_3$ with 20 pphm $SO_2$. The highest sulfur dioxide concentration of 0.25 ppm caused only slight injury to all

Table VI-8. Percent Foliar Injury Response of Two- to Three-Year-Old Ponderosa Pine and Jeffrey Pine and Four-Month-Old Giant Sequoia Seedlings Exposed to Sulfur Dioxide and Ozone Singly and in Combinations from April 1, 1982 to June 2, 1982

| Ponderosa Pine | | | Jeffrey Pine | | | Giant Sequoia | | |
|---|---|---|---|---|---|---|---|---|
| $O_3$ (pphm) | $SO_2$ | Average Injury (%) | $O_3$ (pphm) | $SO_2$ | Average Injury (%) | $O_3$ (pphm) | $SO_2$ | Average Injury (%) |
| 20 | 20 | 57.40a | 20 | 20 | 52.45a | 40 | 0 | 91.60a |
| 40 | 0 | 52.60ab | 40 | 0 | 42.90a | 20 | 10 | 79.80ab |
| 20 | 10 | 48.60ab | 20 | 10 | 40.40a | 30 | 0 | 76.00abc |
| 20 | 5 | 47.30ab | 30 | 0 | 32.90ab | 20 | 20 | 74.15abc |
| 30 | 0 | 35.10 bc | 20 | 5 | 31.00ab | 20 | 5 | 61.60abcd |
| 10 | 20 | 21.20 cd | 10 | 20 | 16.00 bc | 10 | 20 | 63.20 bcde |
| 20 | 0 | 16.55 cd | 20 | 0 | 7.65 c | 20 | 0 | 35.30 bcde |
| 0 | 25 | 15.80 cd | 10 | 10 | 6.40 c | 0 | 20 | 35.10 bcde |
| 10 | 10 | 8.40 d | 10 | 5 | 5.10 c | 10 | 5 | 32.30 cde |
| 0 | 20 | 6.55 d | 0 | 25 | 3.70 c | 10 | 10 | 23.20 de |
| 10 | 5 | 6.00 d | 0 | 20 | 0.00 c | 0 | 25 | 13.70 e |
| 0 | 15 | 2.70 d | 0 | 15 | 0.00 c | 10 | 0 | 9.20 e |
| 10 | 0 | 1.60 d | 0 | 10 | 0.00 c | 0 | 10 | 7.00 e |
| 0 | 10 | 0.20 d | 0 | 5 | 0.00 c | 0 | 15 | 6.60 e |
| 0 | 5 | 0.00 d | 10 | 0 | 0.00 c | 0 | 0 | 3.55 e |
| 0 | 0 | 0.00 d | 0 | 0 | 0.00 c | 0 | 5 | 0.10 e |

Upper bounds for pairwise comparison at 5%, based on Tukey's multiple comparison method were: ponderosa 22.09, jeffrey 22.07, giant sequoia 46.13.

species. The mean injury from two chambers is shown for the 0-0, 0-20, 20-0, and 20-20 treatments; other treatments were not replicated.

For all three species in Table VI-9, the injury from all mixtures tested was consistently greater than the sum of injury from each gas alone (more-than-additive). The mixture of the lowest $SO_2$ concentration, 5 pphm, in combination with 20 or 10 pphm ozone resulted in a substantial increase of injury. This is notable because the 5-10 combination can occur under ambient conditions (Chapter II).

Examples of visible injury symptoms caused by both single and mixed gases were photographed. At 20 and 25 pphm $SO_2$, the injury was a combination of tip and mid-needle necrosis on pines. The highest concentrations of ozone (30 and 40 pphm) caused intense chlorotic mottle and mid-needle necrosis on pines. The mixtures of $SO_2$ (> 5 pphm) and

Table VI-9. Percent Foliage Injury to Ponderosa Pine, Jeffrey Pine and Giant Sequoia from Exposure to Mixtures of Ozone and Sulfur Dioxide Compared to Percent Foliar Injury from the Same Concentrations of Single Gas Exposures

| Treatment $O_3$ (pphm) | Treatment $SO_2$ (pphm) | Ponderosa Pine: Injury from Gas Mixture (%) | Ponderosa Pine: Sum of Injury from Single Gases (%) | Jeffrey Pine: Injury from Gas Mixture (%) | Jeffrey Pine: Sum of Injury from Single Gases (%) | Giant Sequoia: Injury from Gas Mixture (%) | Giant Sequoia: Sum of Injury from Single Gases (%) |
|---|---|---|---|---|---|---|---|
| 20 | 20 | 57.4 | 23.3 | 52.5 | 7.7 | 74.2 | 52.8 |
| 20 | 10 | 48.6 | 16.8 | 40.4 | 7.9 | 79.8 | 42.3 |
| 20 | 5 | 47.3 | 16.6 | 31.0 | 7.7 | 61.6 | 35.3 |
| 10 | 20 | 21.2 | 8.3 | 16.0 | 0 | 36.2 | 26.7 |
| 10 | 10 | 8.4 | 1.8 | 6.4 | 0 | 23.2 | 16.2 |
| 10 | 5 | 6.0 | 1.6 | 5.1 | 0 | 32.3 | 9.3 |

(> 20 pphm) ozone caused an intensification of the chlorotic mottle so that it had a brassy, necrotic appearance plus tip and mid-needle necrosis (Figure VI-4). Four-month-old sequoia seedlings responded to higher concentrations of ozone and mixtures with a yellowing and subsequent necrosis of the oldest leaves located near the bottom of the plant and on the inside near the main stem (Figure VI-4).

This new information on symptoms from mixed gas fumigations will provide information needed to identify foliar injury symptoms during field surveys.

## DISCUSSION

The latest revision of the Air Quality Criteria for Ozone and Other Photochemical Oxidants (U.S. EPA, in press) proposes some general concepts about the joint action of ozone and sulfur dioxide. These concepts are paraphrased as follows:

(1) Synergistic joint action occurs frequently at concentrations below or at the threshold for visible injury. (2) Yield loss may be additive as concentrations increase in the mixture above the visible injury threshold. (3) Antagonistic joint action may occur if one pollutant concentration exceeds the other or if both are high. These concepts are based mainly on research with herbaceous plants. The results of exposure to mixed gases depend also on species, cultivar, environmental conditions, duration and frequency of exposure.

The visible injury observed in the fumigations of recently germinated seedlings did conform to concept #1 in the case of digger pine, but ponderosa and jeffrey pines had slight visible injury from exposure to the lowest concentrations of single gases; visible injury increased from

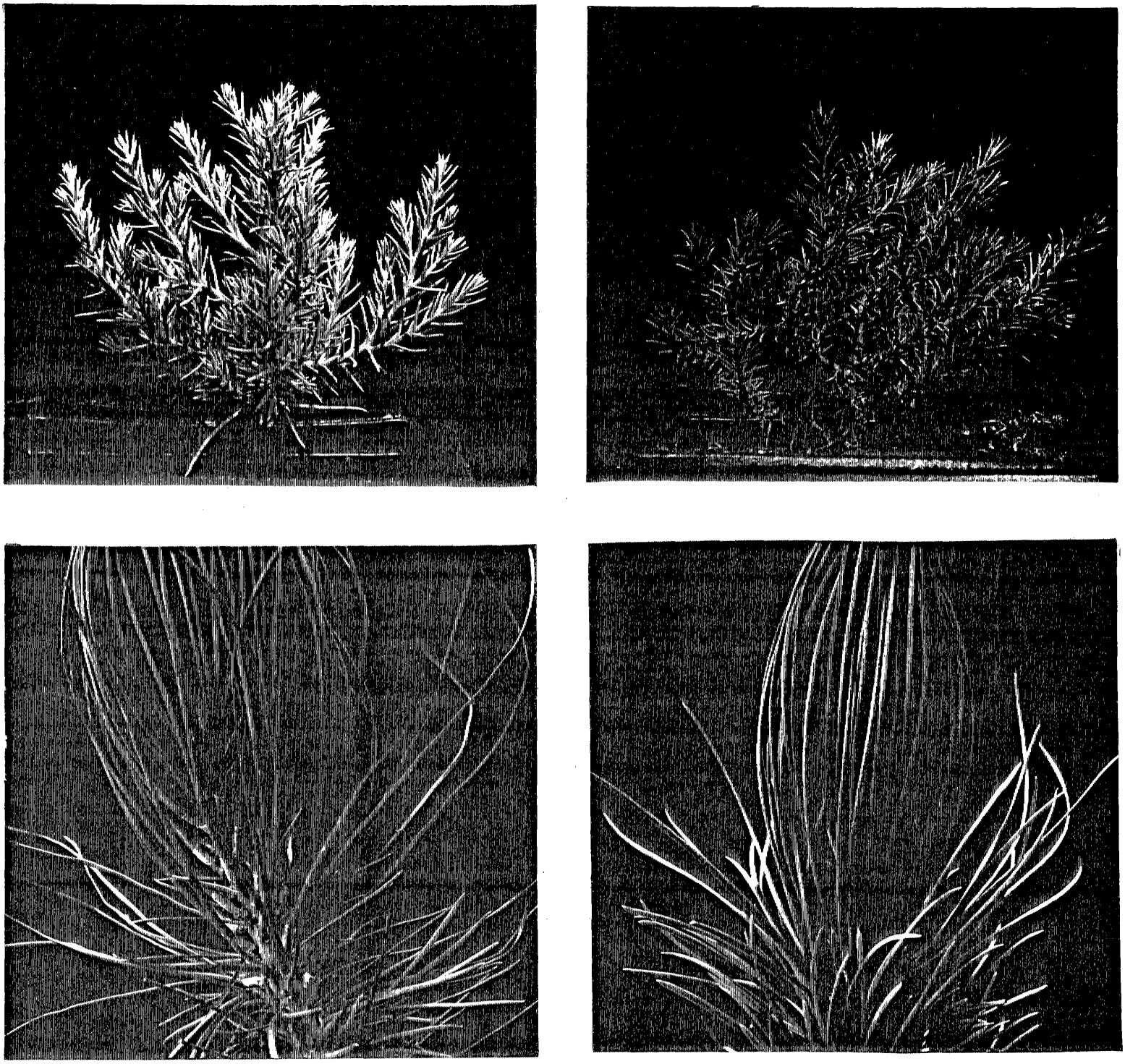


Figure VI-4. Appearance of ozone injury on giant sequoia (upper right) and injury from a combination of ozone and sulfur dioxide on ponderosa pine (lower right). Concentration of both pollutants was 20 pphm. Control plants are on the left.

exposure to mixed gases at higher concentrations. Recently germinated giant sequoia seedlings did not conform clearly to concept #1; substantial injury appeared first with 20 pphm ozone, considerably more injury resulted from the 5-20 pphm mixture, but the 10-20 pphm mixture caused the same or slightly less injury than the 5-20 mixture. The response to the 10-20 pphm mixture may conform to concept #3 regarding antagonistic joint action.

Visible injury to three-year-old ponderosa and jeffrey pines and four-month-old giant sequoia did conform to the concept #1 model. Injury from gas mixtures at the lowest concentrations (5 pphm $SO_2$, 10 pphm $O_3$) showed joint action that was greater than additive, particularly for jeffrey pine. There was no suggestion of antagonistic joint action in mixtures with the highest concentrations.

Both experiments which evaluated effects on TDW and RDW of recently germinated pine seedlings show no significant differences among treatments for TDW of ponderosa and jeffrey pines. There were significant differences in RDW of jeffrey pine in one experiment. RDW losses increased in higher concentration mixtures, and the type of response suggested joint action that was additive (concept #2). In the same experiments, the TDW of giant sequoia sometimes showed significant reductions, while RDW routinely showed significant reductions. Sometimes these reductions were not significantly different from the control but rather from the single gas treatments of 5 or 10 pphm $SO_2$. These low levels of $SO_2$ frequently stimulated both TDW and RDW of giant sequoia and both TDW and RDW of pines in both experiments, but the differences were not statistically significant ($p = 0.05$) when compared with controls. One case of TDW stimulation by ozone was present with digger pine; however, the RDW did not show stimulation. In general, RDW of all species was more

affected by pollutant mixtures than TDW. No effort was made to correlate visible injury with TDW or RDW.

The visible injury observed on two- to three-year-old pines and four-month-old giant sequoia was more severe than observed on newly germinated seedlings that had received a longer duration of exposure. The older plants were exposed during late April, May and early June, when temperatures were consistently warmer than the December through May period when recently germinated seedlings were exposed. The younger plants may have shown greater depression of TDW and RDW if fumigated in spring and summer. During the course of these experiments, the chambers were not available for use in the summer and fall. In future experiments, we will avoid exposures during the winter months in outdoor open-top chambers.

Few studies to date have analyzed the effects of mixtures of ozone and sulfur dioxide on stem, leaf and root growth of newly established conifer seedlings. Usually only visible injury is measured. Dochinger et al. (1970) reported that mixtures of ozone and sulfur dioxide caused greater than additive amounts of visible leaf injury and abscission in Pinus strobus. Yang et al. (1982) observes that six clones of this species showed mixed responses to pollutant mixtures and that additive effects of 10 pphm each of an ozone and sulfur dioxide mixture was indicated on only one clone. Needle dry weight (mg $mm^{-1}$) was the best indicator of injury. Sensitive and resistant clones were exposed to 10 pphm sulfur dioxide and 10 pphm ozone for eight hours per day, five days per week for four to eight weeks. Similarly, Kress et al. (1982) reported that ozone sensitive and resistant strains of Pinus taeda seedlings exhibited reductions in shoot growth when exposed to low concentration mixtures of sulfur dioxide and ozone. Mixtures of ozone (20 pphm) and

sulfur dioxide (150 pphm) acted synergistically in causing damage to Pinus nigra (Brennan et al. 1981).

The usual caveats must be observed when comparing the results of chamber experiments to field conditions where environmental conditions and exposure regimes are quite variable. It appears that additive or synergistic joint action of ozone and sulfur dioxide could occur at concentrations easily attained in the ambient atmosphere, namely 5 or 10 pphm $SO_2$ with 10 or 20 pphm $O_3$. Injury increases larger than those caused by ozone alone might be detected most easily by a change from a chlorotic to necrotic mottle of secondary pine needles or by more frequent failure of seedling establishment due to the suppression of root growth during the critical early summer period before soil moisture is depleted.

# VII. HEALTH OF FOREST VEGETATION IN THE SOUTHERN DISTRICTS OF THE SEQUOIA NATIONAL FOREST

## INTRODUCTION

The determination of the present status of air pollution injury to montane vegetation in the mountains generally east of Bakersfield-Oildale was an important objective. The main focus was on species known to be sensitive to ozone, namely ponderosa and jeffrey pines in forest stands above 4500 ft elevation. Grasslands and oak woodlands at lower elevations were observed but in a less systematic manner. We were aided in the observation of pines by preliminary surveys done by the Forest Pest Management staff of the USDA, Forest Service, Regional Office, San Francisco.

A survey of chronic ozone damage to ponderosa and jeffrey pines was completed in the summer of 1977 for the area including the Greenhorn Mountains, Breckenridge Mountain and the Piute Mountains. The amount of damage at 60 semi-permanent plots was mainly slight with only a few plots having moderate injury (Figure VII-1). At least 21 plots were marked by spray painting numbers on the bark of selected trees. Our objective was to select a representative number of plots to serve as sample locations for soil and leaf sulfur content. We wanted to measure any changes in chronic injury that may have occurred between 1977 and 1981, and to be vigilant for foliage symptoms that may be caused by a combination of ozone and sulfur dioxide.

## PROCEDURE

After considerable searching with the aid of John Pronos and John Wenz of the U. S. Forest Service, Region 5, Forest Pest Management staff, we located only five of the subset of 21 plots. The 1977 paint did not persist because of weathering and shedding of bark platelets. The relocated plots designated Pronos 6-4, 6-6, 6-11, 7-1 and 7-10 are shown in Figure III-1.

The method of rating the amount of chronic ozone injury to pines was the same as that developed in the San Bernardino Mountains (Miller 1973). Scores are derived by summing ordinal scale numbers representing the number of annual needle whorls retained, the condition of each needle whorl (4 = uninjured, 2 = ozone needle mottle and 0 = necrotic), the needle length (0 or 1) and lower branch mortality (0 or 1). Higher scores represent less injury. In the San Bernardino Mountains, the following labels were appropriate for the indicated score range: 0-8 = very severe, 9-14 = severe, 15-21 = moderate, 22-28 = slight, 29-35 = very slight and 36 or higher = no visible injury.

## RESULTS AND DISCUSSION

Pines at three of the five relocated plots showed substantial increases in defoliation and needle injury symptoms attributed to ozone. These plots (6-4, 6-6 and 6-1) located on Breckenridge Mountain and the Greenhorn Ridge (Figure III-1) are closer to Bakersfield than the two Piute Mountain plots (7-1 and 7-10) which showed little change (Table VII-1). In 1977 all plot trees had scores ranging between 47.5 and 51.5, but the three plots with declining scores ranged from 36-37.1 in 1981. The lower scores mean decreased needle retention and increased intensity

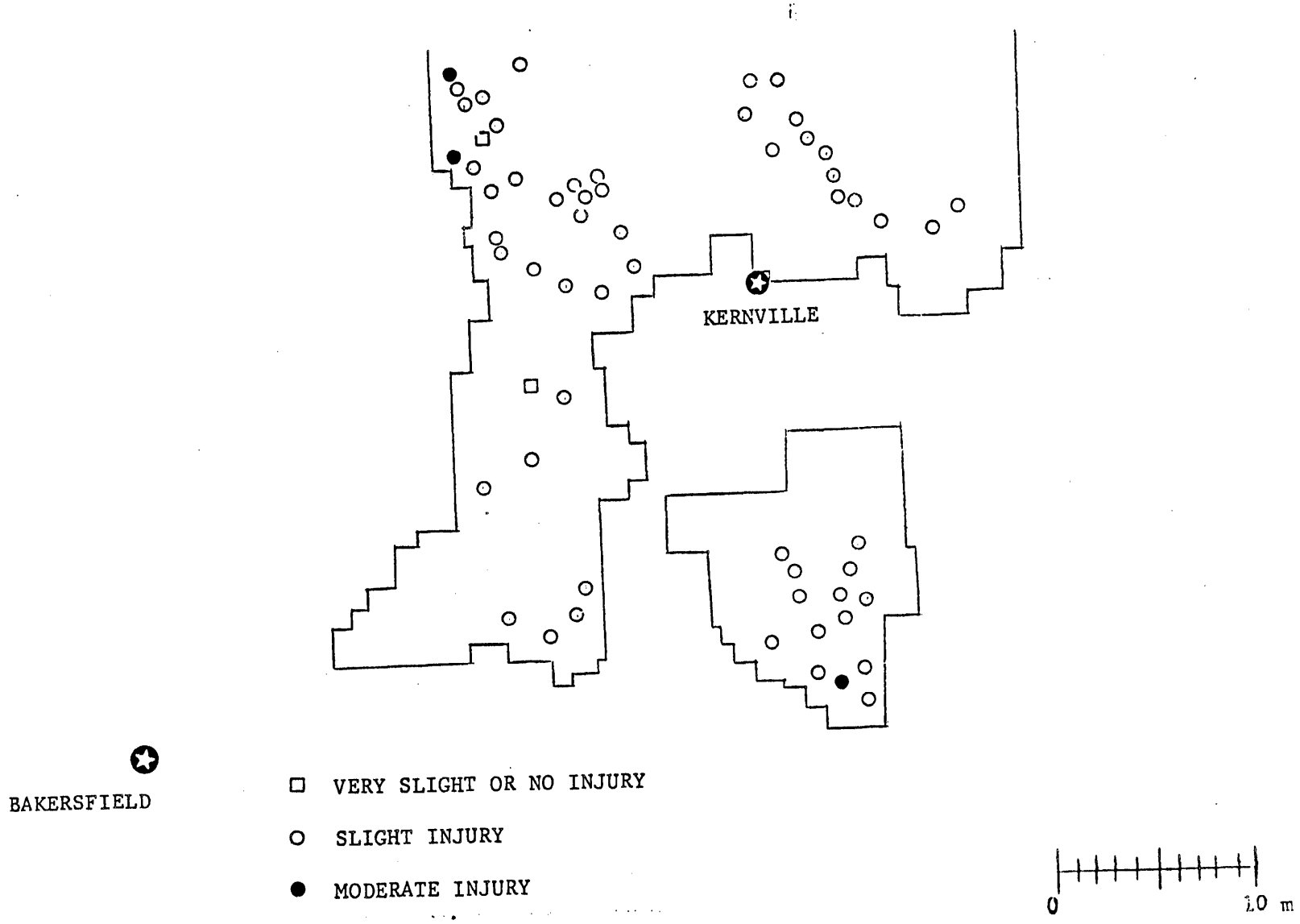



Figure VII-1. Chronic ozone injury to Pinus pondersoa and P. jeffreyi determined at 10-tree observation plots established in 1977 in the southern Sequoia National Forest by the U. S. Forest Service, Forest Pest Management staff, San Francisco, CA.

Table VII-1. Comparison of 1977 and 1981 Oxidant Injury Scores of Ponderosa and Jeffrey Pines at 5-10 Tree Plots in the Southern Sequoia National Forest

| Region | Plot Number | dbh[a] Mean S.O. | Oxidant Injury Score[b] 1977 Mean S.O. | Oxidant Injury Score[b] 1982 Mean S.O. |
|---|---|---|---|---|
| Breckenridge Mountain | 6-4 | 18.3 ± 5.5 | 51.5 ± 4.1 | 37.1 ± 9.9 |
| Greenhorn Mountain | 6-6 | 14.1 ± 4.6 | 50.3 ± 4.2 | 36.6 ± 7.5 |
| | 6-11 | 14.0 ± 3.4 | 50.4 ± 8.6 | 36.0 ± 8.9 |
| Piute Mountains | 7-1 | 12.6 ± 4.7 | 47.5 ± 12.2 | 47.8 ± 14.4 |
| | 7-10 | 17.9 ± 6.5 | 48.5 ± 11.5 | 47.0 ± 10.2 |

[a]dbh = diameter at breast height (inches).

[b]Higher scores indicate less injury; the score of 36 and higher indicates no visible injury based on the San Bernardino Mountain criteria, but the obvious decline of scores from about 50 in 1977 to about 37 in 1981 at several plots suggest a need for re-evaluating the terminology applied to score values.

of ozone-caused chlorotic mottle symptoms on needles. Variation of the chlorotic mottle symptom (Figure VI-5) or sulfur dioxide symptoms were not detected at any plot.

The similarity of scores between 1977 and 1981 at the Piute Mountain plots (7-1 and 7-10) suggests a minimal influence of ozone at distances ranging from 30-35 miles east of Bakersfield. One plot in the vicinity of 7-10 was indicated on Figure VII-1 as having moderate injury in 1977. This defoliation appeared to be due to biotic pests in 1981 and not ozone.

Digger pines growing at elevations between about 2000 and 4500 ft in the Greenhorn and Breckenridge Mountain areas were observed repeatedly during the process of sampling foliage for sulfur analysis. It was common

for digger pines to retain only two annual needle whorls at many sites. Other trees with three or more annual whorls present were also observed at the same sites. Defoliation seemed to be caused mainly by insects that were no longer present at the time we were collecting foliage. The chlorotic mottle symptom associated with ozone injury was rarely observed on digger pine. The most common symptom was tip dieback of needles in all whorls. The cause of the tip dieback was not determined.

The foliage of California sycamore (Plantanus racemosa) had severe necrotic stippling on the upper leaf surface at two of three sites on the banks of the Kern River. This is a typical ozone symptom. However, at sites designated as SYC1 and possibly SYC2 and SYC3 (Figure III-2), there is more probability that sulfur dioxide and ozone may interact to cause injury than at any other location in the study area because of the nearness to Bakersfield. This species requires further study to determine if it could be developed as a bioindicator of injury due to the combined effects of ozone and sulfur dioxide.

In summary, ozone injury to ponderosa and jeffrey pines in the study area (Figure VII-1) has increased since 1977 at locations selected for observation. Forested areas above 4500 ft elevation appear to have higher average ozone concentrations than the Bakersfield-Oildale area (Table II-1), and injury from this single pollutant is expected to continue. Fumigation studies (Section VI) suggest that sulfur dioxide may interact with ozone to cause additional injury, but not until sulfur dioxide hourly averages exceed 5-10 pphm (50-100 ppb).

# VIII. REFERENCES


Brennan, E., I. Leone, R. Harkov, A. Rhoad. 1981. Austrian pine injury traced to ozone and sulfur dioxide pollution. Plant Disease 65:363-364.

Carroll, J. J. and R. L. Baskett. 1979. Dependence of air quality in a remote location on local and mesoscale transports: A case study. J. Appl. Meteor. 18:474-456.

Case, J. W. and H. R. Krouse. 1980. Variations in sulphur content and stable sulfur isotope composition of vegetation near a $SO_2$ source at Fox Creek, Alberta, Canada. Oecologia 44:248-257.

Dochinger, L. S., F. W. Bender, F. L. Fox and W. W. Heck. 1970. Chlorotic dwarf of eastern white pine caused by an ozone and sulfur dioxide interaction. Nature 225:476.

Hitchon, B. and H. R. Krouse. 1972. Hydrogeochemistry of surface waters of the Mackenzie River drainage basin, Canada. III. Stable isotopes of oxygen, carbon and sulfur. Geochim. Cosmochim. Acta. 36:1337-1357.

Duckworth, S. and D. Crowe. 1979. Sulfur dioxide and sulfate survey. . . Bakersfield 1977-1978. California Air Resources Board, Technical Services Division, Sacramento. 34 pp.

Evans, L. S. and P. R. Miller. 1975. Histological comparison of single and additive $O_3$ and $SO_2$ injuries to elongating ponderosa pine needles. Amer. J. Bot. 62:416-421.

Gilbert, O. L. 1969. The effect of $SO_2$ on lichens and bryophytes around Newcastle upon Tyne. In Proc. First Europ. Cong. on Influence of Air Pollution on Plants and Animals, Wageningen. pp. 223-225.

Huey, N. A. 1968. The lead peroxide estimation of sulfur dioxide pollution. J. Air Pollut. Control Assoc. 18:9. p. 610.

Katz, M. 1949. Sulfur dioxide in the atmosphere and its relation to plant life. Ind. Eng. Chem. 41:2450-2465.

Kress, L. W., J. M. Skelly and K. H. Hinkelmann. 1982. Growth impact of $O_3$, $NO_2$ and/or $SO_2$ on Pinus taeda. Environ. Monitor. and Assess. 1:229-239.

Krouse, H. R. 1980. Sulfur isotopes in our environment. In Handbook of Environmental Isotope Chemistry, Vol. 1, P. Fritz and J. Ch. Fontes (Eds.), The Terrestrial Environment, A. pp. 435-471.

Krouse, H. R. and J. W. Case. 1981. Sulfur isotope ratios in water, air, soil and vegetation near Teepee Creek gas plant, Alberta. Water, Air and Soil Pollut. 15:11-28.

Legge, A. H. (1980). Primary productivity, sulfur dioxide and the forest ecosystem: An overview of a case study. In Effects of air pollutants on mediterranean and temperate forest ecosystems. USDA Forest Service Gen. Tech. Rep. PSW-43. Berkeley, CA, Pacific Southwest Forest and Range Experiment Station. 11 pp.

Linzon, S. N., P. J. Temple and R. G. Reanson. 1979. Sulfur concentration in plant foliage and related effects. J. Air Pollut. Control Assoc. 29:520-525.

Miller, P. R., M. H. McCutchan and H. P. Milligan. 1972. Oxidant air pollution in the Central Valley, Sierra Nevada foothills and Mineral King Valley of California. Atmos. Environ. 6:623-633.

Miller, P. R. 1973. Oxidant-induced community change in a mixed conifer forest. In Air pollution damage to vegetation. J. A. Naegele, (Ed.), Advances in Chem. Ser. 122:101-117.

Pronos, J., D. R. Vogler and R. S. Smith, Jr. 1978. An evaluation of ozone injury to pines in the southern Sierra Nevada. Report No. 78-1. Forest Insect and Disease Management, U. S. Forest Service, San Francisco. 17 pp.

Taylor, R. J. and M. A. Bell. 1983. Effects of $SO_2$ on the lichen flora in an industrial area Northwest Whatcom County, Washington. Northeast Science 57(3):157-166.

Thomas, F. W. and C. M. Davidson. 1961. Monitoring sulfur dioxide with lead peroxide cylinders. J. Air Pollut. Control Assoc. 11:1 pp. 24-27.

Unger, C. D. 1974. Climate of the San Joaquin Valley Air Basin. California Air Resources Board, Division of Technical Services, Sacramento. 20 pp.

Unger, C. D. 1978. The transport of photochemical smog in the Central Valley and the Sierra Nevada Mountains of California. pp. 38-45. In Proc. Conf. Sierra Nevada Meteorology. American Meteorological Society, Boston, MA. 170 pp.

Winner, W. E., J. D. Bewley, H. R. Krouse and H. M. Brown. 1978. Stable sulfur isotope analysis of $SO_2$ pollution impact on vegetation. Oecologia 36:351-361.

Wall, L. F., C. W. Gehrke and J. Suzuki. 1980. An automated turbidimetric method for total sulfur in plant tissue and sulfate sulfur in soils. Commun. in Soil Science and Plant Analysis 11(1):1087-1103.

Yang, Y., J. M. Skelly and B. I. Chevone. 1982. Clonal response of eastern white pine to low doses of $O_3$, $SO_2$ and $NO_2$, singly and in combination. Can. J. For. Res. 12:803-808.

# IX. APPENDICES

1. Vertical Mixing and Mass Flux Between Bakersfield and the Kern River Drainage During Summer Synoptic Forcing--A Case Study.
   Contriuted by:
   Michal A. Fosberg
   USDA, Forest Service
   Fire Laboratory
   Riverside, CA

2. Hourly Ozone, Sulfur Dioxide, Temperatures, Relative Humidities, Wind Speed, Wind Direction and Monthly Wind Roses and Wind Run for Democrat Springs (2400 ft) and Shirley Meadow (6400 ft) During July Through October 1982.

3. Stable Sulfur Isotope Determinations for Soils and Plant Tissue Based on Total Sulfur in Samples Collected in 1981 and 1982.

4. Record of Daily Fumigation Duration and Weather Conditions from November 16, 1983 to April 11,1983.

APPENDIX 1

# VERTICAL MIXING AND MASS FLUX BETWEEN BAKERSFIELD AND THE KERN RIVER DRAINAGE DURING SUMMER SYNOPTIC FORCING -- A CASE STUDY.

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Abstract --A brief intensive field experiment was conducted to determine pollutant transport mechanisms from the southern end of the San Joaquin Valley of California into the southern Sierra Nevada Mountains. Six surface wind stations were located in the Kern River Canyon, Lake Isabella and upper portions of the drainage to determine mass flux. These measurements indicated that the lower gorge of the Kern River showed mass flux, an order of magnitude below that observed in the mid and upper canyon.

Radar traced tetroon released from Oildale showed deep mixing of the San Joaquin Valley. This case study indicated that pollutants in the San Joaquin Valley would have been mixed through a deep layer and that transport into the Kern River Drainage would have been at ridge top level rather than through the lower Kern River Canyon.

Key Words: pollutant transport, tetroons

# 1. INTRODUCTION

Pollutant concentration in the San Joaquin Valley of California is sufficient to cause vegetation damage (Millecan, 1971). Transport of these pollutants into the forested areas of the Sierra Nevada Mountains and subsequent chronic exposure of the forests to pollutants, particularly oxidents and sulphur oxides can range in results from individual plant damage to major perturbations in the ecosystem (Skelly, 1980; Legge, 1980).

Major regional scale experiments (Smith et al., 1981) have documented the flow within the San Joaquin Valley and transport across the Tehachapi Mountains onto the Mojave Desert. Detailed fine scale flow features such as the Bakersfield eddy and the nocturnal low level jet contribute to well mixed aerosol (Smith et al., 1981). Specific studies of pollutants transport from the San Joaquin Valley into the Sierra Nevada Mountains showed that oxidants were transported into the mountains during periods of good ventilation rather than stagnation periods, and that significant transport took place above the ground (Miller et al., 1972; Carroll and Baskett, 1979). These latter two papers served as the model for determining the specific transport processes into the Kern River drainage.

A short, intensive exploratory study was carried out on September 15 and 16, 1982, to provide meteorological information on transport of oxidants and sulfur oxides into the Greenhorn and Breckenridge Mountain areas of the southern Sierra Nevada Mountains. The specific objectives of this study were to determine the mass balance in the lower and midregions of the drainage, to determine the transport patterns from Oildale, and to make a preliminary estimate of the mixing and dispersion processes at the valley-mountain interface.

## 2. METHODS

### 2.1 Experimental Methods

The experimental area consisted of the Oildale-Bakersfield urban area, the Kern River Canyon, Lake Isabella, Kernville, south fork of the Kern River towards Walker Pass, and the surrounding Greenhorn and Breckenridge Mountains (Fig. 1). Six Climatronix[1] surface weather stations were set out for the experiment. Wind speed and direction were obtained at hourly intervals from 0400 PDT on September 15 to 1600 PDT on September 16 at the Shirley Peak Ski area, the Kernville Airport, an open field in Weldon, the dam on Lake Isabella, Democrat Springs Fire Station and the hydroelectric plant in the lower Kern River gorge (Fig. 1). Particular care was taken to locate these surface wind stations at well exposed sites near the valley center. For example, the wind station at the lower canyon power station was on a well exposed rock outcrop in the center of the canyon. Similarly, the Isabella Dam station was on the dam, the Kernville station was on a peninsula juting out into the lake, and the Shirley Peak station was in the center of the ski slope.

A tracking radar system (Fosberg and Lanham, 1983) was set up on the bluff overlooking the Kern River within the City of Bakersfield. The radar is an S band marine radar and equipped with a collision avoidance computer capable of tracking 20 targets simultaneously. The radar was used to track constant volume tetroons released from Oildale. Each tetroon was equipped with a transponder. The radar transmitted a 3.05 GHz signal and the transponder returned a 2.95 GHz signal. This 100 MHz shift eliminated ground clutter in

[1]Trade names, commercial products, and enterprises are mentioned solely for information. No endorsement by the U.S. Department of Agriculture is implied.

the radar processed data. Tetroons were equipped for temperature and pressure and these data were telemetered to the radar trailer. The temperature and pressure data were used to calculate tetroon elevation. Radar and telemetered data were logged at 1 minute intervals. Tetroon volume was 1 cubic meter. Tetroons were flown at three altitudes; 600, 1000, and 1500 meters msl. These altitudes were chosen in order to measure transport patterns in the boundary layer in the valley, transport patterns at the level at which maximum concentrations of pollutants have been found in the mountains and at the 850 mb level in order to relate the local observations to the larger scale flow features.

## 2.2 Mass Flux Calculations

Mass flux within the Kern River Canyon was calculated at five of the six surface wind stations. The vertical cross sectional area of the canyon was measured perpendicular to the local orientation of the canyon axis at the lower canyon power station, Democrat Springs Fire Station, the dam at Lake Isabella, Kernville and at Weldon. Because the mixing depth was not known, the top of the cross section was set at the ridge line on each side of the valley. The wind speed perpendicular to these cross sections was then used to calculate the volumetric flux of air moving past the weather station. No correction was made for variations in wind profiles at any of the stations. The surface winds were used directly. Also, this calculation of volumetric flux does not include variations in density. This latter factor is least important.

## 3. RESULTS

Large scale weather features during the experiment were as somewhat anomalous. A weak, short wave disturbance moved through the experimental area on September 15. This resulted in a high thin cloud cover, and weakened extended sea breeze and local flows.

Surface wind patterns within the study area during the passage of the short wave disturbance showed strong up canyon from Democrat Springs past Lake Isabella and up both forks of the upper Kern River drainage (Fig. 2). Winds at Shirley Peak reflected the large scale southwesterly flow throughout the entire study and were particularly strong during the passage of the disturbance (Fig. 2). Surface winds at the lower canyon power station were down canyon in the afternoon (Fig. 2) and continued to flow down canyon until sunset.

The volumetric flux past the five canyon weather stations showed a large flux at four of the stations from 0800 PDT to 1800 PDT on September 15. These fluxes were considerably greater than observed on September 16 (Fig. 3). The lower canyon power station flux did not show any response to the passage of the disturbance (Fig. 3). Also, the volumetric flux at the lower canyon power station was significantly smaller than that observed at the other stations. The cross sectional area of the canyon at the power station is about one-eighth that of the cross section at Democrat Springs. The canyon at the power station is best characterized as a narrow, steep walled gorge.

Radar tracked tetroons released from Oildale showed northerly flow in the lowest levels and westerly flow at the highest elevations. The tetroon released at 1400 PDT and ballasted for 1500 m msl drifted towards the southeast until it was caught in an updraft and lifted to approximately 2000 m msl. The tetroon then drifted towards the northeast. When the tetroon

escaped the updraft and returned to the ballast elevation, it again drifted towards the southeast (Figs. 4, 5). The two tetroons flown at lower levels, 1520 PDT, ballast altitute 600 m msl and 1616 PDT, ballast altitude 1000 m msl, showed definite northerly flow towards the Tehachapi Mountains (Fig. 4). These tetroon tracks showed strong northerly flow in the lowest levels, with northerly flow decreasing with elevation and the transition from low level northerly flow to the large scale southwesterly flow occurring between 1500 m and 2000 m msl. The lower two tetroons were tracked south-southeastward across Bakersfield towards the Tehachapi Mountains. Average transport speed of the 600 m msl tetroon was 8.2 m $s^{-1}$. The average transport speed of the 1000 m msl tetroon was 5.1 m $s^{-1}$. The highest tetroon (1500 m msl) had an average transport speed of 1.4 m $s^{-1}$ towards the east-southeast. This tetroon stayed north of Bakersfield during the entire track. All three tetroons flown on September 15 showed large vertical movement. The tetroon released 1400 PDT with a ballast altitute of 1500 m msl (850 mb) was caught in an updraft and displaced about 500 m above the ballast altitutde for approximately 20 minutes (Fig. 5). The tetroon released at 1520 PDT with a ballast altitude of 600 m (950 mb) also showed vertical displacements as great as 500 m (Fig. 5). The limited record from the telemetry package on the tetroon released at 1616 PDT, ballast altitude 1000 m msl (900 mb) also suggest several hundred meter fluctuations (Fig. 5). These three flights showed deep mixing from the lowest levels up to the transition to the large scale flow.

FIGURE CAPTIONS

Figure 1. Map of study area with location of weather stations and tetroon launch site. Tetroons were released from Oildale. Weather stations were located at Shirley Peak, Kernville, Weldon, the Lake Isabella dam, Democrat Springs Fire Station, and the lower canyon power station.

Figure 2. Surface winds during the passage of the short wave disturbance on September 15, 1982, (a) 1500 PDT, (b) 1700 PDT. Wind direction is shown by the arrow. Wind speed is in m $s^{-1}$.

Figure 3. Volumetric flux of air past five canyon weather stations.

Figure 4. Horizontal tracts of tetroon on September 15. Launch site is 331 degrees and 3.9 nautical miles from the radar. Each dot represents the tetroon position at 1 minute intervals. ~~Solid dots~~ open circles are 1400 PDT, ballast altitude 1500 m msl, ~~open circles~~ solid dots (X's) are 1520 PDT, ballast altitude 600 m msl, ~~(x's)~~ solid dots are 1616 PDT, ballast altitude 1000 m msl. Range circles are in nautical miles. Direction is in true north bearing from radar.

Figure 5. Vertical position of the tetroons shown in Figure 4. Vertical axis is in millibars. Horizontal axis is in minutes from time of release.

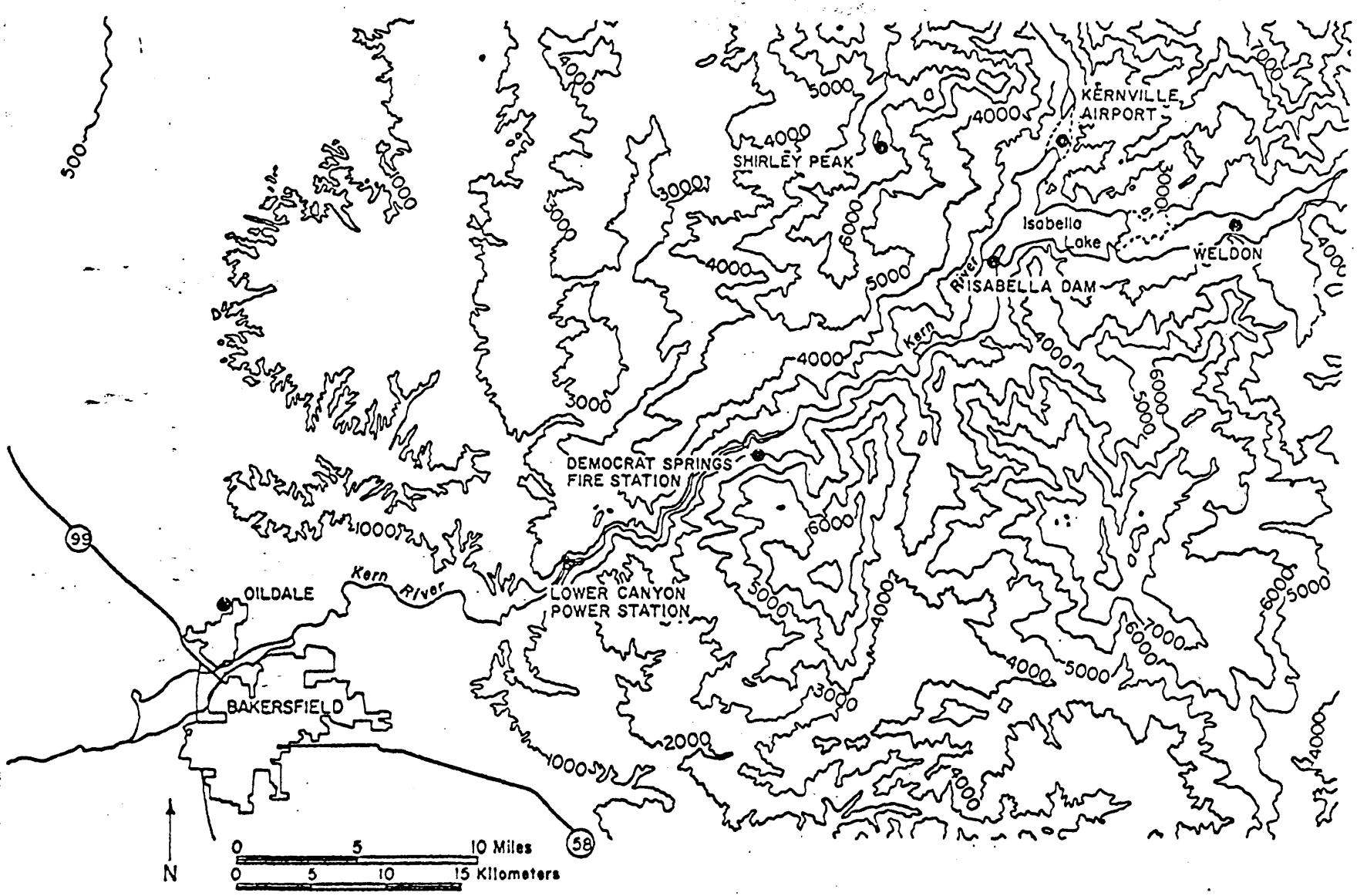

KERNVILLE AIRPORT
SHIRLEY PEAK
Isabello Lake
WELDON
ISABELLA DAM
Kern River
DEMOCRAT SPRINGS FIRE STATION
LOWER CANYON POWER STATION
OILDALE
Kern River
BAKERSFIELD
99
58
N
0 5 10 Miles
0 5 10 15 Kilometers

Figure 1

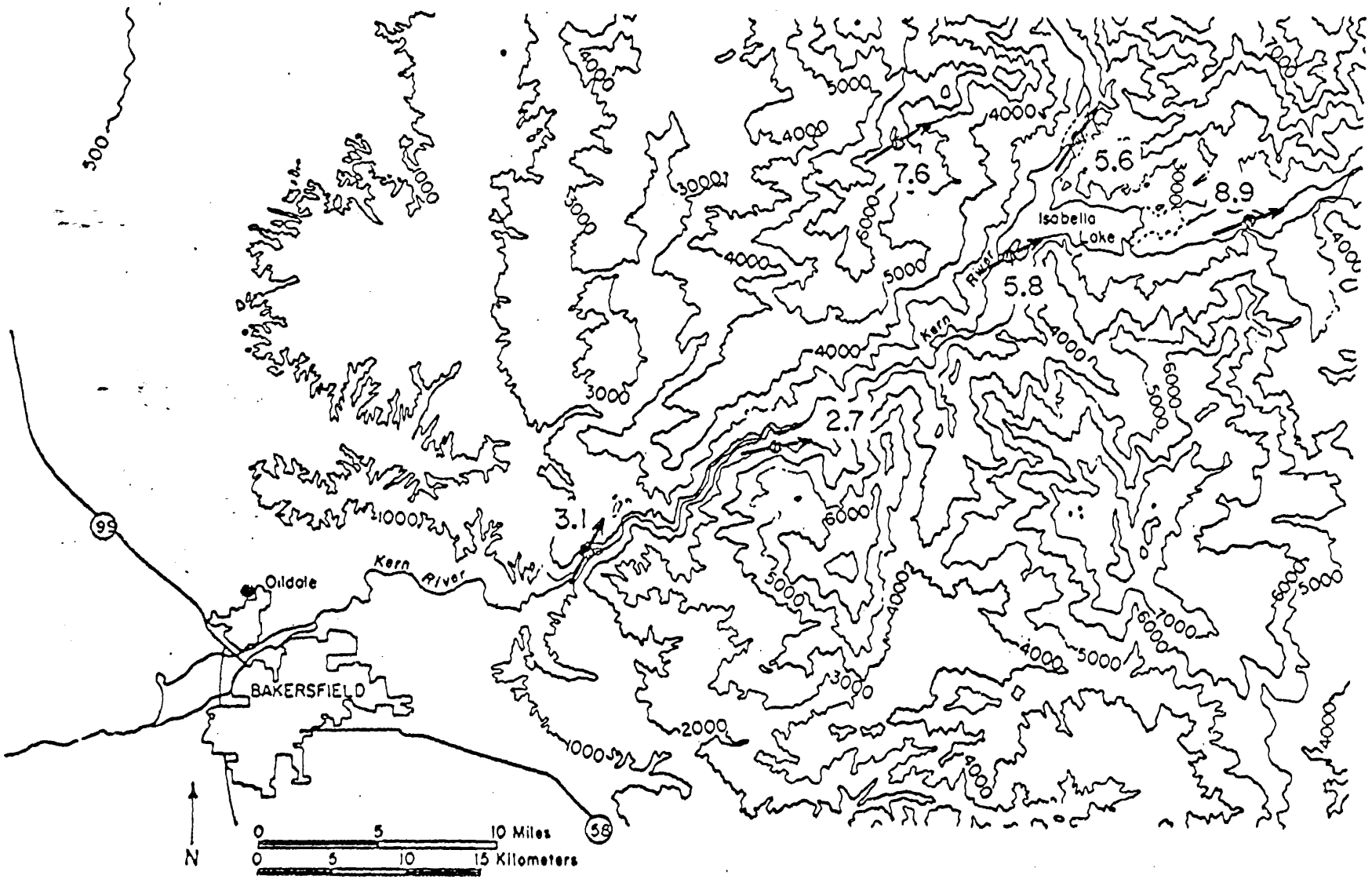
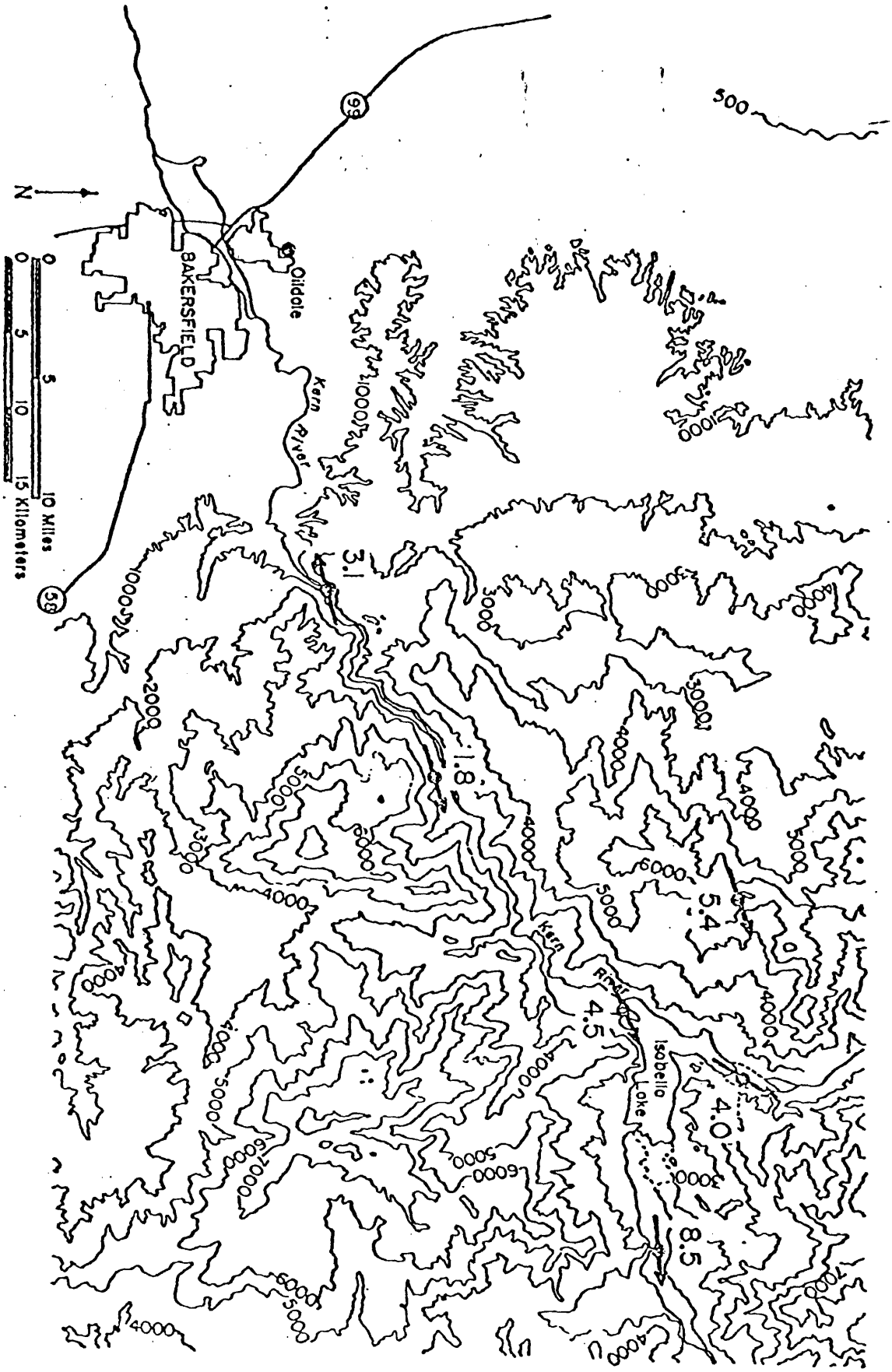

7.6
5.6
8.9
5.8
2.7
3.1
Isabella Lake
Kern River
Kern River
Oildale
BAKERSFIELD
99
58
N
0 5 10 Miles
0 5 10 15 Kilometers

Figure 2A

Figure 2b


N
0 5 10 15 Kilometers
0 5 10 Miles
BAKERSFIELD
Oildale
Kern River
Isabella Lake
3.1
1.8
5.4
4.5
4.0
8.5
500
1000
2000
3000
4000
5000
6000
7000
8000
99
58

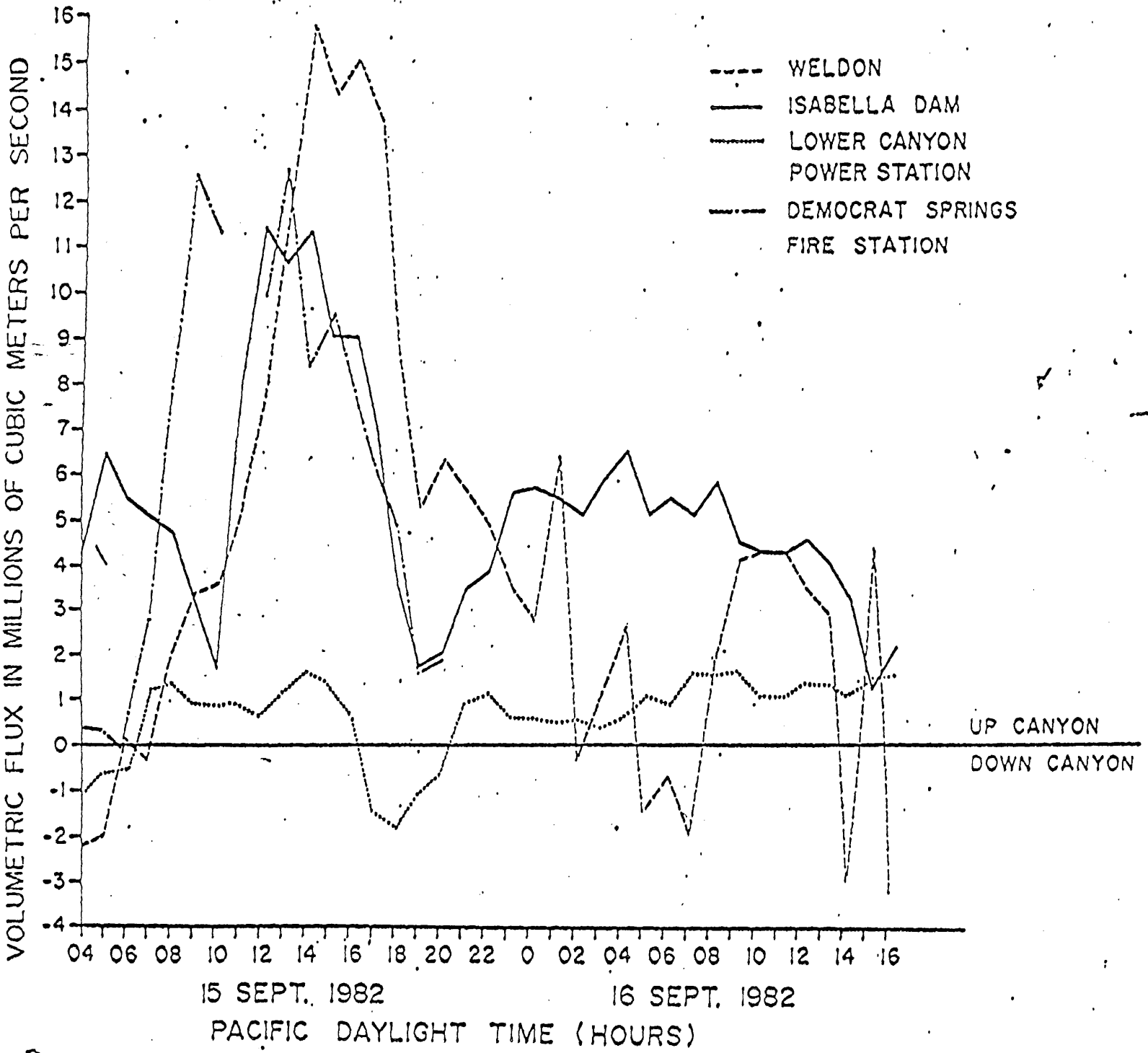

VOLUMETRIC FLUX IN MILLIONS OF CUBIC METERS PER SECOND
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
-3
-4
WELDON
ISABELLA DAM
LOWER CANYON POWER STATION
DEMOCRAT SPRINGS FIRE STATION
UP CANYON
DOWN CANYON
04 06 08 10 12 14 16 18 20 22 0 02 04 06 08 10 12 14 16
15 SEPT. 1982
16 SEPT. 1982
PACIFIC DAYLIGHT TIME (HOURS)

Figure 3

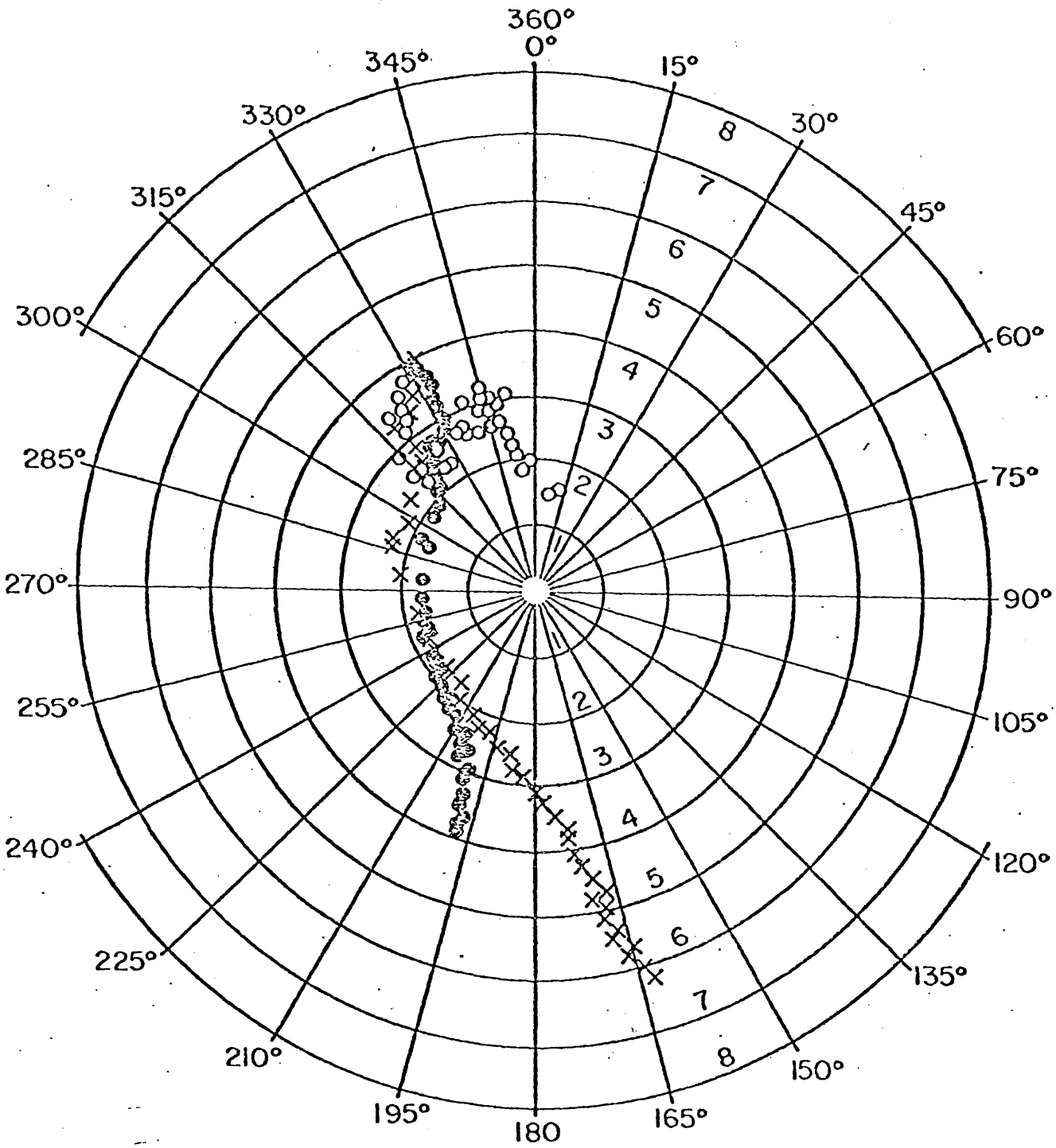

360°
0°
15°
30°
45°
60°
75°
90°
105°
120°
135°
150°
165°
180
195°
210°
225°
240°
255°
270°
285°
300°
315°
330°
345°
1
2
3
4
5
6
7
8

Figure 4

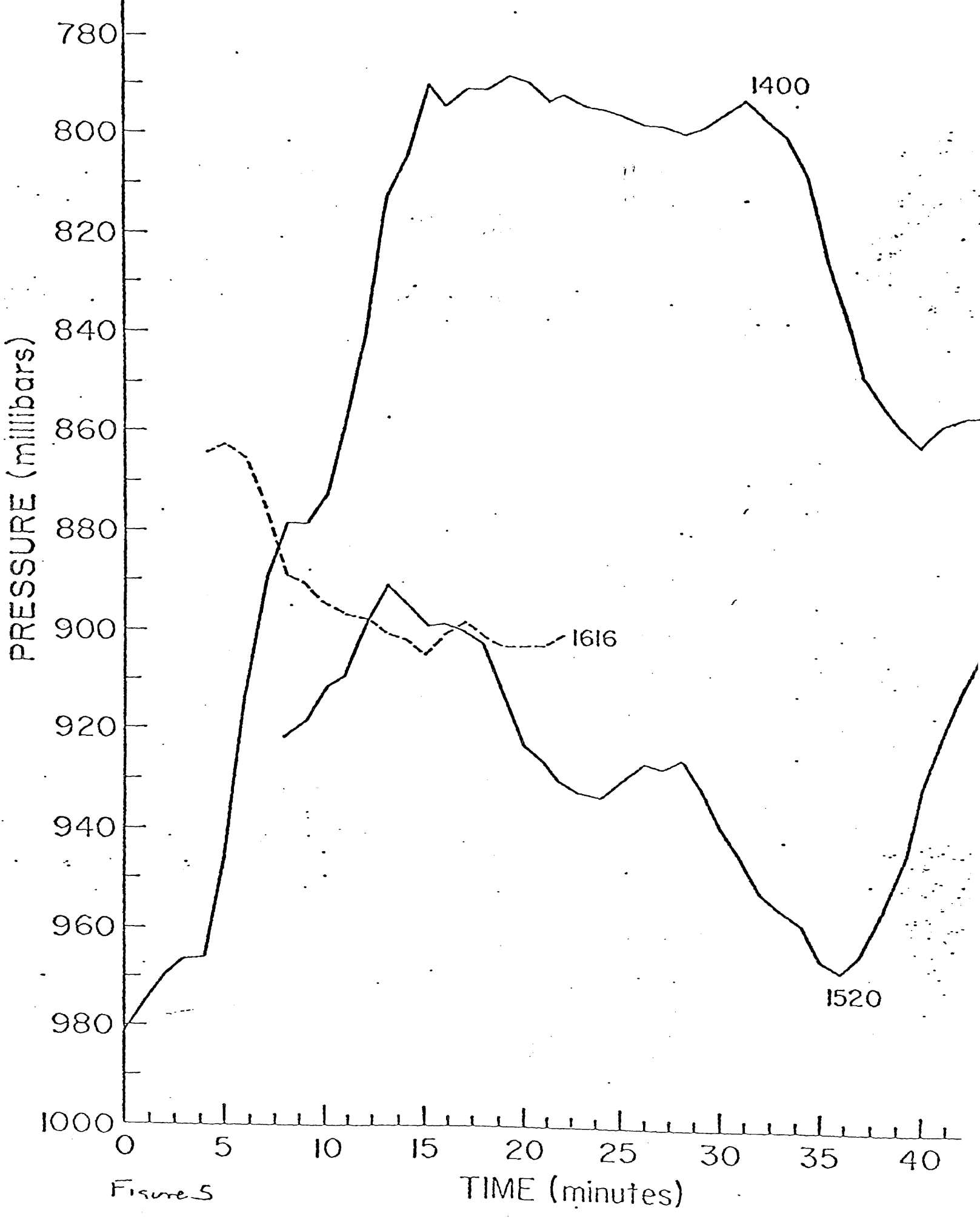

780
800
820
840
860
880
900
920
940
960
980
1000
PRESSURE (millibars)
1400
1616
1520
0
5
10
15
20
25
30
35
40
TIME (minutes)

Figure 5

# APPENDIX 2

Hourly Ozone, Sulfur Dioxide, Temperatures, Relative Humidities, Wind Speed, Wind Direction and Monthly Wind Roses and Wind Run for Democrat Springs (2400 ft) and Shirley Meadow (6400 ft) During July Through October 1982.

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

SHIRLEY PEAK
JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 6.1 | 7 | 7 | 6 |
| 9 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 6.0 | 24 | 7 | 5 |
| 10 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6.5 | 24 | 7 | 5 |
| 11 | 7 | 7 | 7 | 7 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5.6 | 24 | 7 | 4 |
| 12 | 6 | 7 | 6 | 6 | 7 | 6 | 6 | 5 | 5 | 4 | 5 | 5 | 5 | 6 | 6 | 9 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 6.3 | 24 | 9 | 4 |
| 13 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6.7 | 24 | 8 | 6 |
| 14 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 6 | 5 | 6 | 6 | 6.0 | 24 | 7 | 5 |
| 15 | 6 | 7 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 6 | 7 | 6 | 6 | 6 | 6 | 5.6 | 24 | 7 | 5 |
| 16 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 6.4 | 23 | 8 | 5 |
| 17 | 8 | 8 | 8 | 7 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 9 | 8 | 7 | 7 | 9 | 6.9 | 24 | 9 | 5 |
| 18 | 8 | 7 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 4 | 4 | 6 | 6 | 7 | 10 | 12 | 12 | 11 | 10 | 9 | 5 | 6 | 9 | 7.1 | 24 | 12 | 4 |
| 19 | 10 | 5 | 5 | 5 | 5 | 8 | 5 | 4 | 4 | 5 | 5 | 7 | 8 | 8 | 11 | 10 | 9 | 8 | 9 | 8 | 9 | 9 | 7 | 8 | 7.2 | 24 | 11 | 4 |
| 20 | 8 | 6 | 6 | 7 | 9 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 8 | 9 | 9 | 10 | 9 | 9 | 8 | 8 | 8 | 6 | 6 | 8 | 7.8 | 24 | 10 | 6 |
| 21 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 8 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 8.3 | 24 | 9 | 7 |
| 22 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7 | 7 | | | | | | | | | | | | | | | 8.6 | 10 | 9 | 7 |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | 9 | 9 | 8 | 8 | 9 | 10 | 7 | 8 | 9 | 8.6 | 9 | 10 | 7 |
| 30 | 9 | 6 | 7 | 8 | 7 | 8 | 8 | 5 | 5 | 5 | | 7 | 8 | 9 | 10 | 10 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 8.2 | 23 | 10 | 5 |
| 31 | 11 | 11 | 12 | 13 | 13 | 13 | 12 | 10 | 5 | 7 | 7 | 7 | 8 | 9 | 7 | 7 | 8 | 8 | 8 | 9 | 10 | 10 | 10 | 10 | 9.4 | 24 | 13 | 5 |
| AVE | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 7 | 8 | 8 | 8 | 7 | 7 | 8 | 7.0 | | 9 | 5 |
| N | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 13 | 15 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | | 384 | 17 | |
| MAX | 11 | 11 | 12 | 13 | 13 | 13 | 12 | 10 | 8 | 8 | 7 | 7 | 8 | 9 | 11 | 10 | 12 | 12 | 11 | 10 | 10 | 10 | 10 | 10 | 9.4 | | 13 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

SHIRLEY PEAK
AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 10 | 11 | 12 | 11 | 11 | 8 | 9 | 9 | 8 | 7 | 7 | 8 | 8 | 7 | 6 | 6 | 7 | 7 | 8 | 7 | 7 | 7 | 8 | 8 | 8.2 | 24 | 12 | 6 |
| 2 | 5 | 7 | | | | | | | | | | 3 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6.1 | 15 | 7 | 3 |
| 3 | 6 | | | | | | | | | | | | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 6.7 | 13 | 7 | 5 |
| 4 | | | | | | | | | | | 4 | 7 | 6 | 7 | 8 | | | | 8 | 9 | 9 | 6 | 6 | 6 | 6.9 | 11 | 9 | 4 |
| 5 | 7 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 11 | 11 | 8 | 7 | 7 | 8 | 7.0 | 24 | 13 | 4 |
| 6 | 7 | 7 | 8 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 6 | 6 | 6.7 | 24 | 8 | 6 |
| 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 7 | 10 | 9 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 6.7 | 24 | 10 | 5 |
| 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 9 | 7 | 7 | 8 | 7 | 8 | 8 | 8 | 8 | 7.4 | 24 | 9 | 7 |
| 9 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 5 | 5 | 5 | 6 | 9 | 12 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 12 | 8.5 | 24 | 12 | 5 |
| 10 | 12 | 12 | 11 | 11 | 9 | 9 | 6 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 8.4 | 24 | 12 | 5 |
| 11 | 10 | 10 | 10 | 11 | 11 | 11 | 10 | 8 | 8 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 8.2 | 24 | 11 | 6 |
| 12 | 7 | 7 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 5 | | | 6 | 6 | 7 | 8 | 11 | 12 | 11 | 10 | 9 | 10 | 10 | 10 | 7.7 | 22 | 12 | 5 |
| 13 | 9 | 9 | 7 | 5 | 6 | 7 | 7 | 7 | 9 | 9 | 7 | 7 | 8 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 9 | 8.3 | 24 | 10 | 5 |
| 14 | 8 | 8 | 6 | 6 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 6 | 7 | 8 | 9 | 9 | 9 | 9 | 9 | 10 | 9 | 9 | 9 | 8 | 7.6 | 24 | 10 | 5 |
| 15 | 8 | 8 | 7 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 9 | 10 | 13 | 13 | 12 | 11 | 8 | 7 | 8 | 7 | 7.5 | 24 | 13 | 5 |
| 16 | 8 | 8 | 8 | 7 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 8 | 9 | 11 | 13 | 12 | 11 | 10 | 9 | 9 | 9 | 9 | 8.3 | 24 | 13 | 5 |
| 17 | 8 | 8 | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 8 | 8 | 8 | 10 | 10 | 11 | 11 | 11 | 11 | 10 | 10 | 9 | 9 | 9.0 | 24 | 11 | 7 |
| 18 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 10 | 12 | 12 | 12 | 11 | 10 | 9 | 9 | 10 | 10 | 9.5 | 24 | 12 | 7 |
| 19 | 10 | 10 | 9 | 9 | 10 | 9 | 8 | 8 | 7 | | 6 | 6 | 6 | 6 | 9 | 9 | 11 | 13 | 12 | 11 | 11 | 8 | 7 | 8 | 8.8 | 23 | 13 | 6 |
| 20 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 7 | 8 | 8 | 7 | 13 | 16 | 16 | 16 | 15 | 13 | 9 | 9 | 8 | 6 | 9.2 | 24 | 16 | 6 |
| 21 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 10 | 11 | 12 | 12 | 13 | 12 | 11 | 10 | 8 | 9 | 11 | 8.1 | 24 | 13 | 5 |
| 22 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 9 | 10 | 13 | 15 | 12 | 10 | 7 | 10 | 10 | 10 | 10 | 10 | 9.0 | 24 | 15 | 7 |
| 23 | 10 | 10 | 10 | 10 | 11 | 11 | 12 | 10 | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 8 | 8 | 8 | 8 | 9 | 10 | 10 | 10 | 10 | 9.3 | 24 | 12 | 7 |
| 24 | 9 | 8 | 9 | 10 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7.3 | 24 | 10 | 6 |
| 25 | 7 | 7 | 7 | 7 | 8 | 7 | 7 | 8 | 7 | 6 | 6 | 7 | 8 | 10 | 11 | 11 | 11 | | 10 | 10 | 10 | 10 | 10 | 10 | 8.5 | 23 | 11 | 6 |
| 26 | 8 | 9 | 9 | 9 | 10 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 11 | 12 | 11 | 11 | 11 | 10 | 11 | 11 | 12 | 11 | 9.7 | 24 | 12 | 8 |
| 27 | 10 | 8 | 6 | 7 | 8 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 8 | 9 | 10 | 13 | 15 | 13 | 12 | 11 | 11 | 11 | 9 | 11 | 9.9 | 24 | 15 | 6 |
| 28 | 11 | 10 | 10 | 10 | 10 | 10 | 9 | 10 | 9 | 8 | 7 | 7 | 6 | 6 | 8 | 10 | 11 | 10 | 10 | 9 | 9 | 9 | 9 | 10 | 9.1 | 24 | 11 | 6 |
| 29 | 10 | 10 | 9 | 9 | 8 | 8 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 9 | 9 | 9 | 9 | 9 | 8 | 8 | 9 | 9 | 9.0 | 24 | 10 | 8 |
| 30 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 | 6 | 6 | 7 | 7 | 7 | 8 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7.5 | 24 | 9 | 6 |
| 31 | 8 | 8 | 5 | 6 | 6 | 7 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 10 | 12 | 5 | 5 | 5 | 5 | 5 | 6.3 | 24 | 12 | 5 |
| AVE | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 10 | 10 | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 8.1 | | 11 | 6 |
| N | 30 | 29 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 27 | 28 | 29 | 31 | 31 | 31 | 30 | 30 | 29 | 31 | 31 | 31 | 31 | 31 | 31 | | 707 | 31 | |
| MAX | 12 | 12 | 12 | 11 | 11 | 11 | 12 | 10 | 9 | 10 | 10 | 10 | 9 | 10 | 13 | 16 | 16 | 16 | 15 | 13 | 11 | 11 | 12 | 12 | 9.9 | | 16 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

SHIRLEY PEAK
OCTOBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6.3 | 24 | 7 | 6 |
| 2 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 6.2 | 24 | 8 | 5 |
| 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 7 | 6 | 6 | 6 | 7 | 6.8 | 24 | 9 | 6 |
| 4 | 8 | 7 | 8 | 7 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 9 | 10 | 10 | 11 | 10 | 9 | 9 | 8 | 8.9 | 24 | 11 | 6 |
| 5 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6.2 | 24 | 8 | 6 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 6.2 | 24 | 9 | 5 |
| 7 | 9 | 8 | 8 | 7 | 7 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.1 | 24 | 9 | 3 |
| 8 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 | 24 | 5 | 5 |
| 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5.1 | 24 | 6 | 5 |
| 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 5.5 | 24 | 7 | 5 |
| 11 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 6.1 | 24 | 7 | 5 |
| 12 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.1 | 24 | 6 | 5 |
| 13 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 5.5 | 24 | 7 | 5 |
| 14 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 7 | 6 | 7 | 6 | 6 | 7 | 5.6 | 24 | 7 | 5 |
| 15 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5.7 | 24 | 6 | 5 |
| 16 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 9 | 9 | 7 | 7 | 5 | 7 | 7 | 5.8 | 24 | 9 | 5 |
| 17 | 7 | 9 | 9 | 7 | 7 | 9 | 9 | 9 | 7 | 7 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7.5 | 24 | 9 | 6 |
| 18 | 7 | 7 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 5 | 4 | 4 | 4 | 5 | 5.0 | 24 | 8 | 4 |
| 19 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 7 | 8 | 8 | 8 | 9 | 8 | 7 | 6 | 6 | 6.0 | 24 | 9 | 4 |
| 20 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 5 | 5 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5.4 | 24 | 6 | 4 |
| 21 | 5 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 6 | 7 | 7 | 8 | 5 | 5 | 4 | 5 | 4 | 3 | 4.9 | 24 | 8 | 3 |
| 22 | 4 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3.3 | 24 | 5 | 3 |
| 23 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3.4 | 24 | 6 | 2 |
| 24 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.0 | 24 | 4 | 3 |
| 25 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2.6 | 24 | 3 | 2 |
| 26 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4.0 | 24 | 5 | 2 |
| 27 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | | | | | | | | | | | | | | 4.9 | 11 | 5 | 4 |
| AVE | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 5.4 | | 7 | 4 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | | 635 | 27 | |
| MAX | 9 | 8 | 9 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 9 | 10 | 10 | 11 | 10 | 9 | 9 | 9 | 8.9 | | 11 | |

OK, LO

FIRELB (user 6) logged out Wednesday, 29 Jun 83 11:55:56.
Time used: 00h 03m connect, 00m 06s CPU, 00m 03s I/O.

| | Prime time | Non-prime time |
|---|---|---|
| Connect time: | 3 | 0 Minutes. |
| CPU Time : | 7 | 0 Seconds. |
| Batch CPU : | 0 | Seconds. |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

SHIRLEY PEAK
SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 6 | 5 | 5 | 4 | 4 | 6 | 7 | 9 | 10 | 10 | 10 | 9 | 5 | 4 | 4 | 4 | 4 | 6.2 | 24 | 10 | 4 |
| 2 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 8 | | 10 | 11 | 13 | 11 | 8 | 6 | 5 | 5 | 5 | 6.2 | 23 | 13 | 4 |
| 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 9 | 10 | 10 | 10 | 11 | 12 | 15 | 15 | 12 | 12 | 11 | 11 | 12 | 12 | 8.9 | 24 | 15 | 5 |
| 4 | 12 | 12 | 12 | 12 | 12 | 11 | 8 | 6 | 9 | 10 | 10 | 10 | 10 | 9 | 9 | 10 | 10 | 10 | 10 | 8 | 6 | 6 | 7 | 7 | 9.4 | 24 | 12 | 6 |
| 5 | 8 | 8 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 9 | 11 | 12 | 10 | 12 | 9 | 8 | 9 | 9 | 7.8 | 24 | 12 | 6 |
| 6 | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 8 | 8 | 7 | 7 | 7 | 8 | 9 | 10 | 9 | 10 | 11 | 10 | 10 | 10 | 10 | 10 | 8 | 8.8 | 24 | 11 | 7 |
| 7 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 6.7 | 24 | 8 | 6 |
| 8 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 8 | 9 | 10 | 9 | 10 | 10 | 9 | 7.1 | 23 | 10 | 6 |
| 9 | 8 | 8 | 8 | 8 | 8 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 8 | 8 | 8 | 8 | 8 | 7.7 | 24 | 9 | 6 |
| 10 | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7.4 | 24 | 8 | 6 |
| 11 | 6 | 7 | 6 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 6.3 | 24 | 7 | 6 |
| 12 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7.9 | 24 | 9 | 7 |
| 13 | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7.1 | 24 | 9 | 6 |
| 14 | 7 | 8 | 8 | 8 | 7 | 7 | 7 | 8 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 8.2 | 24 | 9 | 7 |
| 15 | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 6 | 6 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6.8 | 24 | 9 | 6 |
| 16 | 6 | 6 | 6 | 6 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4.8 | 24 | 6 | 4 |
| 17 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 8 | 8 | 6 | 6 | 6 | 5 | 5 | 5.2 | 24 | 8 | 4 |
| 18 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4.0 | 24 | 6 | 3 |
| 19 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4.2 | 24 | 6 | 3 |
| 20 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 8 | 7 | 7 | 7 | 6 | 7 | 6.2 | 24 | 9 | 4 |
| 21 | 6 | 7 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6.4 | 24 | 8 | 5 |
| 22 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 6 | 7 | 7 | 7 | 6.8 | 24 | 8 | 6 |
| 23 | 8 | 8 | 6 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 7 | 12 | 12 | 10 | 13 | 12 | 10 | 9 | 7 | 7 | 6.9 | 24 | 13 | 3 |
| 24 | 7 | 6 | 6 | 8 | 7 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4.0 | 24 | 8 | 2 |
| 25 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3.4 | 24 | 4 | 3 |
| 26 | 3 | 3 | 4 | 4 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4.1 | 24 | 6 | 3 |
| 27 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4.8 | 24 | 5 | 4 |
| 28 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 5.5 | 24 | 7 | 5 |
| 29 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.4 | 24 | 7 | 5 |
| 30 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 5.2 | 24 | 6 | 4 |
| AVE | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6.3 | | 9 | 5 |
| N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | 30 | 29 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | 718 | 30 | |
| MAX | 12 | 12 | 12 | 12 | 12 | 11 | 8 | 8 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 12 | 15 | 15 | 13 | 12 | 11 | 11 | 12 | 12 | 9.4 | | 15 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

DEMOCRAT

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 7 | 7.2 | 13 | 8 | 7 |
| 9 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | 5 | 6 | 7 | 7 | 8 | 9 | 9 | 11 | 10 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 7.6 | 24 | 11 | 5 |
| 10 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 9 | 11 | 10 | 9 | 9 | 10 | 11 | 10 | 9 | 9 | 8.5 | 24 | 11 | 7 |
| 11 | 8 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 15 | 12 | 11 | 10 | 10 | 10 | 9 | 8 | 8 | 8.1 | 24 | 15 | 5 |
| 12 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 10 | 9 | 13 | 13 | 10 | 10 | 10 | 9 | 9 | 9 | 9 | 8.7 | 24 | 13 | 7 |
| 13 | 9 | 9 | 8 | 8 | 8 | 7 | 7 | 6 | 6 | 7 | 8 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | 11 | 10 | 9 | 7 | 7 | 7 | 8.4 | 24 | 11 | 6 |
| 14 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 8 | 9 | 9 | 10 | 11 | 11 | 9 | 8 | 7 | 8 | 8 | 7 | 7 | 6 | 6 | 8.1 | 24 | 11 | 6 |
| 15 | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 7 | 6 | 7 | 8 | 8 | 7 | 8 | 9 | 8 | 7 | 7 | 8 | 9 | 10 | 9 | 8 | 7 | 7.7 | 24 | 10 | 6 |
| 16 | 7 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 7 | 9 | 8 | 9 | 8 | 8 | 8 | 8 | 9 | 9 | 8 | 8 | 7 | 6 | 6 | 7.0 | 24 | 9 | 5 |
| 17 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 9 | 7 | 7 | 7 | 7.1 | 24 | 10 | 5 |
| 18 | 8 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 14 | 15 | 14 | 12 | 11 | 9 | 9 | 9 | 9.1 | 24 | 15 | 6 |
| 19 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 8 | 8 | 9 | 10 | 10 | 11 | 11 | 13 | 15 | 12 | 8 | 8 | 8 | 7 | 6 | 6 | 8.8 | 24 | 15 | 6 |
| 20 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 7 | 5 | 8 | 9 | 10 | 10 | 10 | 11 | 13 | 11 | 9 | 9 | 10 | 9 | 8 | 7 | 7 | 8.5 | 24 | 13 | 5 |
| 21 | 8 | 8 | 8 | 9 | 9 | 9 | 8 | 7 | 7 | 8 | 9 | 10 | 10 | 10 | 11 | | 9 | 9 | 10 | 9 | 9 | 9 | 8 | 8 | 8.8 | 23 | 11 | 7 |
| 22 | 8 | 8 | 9 | 8 | 9 | 9 | 8 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 12 | 16 | 14 | 12 | 11 | 9 | 9 | 8 | 7 | 9.5 | 24 | 16 | 7 |
| 23 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 10 | 12 | 10 | 9 | 9 | 9 | 8 | 8 | 7 | 7.3 | 24 | 12 | 5 |
| 24 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 12 | 11 | 11 | 11 | 11 | 9 | 9 | 7 | 7 | 7.8 | 24 | 12 | 5 |
| 25 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 7 | 7 | 7 | 8 | 9 | 12 | 13 | 11 | 11 | 10 | 9 | 9 | 8 | 7 | 7.8 | 24 | 13 | 5 |
| 26 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 7 | 9 | 9 | 10 | 11 | 10 | 11 | 14 | 14 | 12 | 10 | 9 | 9 | 8.4 | 24 | 14 | 5 |
| 27 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 8 | 9 | 10 | 10 | 11 | 12 | 16 | 15 | 11 | 10 | 10 | 10 | 9 | 8 | 8 | 9.2 | 24 | 16 | 6 |
| 28 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 8 | 9 | 10 | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 8 | 8.5 | 24 | 11 | 6 |
| 29 | 8 | 8 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 10 | 9 | 10 | 11 | 12 | 12 | 11 | 11 | 11 | 11 | 9 | 8 | 8 | 8 | 9.3 | 24 | 12 | 8 |
| 30 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 8 | 8 | 7 | 10 | 10 | 11 | 12 | | 15 | 12 | 10 | 9 | 10 | 10 | 9 | 8 | 8 | 9.4 | 23 | 15 | 7 |
| 31 | 8 | 9 | 9 | 10 | 10 | 10 | 9 | 7 | 8 | 9 | 9 | 9 | 10 | 11 | 11 | 11 | 10 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 9.2 | 24 | 11 | 7 |
| AVE | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 8 | 8 | 9 | 10 | 10 | 11 | 11 | 10 | 10 | 10 | 9 | 8 | 8 | 8 | 8.4 | | 12 | 6 |
| N | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 24 | 24 | 24 | 23 | 23 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | 563 | 24 | |
| MAX | 9 | 9 | 9 | 10 | 10 | 10 | 9 | 8 | 8 | 9 | 10 | 10 | 11 | 12 | 12 | 16 | 16 | 15 | 14 | 14 | 12 | 10 | 9 | 9 | 9.5 | | 16 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

DEMOCRAT

SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 6 | 9 | 9 | 12 | 18 | 17 | 13 | 11 | 9 | 8 | 8 | 8.7 | 24 | 18 | 6 |
| 2 | 8 | 8 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 9 | 10 | 11 | 12 | 17 | 16 | 14 | 11 | 10 | 10 | 9 | 9 | 9.2 | 24 | 17 | 6 |
| 3 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 12 | 12 | 14 | 17 | 12 | 10 | 9 | 9 | 8 | 9.5 | 24 | 17 | 7 |
| 4 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 10 | 12 | 11 | 9 | 8 | 8 | 8 | 7 | 8.0 | 24 | 12 | 6 |
| 5 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 9 | 10 | 12 | 14 | 14 | 13 | 13 | 12 | 10 | 10 | 10 | 8.8 | 24 | 14 | 6 |
| 6 | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 11 | 12 | 13 | 13 | 13 | 12 | 11 | 9 | 9 | 9 | 8 | 9.2 | 24 | 13 | 6 |
| 7 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 9 | 11 | 11 | 11 | 12 | 11 | 9 | 9 | 8 | 7 | 8.0 | 24 | 12 | 6 |
| 8 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 9 | 10 | 10 | 11 | 10 | 8 | 8 | 7 | 7 | 7 | 7 | 6.8 | 24 | 11 | 5 |
| 9 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 8 | 8 | 7 | 7 | 7.0 | 23 | 9 | 5 |
| 10 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 7 | 6 | 5 | 5 | 6 | 5 | 6 | 6 | 6 | 6.3 | 24 | 9 | 5 |
| 11 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5.1 | 24 | 6 | 4 |
| 12 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 10 | 8 | 8 | 7 | 7 | 6 | 6 | 6 | 6 | 6.2 | 24 | 10 | 5 |
| 13 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6.0 | 24 | 7 | 4 |
| 14 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 6.5 | 24 | 9 | 4 |
| 15 | 7 | 7 | 6 | 6 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5.5 | 24 | 7 | 4 |
| 16 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 5 | 5 | 4 | 4 | 4 | 3.5 | 24 | 6 | 2 |
| 17 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 6 | 7 | 8 | 8 | 7 | 7 | 6 | 5 | 4 | 4 | 4 | 4.6 | 24 | 8 | 3 |
| 18 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 3.8 | 24 | 6 | 2 |
| 19 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 7 | 6 | 5 | 5 | 5 | 4 | 4.1 | 24 | 7 | 1 |
| 20 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 7 | 6 | 6 | 6 | 6 | 5.3 | 24 | 8 | 3 |
| 21 | 6 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 8 | 10 | 13 | 15 | 16 | 14 | 11 | 9 | 9 | 8 | 7.5 | 24 | 16 | 4 |
| 22 | 8 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 9 | 13 | 14 | 14 | 13 | 11 | 10 | 9 | 9 | 7.9 | 24 | 14 | 5 |
| 23 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 7 | 10 | 10 | 12 | 15 | 13 | 12 | 12 | 11 | | | | | 8.5 | 20 | 15 | 5 |
| 24 | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 2 | 3.8 | 8 | 5 | 2 |
| 25 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 2.1 | 24 | 4 | 1 |
| 26 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3.6 | 24 | 5 | 2 |
| 27 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | | | | | | | | | | | | | | | 4.3 | 10 | 5 | 3 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AVE | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 8 | 7 | 7 | 6 | 6 | 6.4 | | 10 | 4 |
| N | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 26 | 26 | 26 | 26 | 25 | 25 | 25 | 25 | | 613 | 26 | |
| MAX | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 15 | 17 | 18 | 17 | 14 | 12 | 10 | 10 | 10 | 9.5 | | 18 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

DEMOCRAT

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 8 | 8 | 8 | 9 | 9 | 8 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 10 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7.6 | 24 | 10 | 6 |
| 2 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6.4 | 24 | 9 | 4 |
| 3 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 7 | 7 | 7 | 7 | 8 | 7 | 7 | 7 | 6.5 | 24 | 8 | 5 |
| 4 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | | | 8 | 8 | 10 | 11 | 9 | 9 | 9 | 9 | 7 | 7 | 7 | 7.3 | 22 | 11 | 5 |
| 5 | 7 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 9 | 10 | 11 | 14 | 14 | 13 | 11 | 10 | 9 | 8 | 8 | 8.3 | 24 | 14 | 6 |
| 6 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 9 | 10 | 10 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 7.0 | 24 | 10 | 6 |
| 7 | 6 | 6 | 5 | 6 | 6 | | | | | | | | | | | | | | | | | | | | 5.8 | 5 | 6 | 5 |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 9 | 9 | 9 | 8 | 8 | 9.0 | 13 | 10 | 8 |
| 14 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 | 10 | 10 | 10 | 10 | 9 | 8 | 8 | 7 | 7.6 | 24 | 10 | 5 |
| 15 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 9 | 9 | 13 | 14 | 14 | 12 | 11 | 9 | 8 | 8 | 8 | 8.4 | 24 | 14 | 6 |
| 16 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 13 | 13 | 13 | 11 | 10 | 9 | 8 | 8 | 8 | 8.7 | 24 | 13 | 6 |
| 17 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 10 | 13 | 14 | 13 | 12 | 11 | 9 | 8 | 8 | 8 | 8.6 | 24 | 14 | 6 |
| 18 | 8 | 8 | 8 | 8 | 7 | 8 | 8 | 7 | 7 | 7 | 8 | 8 | 8 | | | 12 | 16 | 12 | 12 | 11 | 10 | 8 | 8 | 7 | 8.9 | 22 | 16 | 7 |
| 19 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 9 | 10 | 10 | 12 | 14 | 13 | 12 | 10 | 8 | 7 | 7 | 7 | 8.4 | 24 | 14 | 6 |
| 20 | 7 | 6 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 11 | 11 | 12 | 17 | 18 | 15 | 14 | 13 | 11 | 10 | 9 | 9.2 | 24 | 18 | 5 |
| 21 | 10 | 9 | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 10 | 12 | 13 | 13 | 16 | 16 | 15 | 15 | 13 | 11 | 10 | 10 | 10.5 | 24 | 16 | 7 |
| 22 | 10 | 10 | 9 | 9 | 9 | 9 | 9 | 8 | 8 | 9 | 10 | 10 | 11 | 12 | 12 | 15 | 15 | 12 | 11 | 10 | 10 | 9 | 9 | 9 | 10.2 | 24 | 15 | 8 |
| 23 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 10 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7.8 | 24 | 10 | 7 |
| 24 | 7 | 8 | 8 | 9 | 8 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 13 | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 8.1 | 24 | 13 | 6 |
| 25 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 11 | 13 | 12 | 11 | 11 | 10 | 10 | 10 | 9 | 8 | 8 | 8.7 | 24 | 13 | 7 |
| 26 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 12 | 14 | 12 | 11 | 10 | 9 | 9 | 9 | 8 | 8.5 | 24 | 14 | 6 |
| 27 | 7 | 7 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 12 | 14 | 13 | 12 | 12 | 13 | 11 | 10 | 9 | 9.2 | 24 | 14 | 7 |
| 28 | 9 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 7 | 11 | 13 | 14 | 13 | 11 | 12 | 11 | 10 | 9 | 9 | 9.2 | 24 | 14 | 7 |
| 29 | 9 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 10 | 11 | 9 | 8 | 8 | 8 | 9 | 9 | 8 | 7 | 8.0 | 24 | 11 | 6 |
| 30 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 5 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 10 | 7 | 7 | 6 | 6 | 6 | 6.5 | 24 | 10 | 4 |
| 31 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 9 | 9 | 9 | 12 | 13 | 12 | 10 | 8 | 7 | 7.1 | 24 | 13 | 5 |
| AVE | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 8 | 9 | 10 | 11 | 12 | 11 | 10 | 10 | 9 | 8 | 8 | 8 | 8.2 | | 12 | 6 |
| N | 25 | 25 | 25 | 25 | 25 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | | 590 | 25 | |
| MAX | 10 | 10 | 9 | 9 | 9 | 9 | 9 | 8 | 8 | 9 | 10 | 10 | 11 | 12 | 13 | 15 | 17 | 18 | 15 | 15 | 13 | 11 | 10 | 10 | 10.5 | | 18 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

OZONE BY DASIBI/AT HOUR OR HRLY AVE/ IN PPHM

DEMOCRAT

OCTOBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 4.1 | 12 | 5 | 3 |
| 8 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 6 | 7 | 7 | 7 | 6 | 5 | 5 | 5 | 4 | 4 | 4.0 | 24 | 7 | 2 |
| 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 3.8 | 24 | 5 | 3 |
| 10 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4.0 | 24 | 6 | 3 |
| 11 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4.4 | 24 | 6 | 3 |
| 12 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3.8 | 24 | 6 | 3 |
| 13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4.0 | 24 | 6 | 3 |
| 14 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 9 | 9 | 8 | | 6 | 6 | 5 | 5 | 4.9 | 23 | 9 | 3 |
| 15 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4.4 | 24 | 6 | 3 |
| 16 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 7 | 9 | 11 | 10 | 9 | 7 | 6 | 7 | 7 | 7 | 5.5 | 24 | 11 | 3 |
| 17 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 9 | 8 | 8 | 7 | 6 | 6 | 6 | 6.8 | 24 | 9 | 5 |
| 18 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 10 | 7 | 6 | 6 | 5 | 5 | 6.1 | 24 | 10 | 4 |
| 19 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 6 | 8 | 8 | 7 | 7 | 7 | 8 | 8 | 7 | 6 | 5 | 5 | 5 | 5.9 | 24 | 8 | 4 |
| 20 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | | | 8 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4.6 | 21 | 8 | 3 |
| 21 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 7 | 7 | 8 | 7 | 5 | 5 | 4 | 4 | 3 | 4.6 | 24 | 8 | 3 |
| 22 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2.9 | 24 | 4 | 2 |
| 23 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2.7 | 24 | 4 | 2 |
| 24 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2.4 | 24 | 4 | 1 |
| 25 | 2 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2.3 | 24 | 3 | 1 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3.0 | 24 | 4 | 1 |
| 27 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | | | | | | | | 2.9 | 17 | 5 | 1 |
| AVE | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4.2 | | 6 | 3 |
| N | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | 20 | 21 | 21 | 21 | 21 | 20 | 20 | 19 | 20 | 20 | 20 | 20 | | 481 | 21 | |
| MAX | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | 7 | 8 | 8 | 7 | 9 | 11 | 10 | 10 | 8 | 7 | 7 | 7 | 7 | 6.8 | | 11 | |

OK,

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

DEMOCRAT

DAY — HOUR PST — JULY, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 13 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | 10 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 19 | 10 | 0 |
| 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 | 24 | 5 | 5 |
| 11 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.4 | 24 | 10 | 5 |
| 12 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.4 | 24 | 10 | 5 |
| 13 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 5 | 5 | 4.8 | 24 | 5 | 0 |
| 14 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.4 | 24 | 10 | 5 |
| 15 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 5 | 5 | 5 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 23 | 10 | 0 |
| 16 | 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 | 24 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 20 | 20 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2.3 | 24 | 20 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 2.3 | 24 | 10 | 0 |
| 19 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 10 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1.7 | 24 | 10 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.3 | 24 | 10 | 0 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 23 | 5 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 0 | 0 | 3.1 | 24 | 10 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 5 | 0 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 15 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 1.7 | 24 | 15 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 15 | 15 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2.1 | 24 | 15 | 0 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 0 | 5 | 1.5 | 24 | 5 | 0 |
| 27 | 0 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 15 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3.8 | 24 | 15 | 0 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | | 0 | 5 | 5 | 5 | 0 | 5 | 5 | 5 | 0 | 5 | 2.4 | 23 | 5 | 0 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 10 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.3 | 24 | 10 | 0 |
| 31 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.7 | 24 | 5 | 0 |
| AVE | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 5 | 7 | 5 | 4 | 2 | 2 | 2 | 2 | 1 | 2 | 2.4 | | 9 | 1 |
| N | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 22 | 23 | 23 | 22 | 22 | 23 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | 557 | 24 | |
| MAX | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 20 | 20 | 10 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5.4 | | 20 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

DEMOCRAT

SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 20 | 15 | 5 | 5 | 5 | 0 | 0 | 0 | 2.7 | 24 | 20 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 15 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 1.3 | 23 | 15 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0.2 | 24 | 5 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 5 | 5 | 0 | 0 | 0 | 1.0 | 24 | 10 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 1.0 | 24 | 5 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 5 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 5 | 0.6 | 24 | 5 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 17 | 0 | 0 |
| 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 11 | 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 | 24 | 0 | 0 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 10 | 0 |
| 13 | 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 | 24 | 0 | 0 |
| 14 | 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 | 24 | 0 | 0 |
| 15 | 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 | 24 | 0 | 0 |
| 16 | 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 | 23 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 24 | 5 | 0 |
| 18 | 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 | 24 | 0 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 8 | 0 |
| 20 | 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 | 24 | 0 | 0 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 14 | 16 | 9 | 5 | 5 | 3 | 3 | 0 | 2.5 | 24 | 16 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 5 | 5 | 3 | 3 | 0 | 0 | 0 | 1.5 | 24 | 10 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 3 | 13 | 3 | 0 | 0 | 0 | | | | | 1.0 | 19 | 13 | 0 |
| 24 | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 8 | 0 | 0 |
| 25 | 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 | 24 | 0 | 0 |
| 26 | 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 | 24 | 0 | 0 |
| 27 | 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 | 24 | 0 | 0 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 3 | 0 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 24 | 3 | 0 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 5 | 5 | 5 | 3 | 1.2 | 24 | 8 | 0 |
| AVE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0.6 | | 5 | 0 |
| N | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 28 | 28 | 26 | 28 | 28 | 28 | 29 | 29 | 30 | 30 | 29 | 29 | 29 | 29 | | 690 | 30 | |
| MAX | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 5 | 10 | 13 | 20 | 16 | 10 | 8 | 5 | 5 | 5 | 5 | 2.7 | | 20 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

DEMOCRAT

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 5 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 5 | 10 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 22 | 10 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 5 | 0 | 2.2 | 23 | 10 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1.0 | 24 | 5 | 0 |
| 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 5 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 10 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 1.0 | 24 | 5 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 5 | 10 | 10 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.1 | 24 | 10 | 0 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 23 | 5 | 0 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 24 | 5 | 0 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 23 | 5 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 5 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 1.5 | 24 | 15 | 0 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0.8 | 24 | 5 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 24 | 5 | 0 |
| 23 | 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 | 24 | 0 | 0 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 24 | 5 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 15 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 23 | 15 | 0 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 10 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 1.3 | 24 | 10 | 0 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 15 | 5 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 1.7 | 24 | 15 | 0 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 10 | 5 | 5 | 5 | 5 | 1.9 | 24 | 10 | 0 |
| AVE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0.8 | | 7 | 0 |
| N | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | 30 | 30 | 29 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | | 738 | 31 | |
| MAX | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 5 | 10 | 15 | 15 | 15 | 10 | 10 | 10 | 5 | 5 | 5 | 5 | 2.2 | | 15 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

DEMOCRAT

DAY — HOUR PST — OCTOBER, 1982

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 1.7 | 24 | 5 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 15 | 15 | 10 | 5 | 5 | 3 | 3 | 3 | 3 | 3.0 | 24 | 15 | 0 |
| 3 | 0 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 8 | 15 | 12 | 10 | 3 | 0 | 0 | 0 | 0 | 3.4 | 24 | 15 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.2 | 24 | 6 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 4 | 8 | 3 | 3 | 3 | 3 | 3 | 1.6 | 24 | 8 | 0 |
| 6 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 3 | 3 | 3 | 0 | 3 | 5 | 3 | 1.4 | 24 | 5 | 0 |
| 7 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 24 | 3 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 24 | 3 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 5 | 5 | 0 | 0 | 0 | 0 | 0.9 | 24 | 8 | 0 |
| 10 | 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 | 24 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 10 | 10 | 10 | 5 | 5 | 5 | 2.7 | 24 | 10 | 0 |
| 12 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 10 | 5 | 5 | 0 | 0 | 0 | 0 | 2.7 | 24 | 10 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 5 | 3 | 5 | 5 | 3 | 3.4 | 24 | 10 | 0 |
| 14 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 15 | 13 | 10 | 10 | | 5 | 5 | 5 | 3 | 4.3 | 23 | 15 | 0 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 13 | 10 | 10 | 5 | 5 | 5 | 3 | 2.8 | 24 | 15 | 0 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 15 | 10 | 10 | 5 | 0 | 5 | 5 | 5 | 2.7 | 24 | 15 | 0 |
| 17 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 10 | 5 | 10 | 5 | 3 | 0 | 0 | 4.2 | 24 | 10 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 10 | 15 | 15 | 13 | 10 | 5 | 5 | 5 | 3.6 | 24 | 15 | 0 |
| 19 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 0 | 3 | 5 | 10 | 10 | 10 | 5 | 5 | 5 | 5 | 10 | 8 | 3 | 0 | 0 | 0 | 4.9 | 24 | 10 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 21 | 0 | 0 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 24 | 8 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 10 | 0 |
| 23 | 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 | 24 | 0 | 0 |
| 24 | 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 | 24 | 0 | 0 |
| 25 | 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 | 24 | 0 | 0 |
| 26 | 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 | 24 | 0 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0.0 | 18 | 0 | 0 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AVE | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 6 | 5 | 5 | 4 | 2 | 2 | 2 | 1 | 1.7 | | 7 | 0 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 26 | 26 | 27 | 27 | 27 | 27 | 27 | 26 | 25 | 26 | 26 | 26 | 26 | | 638 | 27 | |
| MAX | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 5 | 5 | 10 | 10 | 10 | 10 | 15 | 15 | 15 | 15 | 13 | 10 | 5 | 5 | 5 | 4.9 | | 15 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

SHIRLEY PEAK

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 7 | 3 | 0 |
| 8 | 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 | 24 | 0 | 0 |
| 9 | 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 | 24 | 0 | 0 |
| 10 | 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 | 24 | 0 | 0 |
| 11 | 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 | 24 | 0 | 0 |
| 12 | 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 | 24 | 0 | 0 |
| 13 | 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 | 24 | 0 | 0 |
| 14 | 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 | 24 | 0 | 0 |
| 15 | 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 | 24 | 0 | 0 |
| 16 | 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 | 23 | 0 | 0 |
| 17 | 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 | 24 | 0 | 0 |
| 18 | 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 | 24 | 0 | 0 |
| 19 | 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 | 24 | 0 | 0 |
| 20 | 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 | 24 | 0 | 0 |
| 21 | 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 | 24 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | 0.0 | 11 | 0 | 0 |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | 3 | 3 | | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 8 | 3 | 0 |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 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 | 24 | 0 | 0 |
| 31 | 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 | 24 | 0 | 0 |
| AVE | 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 | | 0 | 0 |
| N | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | | 385 | 17 | |
| MAX | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | | 3 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

SHIRLEY PEAK
SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 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 | 24 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0.7 | 23 | 5 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 5 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 24 | 10 | 0 |
| 4 | 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 | 24 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 1.0 | 24 | 5 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 24 | 5 | 0 |
| 7 | 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 | 24 | 0 | 0 |
| 8 | 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 | 24 | 0 | 0 |
| 9 | 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 | 24 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 11 | 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 | 24 | 0 | 0 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 24 | 5 | 0 |
| 14 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 5 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 2.1 | 24 | 5 | 0 |
| 15 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 1.5 | 24 | 5 | 0 |
| 16 | 0 | 5 | 5 | 0 | 5 | 5 | 0 | 5 | 5 | 5 | 0 | 0 | 5 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 5 | 5 | 2.7 | 24 | 5 | 0 |
| 17 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 5 | 5 | 3 | 3 | 0 | 0 | 0 | 3.1 | 24 | 5 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 24 | 3 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 24 | 3 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0.3 | 24 | 3 | 0 |
| 21 | 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 | 24 | 0 | 0 |
| 22 | 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 | 24 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 8 | 5 | 5 | 5 | 3 | 5 | 3 | 3 | 0 | 1.7 | 24 | 8 | 0 |
| 24 | 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 | 23 | 0 | 0 |
| 25 | 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 | 24 | 0 | 0 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 1.5 | 24 | 3 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 3 | 0 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 3 | 0 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 3 | 0 |
| 30 | 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 | 24 | 0 | 0 |
| AVE | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0.7 | | 3 | 0 |
| N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | 30 | 30 | 29 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | 718 | 30 | |
| MAX | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 10 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 3.1 | | 10 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

SHIRLEY PEAK

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 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 | 24 | 0 | 0 |
| 2 | 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 | 24 | 0 | 0 |
| 3 | 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 | 24 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 3 | | | 0 | 0 | 0 | 0 | 0 | 0.2 | 19 | 3 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 1.0 | 24 | 5 | 0 |
| 6 | 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 | 24 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 24 | 5 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 10 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 15 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.3 | 24 | 15 | 0 |
| 10 | 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 | 24 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | 0.0 | 11 | 0 | 0 |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 14 | 0 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 1.3 | 24 | 5 | 0 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 5 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 23 | 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 | 24 | 0 | 0 |
| 24 | 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 | 24 | 0 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 23 | 5 | 0 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 28 | 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 | 24 | 0 | 0 |
| 29 | 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 | 24 | 0 | 0 |
| 30 | 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 | 24 | 0 | 0 |
| 31 | 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 | 24 | 0 | 0 |
| AVE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | | 3 | 0 |
| N | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 25 | 24 | 24 | 23 | 23 | 23 | 24 | 22 | 23 | 24 | 24 | 24 | 24 | 24 | | 571 | 25 | |
| MAX | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 15 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 1.3 | | 15 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

SULFUR DIOXIDE/ HOURLY AVERAGE/ IN PPB

SHIRLEY PEAK

OCTOBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 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 | 24 | 0 | 0 |
| 2 | 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 | 24 | 0 | 0 |
| 3 | 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 | 24 | 0 | 0 |
| 4 | 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 | 24 | 0 | 0 |
| 5 | 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 | 24 | 0 | 0 |
| 6 | 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 | 24 | 0 | 0 |
| 7 | 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 | 24 | 0 | 0 |
| 8 | 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 | 24 | 0 | 0 |
| 9 | 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 | 24 | 0 | 0 |
| 10 | 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 | 24 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0.3 | 24 | 3 | 0 |
| 12 | 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 | 24 | 0 | 0 |
| 13 | 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 | 24 | 0 | 0 |
| 14 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | 0.0 | 2 | 0 | 0 |
| 15 | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0.8 | 11 | 3 | 0 |
| 16 | 3 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 1.2 | 24 | 5 | 0 |
| 17 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 24 | 3 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0.3 | 24 | 3 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 5 | 5 | 3 | 3 | 3 | 0 | 1.2 | 24 | 5 | 0 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0.6 | 24 | 3 | 0 |
| 21 | 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 | 24 | 0 | 0 |
| 22 | 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 | 24 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 24 | 5 | 0 |
| 24 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 1.3 | 24 | 3 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 5 | 3 | 3 | 0.7 | 24 | 5 | 0 |
| 26 | 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 | 24 | 0 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | 0.0 | 11 | 0 | 0 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AVE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.3 | | 1 | 0 |
| N | 26 | 26 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 24 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | | 600 | 26 | |
| MAX | 3 | 3 | 0 | 0 | 3 | 3 | 0 | 0 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 5 | 3 | 5 | 5 | 3 | 5 | 3 | 3 | 1.3 | | 5 | |

OK,

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

PERCENT RELATIVE HUMIDITY, AMBIENT AIR

SHIRLEY PEAK

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | 33 | 35 | 40 | 44 | 36 | 38 | 46 | 38.9 | 7 | 46 | 33 |
| 30 | 44 | 38 | 41 | 41 | 40 | 45 | 40 | 25 | 28 | 32 | 34 | 44 | 43 | 38 | 35 | 32 | 32 | 31 | 32 | 36 | 42 | 44 | 45 | 47 | 37.9 | 24 | 47 | 25 |
| 31 | 48 | 50 | 55 | 59 | 60 | 62 | 56 | 44 | 38 | 33 | 34 | 34 | 34 | 32 | 28 | 26 | 27 | 27 | 29 | 32 | 40 | 43 | 42 | 42 | 40.6 | 24 | 62 | 26 |
| AVE | 46 | 44 | 48 | 50 | 50 | 54 | 48 | 35 | 33 | 33 | 34 | 39 | 39 | 35 | 32 | 29 | 30 | 30 | 32 | 36 | 42 | 41 | 42 | 45 | 39.2 | | 52 | 28 |
| N | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 55 | 3 | |
| MAX | 48 | 50 | 55 | 59 | 60 | 62 | 56 | 44 | 38 | 33 | 34 | 44 | 43 | 38 | 35 | 32 | 32 | 33 | 35 | 40 | 44 | 44 | 45 | 47 | 40.6 | | 62 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

PERCENT RELATIVE HUMIDITY, AMBIENT AIR

SHIRLEY PEAK
SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 30 | 18 | 20 | 18 | 19 | 24 | 27 | 24 | 20 | 22 | 21 | 24 | 25 | 31 | 34 | 38 | 35 | 38 | 42 | 32 | 20 | 22 | 22 | 21 | 26.1 | 24 | 42 | 18 |
| 2 | 22 | 24 | 23 | 21 | 24 | 29 | 30 | 30 | 32 | 27 | 20 | 19 | 18 | 30 | 35 | | 32 | 38 | 32 | 30 | 22 | 18 | 16 | 15 | 25.5 | 23 | 38 | 15 |
| 3 | 18 | 18 | 18 | 18 | 17 | 18 | 21 | 22 | 24 | 25 | 38 | 45 | 43 | 42 | 40 | 38 | 37 | 38 | 40 | 46 | 48 | 46 | 48 | 52 | 33.3 | 24 | 52 | 17 |
| 4 | 56 | 61 | 64 | 65 | 66 | 68 | 46 | 40 | 44 | 50 | 47 | 45 | 44 | 40 | 37 | 34 | 33 | 34 | 37 | 26 | 12 | 14 | 18 | 19 | 41.7 | 24 | 68 | 12 |
| 5 | 20 | 22 | 22 | 20 | 19 | 21 | 22 | 25 | 26 | 20 | 16 | 14 | 16 | 20 | 17 | 30 | 32 | 37 | 28 | 50 | 32 | 26 | 20 | 24 | 24.1 | 24 | 50 | 14 |
| 6 | 30 | 30 | 20 | 22 | 20 | 16 | 15 | 16 | 17 | 16 | 12 | 14 | 24 | 30 | 30 | 24 | 27 | 31 | 33 | 42 | 40 | 40 | 45 | 20 | 25.6 | 24 | 45 | 12 |
| 7 | 24 | 28 | 16 | 19 | 19 | 18 | 18 | 20 | 23 | 24 | 21 | 19 | 21 | 23 | 18 | 20 | 20 | 18 | 20 | 22 | 23 | 48 | 57 | 62 | 25.0 | 24 | 62 | 16 |
| 8 | 64 | 63 | 66 | 67 | 60 | 56 | 52 | 54 | 55 | 46 | 36 | 34 | 32 | 30 | 30 | 36 | 46 | | | | | | | | 48.6 | 17 | 67 | 30 |
| 9 | | | | | | | | | | | | | | | | | | | 70 | 78 | 78 | 84 | 88 | 86 | 80.7 | 6 | 88 | 70 |
| 10 | 87 | 88 | 96 | 100 | 100 | 100 | 96 | 100 | 100 | 100 | 94 | 74 | 66 | 61 | 59 | 60 | 62 | 64 | 78 | 86 | 88 | 96 | 100 | 100 | 85.6 | 24 | 100 | 59 |
| 11 | 92 | 95 | 87 | 89 | 88 | 81 | 82 | 83 | 81 | 60 | 50 | 66 | 60 | 46 | 38 | 37 | 38 | 40 | 43 | 52 | | | | | 65.4 | 20 | 95 | 37 |
| 12 | | | | | | | | | | 52 | 52 | 49 | 46 | 47 | | | | | | | | | | | 49.2 | 5 | 52 | 46 |
| 13 | | | | | | | | | | 58 | 52 | 50 | 50 | 50 | 50 | 49 | 49 | 52 | 57 | 70 | 79 | 74 | 74 | 78 | 59.5 | 15 | 79 | 49 |
| 14 | 80 | 88 | 90 | 88 | 89 | 92 | 97 | 98 | 96 | 80 | 63 | 70 | 64 | 58 | 57 | 54 | 54 | 59 | 66 | 81 | 93 | 96 | 98 | 100 | 79.6 | 24 | 100 | 54 |
| 15 | 100 | 99 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 88 | 74 | 80 | 88 | 92 | 96 | 100 | 100 | 100 | 100 | 96.5 | 24 | 100 | 74 |
| 16 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 95 | 74 | 76 | 53 | | | | | | | 94.3 | 18 | 100 | 53 |
| 17 | | | | | | | | | | | 86 | 62 | 49 | 40 | 38 | 46 | 68 | 62 | 66 | 72 | 80 | 90 | 94 | 90 | 67.4 | 14 | 94 | 38 |
| 18 | 90 | 90 | 94 | 95 | 98 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 92 | 90 | 86 | 85 | 80 | 94 | 100 | 100 | 95 | 100 | 100 | 95.2 | 24 | 100 | 80 |
| 19 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 84 | 88 | 60 | 75 | 71 | 70 | 62 | 78 | 70 | 66 | 79 | 98 | 66 | 63 | 60 | 57 | 81.0 | 24 | 100 | 57 |
| 20 | 56 | 50 | 38 | 40 | 32 | 28 | 26 | 26 | 28 | 22 | 20 | 16 | 17 | 40 | 45 | 47 | 51 | 56 | 56 | 44 | 50 | 40 | 39 | 38 | 37.7 | 24 | 56 | 16 |
| 21 | 36 | 44 | 47 | 46 | 46 | 45 | 44 | 42 | 39 | 33 | 30 | 28 | 24 | 22 | 18 | 19 | 20 | 24 | 30 | 32 | 34 | 35 | 37 | 38 | 33.9 | 24 | 47 | 18 |
| 22 | 40 | 37 | 34 | 33 | 34 | 35 | 37 | | | | | | | | | | | | | | | | | | 35.7 | 7 | 40 | 33 |
| 23 | | | | | | | | | | | | | | | | 40 | 48 | 46 | 56 | 70 | 55 | 48 | 45 | 46 | 50.4 | 9 | 70 | 40 |
| 24 | 47 | 48 | 50 | 58 | 88 | 78 | 80 | 76 | 74 | 78 | 80 | 84 | 80 | 83 | 85 | 80 | 86 | 83 | 74 | 73 | 72 | 72 | 73 | 77 | 74.1 | 24 | 88 | 47 |
| 25 | 90 | 96 | 92 | 94 | 96 | 95 | 98 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98.4 | 24 | 100 | 90 |
| 26 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 24 | 100 | 100 |
| 27 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 24 | 100 | 100 |
| 28 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 24 | 100 | 99 |
| 29 | 100 | 100 | 100 | 100 | | | | | | | | | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 16 | 100 | 100 |
| 30 | 100 | 80 | 66 | 72 | 78 | 92 | 77 | 72 | 60 | 52 | 56 | 60 | 59 | 56 | 62 | 60 | 62 | 61 | 76 | 62 | 36 | 27 | 26 | 43 | 62.3 | 24 | 100 | 26 |
| AVE | 67 | 67 | 66 | 67 | 66 | 67 | 65 | 66 | 65 | 62 | 60 | 60 | 59 | 60 | 59 | 59 | 60 | 60 | 64 | 68 | 65 | 65 | 66 | 67 | 63.7 | | 78 | 47 |
| N | 25 | 25 | 25 | 25 | 24 | 24 | 24 | 23 | 23 | 25 | 26 | 26 | 27 | 27 | 26 | 26 | 27 | 26 | 26 | 26 | 25 | 25 | 25 | 25 | | 606 | 27 | |
| MAX | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | | 100 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

PERCENT RELATIVE HUMIDITY, AMBIENT AIR

SHIRLEY PEAK

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 46 | 52 | 52 | 52 | 50 | 38 | 40 | 40 | 34 | 35 | 40 | 40 | 37 | 29 | 22 | 24 | 25 | 28 | 31 | 29 | 32 | 36 | 38 | 40 | 37.1 | 24 | 52 | 22 |
| 2 | 41 | 40 | 41 | 43 | 40 | 37 | 36 | 32 | 30 | 28 | 32 | 31 | 31 | 32 | 29 | 25 | 23 | 23 | 26 | 30 | 34 | 41 | 37 | 33 | 33.1 | 24 | 43 | 23 |
| 3 | 33 | 37 | 41 | 44 | 44 | 46 | 43 | 44 | 40 | 40 | 42 | 41 | 38 | 35 | 34 | 32 | 30 | 29 | 32 | 37 | 44 | 48 | 50 | 50 | 39.8 | 24 | 50 | 29 |
| 4 | 50 | 51 | 50 | 44 | 52 | 56 | 50 | 39 | 36 | 37 | 36 | 44 | 43 | 46 | 46 | 42 | 42 | 44 | 46 | 52 | 60 | 46 | 44 | 36 | 45.5 | 24 | 60 | 36 |
| 5 | 29 | 20 | 20 | 20 | 19 | 19 | 20 | 21 | 18 | 16 | 16 | 16 | 24 | 34 | 37 | 38 | 37 | 36 | 40 | 42 | 46 | 32 | 27 | 26 | 27.2 | 24 | 46 | 16 |
| 6 | 26 | 28 | 28 | 26 | 24 | 24 | 26 | 27 | 28 | 25 | 22 | 22 | 22 | 24 | 30 | 31 | 32 | 32 | 34 | 30 | 30 | 35 | 37 | 38 | 28.4 | 24 | 38 | 22 |
| 7 | 38 | 38 | 39 | 40 | 42 | 46 | 48 | 51 | 49 | 48 | 43 | 39 | 38 | 35 | 35 | 36 | 35 | 34 | 35 | 38 | 42 | 47 | 46 | 42 | 41.0 | 24 | 51 | 34 |
| 8 | 44 | 46 | 44 | 46 | 48 | 46 | 44 | 45 | 48 | 44 | 40 | 41 | 42 | 40 | 38 | 34 | 34 | 33 | 33 | 32 | 32 | 39 | 42 | 37 | 40.5 | 24 | 48 | 32 |
| 9 | 36 | 52 | 52 | 49 | 48 | 44 | 41 | 42 | 41 | 38 | 34 | 30 | 34 | 36 | 39 | 40 | 42 | 43 | 46 | 54 | 60 | 70 | 74 | 76 | 46.7 | 24 | 76 | 30 |
| 10 | 74 | 74 | 72 | 70 | 69 | 61 | 60 | 20 | 16 | 12 | 12 | 36 | 41 | 42 | 41 | 40 | 38 | 36 | 37 | 43 | 50 | 54 | 58 | 60 | 46.5 | 24 | 74 | 12 |
| 11 | 66 | 68 | 72 | 75 | 72 | 72 | 74 | 68 | 58 | 52 | 44 | 46 | 48 | 50 | 48 | 43 | 43 | 42 | 43 | 45 | 54 | 36 | 34 | 28 | 53.4 | 24 | 75 | 28 |
| 12 | 15 | 12 | 11 | 13 | 18 | 16 | 13 | 15 | 17 | 20 | 20 | 20 | 14 | 13 | 33 | 31 | 36 | 40 | 42 | 46 | 55 | 54 | 47 | 40 | 26.7 | 24 | 55 | 11 |
| 13 | 38 | 36 | 20 | 12 | 13 | 19 | 28 | 30 | 31 | 28 | 18 | 30 | 40 | 42 | 38 | 39 | 42 | 46 | 52 | 60 | 72 | 44 | 42 | 48 | 36.2 | 24 | 72 | 12 |
| 14 | 40 | 36 | 29 | 27 | 31 | 29 | 29 | 30 | 29 | 27 | 24 | 30 | 39 | 38 | 36 | 35 | 38 | 40 | 44 | 52 | 46 | 40 | 35 | 34 | 34.9 | 24 | 52 | 24 |
| 15 | 37 | 40 | 30 | 24 | 16 | 17 | 16 | 17 | 22 | 18 | 19 | 15 | 13 | 32 | 42 | 42 | 44 | 46 | 48 | 52 | 49 | 47 | 44 | 20 | 31.3 | 24 | 52 | 13 |
| 16 | 32 | 36 | 37 | 36 | 38 | 33 | 30 | 30 | 26 | 21 | 20 | 19 | 20 | 38 | 39 | 40 | 40 | 42 | 44 | 50 | 40 | 32 | 36 | 36 | 34.0 | 24 | 50 | 19 |
| 17 | 28 | 30 | 38 | 34 | 35 | 37 | 36 | 38 | 40 | 32 | 23 | 22 | 21 | 20 | 36 | 40 | 40 | 41 | 40 | 46 | 48 | 48 | 36 | 36 | 35.2 | 24 | 48 | 20 |
| 18 | 39 | 44 | 48 | 53 | 54 | 54 | 52 | 52 | 44 | 36 | 32 | 32 | 30 | 34 | 30 | 34 | 36 | 39 | 40 | | | | | | 41.2 | 19 | 54 | 30 |
| 19 | | | | | | | | | | | 32 | 28 | 26 | 24 | 32 | 28 | 40 | 37 | 39 | 44 | 48 | 46 | 41 | 44 | 36.4 | 14 | 48 | 24 |
| 20 | 46 | 46 | 47 | 50 | 50 | 46 | 45 | 45 | 45 | 41 | 33 | 30 | 29 | 26 | 26 | 38 | 36 | 38 | 42 | 49 | 56 | 46 | 44 | 36 | 41.3 | 24 | 56 | 26 |
| 21 | 28 | 26 | 26 | 26 | 27 | 28 | 28 | 27 | 26 | 30 | 27 | 26 | 26 | 28 | 40 | 46 | 42 | 42 | 42 | 46 | 48 | 52 | 39 | 40 | 34.0 | 24 | 52 | 26 |
| 22 | 49 | 46 | 40 | 40 | 42 | 42 | 40 | 42 | 43 | 42 | 43 | 34 | 32 | 40 | 42 | 42 | 41 | 40 | 36 | 39 | 42 | 48 | 54 | 56 | 42.3 | 24 | 56 | 32 |
| 23 | 54 | 58 | 59 | 59 | 61 | 63 | 60 | 66 | 66 | 56 | 52 | 46 | 46 | 42 | 37 | 32 | 28 | 32 | 34 | 35 | 37 | 52 | 62 | 52 | 49.5 | 24 | 66 | 28 |
| 24 | 56 | 60 | 48 | 46 | 62 | 54 | 39 | 42 | 38 | 38 | 38 | 32 | 36 | 40 | 42 | 35 | 34 | 40 | 42 | 39 | 42 | 49 | 54 | 52 | 44.1 | 24 | 62 | 32 |
| 25 | 54 | 46 | 49 | 47 | 47 | 48 | 44 | 43 | 42 | 48 | 42 | 38 | 34 | 36 | 34 | 34 | 35 | 39 | 41 | 46 | 51 | 52 | 51 | 50 | 43.8 | 24 | 54 | 34 |
| 26 | 44 | 46 | 48 | 50 | 54 | 48 | 54 | 55 | 48 | 40 | 36 | 37 | 40 | 42 | 45 | 44 | 44 | 45 | 50 | 56 | 60 | 62 | 65 | 64 | 49.0 | 24 | 65 | 36 |
| 27 | 56 | 56 | 30 | 35 | 50 | 62 | 57 | 57 | 56 | 42 | 36 | 37 | 42 | 46 | 44 | 43 | 48 | 56 | 61 | 62 | 66 | | | | 49.6 | 21 | 66 | 30 |
| 28 | | | | | | | | | | | | | 34 | 35 | 46 | 54 | 50 | 56 | 56 | 60 | 64 | 66 | 69 | 72 | 55.2 | 12 | 72 | 34 |
| 29 | 75 | 78 | 82 | 88 | 78 | 69 | 93 | 97 | 96 | 84 | 77 | 72 | 65 | 62 | 58 | 54 | 54 | 54 | 55 | 62 | 75 | 73 | 80 | 81 | 73.4 | 24 | 97 | 54 |
| 30 | 84 | 85 | 85 | 86 | 84 | 87 | 87 | 65 | 65 | 68 | 48 | 56 | 54 | 54 | 50 | 46 | 43 | 43 | 45 | 51 | 60 | 50 | 46 | 46 | 62.0 | 24 | 87 | 43 |
| 31 | 40 | 62 | 11 | 9 | 13 | 30 | 18 | 13 | 10 | 11 | 12 | 11 | 12 | 11 | 33 | 34 | 32 | 34 | 38 | 44 | 17 | 17 | 18 | 21 | 23.0 | 24 | 62 | 9 |
| AVE | 45 | 47 | 43 | 43 | 44 | 44 | 43 | 41 | 39 | 36 | 33 | 33 | 34 | 36 | 38 | 38 | 38 | 40 | 42 | 46 | 49 | 47 | 47 | 45 | 41.2 | | 59 | 26 |
| N | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 30 | 29 | 29 | 29 | | 714 | 31 | |
| MAX | 84 | 85 | 85 | 88 | 84 | 87 | 93 | 97 | 96 | 84 | 77 | 72 | 65 | 62 | 58 | 54 | 54 | 56 | 61 | 62 | 75 | 73 | 80 | 81 | 73.4 | | 97 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

PERCENT RELATIVE HUMIDITY, AMBIENT AIR

SHIRLEY PEAK

OCTOBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 59 | 58 | 61 | 57 | 56 | 51 | 49 | 36 | 37 | 40 | 34 | 29 | 30 | 46 | 46 | 54 | 54 | 66 | 62 | 61 | 53 | 56 | 58 | 55 | 50.3 | 24 | 66 | 29 |
| 2 | 57 | 55 | 49 | 47 | 46 | | | | | | | | | | | | | | | | | | | | 50.8 | 5 | 57 | 46 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 10 | 100 | 100 |
| 8 | 76 | 88 | 90 | 80 | 82 | | | | | | | | | 30 | 28 | 25 | 28 | 30 | 29 | 31 | 32 | 34 | 34 | 34 | 46.9 | 16 | 90 | 25 |
| 9 | 35 | 35 | 35 | 35 | 35 | 36 | 36 | 37 | 36 | 31 | 29 | 28 | 26 | 25 | 23 | 22 | 23 | 27 | 46 | 57 | 38 | 40 | 36 | 39 | 33.8 | 24 | 57 | 22 |
| 10 | 40 | 42 | 45 | 49 | 48 | 48 | 48 | 47 | 44 | 31 | 27 | 24 | 24 | 31 | 35 | 30 | 36 | 42 | 49 | 48 | 48 | 47 | 46 | 38 | 40.3 | 24 | 49 | 24 |
| 11 | 36 | 32 | 32 | 37 | 31 | 30 | 30 | 29 | 33 | 28 | 26 | 30 | 22 | 20 | 28 | 30 | 32 | 34 | 42 | 36 | 36 | 36 | 39 | 39 | 32.0 | 24 | 42 | 20 |
| 12 | 40 | 40 | 35 | 33 | 31 | 30 | 32 | 34 | 34 | 29 | 27 | 26 | 24 | 24 | 22 | 21 | 27 | 29 | 37 | 39 | 39 | 37 | 36 | 36 | 31.8 | 24 | 40 | 21 |
| 13 | 35 | 36 | 37 | 37 | 37 | 39 | 40 | 42 | 40 | 32 | 29 | 26 | 24 | 22 | 30 | 33 | 33 | 34 | 43 | 40 | 38 | 37 | 36 | 36 | 34.8 | 24 | 43 | 22 |
| 14 | 34 | 34 | 34 | 36 | 35 | 36 | 38 | 37 | 37 | 28 | 26 | 24 | 22 | 21 | 20 | 20 | 24 | 24 | 40 | 36 | 36 | 35 | 35 | 39 | 31.3 | 24 | 40 | 20 |
| 15 | 33 | 32 | 33 | 33 | 33 | 33 | 32 | 31 | 30 | 29 | 24 | 22 | 21 | 24 | 22 | 23 | 26 | 32 | 38 | 30 | 28 | 29 | 28 | 27 | 28.9 | 24 | 38 | 21 |
| 16 | 27 | 29 | 26 | 27 | 26 | 24 | 26 | 28 | 28 | 24 | 21 | 20 | 19 | 17 | 29 | 32 | 37 | 43 | 39 | 45 | 33 | 36 | 40 | 45 | 30.0 | 24 | 45 | 17 |
| 17 | 40 | 70 | 32 | 36 | 66 | 70 | 73 | 32 | 40 | 25 | 38 | 39 | 46 | 58 | 65 | 64 | 74 | 80 | 85 | 65 | 70 | 68 | 56 | 90 | 57.6 | 24 | 90 | 25 |
| 18 | 76 | 92 | 21 | 50 | 22 | 17 | 20 | 26 | 28 | 25 | 19 | 17 | 26 | 36 | 45 | 52 | 63 | 68 | 80 | 11 | 8 | 5 | 18 | 42 | 36.1 | 24 | 92 | 5 |
| 19 | 42 | 36 | 35 | 35 | 34 | 33 | 34 | 35 | 34 | 32 | 30 | 22 | 24 | 20 | 28 | 42 | 43 | 44 | 45 | 61 | 67 | 62 | 64 | 70 | 40.5 | 24 | 70 | 20 |
| 20 | 72 | 74 | 76 | 82 | 84 | 89 | 88 | 89 | 92 | 86 | 86 | 85 | 78 | 74 | 75 | 83 | 90 | 93 | 95 | 100 | 92 | 91 | 92 | 93 | 85.8 | 24 | 100 | 72 |
| 21 | 88 | 93 | 73 | 61 | 56 | 44 | 40 | 24 | 38 | 52 | 41 | 38 | 36 | 40 | 48 | 52 | 59 | 59 | 68 | 25 | 21 | 24 | 30 | 27 | 47.4 | 24 | 93 | 21 |
| 22 | 32 | 30 | 29 | 38 | 48 | 46 | 43 | 44 | 43 | 42 | 41 | 41 | 40 | 39 | 39 | 39 | 36 | 40 | 45 | 43 | 42 | 54 | 52 | 44 | 41.3 | 24 | 54 | 29 |
| 23 | 41 | 44 | 46 | 43 | 44 | 48 | 57 | 57 | 66 | 67 | 65 | 62 | 56 | 54 | 52 | 54 | 55 | 58 | 64 | 72 | 72 | 72 | 73 | 74 | 58.2 | 24 | 74 | 41 |
| 24 | 74 | 78 | 79 | 80 | 80 | 82 | 98 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 94.6 | 24 | 100 | 74 |
| 25 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 24 | 100 | 100 |
| 26 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | 24 | 100 | 100 |
| 27 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | | | | | | | | | | | | | | 99.6 | 11 | 100 | 96 |
| AVE | 56 | 59 | 53 | 54 | 54 | 53 | 54 | 51 | 53 | 50 | 48 | 44 | 43 | 44 | 49 | 51 | 54 | 57 | 62 | 57 | 55 | 55 | 56 | 58 | 53.2 | | 71 | 41 |
| N | 22 | 22 | 22 | 22 | 22 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | 498 | 22 | |
| MAX | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100.0 | | 100 | |

OK,

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/FARHENHIET/HOURLY AVERAGE

SHIRLEY PEAK

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | 76 | 74 | 71 | 67 | 70 | 68 | 65 | 70.1 | 7 | 76 | 65 |
| 30 | 66 | 68 | 66 | 66 | 68 | 65 | 66 | 71 | 74 | 76 | 76 | 75 | 75 | 75 | 76 | 75 | 76 | 76 | 73 | 70 | 66 | 66 | 64 | 64 | 70.5 | 24 | 76 | 64 |
| 31 | 64 | 62 | 62 | 62 | 62 | 61 | 61 | 63 | 64 | 68 | 70 | 71 | 72 | 74 | 75 | 75 | 75 | 73 | 71 | 69 | 64 | 62 | 63 | 62 | 66.9 | 24 | 75 | 61 |
| AVE | 65 | 65 | 64 | 64 | 65 | 63 | 64 | 67 | 69 | 72 | 73 | 73 | 74 | 75 | 76 | 75 | 76 | 75 | 73 | 70 | 66 | 66 | 65 | 64 | 68.9 | | 76 | 63 |
| N | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 55 | 3 | |
| MAX | 66 | 68 | 66 | 66 | 68 | 65 | 66 | 71 | 74 | 76 | 76 | 75 | 75 | 75 | 76 | 75 | 76 | 76 | 74 | 71 | 67 | 70 | 68 | 65 | 70.5 | | 76 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/FARHENHIET/HOURLY AVERAGE

SHIRLEY PEAK

SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 64 | 63 | 62 | 64 | 64 | 63 | 61 | 62 | 65 | 69 | 71 | 74 | 74 | 74 | 72 | 71 | 73 | 70 | 66 | 67 | 68 | 67 | 68 | 68 | 67.5 | 24 | 74 | 61 |
| 2 | 67 | 67 | 68 | 67 | 66 | 65 | 65 | 66 | 68 | 75 | 80 | 83 | 83 | 80 | 76 | | 75 | 72 | 70 | 68 | 69 | 68 | 70 | 70 | 71.2 | 23 | 83 | 65 |
| 3 | 69 | 70 | 68 | 69 | 70 | 69 | 68 | 67 | 66 | 70 | 64 | 63 | 66 | 68 | 68 | 69 | 68 | 66 | 64 | 60 | 58 | 59 | 58 | 57 | 65.6 | 24 | 70 | 57 |
| 4 | 56 | 56 | 55 | 55 | 56 | 54 | 58 | 58 | 58 | 60 | 64 | 67 | 68 | 68 | 70 | 70 | 69 | 68 | 65 | 63 | 62 | 64 | 64 | 64 | 62.2 | 24 | 70 | 54 |
| 5 | 64 | 65 | 65 | 65 | 65 | 64 | 62 | 60 | 64 | 70 | 76 | 78 | 79 | 76 | 78 | 74 | 73 | 71 | 73 | 66 | 64 | 65 | 66 | 66 | 68.7 | 24 | 79 | 60 |
| 6 | 63 | 64 | 63 | 65 | 65 | 66 | 66 | 66 | 68 | 70 | 76 | 77 | 75 | 73 | 74 | 74 | 73 | 72 | 70 | 66 | 64 | 64 | 62 | 63 | 68.3 | 24 | 77 | 62 |
| 7 | 64 | 63 | 65 | 65 | 66 | 65 | 66 | 64 | 64 | 65 | 71 | 74 | 72 | 70 | 77 | 75 | 74 | 75 | 70 | 68 | 67 | 62 | 61 | 60 | 67.6 | 24 | 77 | 60 |
| 8 | 59 | 59 | 58 | 57 | 58 | 59 | 60 | 60 | 61 | 66 | 71 | 73 | 73 | 74 | 72 | 70 | 64 | | | | | | | | 64.4 | 17 | 74 | 57 |
| 9 | | | | | | | | | | | | | | | | | | | 56 | 55 | 55 | 54 | 53 | 52 | 54.2 | 6 | 56 | 52 |
| 10 | 52 | 52 | 50 | 51 | 50 | 49 | 49 | 50 | 50 | 51 | 52 | 56 | 57 | 58 | 59 | 58 | 58 | 56 | 55 | 52 | 50 | 49 | 48 | 48 | 52.5 | 24 | 59 | 48 |
| 11 | 49 | 48 | 49 | 47 | 48 | 48 | 48 | 49 | 49 | 55 | 58 | 57 | 57 | 58 | 58 | 60 | 59 | 58 | 56 | 52 | 50 | 50 | 50 | 50 | 52.6 | 24 | 60 | 47 |
| 12 | 49 | 49 | 51 | 49 | 50 | 49 | 49 | 48 | 51 | 54 | 55 | 57 | 58 | 59 | 58 | 58 | 58 | 57 | 55 | 51 | 49 | 49 | 49 | 49 | 52.5 | 24 | 59 | 48 |
| 13 | 48 | 48 | 48 | 48 | 48 | 47 | 47 | 46 | 47 | 51 | 54 | 56 | 56 | 57 | 58 | 58 | 58 | 57 | 55 | 55 | 48 | 49 | 48 | 48 | 51.5 | 24 | 58 | 46 |
| 14 | 47 | 46 | 46 | 46 | 46 | 45 | 45 | 45 | 46 | 50 | 52 | 54 | 56 | 57 | 57 | 57 | 56 | 54 | 52 | 47 | 46 | 45 | 44 | 44 | 49.3 | 24 | 57 | 44 |
| 15 | 44 | 44 | 44 | 44 | 44 | 44 | 42 | 43 | 44 | 44 | 46 | 46 | 46 | 46 | 48 | 50 | 48 | 46 | 46 | 45 | 44 | 44 | 44 | 44 | 45.0 | 24 | 50 | 42 |
| 16 | 44 | 44 | 44 | 43 | 42 | 42 | 41 | 40 | 41 | 42 | 42 | 42 | 44 | 44 | 45 | 48 | 50 | 52 | | | | | | | 43.9 | 18 | 52 | 40 |
| 17 | | | | | | | | | | | 49 | 55 | 57 | 60 | 59 | 52 | 55 | 54 | 53 | 49 | 46 | 45 | 44 | 45 | 51.6 | 14 | 60 | 44 |
| 18 | 45 | 46 | 46 | 46 | 47 | 46 | 48 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 53 | 53 | 54 | 53 | 51 | 50 | 49 | 48 | 47 | 47 | 49.2 | 24 | 54 | 45 |
| 19 | 47 | 47 | 46 | 45 | 46 | 45 | 46 | 46 | 47 | 50 | 53 | 53 | 54 | 54 | 54 | 52 | 53 | 52 | 50 | 47 | 45 | 45 | 46 | 46 | 48.7 | 24 | 54 | 45 |
| 20 | 46 | 48 | 46 | 48 | 49 | 48 | 50 | 50 | 53 | 60 | 64 | 66 | 65 | 62 | 62 | 62 | 60 | 60 | 60 | 52 | 54 | 54 | 53 | 52 | 55.2 | 24 | 66 | 46 |
| 21 | 54 | 53 | 54 | 54 | 53 | 53 | 53 | 56 | 60 | 65 | 67 | 70 | 71 | 74 | 75 | 74 | 70 | 69 | 63 | 63 | 61 | 60 | 59 | 57 | 62.0 | 24 | 75 | 53 |
| 22 | 56 | 56 | 59 | 58 | 58 | 57 | 58 | | | | | | | | | | | | | | | | | | 57.4 | 7 | 59 | 56 |
| 23 | | | | | | | | | | | | | | | | 70 | 66 | 63 | 58 | 55 | 58 | 60 | 62 | 62 | 61.6 | 9 | 70 | 55 |
| 24 | 61 | 61 | 61 | 55 | 50 | 54 | 55 | 55 | 57 | 58 | 59 | 59 | 60 | 59 | 58 | 60 | 59 | 59 | 57 | 58 | 58 | 58 | 57 | 57 | 57.7 | 24 | 61 | 50 |
| 25 | 55 | 54 | 54 | 54 | 55 | 55 | 54 | 54 | 54 | 55 | 55 | 56 | 56 | 56 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 54.9 | 24 | 56 | 54 |
| 26 | 55 | 55 | 55 | 54 | 54 | 53 | 52 | 51 | 50 | 48 | 45 | 46 | 45 | 44 | 42 | 42 | 40 | 39 | 38 | 38 | 37 | 37 | 38 | 38 | 45.7 | 24 | 55 | 37 |
| 27 | 37 | 37 | 37 | 36 | 36 | 36 | 36 | 36 | 33 | 34 | 35 | 36 | 36 | 36 | 36 | 37 | 37 | 36 | 37 | 38 | 36 | 36 | 37 | 37 | 36.2 | 24 | 38 | 33 |
| 28 | 37 | 36 | 36 | 36 | 36 | 36 | 36 | 37 | 38 | 39 | 39 | 42 | 42 | 42 | 42 | 40 | 40 | 40 | 39 | 39 | 39 | 39 | 38 | 38 | 38.6 | 24 | 42 | 36 |
| 29 | 37 | 37 | 37 | 37 | | | | | | | | | 35 | 35 | 34 | 33 | 33 | 34 | 34 | 32 | 32 | 32 | 31 | 32 | 34.1 | 16 | 37 | 31 |
| 30 | 33 | 34 | 33 | 32 | 31 | 31 | 32 | 33 | 38 | 40 | 42 | 42 | 43 | 44 | 44 | 44 | 42 | 41 | 37 | 36 | 37 | 38 | 40 | 37 | 37.7 | 24 | 44 | 31 |
| AVE | 52 | 52 | 52 | 51 | 52 | 52 | 52 | 52 | 53 | 56 | 57 | 59 | 59 | 59 | 59 | 58 | 58 | 57 | 55 | 53 | 52 | 52 | 52 | 51 | 54.2 | | 61 | 49 |
| N | 27 | 27 | 27 | 27 | 26 | 26 | 26 | 25 | 25 | 25 | 26 | 26 | 27 | 27 | 27 | 27 | 28 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | | 638 | 28 | |
| MAX | 69 | 70 | 68 | 69 | 70 | 69 | 68 | 67 | 68 | 75 | 80 | 83 | 83 | 80 | 78 | 75 | 75 | 75 | 73 | 68 | 69 | 68 | 70 | 70 | 71.2 | | 83 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/FAHRENHEIT/HOURLY AVERAGE

SHIRLEY PEAK

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 62 | 60 | 60 | 60 | 59 | 59 | 59 | 60 | 62 | 64 | 64 | 64 | 65 | 67 | 68 | 68 | 67 | 64 | 63 | 62 | 57 | 56 | 56 | 55 | 61.7 | 24 | 68 | 55 |
| 2 | 54 | 54 | 54 | 52 | 52 | 52 | 52 | 53 | 55 | 58 | 58 | 61 | 63 | 64 | 64 | 65 | 64 | 63 | 62 | 60 | 56 | 53 | 54 | 54 | 57.4 | 24 | 65 | 52 |
| 3 | 54 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 53 | 55 | 56 | 57 | 59 | 60 | 61 | 62 | 62 | 61 | 60 | 58 | 54 | 52 | 50 | 50 | 55.3 | 24 | 62 | 50 |
| 4 | 50 | 50 | 50 | 50 | 50 | 49 | 50 | 52 | 54 | 56 | 60 | 59 | 60 | 60 | 61 | 62 | 63 | 63 | 62 | 59 | 54 | 53 | 54 | 55 | 55.7 | 24 | 63 | 49 |
| 5 | 57 | 60 | 58 | 58 | 58 | 59 | 58 | 59 | 63 | 68 | 72 | 73 | 73 | 72 | 71 | 70 | 71 | 71 | 70 | 68 | 64 | 62 | 63 | 64 | 65.1 | 24 | 73 | 57 |
| 6 | 65 | 63 | 64 | 64 | 66 | 66 | 65 | 65 | 66 | 72 | 75 | 76 | 78 | 75 | 70 | 67 | 67 | 67 | 66 | 69 | 66 | 63 | 62 | 62 | 67.5 | 24 | 78 | 62 |
| 7 | 63 | 63 | 62 | 63 | 60 | 59 | 60 | 59 | 60 | 62 | 66 | 68 | 68 | 71 | 72 | 72 | 72 | 72 | 71 | 68 | 66 | 61 | 62 | 62 | 65.1 | 24 | 72 | 59 |
| 8 | 61 | 61 | 62 | 61 | 60 | 60 | 60 | 60 | 61 | 63 | 67 | 68 | 69 | 71 | 72 | 73 | 72 | 72 | 71 | 69 | 66 | 62 | 61 | 62 | 65.2 | 24 | 73 | 60 |
| 9 | 61 | 58 | 58 | 58 | 58 | 58 | 58 | 59 | 59 | 62 | 65 | 68 | 68 | 69 | 70 | 70 | 70 | 69 | 67 | 64 | 61 | 56 | 56 | 56 | 62.4 | 24 | 70 | 56 |
| 10 | 56 | 56 | 56 | 56 | 56 | 55 | 57 | 63 | 65 | 69 | 72 | 68 | 66 | 67 | 69 | 68 | 68 | 67 | 65 | 62 | 60 | 57 | 56 | 56 | 62.1 | 24 | 72 | 55 |
| 11 | 54 | 54 | 54 | 53 | 52 | 52 | 52 | 53 | 54 | 57 | 62 | 61 | 62 | 63 | 64 | 65 | 65 | 66 | 64 | 62 | 58 | 56 | 56 | 57 | 58.2 | 24 | 66 | 52 |
| 12 | 60 | 61 | 61 | 62 | 62 | 60 | 60 | 60 | 62 | 66 | 72 | 72 | 74 | 74 | 70 | 70 | 70 | 68 | 66 | 62 | 58 | 59 | 59 | 60 | 64.5 | 24 | 74 | 58 |
| 13 | 58 | 58 | 58 | 59 | 58 | 59 | 58 | 60 | 64 | 68 | 70 | 68 | 67 | 68 | 69 | 69 | 68 | 67 | 64 | 60 | 55 | 56 | 56 | 55 | 62.2 | 24 | 70 | 55 |
| 14 | 55 | 55 | 56 | 57 | 57 | 56 | 55 | 57 | 61 | 64 | 67 | 67 | 67 | 68 | 69 | 69 | 68 | 66 | 64 | 60 | 56 | 57 | 58 | 58 | 61.1 | 24 | 69 | 55 |
| 15 | 57 | 57 | 58 | 59 | 58 | 56 | 56 | 60 | 62 | 70 | 71 | 73 | 73 | 70 | 68 | 68 | 67 | 66 | 65 | 60 | 57 | 58 | 58 | 59 | 62.8 | 24 | 73 | 56 |
| 16 | 58 | 58 | 57 | 56 | 56 | 56 | 56 | 56 | 62 | 70 | 73 | 75 | 74 | 70 | 71 | 70 | 70 | 69 | 66 | 62 | 60 | 60 | 59 | 59 | 63.5 | 24 | 75 | 56 |
| 17 | 60 | 59 | 60 | 62 | 60 | 60 | 61 | 61 | 64 | 71 | 76 | 78 | 78 | 77 | 72 | 70 | 70 | 69 | 70 | 65 | 61 | 60 | 62 | 62 | 66.2 | 24 | 78 | 59 |
| 18 | 60 | 60 | 58 | 58 | 57 | 57 | 57 | 58 | 64 | 70 | 72 | 75 | 76 | 76 | 74 | 74 | 74 | 71 | 68 | | | | | | 66.3 | 19 | 76 | 57 |
| 19 | | | | | | | | | | | 74 | 79 | 80 | 80 | 74 | 72 | 73 | 73 | 72 | 69 | 63 | 65 | 66 | 65 | 71.8 | 14 | 80 | 63 |
| 20 | 63 | 62 | 62 | 61 | 62 | 63 | 63 | 64 | 65 | 72 | 76 | 79 | 80 | 82 | 78 | 76 | 77 | 76 | 72 | 69 | 65 | 65 | 66 | 67 | 69.4 | 24 | 82 | 61 |
| 21 | 68 | 69 | 69 | 69 | 67 | 67 | 67 | 68 | 69 | 71 | 77 | 76 | 78 | 78 | 74 | 72 | 74 | 75 | 72 | 70 | 70 | 66 | 67 | 67 | 70.8 | 24 | 78 | 66 |
| 22 | 64 | 65 | 67 | 66 | 65 | 66 | 67 | 66 | 66 | 68 | 71 | 78 | 77 | 75 | 74 | 74 | 75 | 75 | 76 | 74 | 71 | 66 | 63 | 64 | 69.7 | 24 | 78 | 63 |
| 23 | 65 | 63 | 62 | 62 | 61 | 62 | 62 | 60 | 60 | 62 | 64 | 66 | 68 | 69 | 71 | 72 | 72 | 72 | 70 | 69 | 67 | 63 | 60 | 62 | 65.2 | 24 | 72 | 60 |
| 24 | 61 | 61 | 62 | 62 | 60 | 60 | 61 | 60 | 62 | 62 | 63 | 64 | 68 | 70 | 67 | 70 | 70 | 66 | 67 | 68 | 66 | 64 | 65 | 63 | 64.3 | 24 | 70 | 60 |
| 25 | 63 | 63 | 63 | 63 | 62 | 61 | 63 | 62 | 61 | 62 | 68 | 70 | 72 | 70 | 70 | 71 | 71 | 70 | 67 | 62 | 60 | 60 | 60 | 59 | 64.7 | 24 | 72 | 59 |
| 26 | 58 | 60 | 59 | 58 | 58 | 57 | 58 | 58 | 60 | 66 | 69 | 69 | 69 | 70 | 68 | 69 | 66 | 66 | 62 | 59 | 57 | 57 | 56 | 56 | 61.9 | 24 | 70 | 56 |
| 27 | 57 | 57 | 59 | 59 | 58 | 56 | 58 | 60 | 63 | 70 | 74 | 75 | 72 | 70 | 70 | 70 | 68 | 63 | 61 | 59 | | | | | 63.9 | 20 | 75 | 56 |
| 28 | | | | | | | | | | | | | 68 | 70 | 64 | 63 | 67 | 68 | 63 | 61 | 59 | 57 | 58 | 56 | 62.8 | 12 | 70 | 56 |
| 29 | 55 | 54 | 53 | 52 | 53 | 54 | 52 | 51 | 54 | 56 | 58 | 60 | 62 | 62 | 63 | 63 | 63 | 62 | 61 | 58 | 54 | 53 | 52 | 52 | 56.5 | 24 | 63 | 51 |
| 30 | 51 | 50 | 50 | 50 | 49 | 49 | 49 | 52 | 53 | 54 | 61 | 62 | 62 | 63 | 64 | 64 | 65 | 64 | 63 | 60 | 54 | 54 | 54 | 54 | 56.3 | 24 | 65 | 49 |
| 31 | 53 | 51 | 57 | 57 | 55 | 53 | 54 | 55 | 58 | 63 | 68 | 71 | 70 | 72 | 71 | 70 | 72 | 71 | 68 | 62 | 63 | 64 | 64 | 64 | 62.8 | 24 | 72 | 51 |
| AVE | 59 | 58 | 59 | 59 | 58 | 58 | 58 | 59 | 61 | 65 | 68 | 69 | 70 | 70 | 69 | 69 | 69 | 68 | 66 | 64 | 61 | 59 | 59 | 59 | 63.2 | | 72 | 57 |
| N | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 29 | 29 | 29 | 29 | | 713 | 31 | |
| MAX | 68 | 69 | 69 | 69 | 67 | 67 | 67 | 68 | 69 | 72 | 77 | 79 | 80 | 82 | 78 | 76 | 77 | 76 | 76 | 74 | 71 | 66 | 67 | 67 | 71.8 | | 82 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/FARHENHIET/HOURLY AVERAGE

SHIRLEY PEAK

DAY — HOUR PST — OCTOBER, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 37 | 38 | 38 | 39 | 40 | 40 | 40 | 45 | 49 | 49 | 52 | 52 | 53 | 52 | 52 | 49 | 49 | 44 | 44 | 43 | 45 | 44 | 44 | 43 | 45.0 | 24 | 53 | 37 |
| 2 | 43 | 43 | 42 | 43 | 43 | | | | | | | | | | | | | | | | | | | | 42.8 | 5 | 43 | 42 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | 38 | 38 | 38 | 38 | 38 | 37 | 38 | 38 | 38 | 39 | 38.0 | 10 | 39 | 37 |
| 8 | 40 | 37 | 37 | 39 | 38 | 40 | 39 | 38 | 40 | 45 | 46 | 49 | 51 | 52 | 54 | 56 | 54 | 49 | 48 | 46 | 45 | 44 | 44 | 43 | 44.8 | 24 | 56 | 37 |
| 9 | 43 | 43 | 43 | 42 | 42 | 41 | 41 | 41 | 42 | 48 | 50 | 52 | 55 | 56 | 58 | 59 | 57 | 52 | 50 | 47 | 47 | 46 | 45 | 44 | 47.7 | 24 | 59 | 41 |
| 10 | 43 | 42 | 42 | 40 | 40 | 40 | 40 | 40 | 42 | 50 | 52 | 52 | 52 | 53 | 53 | 54 | 52 | 50 | 46 | 44 | 44 | 44 | 44 | 45 | 46.0 | 24 | 54 | 40 |
| 11 | 45 | 44 | 44 | 44 | 43 | 43 | 44 | 45 | 46 | 50 | 52 | 53 | 55 | 57 | 56 | 55 | 54 | 53 | 48 | 49 | 49 | 48 | 46 | 46 | 48.8 | 24 | 57 | 43 |
| 12 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 45 | 47 | 52 | 55 | 57 | 58 | 59 | 60 | 59 | 55 | 53 | 47 | 46 | 46 | 46 | 45 | 45 | 49.3 | 24 | 60 | 44 |
| 13 | 46 | 46 | 46 | 47 | 47 | 46 | 45 | 45 | 48 | 54 | 57 | 59 | 60 | 60 | 58 | 56 | 56 | 53 | 48 | 49 | 50 | 50 | 50 | 50 | 51.1 | 24 | 60 | 45 |
| 14 | 50 | 51 | 50 | 50 | 49 | 48 | 47 | 47 | 50 | 56 | 59 | 60 | 61 | 62 | 62 | 61 | 56 | 54 | 50 | 48 | 49 | 48 | 48 | 47 | 52.6 | 24 | 62 | 47 |
| 15 | 48 | 49 | 48 | 47 | 47 | 47 | 47 | 48 | 50 | 54 | 60 | 60 | 62 | 60 | 61 | 59 | 56 | 54 | 51 | 50 | 51 | 52 | 51 | 52 | 52.7 | 24 | 62 | 47 |
| 16 | 52 | 51 | 51 | 50 | 51 | 50 | 50 | 50 | 50 | 59 | 58 | 60 | 61 | 60 | 59 | 58 | 56 | 55 | 53 | 50 | 49 | 48 | 48 | 47 | 53.2 | 24 | 61 | 47 |
| 17 | 48 | 45 | 50 | 46 | 44 | 43 | 44 | 48 | 48 | 52 | 52 | 53 | 52 | 51 | 50 | 50 | 48 | 47 | 45 | 45 | 43 | 44 | 45 | 42 | 47.3 | 24 | 53 | 42 |
| 18 | 42 | 40 | 49 | 44 | 48 | 50 | 49 | 47 | 46 | 50 | 54 | 57 | 58 | 56 | 55 | 54 | 52 | 50 | 48 | 50 | 50 | 51 | 50 | 48 | 49.9 | 24 | 58 | 40 |
| 19 | 49 | 50 | 50 | 50 | 49 | 49 | 48 | 48 | 49 | 50 | 56 | 60 | 59 | 59 | 56 | 54 | 53 | 52 | 49 | 45 | 43 | 44 | 43 | 43 | 50.3 | 24 | 60 | 43 |
| 20 | 44 | 44 | 43 | 42 | 41 | 41 | 41 | 41 | 41 | 43 | 43 | 45 | 46 | 47 | 48 | 47 | 46 | 45 | 44 | 42 | 42 | 42 | 42 | 41 | 43.4 | 24 | 48 | 41 |
| 21 | 42 | 42 | 42 | 42 | 45 | 46 | 47 | 47 | 46 | 53 | 55 | 56 | 56 | 58 | 55 | 54 | 53 | 52 | 50 | 51 | 53 | 50 | 50 | 52 | 49.9 | 24 | 58 | 42 |
| 22 | 53 | 49 | 49 | 51 | 51 | 51 | 53 | 53 | 53 | 54 | 55 | 56 | 57 | 58 | 57 | 57 | 58 | 56 | 54 | 54 | 52 | 50 | 50 | 53 | 53.5 | 24 | 58 | 49 |
| 23 | 54 | 51 | 52 | 53 | 52 | 50 | 47 | 48 | 46 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 53 | 52 | 50 | 48 | 48 | 49 | 49 | 49 | 50.5 | 24 | 55 | 46 |
| 24 | 49 | 48 | 47 | 47 | 46 | 46 | 46 | 46 | 46 | 45 | 47 | 48 | 47 | 48 | 48 | 47 | 47 | 47 | 47 | 47 | 46 | 45 | 46 | 45 | 46.7 | 24 | 49 | 45 |
| 25 | 46 | 46 | 46 | 46 | 46 | 46 | 45 | 44 | 44 | 43 | 44 | 44 | 45 | 46 | 47 | 46 | 46 | 45 | 44 | 44 | 44 | 44 | 44 | 44 | 45.0 | 24 | 47 | 43 |
| 26 | 44 | 44 | 44 | 44 | 43 | 43 | 43 | 40 | 38 | 38 | 39 | 40 | 34 | 34 | 35 | 34 | 33 | 32 | 32 | 31 | 32 | 32 | 31 | 30 | 37.2 | 24 | 44 | 30 |
| 27 | 30 | 29 | 28 | 27 | 27 | 27 | 26 | 26 | 27 | 30 | 40 | | | | | | | | | | | | | | 28.8 | 11 | 40 | 26 |
| AVE | 45 | 44 | 45 | 44 | 44 | 44 | 44 | 44 | 45 | 49 | 51 | 53 | 54 | 54 | 53 | 52 | 51 | 49 | 47 | 46 | 46 | 46 | 45 | 45 | 47.6 | | 54 | 41 |
| N | 22 | 22 | 22 | 22 | 22 | 21 | 21 | 21 | 21 | 21 | 21 | 20 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | 506 | 22 | |
| MAX | 54 | 51 | 52 | 53 | 52 | 51 | 53 | 53 | 53 | 59 | 60 | 60 | 62 | 62 | 62 | 61 | 58 | 56 | 54 | 54 | 53 | 52 | 51 | 53 | 53.5 | | 62 | |

OK,

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/CENTIGRADE/HOURLY AVERAGE

DEMOCRAT

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | 34 | 34 | 33 | 31 | 30 | 28 | 26 | 23 | 29.9 | 8 | 34 | 23 |
| 16 | 21 | 20 | 20 | 19 | 18 | 18 | 19 | 18 | 23 | 25 | 27 | 29 | 28 | 31 | 32 | 32 | 33 | 31 | 29 | 29 | 27 | 26 | 23 | 21 | 25.0 | 24 | 33 | 18 |
| 17 | 18 | 19 | 18 | 16 | 15 | 14 | 14 | 15 | 20 | 24 | 25 | 28 | 30 | 31 | 31 | 31 | 30 | 30 | 29 | 29 | 26 | 22 | 21 | 20 | 23.2 | 24 | 31 | 14 |
| 18 | 19 | 19 | 18 | 17 | 15 | 15 | 15 | 17 | 20 | 24 | 25 | 27 | 29 | 30 | 31 | 31 | 31 | 32 | 30 | 29 | 26 | 23 | 22 | 21 | 23.6 | 24 | 32 | 15 |
| 19 | 21 | 19 | 18 | 18 | 17 | 17 | 16 | 17 | 22 | 24 | 26 | 30 | 30 | 30 | 31 | 33 | 33 | 32 | 32 | 31 | 26 | 25 | 21 | 20 | 24.5 | 24 | 33 | 16 |
| 20 | 19 | 20 | 19 | 18 | 19 | 18 | 16 | 18 | 22 | 24 | 28 | 29 | 30 | 30 | 32 | 32 | 32 | 32 | 32 | 31 | 28 | 25 | 22 | 23 | 25.0 | 24 | 32 | 16 |
| 21 | 20 | 20 | 19 | 20 | 19 | 20 | 19 | 19 | 23 | 24 | 28 | 30 | 30 | 31 | 31 | 31 | 33 | 33 | 32 | 30 | 29 | 26 | 23 | 21 | 25.5 | 24 | 33 | 19 |
| 22 | 21 | 20 | 20 | 19 | 20 | 19 | 18 | 18 | 22 | 26 | 29 | 30 | 33 | 32 | 32 | 34 | 34 | 33 | 32 | 31 | 27 | 25 | 22 | 22 | 25.8 | 24 | 34 | 18 |
| 23 | 21 | 20 | 20 | 20 | 18 | 18 | 18 | 19 | 23 | 26 | 30 | 31 | 34 | 35 | 34 | 35 | 35 | 35 | 34 | 31 | 30 | 26 | 26 | 23 | 26.8 | 24 | 35 | 18 |
| 24 | 22 | 20 | 20 | 19 | 19 | 18 | 18 | 20 | 24 | 28 | 30 | 32 | 34 | 33 | 34 | 35 | 35 | 35 | 33 | 32 | 30 | 29 | 25 | 23 | 27.0 | 24 | 35 | 18 |
| 25 | 23 | 22 | 21 | 20 | 19 | 18 | 18 | 20 | 24 | 28 | 29 | 32 | 33 | 34 | 34 | 34 | 34 | 33 | 33 | 31 | 29 | 26 | 25 | 23 | 26.8 | 24 | 34 | 18 |
| 26 | 22 | 23 | 21 | 21 | 20 | 19 | 20 | 20 | 24 | 24 | 28 | 31 | 33 | 34 | 33 | 34 | 35 | 35 | 33 | 32 | 30 | 26 | 25 | 26 | 27.0 | 24 | 35 | 19 |
| 27 | 24 | 23 | 24 | 22 | 22 | 21 | 20 | 21 | 25 | 27 | 29 | 31 | 32 | 34 | 33 | 34 | 34 | 34 | 33 | 31 | 30 | 28 | 24 | 23 | 27.5 | 24 | 34 | 20 |
| 28 | 23 | 23 | 22 | 21 | 22 | 20 | 20 | 20 | 24 | 27 | 28 | 31 | 31 | 31 | 33 | 34 | 34 | 34 | 33 | 31 | 29 | 27 | 25 | 23 | 26.9 | 24 | 34 | 20 |
| 29 | 22 | 22 | 22 | 21 | 21 | 20 | 20 | 21 | 26 | 29 | 30 | 32 | 34 | 35 | 35 | 36 | 38 | 37 | 35 | 32 | 29 | 26 | 25 | 24 | 28.0 | 24 | 38 | 20 |
| 30 | 24 | 22 | 22 | 22 | 21 | 21 | 20 | 21 | 27 | 29 | 31 | 34 | 35 | 35 | 36 | 37 | 38 | 37 | 36 | 34 | 31 | 28 | 26 | 25 | 28.8 | 24 | 38 | 20 |
| 31 | 25 | 24 | 23 | 22 | 22 | 21 | 20 | 22 | 28 | 31 | 33 | 34 | 34 | 35 | 35 | 36 | 36 | 37 | 35 | 33 | 30 | 27 | 26 | 25 | 28.9 | 24 | 37 | 20 |
| AVE | 22 | 21 | 20 | 20 | 19 | 19 | 18 | 19 | 24 | 26 | 29 | 31 | 32 | 33 | 33 | 34 | 34 | 34 | 33 | 31 | 29 | 26 | 24 | 23 | 26.3 | | 34 | 18 |
| N | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | | 392 | 17 | |
| MAX | 25 | 24 | 24 | 22 | 22 | 21 | 20 | 22 | 28 | 31 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 37 | 36 | 34 | 31 | 29 | 26 | 26 | 29.9 | | 38 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/CENTIGRADE/HOURLY AVERAGE

DEMOCRAT

SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | 24 | 26 | 25 | 25 | 25 | 26 | 26 | 26 | 26 | 25 | 24 | 23 | 23 | 22 | 21 | 24.5 | 15 | 26 | 21 |
| 10 | 20 | 19 | 18 | 18 | 18 | 17 | 16 | 16 | 21 | 23 | 25 | 26 | 27 | 27 | 27 | 27 | 28 | 26 | 26 | 23 | 22 | 22 | 20 | 18 | 22.1 | 24 | 28 | 16 |
| 11 | 17 | 17 | 15 | 15 | 14 | 14 | 13 | 14 | 18 | 21 | 23 | 24 | 25 | 26 | 26 | 27 | 27 | 26 | 26 | 22 | 20 | 17 | 16 | 16 | 20.0 | 24 | 27 | 13 |
| 12 | 16 | 14 | 14 | 13 | 13 | 12 | 12 | 12 | 17 | 20 | 23 | 26 | 26 | 26 | 27 | 27 | 27 | 26 | 26 | 22 | 19 | 18 | 17 | 16 | 19.5 | 24 | 27 | 12 |
| 13 | 15 | 15 | 14 | 14 | 14 | 13 | 13 | 13 | 17 | 21 | 24 | 25 | 25 | 26 | 26 | 27 | 26 | 26 | 25 | 21 | 20 | 18 | 17 | 16 | 19.6 | 24 | 27 | 13 |
| 14 | 16 | 14 | 14 | 14 | 13 | 12 | 12 | 12 | 17 | 20 | 23 | 24 | 24 | 25 | 26 | 25 | 25 | 25 | 23 | 21 | 19 | 17 | 15 | 16 | 18.8 | 24 | 26 | 12 |
| 15 | 14 | 14 | 13 | 13 | 12 | 12 | 13 | 14 | 16 | 17 | 18 | 19 | 20 | 22 | 22 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 17 | 17 | 17.2 | 24 | 23 | 12 |
| 16 | 16 | 15 | 15 | 14 | 15 | 13 | 12 | 13 | 14 | 15 | 15 | 16 | 18 | 18 | 18 | 18 | 19 | 20 | 18 | 16 | 14 | 13 | 13 | 11 | 15.4 | 24 | 20 | 11 |
| 17 | 10 | 10 | 11 | 10 | 9 | 9 | 8 | 9 | 14 | 19 | 21 | 24 | 26 | 23 | 24 | 25 | 25 | 24 | 22 | 19 | 17 | 16 | 16 | 15 | 16.9 | 24 | 26 | 8 |
| 18 | 14 | 14 | 15 | 15 | 14 | 14 | 14 | 15 | 14 | 15 | 18 | 19 | 21 | 23 | 25 | 26 | 25 | 24 | 23 | 20 | 18 | 17 | 17 | 15 | 18.1 | 24 | 26 | 14 |
| 19 | 15 | 15 | 14 | 14 | 12 | 12 | 12 | 14 | 15 | 17 | 18 | 20 | 21 | 24 | 23 | 23 | 23 | 23 | 21 | 19 | 17 | 16 | 16 | 14 | 17.4 | 24 | 24 | 12 |
| 20 | 14 | 13 | 12 | 12 | 11 | 10 | 9 | 9 | 14 | 16 | 19 | 21 | 22 | 24 | 26 | 25 | 25 | 24 | 22 | 18 | 17 | 16 | 16 | 13 | 17.0 | 24 | 26 | 9 |
| 21 | 12 | 12 | 11 | 11 | 11 | 11 | 11 | 11 | 15 | 21 | 23 | 26 | 29 | 30 | 32 | 30 | 28 | 27 | 25 | 21 | 19 | 19 | 16 | 16 | 19.5 | 24 | 32 | 11 |
| 22 | 15 | 14 | 15 | 15 | 14 | 15 | 13 | 13 | 19 | 23 | 25 | 29 | 31 | 34 | 34 | 33 | 32 | 31 | 29 | 23 | 22 | 21 | 20 | 18 | 22.4 | 24 | 34 | 13 |
| 23 | 17 | 16 | 15 | 15 | 16 | 16 | 15 | 16 | 19 | 24 | 26 | 29 | 30 | 33 | 30 | 27 | 26 | 26 | 25 | | | | | | 22.2 | 19 | 33 | 15 |
| 24 | | | | | | | | | | | | | | | | 21 | 22 | 21 | 21 | 20 | 20 | 19 | 19 | 19 | 20.2 | 9 | 22 | 19 |
| 25 | 19 | 19 | 19 | 18 | 18 | 18 | 18 | 18 | 19 | 20 | 21 | 20 | 22 | 22 | 21 | 19 | 20 | 21 | 20 | 19 | 19 | 19 | 19 | 19 | 19.5 | 24 | 22 | 18 |
| 26 | 19 | 18 | 18 | 18 | 18 | 18 | 18 | 17 | 16 | 14 | 14 | 14 | 15 | 16 | 18 | 16 | 15 | 16 | 15 | 14 | 14 | 14 | 14 | 14 | 16.0 | 24 | 19 | 14 |
| 27 | 13 | 13 | 13 | 13 | 13 | 12 | 12 | 12 | 11 | 9 | 10 | 10 | 12 | 13 | 13 | 14 | 15 | 16 | 16 | 14 | 12 | 11 | 9 | 8 | 12.3 | 24 | 16 | 8 |
| 28 | 8 | 9 | 10 | 9 | 8 | 8 | 7 | 7 | 9 | 12 | 16 | 17 | 18 | 18 | 18 | 19 | 19 | 18 | 18 | 16 | 14 | 11 | 11 | 10 | 12.9 | 24 | 19 | 7 |
| 29 | 10 | 11 | 11 | 10 | 11 | 10 | 10 | 8 | 10 | 13 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 14 | 13 | 10 | 9 | 7 | 7 | 11.6 | 24 | 15 | 7 |
| 30 | 6 | 6 | 6 | 5 | 4 | 4 | 4 | 3 | 5 | 10 | 12 | 14 | 16 | 18 | 18 | 19 | 19 | 18 | 17 | 14 | 11 | 10 | 9 | 7 | 10.6 | 24 | 19 | 3 |
| AVE | 14 | 14 | 14 | 13 | 13 | 13 | 12 | 12 | 15 | 18 | 20 | 21 | 22 | 23 | 24 | 23 | 23 | 23 | 22 | 19 | 17 | 16 | 16 | 15 | 17.7 | | 24 | 12 |
| N | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 22 | 22 | 22 | 22 | 21 | 21 | 21 | 21 | 21 | | 499 | 22 | |
| MAX | 20 | 19 | 19 | 18 | 18 | 18 | 18 | 18 | 21 | 24 | 26 | 29 | 31 | 34 | 34 | 33 | 32 | 31 | 29 | 24 | 23 | 23 | 22 | 21 | 24.5 | | 34 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/CENTIGRADE/HOURLY AVERAGE

DEMOCRAT

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 24 | 22 | 22 | 21 | 21 | 20 | 19 | 20 | 26 | 27 | 29 | 30 | 31 | 31 | 32 | 32 | 33 | 32 | 31 | 30 | 27 | 23 | 21 | 20 | 26.0 | 24 | 33 | 19 |
| 2 | 18 | 18 | 18 | 17 | 16 | 15 | 15 | 15 | 23 | 26 | 28 | 29 | 30 | 32 | 31 | 32 | 33 | 32 | 30 | 29 | 26 | 24 | 20 | 18 | 24.0 | 24 | 33 | 15 |
| 3 | 19 | 17 | 16 | 16 | 16 | 15 | 15 | 16 | 22 | 23 | 26 | 28 | 27 | 29 | 29 | 31 | 32 | 31 | 29 | 27 | 24 | 21 | 20 | 18 | 22.8 | 24 | 32 | 15 |
| 4 | 16 | 17 | 16 | 16 | 15 | 15 | 14 | 15 | 20 | 23 | | | 27 | 27 | 28 | 29 | 29 | 29 | 29 | 26 | 24 | 22 | 20 | 19 | 21.6 | 22 | 29 | 14 |
| 5 | 18 | 17 | 16 | 16 | 15 | 14 | 14 | 14 | 22 | 23 | 26 | 28 | 30 | 32 | 32 | 33 | 33 | 33 | 31 | 28 | 25 | 22 | 21 | 20 | 23.5 | 24 | 33 | 14 |
| 6 | 20 | 19 | 17 | 16 | 16 | 16 | 16 | 17 | 25 | 26 | 29 | 31 | 30 | 30 | 28 | 30 | 32 | 32 | 30 | 29 | 25 | 25 | 22 | 22 | 24.3 | 24 | 32 | 16 |
| 7 | 22 | 21 | 21 | 22 | 22 | 22 | 24 | 25 | 27 | 29 | 30 | 32 | 34 | 35 | 34 | 35 | 36 | 36 | 34 | 32 | 29 | 25 | 24 | 22 | 28.0 | 24 | 36 | 21 |
| 8 | 22 | 22 | 20 | 20 | 19 | 18 | 18 | 19 | 27 | 28 | 31 | 33 | 33 | 34 | 35 | 35 | 36 | 34 | 34 | 32 | 28 | 27 | 24 | 22 | 27.1 | 24 | 36 | 18 |
| 9 | 23 | 20 | 19 | 18 | 18 | 17 | 16 | 18 | 26 | 27 | 29 | 31 | 32 | 33 | 33 | 32 | 33 | 34 | 31 | 29 | 26 | 24 | 22 | 20 | 25.5 | 24 | 34 | 16 |
| 10 | 20 | 20 | 20 | 19 | 19 | 18 | 16 | 17 | 24 | 25 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 31 | 29 | 27 | 23 | 22 | 21 | 19 | 24.2 | 24 | 32 | 16 |
| 11 | 19 | 18 | 18 | 17 | 16 | 16 | 16 | 17 | 23 | 23 | 25 | 27 | 27 | 28 | 28 | 28 | 31 | 30 | 29 | 26 | 24 | 21 | 20 | 19 | 22.8 | 24 | 31 | 16 |
| 12 | 17 | 17 | 16 | 15 | 14 | 14 | 14 | 14 | 22 | 23 | 26 | 29 | 31 | 32 | 31 | 33 | 32 | 32 | 32 | 29 | 26 | 22 | 21 | 20 | 23.4 | 24 | 33 | 14 |
| 13 | 19 | 18 | 18 | 17 | 16 | 15 | 15 | 16 | 22 | 24 | 27 | 29 | 30 | 32 | 32 | 32 | 33 | 32 | 30 | 28 | 26 | 24 | 22 | 20 | 24.0 | 24 | 33 | 15 |
| 14 | 19 | 19 | 18 | 16 | 16 | 15 | 14 | 15 | 23 | 23 | 25 | 27 | 30 | 29 | 30 | 31 | 31 | 30 | 30 | 27 | 24 | 21 | 20 | 20 | 23.0 | 24 | 31 | 14 |
| 15 | 18 | 17 | 18 | 16 | 15 | 13 | 13 | 14 | 21 | 24 | 27 | 27 | 29 | 30 | 30 | 29 | 29 | 31 | 29 | 27 | 24 | 21 | 20 | 19 | 22.5 | 24 | 31 | 13 |
| 16 | 18 | 18 | 17 | 16 | 15 | 14 | 15 | 15 | 32 | 24 | 26 | 30 | 32 | 31 | 31 | 31 | 32 | 32 | 30 | 27 | 25 | 22 | 21 | 20 | 23.9 | 24 | 32 | 14 |
| 17 | 20 | 18 | 18 | 17 | 16 | 15 | 15 | 16 | 20 | 23 | 27 | 29 | 33 | 34 | 34 | 33 | 34 | 34 | 33 | 29 | 26 | 24 | 22 | 23 | 24.7 | 24 | 34 | 15 |
| 18 | 22 | 21 | 20 | 19 | 18 | 18 | 18 | 18 | 23 | 28 | 30 | 32 | 34 | 34 | 35 | 34 | 35 | 35 | 33 | 31 | 29 | 26 | 23 | 23 | 26.6 | 24 | 35 | 18 |
| 19 | 22 | 21 | 19 | 19 | 18 | 18 | 19 | 21 | 24 | 28 | 32 | 34 | 33 | 34 | 33 | 34 | 35 | 35 | 33 | 29 | 25 | 23 | 22 | 21 | 26.3 | 24 | 35 | 18 |
| 20 | 21 | 21 | 20 | 19 | 19 | 19 | 20 | 20 | 25 | 29 | 31 | 33 | 34 | 35 | 36 | 35 | 34 | 34 | 28 | 29 | 26 | 24 | 23 | 23 | 26.6 | 24 | 36 | 19 |
| 21 | 22 | 22 | 20 | 20 | 19 | 19 | 19 | 19 | 24 | 28 | 31 | 33 | 34 | 32 | 34 | 34 | 34 | 34 | 33 | 30 | 26 | 25 | 24 | 24 | 26.7 | 24 | 34 | 19 |
| 22 | 23 | 22 | 22 | 21 | 20 | 20 | 20 | 20 | 25 | 28 | 30 | 34 | 34 | 34 | 35 | 36 | 35 | 35 | 34 | 31 | 30 | 27 | 26 | 25 | 27.8 | 24 | 36 | 20 |
| 23 | 25 | 25 | 24 | 22 | 23 | 22 | 22 | 22 | 28 | 29 | 32 | 33 | 33 | 34 | 34 | 36 | 34 | 34 | 33 | 31 | 29 | 25 | 25 | 23 | 28.3 | 24 | 36 | 22 |
| 24 | 23 | 22 | 23 | 22 | 22 | 22 | 22 | 24 | 25 | 29 | 30 | 30 | 33 | 33 | 33 | 33 | 31 | 31 | 30 | 29 | 27 | 26 | 26 | 25 | 27.1 | 24 | 33 | 22 |
| 25 | 25 | 25 | 24 | 24 | 22 | 22 | 20 | 20 | 24 | 29 | 31 | 32 | 33 | 34 | 34 | 34 | 33 | 33 | 33 | 30 | 28 | 25 | 23 | 23 | 27.5 | 24 | 34 | 20 |
| 26 | 22 | 22 | 21 | 19 | 19 | 20 | 18 | 18 | 23 | 26 | 29 | 31 | 30 | 31 | 31 | 32 | 32 | 32 | 29 | 27 | 24 | 22 | 21 | 21 | 25.0 | 24 | 32 | 18 |
| 27 | 20 | 20 | 18 | 17 | 17 | 16 | 16 | 17 | 22 | 25 | 28 | 29 | 31 | 32 | 31 | 31 | 30 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 23.7 | 24 | 32 | 16 |
| 28 | 20 | 19 | 19 | 18 | 18 | 17 | 17 | 17 | 23 | 25 | 25 | 28 | 31 | 31 | 30 | | | | | | | | | | 22.5 | 15 | 31 | 17 |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AVE | 21 | 20 | 19 | 18 | 18 | 17 | 17 | 18 | 24 | 26 | 28 | 30 | 31 | 32 | 32 | 32 | 33 | 32 | 31 | 29 | 26 | 24 | 22 | 21 | 25.0 | | 33 | 17 |
| N | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 27 | 27 | 28 | 28 | 28 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | | 661 | 28 | |
| MAX | 25 | 25 | 24 | 24 | 23 | 22 | 24 | 25 | 32 | 29 | 32 | 34 | 34 | 35 | 36 | 36 | 36 | 36 | 34 | 32 | 30 | 27 | 26 | 25 | 28.3 | | 36 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

TEMPERATURE/CENTIGRADE/HOURLY AVERAGE

DEMOCRAT

DAY — HOUR PST — OCTOBER, 1982

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 11 | 13 | 16 | 18 | 21 | 23 | 22 | 22 | 21 | 19 | 15 | 14 | 12 | 12 | 11 | 12.1 | 24 | 23 | 4 |
| 2 | 9 | 8 | 7 | 8 | 7 | 7 | 8 | 7 | 9 | 13 | 18 | 20 | 24 | 26 | 26 | 25 | 24 | 23 | 22 | 17 | 15 | 14 | 13 | 13 | 15.1 | 24 | 26 | 7 |
| 3 | 11 | 11 | 7 | 9 | 8 | 8 | 7 | 7 | 9 | 14 | 16 | 20 | 22 | 24 | 25 | 24 | 24 | 24 | 22 | 18 | 16 | 14 | 13 | 11 | 15.2 | 24 | 25 | 7 |
| 4 | 14 | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 10 | 16 | 19 | 20 | 20 | 21 | 22 | 21 | 21 | 20 | 19 | 18 | 17 | 17 | 15 | 11 | 15.1 | 24 | 22 | 8 |
| 5 | 11 | 8 | 8 | 7 | 7 | 6 | 7 | 6 | 6 | 13 | 15 | 17 | 19 | 20 | 22 | 23 | 22 | 22 | 20 | 14 | 13 | 12 | 11 | 10 | 13.3 | 24 | 23 | 6 |
| 6 | 9 | 11 | 9 | 8 | 9 | 9 | 9 | 8 | 9 | 14 | 19 | 21 | 23 | 25 | 27 | 27 | 26 | 24 | 22 | 17 | 16 | 13 | 13 | 14 | 15.9 | 24 | 27 | 8 |
| 7 | 12 | 14 | 12 | 11 | 12 | 12 | 12 | 11 | 10 | 12 | 14 | 15 | 16 | 16 | 14 | 17 | 15 | 15 | 14 | 13 | 12 | 10 | 8 | 9 | 12.8 | 24 | 17 | 8 |
| 8 | 7 | 8 | 8 | 7 | 6 | 5 | 5 | 4 | 6 | 10 | 14 | 16 | 18 | 21 | 21 | 20 | 21 | 21 | 17 | 14 | 13 | 11 | 9 | 8 | 12.1 | 24 | 21 | 4 |
| 9 | 7 | 8 | 10 | 9 | 9 | 9 | 8 | 8 | 11 | 14 | 20 | 22 | 24 | 25 | 26 | 26 | 26 | 25 | 21 | 19 | 16 | 14 | 12 | 11 | 15.8 | 24 | 26 | 7 |
| 10 | 11 | 10 | 10 | 11 | 13 | 11 | 9 | 8 | 8 | 14 | 19 | 21 | 23 | 24 | 24 | 24 | 24 | 23 | 20 | 17 | 16 | | 11 | 11 | 15.7 | 23 | 24 | 8 |
| 11 | 10 | 9 | 9 | 7 | 7 | 6 | 7 | 6 | 7 | 13 | 16 | 19 | 21 | 24 | 25 | 25 | 25 | 25 | 20 | 17 | 15 | 12 | 12 | 11 | 14.5 | 24 | 25 | 6 |
| 12 | 10 | 10 | 9 | 9 | 8 | 7 | 7 | 7 | 8 | 14 | 17 | 22 | 25 | 27 | 27 | 27 | 26 | 24 | 21 | 18 | 15 | 15 | 15 | 14 | 15.9 | 24 | 27 | 7 |
| 13 | 14 | 13 | 13 | 10 | 11 | 10 | 10 | 9 | 8 | 13 | 18 | 22 | 24 | 27 | 26 | 28 | 26 | 25 | 23 | 20 | 18 | 14 | 13 | 13 | 17.0 | 24 | 28 | 8 |
| 14 | 11 | 11 | 11 | 10 | 9 | 9 | 9 | 8 | 9 | 13 | 18 | 21 | 24 | 27 | 28 | 28 | 27 | 26 | 21 | 19 | 18 | 15 | 14 | 12 | 16.6 | 24 | 28 | 8 |
| 15 | 11 | 12 | 11 | 10 | 8 | 10 | 10 | 9 | 9 | 15 | 18 | 21 | 22 | 23 | 27 | 27 | 26 | 25 | 21 | 19 | 16 | 15 | 14 | 13 | 16.3 | 24 | 27 | 8 |
| 16 | 12 | 12 | 11 | 11 | 9 | 9 | 8 | 9 | 9 | 14 | 18 | 21 | 23 | 28 | 27 | 26 | 26 | 23 | 21 | 17 | 16 | 15 | 15 | 14 | 16.4 | 24 | 28 | 8 |
| 17 | 12 | 11 | 11 | 10 | 9 | 10 | 10 | 9 | 9 | 14 | 15 | 18 | 20 | 22 | 22 | 22 | 20 | 19 | 18 | 16 | 14 | 11 | 10 | 10 | 14.3 | 24 | 22 | 9 |
| 18 | 10 | 9 | 8 | 9 | 8 | 7 | 7 | 8 | 7 | 12 | 14 | 18 | 20 | 23 | 23 | 22 | 21 | 20 | 19 | 16 | 13 | 14 | 12 | 10 | 13.8 | 24 | 23 | 7 |
| 19 | 10 | 10 | 11 | 12 | 14 | 13 | 14 | 13 | 13 | 16 | 18 | 20 | 22 | 23 | 24 | 24 | 24 | 23 | 19 | 16 | 16 | 14 | 14 | 14 | 16.5 | 24 | 24 | 10 |
| 20 | 12 | 12 | 12 | 13 | 10 | 10 | 10 | 9 | 9 | 14 | | | | 20 | 21 | 20 | 21 | 20 | 17 | 15 | 13 | 12 | 12 | 10 | 13.9 | 21 | 21 | 9 |
| 21 | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 12 | 15 | 17 | 20 | 22 | 24 | 23 | 23 | 22 | 20 | 17 | 17 | 15 | 13 | 14 | 14.7 | 24 | 24 | 8 |
| 22 | 12 | 13 | 12 | 12 | 12 | 11 | 13 | 13 | 14 | 15 | 17 | 20 | 23 | 27 | 27 | 27 | 26 | 24 | 22 | 19 | 17 | 17 | 17 | 17 | 17.8 | 24 | 27 | 11 |
| 23 | 16 | 15 | 15 | 14 | 13 | 12 | 13 | 12 | 15 | 17 | 19 | 22 | 24 | 25 | 26 | 26 | 26 | 23 | 22 | 20 | 19 | 17 | 16 | 16 | 18.5 | 24 | 26 | 12 |
| 24 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 14 | 14 | 14 | 16 | 16 | 19 | 20 | 21 | 22 | 21 | 19 | 16 | 15 | 14 | 14 | 15 | 16.3 | 24 | 22 | 14 |
| 25 | 14 | 14 | 13 | 14 | 15 | 16 | 15 | 14 | 15 | 17 | 17 | 18 | 20 | 21 | 22 | 20 | 20 | 19 | 18 | 17 | 16 | 16 | 16 | 16 | 16.8 | 24 | 22 | 13 |
| 26 | 14 | 13 | 14 | 13 | 13 | 13 | 13 | 11 | 11 | 11 | 11 | 12 | 10 | 10 | 12 | 11 | 12 | 11 | 11 | 10 | 9 | 9 | 9 | 7 | 11.3 | 24 | 14 | 7 |
| 27 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 5 | 9 | 11 | 12 | 14 | 15 | 15 | 15 | 15 | | | | | | | 7.8 | 18 | 15 | 2 |
| AVE | 11 | 11 | 10 | 10 | 9 | 9 | 9 | 9 | 9 | 13 | 16 | 19 | 21 | 22 | 23 | 23 | 23 | 22 | 20 | 17 | 15 | 14 | 13 | 12 | 14.9 | | 24 | 8 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 26 | 26 | 27 | 27 | 27 | 27 | 27 | 26 | 26 | 26 | 25 | 26 | 26 | | 638 | 27 | |
| MAX | 16 | 15 | 15 | 15 | 15 | 16 | 15 | 15 | 15 | 17 | 20 | 22 | 25 | 28 | 28 | 28 | 27 | 26 | 23 | 20 | 19 | 17 | 17 | 17 | 18.5 | | 28 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

SHIRLEY PEAK

WIND POINTS JULY, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 12 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 24 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 38 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 55 |
| DAYS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |

225 (POINT 16) HAD 38 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

SHIRLEY PEAK

DAY HOUR PST JULY, 1982

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 72 | 9 | | | | | | | | | | | | | | | | | 8 | 8 | 10 | 9 | 9 | 9 | 8 | 8.8 | 8 | 10 | 8 |
| 30 | 6 | 6 | 5 | 3 | 4 | 4 | 2 | 2 | 3 | 3 | 4 | 5 | 7 | 8 | 11 | 12 | 12 | 11 | 12 | 12 | 11 | 10 | 11 | 11 | 7.3 | 24 | 12 | 2 |
| 31 | 10 | 10 | 11 | 10 | 10 | 9 | 8 | 8 | 9 | 9 | 8 | 8 | 11 | 12 | 13 | 14 | 14 | 14 | 14 | 13 | 12 | 11 | 12 | 12 | 10.9 | 24 | 14 | 8 |
| AVE | 8 | 8 | 8 | 7 | 7 | 7 | 5 | 5 | 6 | 6 | 6 | 7 | 9 | 10 | 12 | 13 | 13 | 11 | 11 | 12 | 11 | 10 | 11 | 10 | 9.1 | | 12 | 6 |
| N | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 56 | 3 | |
| MAX | 10 | 10 | 11 | 10 | 10 | 9 | 8 | 8 | 9 | 9 | 8 | 8 | 11 | 12 | 13 | 14 | 14 | 14 | 14 | 13 | 12 | 11 | 12 | 12 | 10.9 | | 14 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

SHIRLEY PEAK

WIND POINTS JULY, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 11 | 117 | 39 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 24 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 11 | 397 | 82 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 498 |
| DAYS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |

225 (POINT 16) HAD 397 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

SHIRLEY PEAK

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | 240 | 240 | 240 | 235 | 235 | 240 | 240 | 238.6 | 7 | 240 | 235 |
| 30 | 240 | 250 | 230 | 210 | 220 | 215 | 190 | 350 | 230 | 240 | 260 | 250 | 240 | 230 | 230 | 230 | 230 | 230 | 230 | 240 | 230 | 225 | 225 | 225 | 235.4 | 24 | 350 | 190 |
| 31 | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 230 | 230 | 225 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 235 | 225 | 225 | 225 | 227.7 | 24 | 235 | 225 |
| AVE | 233 | 238 | 228 | 218 | 223 | 220 | 208 | 288 | 230 | 235 | 243 | 240 | 235 | 230 | 230 | 230 | 230 | 233 | 233 | 237 | 233 | 228 | 230 | 230 | 232.5 | | 275 | 217 |
| N | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 55 | 3 | |
| MAX | 240 | 250 | 230 | 225 | 225 | 225 | 225 | 350 | 230 | 240 | 260 | 250 | 240 | 230 | 230 | 230 | 230 | 240 | 240 | 240 | 235 | 235 | 240 | 240 | 238.6 | | 350 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

SHIRLEY PEAK

AUGUST, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 11 | 10 | 11 | 12 | 13 | 12 | 11 | 9 | 10 | 11 | 12 | 14 | 15 | 16 | 15 | 17 | 17 | 19 | 19 | 19 | 16 | 12 | 11 | 12 | 13.5 | 24 | 19 | 9 |
| 2 | 12 | 14 | 13 | 13 | 14 | 15 | 15 | 14 | 9 | 6 | 7 | 7 | 6 | 13 | 13 | 14 | 17 | 18 | 20 | 17 | 15 | 14 | 14 | 14 | 13.1 | 24 | 20 | 6 |
| 3 | 15 | 15 | 16 | 17 | 19 | 18 | 15 | 13 | 10 | 9 | 8 | 11 | 14 | 15 | 15 | 15 | 16 | 16 | 15 | 15 | 13 | 11 | 9 | 8 | 13.7 | 24 | 19 | 8 |
| 4 | 9 | 11 | 8 | 12 | 12 | 10 | 8 | 7 | 6 | 7 | 4 | 4 | 7 | 12 | 12 | 13 | 13 | 13 | 11 | 11 | 8 | 7 | 6 | 5 | 9.0 | 24 | 13 | 4 |
| 5 | 4 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 8 | 8 | 9 | 8 | 9 | 7 | 5 | 3 | 2 | 3.8 | 24 | 9 | 1 |
| 6 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2.0 | 24 | 3 | 1 |
| 7 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 4 | 7 | 8 | 10 | 11 | 12 | 13 | 11 | 9 | 6 | 5 | 4 | 5.3 | 24 | 13 | 1 |
| 8 | 2 | 3 | 3 | 5 | 4 | 2 | 5 | 6 | 5 | 4 | 4 | 5 | 7 | 8 | 10 | 9 | 8 | 10 | 11 | 11 | 12 | 11 | 8 | 10 | 6.8 | 24 | 12 | 2 |
| 9 | 11 | 9 | 8 | 9 | 11 | 12 | 12 | 10 | 9 | 6 | 4 | 4 | 7 | 9 | 10 | 11 | 12 | 12 | 15 | 17 | 16 | 12 | 7 | 7 | 10.0 | 24 | 17 | 4 |
| 10 | 8 | 10 | 10 | 11 | 11 | 8 | 9 | 1 | 2 | 3 | 3 | 3 | 5 | 6 | 7 | 9 | 9 | 11 | 12 | 13 | 11 | 7 | 9 | 11 | 7.9 | 24 | 13 | 1 |
| 11 | 8 | 8 | 8 | 10 | 12 | 11 | 9 | 10 | 7 | 5 | 3 | 4 | 5 | 8 | 9 | 9 | 10 | 11 | 12 | 11 | 9 | 7 | 8 | 4 | 8.3 | 24 | 12 | 3 |
| 12 | 5 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 4 | 3 | 3 | 7 | 8 | 10 | 10 | 11 | 10 | 5 | 4 | 2 | 1 | 4.3 | 24 | 11 | 1 |
| 13 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 5 | 8 | 10 | 11 | 10 | 11 | 12 | 12 | 8 | 5 | 6 | 5 | 5.1 | 24 | 12 | 1 |
| 14 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 7 | 7 | 7 | 8 | 10 | 12 | 11 | 9 | 6 | 4 | 2 | 2 | 4.9 | 24 | 12 | 1 |
| 15 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 0 | 2 | 2 | 3 | 3 | 3 | 3 | 8 | 10 | 10 | 10 | 10 | 7 | 3 | 2 | 3 | 1 | 3.8 | 24 | 10 | 0 |
| 16 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 4 | 3 | 3 | 3 | 4 | 4 | 7 | 7 | 8 | 9 | 9 | 7 | 4 | 4 | 4 | 3 | 3.9 | 24 | 9 | 1 |
| 17 | 2 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 5 | 8 | 8 | 8 | 8 | 7 | 4 | 4 | 3 | 2 | 3.8 | 24 | 8 | 1 |
| 18 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 4 | 5 | 8 | 8 | 10 | 10 | | | | | | 4.5 | 19 | 10 | 1 |
| 19 | | | | | | | | | | | 4 | 4 | 4 | 4 | 3 | 7 | 6 | 7 | 9 | 9 | 7 | 2 | 2 | 1 | 4.9 | 14 | 9 | 1 |
| 20 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 3 | 4 | 3 | 4 | 8 | 9 | 11 | 11 | 10 | 8 | 5 | 4 | 2 | 4.1 | 24 | 11 | 1 |
| 21 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 8 | 8 | 10 | 8 | 9 | 9 | 8 | 8 | 4.5 | 24 | 10 | 1 |
| 22 | 6 | 4 | 2 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 5 | 8 | 10 | 7 | 8 | 6 | 7 | 8 | 10 | 8 | 10 | 5.0 | 24 | 10 | 1 |
| 23 | 10 | 11 | 7 | 5 | 4 | 8 | 8 | 8 | 7 | 9 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 18 | 16 | 16 | 15 | 12 | 5 | 10 | 10.5 | 24 | 18 | 4 |
| 24 | 9 | 9 | 8 | 9 | 9 | 8 | 9 | 8 | 8 | 7 | 7 | 8 | 4 | 6 | 5 | 6 | 5 | 4 | 1 | 2 | 2 | 2 | 2 | 2 | 5.8 | 24 | 9 | 1 |
| 25 | 1 | 2 | 2 | 2 | 4 | 4 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 13 | 13 | 10 | 9 | 5 | 4 | 5 | 3 | 5.0 | 24 | 13 | 1 |
| 26 | 4 | 1 | 2 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 3 | 4 | 8 | 10 | 11 | 12 | 13 | 12 | 11 | 10 | 9 | 7 | 5 | 5.8 | 24 | 13 | 1 |
| 27 | 5 | 4 | 2 | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 9 | 10 | 11 | 11 | 12 | 7 | 11 | | | | | 5.4 | 20 | 12 | 1 |
| 28 | | | | | | | | | | | | | 3 | 3 | 9 | 8 | 6 | 4 | 6 | 5 | 5 | 5 | 4 | 3 | 5.1 | 12 | 9 | 3 |
| 29 | 2 | 4 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 5 | 6 | 7 | 10 | 11 | 13 | 14 | 14 | 15 | 15 | 11 | 7 | 9 | 8 | 9 | 7.8 | 24 | 15 | 2 |
| 30 | 7 | 5 | 5 | 7 | 7 | 5 | 5 | 2 | 2 | 4 | 3 | 4 | 5 | 7 | 10 | 10 | 13 | 14 | 15 | 14 | 10 | 11 | 10 | 6 | 7.5 | 24 | 15 | 2 |
| 31 | 6 | 4 | 2 | 2 | 2 | 4 | 5 | 5 | 4 | 3 | 2 | 4 | 4 | 7 | 7 | 8 | 8 | 7 | 6 | 5 | 3 | 2 | 2 | 3 | 4.4 | 24 | 8 | 2 |
| AVE | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 7 | 8 | 10 | 10 | 11 | 11 | 10 | 8 | 7 | 6 | 5 | 6.5 | | 12 | 2 |
| N | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 29 | 29 | 29 | 29 | | 713 | 31 | |
| MAX | 15 | 15 | 16 | 17 | 19 | 18 | 15 | 14 | 10 | 11 | 12 | 14 | 15 | 16 | 15 | 17 | 17 | 19 | 20 | 19 | 16 | 14 | 14 | 14 | 13.7 | | 20 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

SHIRLEY PEAK

WIND POINTS AUGUST, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 16 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 3 | 7 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 6 | 0 | 0 | 0 | 0 | 14 | 2 | 2 | 1 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 14 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 13 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 7 | 1 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 24 |
| 13 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 3 | 2 | 0 | 2 | 4 | 6 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 9 | 3 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 2 | 3 | 0 | 2 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 2 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 24 |
| 16 | 0 | 0 | 2 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 24 |
| 17 | 0 | 0 | 2 | 3 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 1 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 19 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| 20 | 0 | 0 | 0 | 7 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 4 | 2 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 2 | 1 | 9 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 18 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 1 | 3 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 21 |
| 28 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 8 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 10 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 0 | 3 | 13 | 30 | 70 | 11 | 11 | 5 | 4 | 3 | 11 | 6 | 6 | 7 | 64 | 195 | 238 | 21 | 5 | 1 | 3 | 2 | 2 | 1 | 714 |
| DAYS | 0 | 2 | 9 | 11 | 13 | 8 | 8 | 5 | 5 | 2 | 7 | 3 | 5 | 4 | 23 | 30 | 29 | 12 | 5 | 1 | 2 | 2 | 2 | 1 | |

240 (POINT 17) HAD 238 HOURS.

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

SHIRLEY PEAK

DAY HOUR PST AUGUST, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 225 | 225 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 225 | 225 | 230 | 229.2 | 24 | 230 | 225 |
| 2 | 225 | 225 | 225 | 225 | 230 | 230 | 240 | 230 | 225 | 235 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 225 | 225 | 225 | 225 | 230 | 235 | 235 | 229.2 | 24 | 240 | 225 |
| 3 | 235 | 230 | 235 | 235 | 235 | 235 | 240 | 235 | 240 | 240 | 235 | 230 | 230 | 225 | 225 | 230 | 230 | 225 | 225 | 225 | 220 | 220 | 220 | 230 | 230.4 | 24 | 240 | 220 |
| 4 | 235 | 235 | 230 | 235 | 235 | 230 | 240 | 240 | 240 | 235 | 220 | 230 | 230 | 225 | 225 | 225 | 235 | 240 | 235 | 240 | 225 | 225 | 220 | 220 | 231.3 | 24 | 240 | 220 |
| 5 | 215 | 110 | 150 | 150 | 220 | 230 | 220 | 230 | 230 | 225 | 70 | 60 | 70 | 270 | 250 | 250 | 250 | 245 | 245 | 240 | 235 | 230 | 230 | 190 | 200.6 | 24 | 270 | 60 |
| 6 | 120 | 80 | 80 | 115 | 100 | 140 | 180 | 130 | 100 | 65 | 65 | 60 | 60 | 60 | 60 | 60 | 140 | 65 | 65 | 60 | 60 | 65 | 65 | 65 | 85.8 | 24 | 180 | 60 |
| 7 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 250 | 250 | 250 | 240 | 230 | 235 | 240 | 235 | 240 | 250 | 250 | 255 | 154.4 | 24 | 255 | 65 |
| 8 | 255 | 235 | 260 | 255 | 240 | 270 | 260 | 260 | 245 | 240 | 230 | 250 | 240 | 245 | 240 | 245 | 245 | 240 | 240 | 235 | 235 | 245 | 245 | 240 | 245.6 | 24 | 270 | 230 |
| 9 | 245 | 235 | 245 | 245 | 235 | 245 | 245 | 235 | 240 | 240 | 240 | 240 | 240 | 235 | 240 | 240 | 235 | 235 | 240 | 240 | 240 | 240 | 245 | 250 | 240.4 | 24 | 250 | 235 |
| 10 | 240 | 240 | 235 | 235 | 235 | 230 | 220 | 65 | 65 | 235 | 240 | 240 | 235 | 240 | 240 | 240 | 235 | 240 | 240 | 240 | 235 | 230 | 235 | 235 | 221.9 | 24 | 240 | 65 |
| 11 | 225 | 225 | 230 | 235 | 240 | 240 | 235 | 240 | 230 | 230 | 240 | 240 | 245 | 240 | 235 | 235 | 230 | 240 | 240 | 240 | 235 | 225 | 230 | 220 | 234.4 | 24 | 245 | 220 |
| 12 | 220 | 220 | 210 | 170 | 180 | 200 | 210 | 200 | 220 | 60 | 60 | 60 | 45 | 310 | 240 | 240 | 240 | 240 | 240 | 235 | 220 | 220 | 200 | 160 | 191.7 | 24 | 310 | 45 |
| 13 | 180 | 170 | 180 | 170 | 165 | 85 | 150 | 115 | 20 | 25 | 340 | 270 | 250 | 240 | 240 | 240 | 240 | 235 | 240 | 235 | 220 | 215 | 230 | 230 | 195.2 | 24 | 340 | 20 |
| 14 | 220 | 205 | 210 | 210 | 210 | 205 | 220 | 220 | 220 | 235 | 260 | 250 | 240 | 250 | 240 | 240 | 235 | 240 | 240 | 235 | 220 | 220 | 180 | 100 | 221.0 | 24 | 260 | 100 |
| 15 | 80 | 80 | 90 | 120 | 135 | 155 | 160 | 55 | 40 | 50 | 40 | 45 | 340 | 255 | 250 | 240 | 245 | 240 | 235 | 230 | 220 | 220 | 200 | 90 | 159.0 | 24 | 340 | 40 |
| 16 | 70 | 65 | 65 | 65 | 70 | 70 | 65 | 40 | 50 | 50 | 50 | 30 | 320 | 240 | 250 | 250 | 240 | 240 | 240 | 230 | 230 | 225 | 220 | 210 | 149.4 | 24 | 320 | 30 |
| 17 | 210 | 70 | 75 | 80 | 70 | 60 | 60 | 60 | 60 | 55 | 55 | 50 | 40 | 40 | 245 | 240 | 240 | 240 | 240 | 240 | 225 | 225 | 220 | 210 | 137.9 | 24 | 245 | 40 |
| 18 | 60 | 70 | 60 | 60 | 55 | 60 | 60 | 60 | 60 | 60 | 55 | 55 | 55 | 30 | 250 | 250 | 240 | 230 | 235 | | | | | | 105.5 | 19 | 250 | 30 |
| 19 | | | | | | | | | | | 60 | 50 | 55 | 40 | 270 | 240 | 250 | 250 | 250 | 240 | 230 | 210 | 150 | 80 | 169.6 | 14 | 270 | 40 |
| 20 | 70 | 45 | 70 | 60 | 60 | 70 | 85 | 90 | 50 | 50 | 50 | 50 | 45 | 45 | 350 | 250 | 250 | 240 | 230 | 240 | 240 | 220 | 220 | 210 | 137.1 | 24 | 350 | 45 |
| 21 | 160 | 130 | 150 | 90 | 210 | 210 | 210 | 220 | 230 | 240 | 250 | 250 | 260 | 250 | 250 | 240 | 250 | 245 | 240 | 240 | 230 | 240 | 250 | 250 | 220.6 | 24 | 260 | 90 |
| 22 | 240 | 240 | 260 | 220 | 210 | 160 | 110 | 120 | 80 | 160 | 310 | 50 | 20 | 260 | 240 | 250 | 240 | 240 | 300 | 260 | 240 | 240 | 240 | 235 | 205.2 | 24 | 310 | 20 |
| 23 | 240 | 240 | 250 | 250 | 260 | 250 | 240 | 240 | 240 | 250 | 250 | 240 | 250 | 240 | 240 | 240 | 230 | 240 | 240 | 235 | 240 | 260 | 270 | 260 | 245.6 | 24 | 270 | 230 |
| 24 | 250 | 240 | 240 | 240 | 240 | 240 | 245 | 250 | 250 | 250 | 245 | 240 | 240 | 240 | 240 | 250 | 240 | 230 | 220 | 60 | 70 | 70 | 60 | 210 | 210.8 | 24 | 250 | 60 |
| 25 | 120 | 220 | 210 | 210 | 225 | 230 | 240 | 250 | 230 | 50 | 50 | 250 | 30 | 250 | 240 | 240 | 235 | 230 | 240 | 240 | 225 | 230 | 230 | 220 | 204.0 | 24 | 250 | 30 |
| 26 | 230 | 100 | 220 | 230 | 240 | 230 | 100 | 60 | 30 | 40 | 45 | 240 | 260 | 250 | 250 | 240 | 240 | 240 | 240 | 235 | 230 | 230 | 225 | 220 | 192.7 | 24 | 260 | 30 |
| 27 | 220 | 220 | 110 | 100 | 75 | 70 | 60 | 60 | 55 | 50 | 45 | 40 | 290 | 260 | 260 | 250 | 245 | 240 | 230 | 240 | 240 | | | | 160.0 | 21 | 290 | 40 |
| 28 | | | | | | | | | | | | | 30 | 320 | 230 | 240 | 255 | 250 | 240 | 230 | 235 | 230 | 230 | 220 | 225.8 | 12 | 320 | 30 |
| 29 | 210 | 220 | 235 | 230 | 220 | 225 | 220 | 225 | 225 | 240 | 240 | 240 | 240 | 240 | 240 | 245 | 240 | 240 | 250 | 250 | 230 | 230 | 235 | 240 | 233.8 | 24 | 250 | 210 |
| 30 | 230 | 220 | 250 | 240 | 240 | 230 | 225 | 90 | 230 | 235 | 245 | 250 | 255 | 240 | 250 | 240 | 240 | 245 | 245 | 250 | 240 | 240 | 240 | 225 | 233.1 | 24 | 255 | 90 |
| 31 | 225 | 220 | 230 | 225 | 220 | 225 | 230 | 235 | 225 | 240 | 235 | 240 | 255 | 245 | 240 | 240 | 240 | 250 | 245 | 230 | 225 | 200 | 175 | 170 | 227.7 | 24 | 255 | 170 |
| AVE | 190 | 175 | 183 | 179 | 184 | 183 | 182 | 164 | 159 | 158 | 165 | 166 | 186 | 216 | 240 | 235 | 236 | 233 | 234 | 226 | 220 | 218 | 213 | 204 | 198.4 | | 268 | 104 |
| N | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 30 | 29 | 29 | 29 | | 714 | 31 | |
| MAX | 255 | 240 | 260 | 255 | 260 | 270 | 260 | 260 | 250 | 250 | 340 | 270 | 340 | 320 | 350 | 250 | 255 | 250 | 300 | 260 | 240 | 260 | 270 | 260 | 245.6 | | 350 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

SHIRLEY PEAK

WIND POINTS — AUGUST, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 299 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 261 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 156 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 8 | 24 | 46 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 6 | 0 | 0 | 0 | 0 | 33 | 4 | 3 | 2 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 62 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 110 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 177 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 95 | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 107 | 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 4 | 22 | 10 | 46 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 24 |
| 13 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 4 | 3 | 0 | 13 | 34 | 56 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 25 | 23 | 56 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 5 | 5 | 0 | 4 | 2 | 0 | 1 | 1 | 4 | 0 | 0 | 1 | 5 | 17 | 38 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 24 |
| 16 | 0 | 0 | 5 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 15 | 44 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 24 |
| 17 | 0 | 0 | 6 | 12 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 4 | 14 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 19 | 0 | 0 | 4 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 7 | 38 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 14 |
| 20 | 0 | 0 | 0 | 17 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 24 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 8 | 11 | 81 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 0 | 3 | 0 | 3 | 0 | 2 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 6 | 10 | 69 | 14 | 0 | 0 | 8 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 191 | 26 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 50 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 4 | 3 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 46 | 71 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 4 | 12 | 6 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 7 | 45 | 19 | 0 | 3 | 0 | 0 | 0 | 0 | 20 |
| 28 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 28 | 18 | 6 | 0 | 0 | 0 | 3 | 0 | 0 | 12 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 44 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 29 | 140 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 6 | 38 | 50 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 0 | 6 | 39 | 90 | 151 | 19 | 17 | 7 | 4 | 4 | 15 | 11 | 10 | 16 | 230 | 1836 | 2020 | 113 | 16 | 3 | 11 | 7 | 6 | 4 | 4637 |
| DAYS | 0 | 2 | 9 | 11 | 13 | 8 | 8 | 5 | 5 | 2 | 7 | 3 | 5 | 4 | 23 | 30 | 29 | 12 | 5 | 1 | 2 | 2 | 2 | 1 | |

240 (POINT 17) HAD 2020 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

SHIRLEY PEAK
SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 7 | 9 | 9 | 10 | 12 | 12 | 11 | 8 | 3 | 3 | 2 | 1 | 4.6 | 24 | 12 | 1 |
| 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 8 | | 10 | 10 | 8 | 9 | 7 | 3 | 3 | 2 | 3.9 | 23 | 10 | 1 |
| 3 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 9 | 10 | 10 | 15 | 13 | 12 | 14 | 16 | 16 | 13 | 9 | 8 | 7 | 9 | 7.5 | 24 | 16 | 1 |
| 4 | 9 | 10 | 10 | 8 | 8 | 4 | 1 | 2 | 4 | 4 | 3 | 3 | 6 | 5 | 6 | 8 | 9 | 8 | 10 | 4 | 3 | 2 | 1 | 2 | 5.4 | 24 | 10 | 1 |
| 5 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 5 | 8 | 9 | 6 | 10 | 4 | 4 | 2 | 1 | 3.6 | 24 | 10 | 1 |
| 6 | 2 | 7 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 7 | 8 | 9 | 12 | 13 | 11 | 8 | 5 | 4 | 4 | 5 | 3 | 4.8 | 24 | 13 | 1 |
| 7 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3.0 | 24 | 5 | 1 |
| 8 | 3 | 3 | 4 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | | | | | | | | 2.9 | 17 | 5 | 1 |
| 9 | | | | | | | | | | | | | | | | | | | 16 | 15 | 19 | 19 | 20 | 20 | 18.2 | 6 | 20 | 15 |
| 10 | 21 | 18 | 16 | 13 | 15 | 14 | 16 | 14 | 15 | 13 | 15 | 14 | 16 | 18 | 20 | 22 | 19 | 18 | 21 | 19 | 20 | 17 | 15 | 13 | 17.0 | 24 | 22 | 13 |
| 11 | 9 | 7 | 4 | 5 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 11 | 13 | 13 | 13 | 12 | 13 | 10 | | | | | 6.8 | 20 | 13 | 1 |
| 12 | | | | | | | | | | 5 | 5 | 10 | 13 | 13 | | | | | | | | | | | 9.2 | 5 | 13 | 5 |
| 13 | | | | | | | | | | 7 | 7 | 9 | 10 | 11 | 12 | 10 | 12 | 12 | 12 | 11 | 6 | 7 | 7 | 8 | 9.4 | 15 | 12 | 6 |
| 14 | 8 | 5 | 4 | 4 | 6 | 5 | 6 | 6 | 6 | 4 | 5 | 9 | 10 | 11 | 12 | 12 | 14 | 16 | 15 | 14 | 11 | 11 | 8 | 8 | 8.8 | 24 | 16 | 4 |
| 15 | 9 | 11 | 11 | 11 | 12 | 11 | 10 | 9 | 8 | 7 | 4 | 5 | 7 | 7 | 13 | 17 | 16 | 12 | 9 | 7 | 6 | 6 | 7 | 7 | 9.3 | 24 | 17 | 4 |
| 16 | 8 | 6 | 7 | 8 | 6 | 7 | 7 | 3 | 4 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 6 | | | | | | | 4.4 | 18 | 8 | 1 |
| 17 | | | | | | | | | | | 5 | 6 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3.6 | 14 | 6 | 2 |
| 18 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 5 | 7 | 7 | 8 | 5 | 4 | 3 | 4 | 4 | 4.0 | 24 | 8 | 2 |
| 19 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 12 | 14 | 14 | 15 | 15 | 9 | 7 | 6 | 5 | 4 | 6.1 | 24 | 15 | 2 |
| 20 | 3 | 2 | 2 | 3 | 3 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 4 | 2 | 1 | 3 | 4 | 4 | 4 | 2.9 | 24 | 5 | 1 |
| 21 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 3 | 3.1 | 24 | 5 | 1 |
| 22 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | | | | | | | | | | | | | | | | | | 2.1 | 7 | 3 | 1 |
| 23 | | | | | | | | | | | | | | | | 4 | 5 | 8 | 9 | 6 | 2 | 2 | 1 | 2 | 4.3 | 9 | 9 | 1 |
| 24 | 0 | 3 | 3 | 5 | 6 | 2 | 1 | 1 | 2 | 2 | 4 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1.9 | 24 | 6 | 0 |
| 25 | 2 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 4 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 2 | 4 | 4 | 5 | 3.4 | 24 | 5 | 2 |
| 26 | 6 | 7 | 8 | 9 | 13 | 13 | 15 | 14 | 14 | 16 | 15 | 17 | 17 | 18 | 18 | 18 | 21 | 21 | 20 | 19 | 17 | 21 | 21 | 18 | 15.7 | 24 | 21 | 6 |
| 27 | 18 | 18 | 20 | 21 | 19 | 20 | 16 | 15 | 15 | 10 | 14 | 19 | 17 | 15 | 9 | 10 | 9 | 12 | 9 | 13 | 5 | 11 | 12 | 11 | 14.1 | 24 | 21 | 5 |
| 28 | 13 | 10 | 10 | 4 | 7 | 11 | 12 | 13 | 14 | 15 | 18 | 20 | 21 | 18 | 21 | 18 | 17 | 17 | 17 | 17 | 16 | 18 | 19 | 19 | 15.2 | 24 | 21 | 4 |
| 29 | 20 | 20 | 17 | 17 | | | | | | | | | 18 | 19 | 19 | 21 | 19 | 17 | 19 | 11 | 6 | 2 | 9 | 13 | 15.4 | 16 | 21 | 2 |
| 30 | 8 | 6 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 4 | 3 | 5 | 7 | 9 | 11 | 11 | 10 | 10 | 7 | 6 | 4 | 2 | 2 | 2 | 5.0 | 24 | 11 | 1 |
| AVE | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 9 | 9 | 9 | 10 | 10 | 10 | 9 | 7 | 7 | 7 | 7 | 7.0 | | 12 | 3 |
| N | 25 | 25 | 25 | 25 | 24 | 24 | 24 | 23 | 23 | 25 | 26 | 26 | 27 | 27 | 26 | 26 | 27 | 26 | 26 | 26 | 25 | 25 | 25 | 25 | | 606 | 27 | |
| MAX | 21 | 20 | 20 | 21 | 19 | 20 | 16 | 15 | 15 | 16 | 18 | 20 | 21 | 19 | 21 | 22 | 21 | 21 | 21 | 19 | 20 | 21 | 21 | 20 | 18.2 | | 22 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

SHIRLEY PEAK

WIND POINTS — SEPTEMBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 5 | 3 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 3 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 4 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 6 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 1 | 6 | 3 | 1 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 6 | 1 | 1 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 24 |
| 7 | 0 | 0 | 1 | 3 | 12 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 0 | 0 | 0 | 5 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 2 | 12 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 24 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 3 | 0 | 0 | 3 | 0 | 2 | 1 | 18 |
| 17 | 1 | 1 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 14 |
| 18 | 0 | 0 | 0 | 2 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 1 | 2 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 0 | 0 | 1 | 3 | 5 | 2 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 2 | 17 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 24 |
| 22 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 23 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 24 | 1 | 2 | 1 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 24 |
| 25 | 0 | 1 | 2 | 4 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 8 | 1 | 0 | 0 | 0 | 0 | 24 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 24 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 5 | 8 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 8 | 7 | 9 | 37 | 92 | 9 | 31 | 22 | 14 | 7 | 4 | 2 | 6 | 4 | 24 | 72 | 212 | 43 | 19 | 2 | 4 | 2 | 5 | 3 | 638 |
| DAYS | 7 | 5 | 8 | 12 | 16 | 7 | 13 | 6 | 6 | 7 | 4 | 2 | 5 | 4 | 14 | 20 | 26 | 14 | 6 | 2 | 2 | 2 | 4 | 3 | |

240 (POINT 17) HAD 212 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

SHIRLEY PEAK

SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 125 | 75 | 70 | 90 | 220 | 220 | 225 | 210 | 220 | 230 | 240 | 240 | 250 | 250 | 240 | 240 | 240 | 240 | 245 | 250 | 250 | 225 | 90 | 100 | 199.4 | 24 | 250 | 70 |
| 2 | 120 | 125 | 135 | 200 | 90 | 70 | 70 | 70 | 55 | 50 | 55 | 45 | 45 | 240 | 250 | | 240 | 240 | 230 | 240 | 260 | 230 | 230 | 90 | 147.0 | 23 | 260 | 45 |
| 3 | 10 | 100 | 230 | 220 | 70 | 110 | 100 | 170 | 160 | 230 | 230 | 240 | 240 | 240 | 240 | 230 | 240 | 240 | 240 | 240 | 250 | 260 | 250 | 240 | 199.2 | 24 | 260 | 10 |
| 4 | 230 | 240 | 240 | 230 | 240 | 230 | 60 | 230 | 235 | 240 | 250 | 250 | 240 | 240 | 240 | 240 | 240 | 240 | 230 | 220 | 210 | 180 | 140 | 90 | 216.0 | 24 | 250 | 60 |
| 5 | 70 | 90 | 100 | 100 | 100 | 80 | 70 | 60 | 45 | 50 | 50 | 50 | 45 | 45 | 40 | 240 | 250 | 240 | 250 | 240 | 230 | 220 | 140 | 100 | 121.0 | 24 | 250 | 40 |
| 6 | 70 | 210 | 90 | 80 | 70 | 100 | 230 | 20 | 350 | 10 | 240 | 260 | 240 | 240 | 250 | 240 | 240 | 240 | 250 | 230 | 260 | 270 | 240 | 210 | 193.3 | 24 | 350 | 10 |
| 7 | 200 | 220 | 190 | 120 | 140 | 100 | 90 | 70 | 60 | 60 | 50 | 50 | 60 | 60 | 60 | 60 | 70 | 160 | 40 | 50 | 70 | 70 | 70 | 70 | 91.3 | 24 | 220 | 40 |
| 8 | 70 | 80 | 70 | 70 | 70 | 70 | 80 | 70 | 50 | 60 | 60 | 50 | 60 | 55 | 50 | 50 | 220 | | | | | | | | 72.6 | 17 | 220 | 50 |
| 9 | | | | | | | | | | | | | | | | | | | 240 | 250 | 250 | 260 | 260 | 250 | 251.7 | 6 | 260 | 240 |
| 10 | 250 | 250 | 260 | 250 | 250 | 240 | 250 | 240 | 250 | 240 | 240 | 230 | 230 | 240 | 240 | 230 | 240 | 235 | 240 | 250 | 245 | 250 | 250 | 250 | 243.8 | 24 | 260 | 230 |
| 11 | 250 | 250 | 220 | 230 | 225 | 180 | 110 | 140 | 240 | 340 | 10 | 240 | 250 | 240 | 240 | 245 | 240 | 240 | 250 | 250 | 115 | 115 | 115 | 115 | 202.1 | 24 | 340 | 10 |
| 12 | 110 | 100 | 110 | 100 | 100 | 100 | 100 | 100 | 100 | 240 | 240 | 240 | 230 | 240 | 115 | 115 | 115 | 115 | 115 | 120 | 120 | 115 | 115 | 115 | 136.3 | 24 | 240 | 100 |
| 13 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | 240 | 240 | 250 | 250 | 240 | 240 | 150 | 240 | 240 | 240 | 240 | 225 | 230 | 240 | 240 | 190.2 | 24 | 250 | 110 |
| 14 | 240 | 230 | 220 | 220 | 240 | 230 | 230 | 240 | 240 | 245 | 250 | 240 | 240 | 260 | 250 | 240 | 240 | 240 | 240 | 240 | 240 | 235 | 230 | 230 | 237.9 | 24 | 260 | 220 |
| 15 | 230 | 230 | 240 | 240 | 240 | 240 | 250 | 240 | 240 | 250 | 250 | 250 | 250 | 245 | 240 | 240 | 240 | 235 | 240 | 240 | 240 | 235 | 235 | 240 | 240.8 | 24 | 250 | 230 |
| 16 | 240 | 250 | 260 | 260 | 250 | 250 | 260 | 240 | 230 | 250 | 300 | 340 | 310 | 330 | 300 | 350 | 10 | 0 | | | | | | | 246.1 | 18 | 350 | 0 |
| 17 | | | | | | | | | | | 70 | 55 | 65 | 60 | 45 | 250 | 295 | 260 | 260 | 350 | 25 | 35 | 0 | 70 | 131.4 | 14 | 350 | 0 |
| 18 | 70 | 70 | 65 | 70 | 65 | 65 | 70 | 70 | 65 | 45 | 55 | 60 | 65 | 70 | 250 | 240 | 245 | 245 | 245 | 240 | 250 | 260 | 235 | 235 | 139.6 | 24 | 260 | 45 |
| 19 | 240 | 35 | 25 | 45 | 270 | 90 | 115 | 110 | 100 | 20 | 260 | 0 | 250 | 250 | 240 | 245 | 235 | 245 | 245 | 245 | 235 | 225 | 225 | 220 | 173.8 | 24 | 270 | 0 |
| 20 | 210 | 205 | 90 | 90 | 170 | 160 | 135 | 80 | 70 | 55 | 55 | 45 | 40 | 260 | 250 | 250 | 250 | 250 | 260 | 60 | 70 | 70 | 75 | 70 | 136.3 | 24 | 260 | 40 |
| 21 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 65 | 65 | 70 | 65 | 65 | 65 | 55 | 70 | 125 | 135 | 180 | 340 | 45 | 100 | 70 | 70 | 89.4 | 24 | 340 | 45 |
| 22 | 70 | 65 | 70 | 70 | 80 | 70 | 70 | | | | | | | | | | | | | | | | | | 70.7 | 7 | 80 | 65 |
| 23 | | | | | | | | | | | | | | | | 245 | 245 | 235 | 235 | 225 | 65 | 35 | 85 | 45 | 157.2 | 9 | 245 | 35 |
| 24 | 35 | 70 | 15 | 235 | 235 | 250 | 340 | 245 | 230 | 225 | 245 | 250 | 20 | 325 | 270 | 305 | 55 | 55 | 215 | 0 | 45 | 90 | 70 | 60 | 161.9 | 24 | 340 | 0 |
| 25 | 70 | 70 | 60 | 60 | 45 | 65 | 70 | 70 | 65 | 65 | 65 | 65 | 65 | 50 | 45 | 25 | 35 | 45 | 30 | 325 | 250 | 245 | 250 | 240 | 99.0 | 24 | 325 | 25 |
| 26 | 240 | 245 | 245 | 245 | 245 | 245 | 240 | 240 | 235 | 240 | 240 | 235 | 235 | 240 | 235 | 245 | 235 | 245 | 250 | 250 | 260 | 220 | 265 | 260 | 243.1 | 24 | 265 | 220 |
| 27 | 260 | 255 | 255 | 260 | 265 | 250 | 260 | 270 | 265 | 270 | 275 | 270 | 265 | 265 | 270 | 280 | 270 | 275 | 285 | 265 | 260 | 260 | 255 | 255 | 265.0 | 24 | 285 | 250 |
| 28 | 260 | 250 | 250 | 275 | 270 | 255 | 260 | 265 | 270 | 270 | 270 | 265 | 270 | 270 | 265 | 255 | 255 | 260 | 250 | 245 | 250 | 245 | 245 | 245 | 259.0 | 24 | 275 | 245 |
| 29 | 245 | 245 | 240 | 245 | | | | | | | | | 235 | 235 | 230 | 235 | 235 | 230 | 240 | 250 | 245 | 250 | 245 | 240 | 240.3 | 16 | 250 | 230 |
| 30 | 250 | 250 | 270 | 180 | 215 | 220 | 225 | 110 | 190 | 205 | 215 | 245 | 235 | 235 | 235 | 240 | 235 | 235 | 235 | 225 | 220 | 215 | 110 | 90 | 211.9 | 24 | 270 | 90 |
| AVE | 161 | 163 | 156 | 162 | 168 | 157 | 158 | 150 | 146 | 168 | 174 | 174 | 176 | 203 | 199 | 213 | 206 | 208 | 221 | 225 | 192 | 191 | 175 | 164 | 180.8 | | 270 | 92 |
| N | 27 | 27 | 27 | 27 | 26 | 26 | 26 | 25 | 25 | 25 | 26 | 26 | 27 | 27 | 27 | 27 | 28 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | | 638 | 28 | |
| MAX | 260 | 255 | 270 | 275 | 270 | 255 | 340 | 270 | 350 | 340 | 300 | 340 | 310 | 330 | 300 | 350 | 295 | 275 | 285 | 350 | 260 | 270 | 265 | 260 | 265.0 | | 350 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

SHIRLEY PEAK

WIND POINTS — SEPTEMBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 15 | 4 | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 14 | 41 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 3 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 2 | 0 | 0 | 3 | 2 | 0 | 0 | 2 | 26 | 132 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 7 | 37 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 3 | 22 | 3 | 2 | 9 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 4 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 6 | 2 | 1 | 0 | 0 | 3 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 7 | 75 | 6 | 4 | 0 | 0 | 0 | 0 | 2 | 24 |
| 7 | 0 | 0 | 3 | 11 | 41 | 0 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 0 | 0 | 0 | 16 | 28 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 321 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 9 | 115 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 20 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 13 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 43 | 148 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 177 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 33 | 22 | 0 | 0 | 7 | 0 | 3 | 2 | 18 |
| 17 | 3 | 3 | 3 | 9 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 3 | 0 | 0 | 0 | 2 | 14 |
| 18 | 0 | 0 | 0 | 4 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 39 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 2 | 5 | 3 | 2 | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 32 | 83 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 0 | 0 | 4 | 8 | 14 | 7 | 5 | 0 | 0 | 2 | 1 | 3 | 0 | 2 | 3 | 0 | 16 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 5 | 62 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 24 |
| 22 | 0 | 0 | 0 | 0 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 23 | 0 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 24 | 2 | 5 | 0 | 3 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 15 | 8 | 0 | 2 | 0 | 1 | 2 | 1 | 0 | 24 |
| 25 | 0 | 4 | 7 | 12 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 87 | 212 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 211 | 98 | 9 | 0 | 0 | 0 | 0 | 24 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 142 | 97 | 0 | 0 | 0 | 0 | 0 | 24 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 113 | 134 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 3 | 4 | 14 | 63 | 30 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 21 | 18 | 25 | 109 | 281 | 19 | 40 | 11 | 11 | 9 | 16 | 5 | 10 | 11 | 90 | 683 | 2164 | 564 | 205 | 12 | 8 | 5 | 8 | 6 | 4251 |
| DAYS | 7 | 5 | 7 | 12 | 16 | 7 | 12 | 4 | 4 | 7 | 4 | 2 | 5 | 4 | 14 | 20 | 26 | 14 | 6 | 2 | 2 | 2 | 4 | 3 | |

240 (POINT 17) HAD 2164 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

SHIRLEY PEAK
OCTOBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 4 | 3 | 3 | 3 | 6 | 5 | 6 | 5 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 2.7 | 24 | 6 | 1 |
| 2 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | 3.0 | 5 | 3 | 3 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | 14 | 15 | 16 | 20 | 17 | 13 | 10 | 8 | 7 | 5 | 12.5 | 10 | 20 | 5 |
| 8 | 4 | 7 | 3 | 2 | 3 | 2 | | | | | | | | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2.9 | 17 | 7 | 2 |
| 9 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 3.0 | 24 | 5 | 1 |
| 10 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 5 | 5 | 3 | 6 | 8 | 5 | 2 | 1 | 1 | 2 | 2 | 2.9 | 24 | 8 | 1 |
| 11 | 1 | 2 | 2 | 1 | 3 | 2 | 3 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 6 | 8 | 8 | 9 | 3 | 2 | 2 | 2 | 1 | 2 | 3.0 | 24 | 9 | 1 |
| 12 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 3.5 | 24 | 5 | 1 |
| 13 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 6 | 10 | 10 | 10 | 4 | 2 | 1 | 1 | 1 | 2 | 4.0 | 24 | 10 | 1 |
| 14 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2.2 | 24 | 4 | 1 |
| 15 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 1 | 2 | 1 | 3 | 3 | 2 | 1 | 1 | 2.2 | 24 | 4 | 1 |
| 16 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 4 | 3 | 7 | 9 | 11 | 10 | 10 | 9 | 8 | 9 | 11 | 12 | 5.1 | 24 | 12 | 1 |
| 17 | 10 | 9 | 9 | 9 | 11 | 9 | 6 | 7 | 7 | 7 | 6 | 8 | 8 | 10 | 13 | 14 | 12 | 16 | 11 | 12 | 10 | 9 | 10 | 11 | 9.8 | 24 | 16 | 6 |
| 18 | 10 | 9 | 7 | 6 | 6 | 5 | 5 | 4 | 6 | 6 | 4 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 7 | 5 | 2 | 2 | 3 | 5.7 | 24 | 10 | 2 |
| 19 | 3 | 4 | 4 | 5 | 5 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 8 | 10 | 11 | 12 | 10 | 2 | 4 | 5 | 3 | 4.7 | 24 | 12 | 2 |
| 20 | 1 | 2 | 3 | 6 | 7 | 5 | 5 | 4 | 6 | 6 | 7 | 7 | 8 | 11 | 13 | 12 | 14 | 12 | 10 | 9 | 9 | 8 | 8 | 5 | 7.4 | 24 | 14 | 1 |
| 21 | 6 | 6 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 3 | 6 | 6 | 9 | 8 | 9 | 5 | 2 | 2 | 3 | 6 | 7 | 4.0 | 24 | 9 | 1 |
| 22 | 8 | 6 | 7 | 10 | 11 | 10 | 13 | 17 | 13 | 13 | 12 | 13 | 17 | 16 | 18 | 15 | 16 | 13 | 7 | 9 | 7 | 6 | 7 | 9 | 11.4 | 24 | 18 | 6 |
| 23 | 9 | 4 | 5 | 5 | 6 | 6 | 3 | 10 | 13 | 14 | 13 | 16 | 18 | 17 | 20 | 19 | 16 | 14 | 12 | 10 | 10 | 12 | 11 | 10 | 11.4 | 24 | 20 | 3 |
| 24 | 6 | 6 | 5 | 7 | 5 | 8 | 9 | 12 | 5 | 5 | 1 | 3 | 7 | 7 | 9 | 10 | 9 | 11 | 8 | 10 | 11 | 10 | 7 | 11 | 7.6 | 24 | 12 | 1 |
| 25 | 13 | 10 | 10 | 9 | 12 | 13 | 16 | 15 | 15 | 14 | 13 | 13 | 8 | 9 | 12 | 14 | 14 | 12 | 11 | 9 | 10 | 11 | 11 | 11 | 11.9 | 24 | 16 | 8 |
| 26 | 13 | 16 | 12 | 13 | 14 | 16 | 15 | 17 | 23 | 19 | 17 | 21 | 14 | 15 | 16 | 20 | 19 | 16 | 15 | 16 | 14 | 13 | 11 | | 15.9 | 23 | 23 | 11 |
| 27 | | | | | | | | | | | 2 | | | | | | | | | | | | | | 2.0 | 1 | 2 | 2 |
| AVE | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 8 | 9 | 9 | 9 | 7 | 6 | 5 | 5 | 5 | 5 | 6.2 | | 11 | 3 |
| N | 21 | 21 | 21 | 21 | 21 | 20 | 19 | 19 | 19 | 19 | 20 | 19 | 19 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 20 | | 488 | 21 | |
| MAX | 13 | 16 | 12 | 13 | 14 | 16 | 16 | 17 | 23 | 19 | 17 | 21 | 18 | 17 | 20 | 20 | 19 | 20 | 17 | 16 | 14 | 13 | 11 | 12 | 15.9 | | 23 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

SHIRLEY PEAK

WIND POINTS — OCTOBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 4 | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 8 | 0 | 0 | 5 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 4 | 17 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 1 | 1 | 0 | 1 | 6 | 3 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 24 |
| 11 | 1 | 1 | 0 | 1 | 2 | 2 | 0 | 2 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 24 |
| 12 | 0 | 2 | 3 | 8 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 1 | 5 | 3 | 3 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 2 | 0 | 7 | 5 | 1 | 2 | 1 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 1 | 7 | 9 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 24 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 7 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 1 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 24 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 6 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 3 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 17 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 16 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 8 |
| TOT(2) | 3 | 8 | 16 | 43 | 81 | 9 | 11 | 17 | 7 | 8 | 9 | 6 | 9 | 6 | 10 | 42 | 172 | 30 | 11 | 1 | 0 | 0 | 2 | 2 | 503 |
| DAYS | 3 | 6 | 6 | 11 | 15 | 5 | 8 | 7 | 4 | 5 | 6 | 5 | 6 | 5 | 8 | 17 | 17 | 14 | 6 | 1 | 0 | 0 | 2 | 2 | |

240 (POINT 17) HAD 172 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER -- RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

SHIRLEY PEAK

DAY HOUR PST OCTOBER, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 70 | 75 | 80 | 90 | 115 | 125 | 110 | 205 | 45 | 25 | 35 | 0 | 260 | 245 | 280 | 250 | 260 | 225 | 205 | 90 | 90 | 70 | 70 | 70 | 128.8 | 24 | 280 | 0 |
| 2 | 65 | 65 | 65 | 70 | 65 | | | | | | | | | | | | | | | | | | | | 66.0 | 5 | 70 | 65 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | 245 | 245 | 245 | 250 | 250 | 250 | 260 | 250 | 245 | 350 | 259.0 | 10 | 350 | 245 |
| 8 | 225 | 235 | 70 | 215 | 100 | 65 | 45 | 45 | 40 | 40 | 35 | 170 | 170 | 55 | 55 | 30 | 45 | 35 | 45 | 70 | 75 | 70 | 70 | 70 | 86.5 | 24 | 235 | 30 |
| 9 | 70 | 70 | 70 | 65 | 65 | 70 | 70 | 70 | 60 | 55 | 60 | 60 | 65 | 70 | 45 | 50 | 50 | 65 | 155 | 215 | 190 | 70 | 70 | 65 | 79.0 | 24 | 215 | 45 |
| 10 | 70 | 70 | 65 | 60 | 75 | 65 | 80 | 75 | 60 | 55 | 25 | 10 | 335 | 245 | 250 | 270 | 250 | 245 | 225 | 180 | 135 | 115 | 180 | 160 | 137.5 | 24 | 335 | 10 |
| 11 | 150 | 110 | 145 | 160 | 150 | 80 | 110 | 0 | 70 | 55 | 235 | 245 | 25 | 350 | 260 | 270 | 260 | 265 | 225 | 135 | 145 | 160 | 80 | 65 | 156.3 | 24 | 350 | 0 |
| 12 | 100 | 25 | 25 | 45 | 35 | 35 | 55 | 55 | 45 | 55 | 65 | 65 | 65 | 55 | 45 | 35 | 50 | 65 | 60 | 65 | 70 | 70 | 70 | 65 | 55.0 | 24 | 100 | 25 |
| 13 | 70 | 35 | 35 | 35 | 100 | 105 | 45 | 55 | 35 | 25 | 60 | 60 | 45 | 40 | 245 | 240 | 245 | 235 | 220 | 190 | 190 | 160 | 215 | 170 | 119.0 | 24 | 245 | 25 |
| 14 | 180 | 125 | 195 | 90 | 90 | 80 | 70 | 70 | 70 | 20 | 45 | 55 | 50 | 50 | 45 | 55 | 55 | 190 | 170 | 125 | 115 | 70 | 65 | 25 | 87.7 | 24 | 195 | 20 |
| 15 | 40 | 60 | 65 | 60 | 55 | 60 | 65 | 65 | 65 | 65 | 55 | 55 | 55 | 45 | 60 | 55 | 55 | 215 | 200 | 160 | 145 | 125 | 130 | 130 | 86.9 | 24 | 215 | 40 |
| 16 | 115 | 110 | 115 | 115 | 110 | 170 | 110 | 90 | 110 | 135 | 115 | 125 | 115 | 340 | 240 | 245 | 245 | 245 | 245 | 240 | 240 | 235 | 235 | 240 | 178.5 | 24 | 340 | 90 |
| 17 | 240 | 245 | 250 | 250 | 240 | 250 | 260 | 255 | 245 | 245 | 240 | 235 | 235 | 230 | 245 | 240 | 240 | 245 | 245 | 250 | 250 | 250 | 260 | 250 | 245.6 | 24 | 260 | 230 |
| 18 | 255 | 250 | 260 | 245 | 245 | 245 | 250 | 245 | 240 | 230 | 225 | 210 | 215 | 230 | 235 | 240 | 240 | 235 | 235 | 250 | 225 | 180 | 90 | 65 | 222.5 | 24 | 260 | 65 |
| 19 | 65 | 60 | 60 | 65 | 65 | 65 | 55 | 55 | 65 | 65 | 70 | 45 | 45 | 30 | 290 | 245 | 240 | 250 | 240 | 235 | 245 | 260 | 225 | 215 | 135.6 | 24 | 290 | 30 |
| 20 | 180 | 160 | 230 | 240 | 245 | 235 | 240 | 245 | 255 | 250 | 245 | 240 | 235 | 235 | 240 | 240 | 240 | 245 | 245 | 245 | 240 | 240 | 235 | 230 | 234.8 | 24 | 255 | 160 |
| 21 | 235 | 240 | 215 | 135 | 100 | 205 | 110 | 170 | 135 | 65 | 225 | 45 | 225 | 245 | 240 | 240 | 245 | 245 | 245 | 250 | 260 | 245 | 245 | 250 | 200.6 | 24 | 260 | 45 |
| 22 | 255 | 235 | 235 | 245 | 245 | 250 | 245 | 245 | 250 | 250 | 245 | 245 | 250 | 250 | 245 | 245 | 240 | 245 | 250 | 250 | 250 | 235 | 245 | 245 | 245.6 | 24 | 255 | 235 |
| 23 | 245 | 225 | 250 | 245 | 245 | 240 | 205 | 240 | 245 | 250 | 250 | 240 | 235 | 240 | 240 | 245 | 250 | 245 | 245 | 245 | 260 | 255 | 260 | 260 | 244.2 | 24 | 260 | 205 |
| 24 | 265 | 260 | 250 | 250 | 235 | 245 | 250 | 260 | 230 | 245 | 65 | 60 | 270 | 250 | 240 | 240 | 245 | 240 | 245 | 250 | 245 | 245 | 245 | 245 | 232.3 | 24 | 270 | 60 |
| 25 | 245 | 245 | 240 | 240 | 240 | 240 | 240 | 245 | 250 | 250 | 260 | 250 | 255 | 250 | 245 | 240 | 240 | 245 | 240 | 235 | 245 | 235 | 240 | 245 | 244.2 | 24 | 260 | 235 |
| 26 | 240 | 245 | 240 | 245 | 240 | 245 | 240 | 235 | 245 | 245 | 240 | 245 | 235 | 250 | 260 | 270 | 255 | 260 | 255 | 250 | 270 | 270 | 265 | 270 | 250.6 | 24 | 270 | 235 |
| 27 | 270 | 270 | 265 | 275 | 240 | 235 | | | | 215 | 70 | | | | | | | | | | | | | | 230.0 | 8 | 275 | 70 |
| AVE | 166 | 155 | 156 | 156 | 150 | 158 | 143 | 146 | 138 | 135 | 136 | 133 | 169 | 185 | 202 | 200 | 200 | 214 | 212 | 199 | 197 | 181 | 178 | 175 | 170.3 | | 254 | 94 |
| N | 22 | 22 | 22 | 22 | 22 | 21 | 20 | 20 | 20 | 21 | 21 | 20 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | 503 | 22 | |
| MAX | 270 | 270 | 265 | 275 | 245 | 250 | 260 | 260 | 255 | 250 | 260 | 250 | 335 | 350 | 290 | 270 | 260 | 265 | 255 | 250 | 270 | 270 | 265 | 350 | 259.0 | | 350 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

SHIRLEY PEAK

WIND POINTS — OCTOBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 4 | 3 | 2 | 7 | 3 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 12 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 10 | 0 | 0 | 0 | 0 | 0 | 5 | 10 |
| 8 | 0 | 0 | 4 | 11 | 16 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 9 | 0 | 0 | 0 | 13 | 55 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 3 | 3 | 0 | 2 | 14 | 5 | 0 | 1 | 0 | 1 | 2 | 0 | 4 | 0 | 0 | 5 | 24 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 24 |
| 11 | 1 | 3 | 0 | 2 | 3 | 3 | 0 | 5 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 6 | 3 | 23 | 8 | 0 | 0 | 0 | 0 | 2 | 24 |
| 12 | 0 | 6 | 9 | 31 | 35 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 4 | 18 | 10 | 10 | 0 | 4 | 4 | 0 | 0 | 1 | 2 | 3 | 0 | 5 | 10 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 6 | 0 | 25 | 11 | 1 | 3 | 1 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 2 | 18 | 19 | 0 | 0 | 0 | 4 | 3 | 3 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 15 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 20 | 76 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 24 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 185 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 7 | 43 | 63 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 3 | 10 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 15 | 43 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 24 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 40 | 129 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 3 | 1 | 0 | 2 | 2 | 0 | 5 | 0 | 1 | 0 | 1 | 2 | 11 | 67 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 246 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 22 | 205 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 137 | 24 | 7 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 244 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 210 | 77 | 47 | 0 | 0 | 0 | 0 | 0 | 23 |
| 27 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOT(2) | 7 | 26 | 39 | 177 | 225 | 14 | 23 | 32 | 12 | 17 | 16 | 5 | 14 | 9 | 23 | 292 | 1780 | 266 | 70 | 4 | 0 | 0 | 6 | 7 | 3014 |
| DAYS | 3 | 6 | 6 | 11 | 15 | 5 | 8 | 7 | 4 | 5 | 6 | 4 | 6 | 5 | 7 | 16 | 16 | 13 | 5 | 1 | 0 | 0 | 2 | 2 | |

240 (POINT 17) HAD 1780 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

OK,

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

DEMOCRAT

DAY — HOUR PST — JULY, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | 5 | 5 | 6 | 6 | 7 | 7 | 6 | 5 | 3 | 2 | 2 | 3 | 2 | 4.5 | 13 | 7 | 2 |
| 9 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 5 | 7 | 8 | 7 | 8 | 10 | 6 | 6 | 6 | 6 | 4 | 3 | 2 | 3 | 3 | 4.4 | 24 | 10 | 1 |
| 10 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 3 | 6 | 7 | 8 | 7 | 6 | 6 | 6 | 6 | 5 | 3 | 3 | 2 | 3 | 4.0 | 24 | 8 | 1 |
| 11 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 3 | 6 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 3 | 2 | 3 | 3 | 4.0 | 24 | 8 | 1 |
| 12 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 4 | 7 | 8 | 6 | 7 | 6 | 5 | 6 | 4 | 3 | 3 | 2 | 3 | 3.8 | 24 | 8 | 1 |
| 13 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 4 | 3 | 3 | 3 | 3 | 3.7 | 24 | 6 | 1 |
| 14 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 1 | 2 | 4 | 7 | 6 | 5 | 5 | 5 | 6 | 7 | 5 | 3 | 4 | 3 | 3 | 3 | 3.8 | 24 | 7 | 1 |
| 15 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 1 | 1 | 1 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 6 | 7 | 6 | 6 | 4 | 3 | 2 | 3.9 | 24 | 7 | 1 |
| 16 | 3 | 2 | 3 | 3 | 3 | 4 | 2 | 0 | 1 | 2 | 6 | 6 | 5 | 5 | 6 | 7 | 6 | 6 | 7 | 5 | 4 | 3 | 3 | 3 | 4.0 | 24 | 7 | 0 |
| 17 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 6 | 7 | 8 | 8 | 8 | 6 | 6 | 5 | 5 | 3 | 3 | 4 | 3 | 4.2 | 24 | 8 | 2 |
| 18 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 3 | 5 | 7 | 8 | 7 | 7 | 5 | 6 | 5 | 4 | 2 | 3 | 3 | 3 | 3.9 | 24 | 8 | 1 |
| 19 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 3 | 5 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 4 | 3 | 4 | 4 | 4 | 3.8 | 24 | 7 | 1 |
| 20 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 4 | 5 | 6 | 5 | 7 | 5 | 6 | 6 | 6 | 4 | 3 | 4 | 4 | 4 | 4.0 | 24 | 7 | 1 |
| 21 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 1 | 2 | 5 | 6 | 7 | 8 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 4.1 | 24 | 8 | 1 |
| 22 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 6 | 5 | 3 | 3 | 3 | 4 | 4 | 4.0 | 24 | 7 | 1 |
| 23 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 3 | 4 | 9 | 9 | 8 | 6 | 6 | 6 | 6 | 3 | 3 | 3 | 3 | 4 | 4.1 | 24 | 9 | 1 |
| 24 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 7 | 8 | 8 | 7 | 8 | 7 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 4.3 | 24 | 8 | 2 |
| 25 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 5 | 6 | 8 | 9 | 9 | 11 | 9 | 6 | 4 | 3 | 2 | 2 | 3 | 3 | 4.4 | 24 | 11 | 1 |
| 26 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 4 | 7 | 6 | 5 | 7 | 4 | 5 | 8 | 6 | 4 | 2 | 3 | 2 | 2 | 3.7 | 24 | 8 | 1 |
| 27 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | 2 | 2 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 3 | 2 | 4 | 4 | 3.8 | 24 | 6 | 0 |
| 28 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 5 | 7 | 7 | 7 | 6 | 7 | 5 | 5 | 6 | 3 | 2 | 3 | 3 | 3 | 4.0 | 24 | 7 | 1 |
| 29 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 4 | 7 | 7 | 8 | 5 | 5 | 9 | 7 | 5 | 2 | 3 | 3 | 3 | 3 | 4.0 | 24 | 9 | 1 |
| 30 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 3 | 6 | 7 | 7 | 6 | 6 | 6 | 5 | 8 | 5 | 3 | 4 | 3 | 3 | 4.0 | 24 | 8 | 1 |
| 31 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 | 5 | 6 | 6 | 5 | 6 | 6 | 5 | 5 | 6 | 4 | 3 | 4 | 4 | 3 | 4.0 | 24 | 6 | 1 |
| AVE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 4 | 6 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 4 | 3 | 3 | 3 | 3 | 4.0 | | 8 | 1 |
| N | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | 565 | 24 | |
| MAX | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 2 | 2 | 5 | 7 | 8 | 9 | 9 | 10 | 11 | 9 | 8 | 8 | 6 | 6 | 4 | 4 | 4 | 4.5 | | 11 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

DEMOCRAT

WIND POINTS — JULY, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 13 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 1 | 1 | 0 | 0 | 0 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 2 | 0 | 1 | 0 | 0 | 2 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 9 | 0 | 1 | 0 | 0 | 1 | 4 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 24 |
| 12 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 5 | 2 | 0 | 0 | 1 | 0 | 2 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 4 | 1 | 0 | 0 | 1 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 2 | 0 | 0 | 0 | 3 | 2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 2 | 1 | 1 | 0 | 2 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 2 | 1 | 0 | 0 | 4 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 17 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 10 | 0 | 0 | 0 | 1 | 0 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 9 | 0 | 0 | 1 | 1 | 1 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 11 | 0 | 0 | 0 | 0 | 1 | 3 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 5 | 5 | 0 | 0 | 0 | 1 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 1 | 0 | 0 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 24 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 6 | 1 | 0 | 0 | 0 | 3 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 7 | 0 | 2 | 1 | 0 | 0 | 1 | 4 | 2 | 1 | 0 | 1 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 6 | 0 | 3 | 0 | 1 | 0 | 1 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 1 | 0 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 8 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 2 | 0 | 0 | 0 | 4 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 24 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 8 | 3 | 0 | 1 | 1 | 0 | 3 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 2 | 0 | 0 | 0 | 0 | 3 | 4 | 5 | 0 | 1 | 0 | 0 | 0 | 24 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 4 | 0 | 0 | 0 | 2 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 0 | 0 | 0 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 3 | 1 | 1 | 0 | 0 | 1 | 3 | 6 | 9 | 25 | 176 | 46 | 17 | 6 | 9 | 16 | 64 | 113 | 63 | 4 | 1 | 1 | 0 | 0 | 565 |
| DAYS | 3 | 1 | 1 | 0 | 0 | 1 | 3 | 6 | 6 | 14 | 24 | 15 | 11 | 6 | 8 | 10 | 22 | 24 | 23 | 4 | 1 | 1 | 0 | 0 | |

150 (POINT 11) HAD 176 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

DEMOCRAT

JULY, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | 260 | 250 | 270 | 260 | 270 | 250 | 270 | 240 | 180 | 165 | 150 | 160 | 165 | 222.3 | 13 | 270 | 150 |
| 9 | 150 | 135 | 150 | 160 | 160 | 160 | 150 | 270 | 270 | 270 | 260 | 255 | 250 | 250 | 260 | 255 | 250 | 270 | 270 | 240 | 190 | 160 | 165 | 160 | 212.9 | 24 | 270 | 135 |
| 10 | 150 | 150 | 160 | 160 | 160 | 150 | 140 | 110 | 270 | 270 | 270 | 260 | 260 | 255 | 255 | 240 | 255 | 255 | 270 | 250 | 195 | 170 | 150 | 165 | 207.1 | 24 | 270 | 110 |
| 11 | 150 | 160 | 150 | 155 | 160 | 155 | 140 | 110 | 255 | 280 | 290 | 255 | 250 | 240 | 250 | 255 | 260 | 240 | 255 | 230 | 180 | 150 | 160 | 160 | 203.8 | 24 | 290 | 110 |
| 12 | 155 | 150 | 150 | 145 | 140 | 140 | 140 | 120 | 75 | 250 | 270 | 265 | 260 | 260 | 255 | 255 | 250 | 255 | 260 | 210 | 170 | 160 | 165 | 160 | 194.2 | 24 | 270 | 75 |
| 13 | 155 | 160 | 165 | 160 | 160 | 150 | 160 | 180 | 240 | 280 | 240 | 230 | 240 | 255 | 255 | 270 | 280 | 265 | 255 | 240 | 165 | 165 | 165 | 155 | 207.9 | 24 | 280 | 150 |
| 14 | 150 | 160 | 160 | 160 | 165 | 165 | 160 | 155 | 150 | 260 | 260 | 270 | 260 | 225 | 240 | 230 | 240 | 260 | 255 | 225 | 155 | 150 | 160 | 155 | 198.8 | 24 | 270 | 150 |
| 15 | 150 | 150 | 160 | 165 | 165 | 160 | 150 | 190 | 210 | 260 | 255 | 240 | 250 | 255 | 260 | 270 | 280 | 280 | 280 | 270 | 195 | 185 | 170 | 150 | 212.5 | 24 | 280 | 150 |
| 16 | 150 | 160 | 150 | 155 | 160 | 160 | 140 | 190 | 255 | 270 | 260 | 250 | 240 | 240 | 270 | 280 | 280 | 270 | 260 | 240 | 190 | 195 | 155 | 160 | 211.7 | 24 | 280 | 140 |
| 17 | 160 | 150 | 160 | 155 | 155 | 160 | 150 | 130 | 30 | 0 | 120 | 270 | 260 | 260 | 255 | 255 | 250 | 250 | 245 | 265 | 210 | 150 | 150 | 160 | 181.3 | 24 | 270 | 0 |
| 18 | 155 | 160 | 160 | 150 | 150 | 150 | 140 | 130 | 260 | 240 | 270 | 270 | 270 | 260 | 255 | 240 | 230 | 250 | 220 | 240 | 200 | 155 | 150 | 150 | 202.3 | 24 | 270 | 130 |
| 19 | 155 | 150 | 155 | 150 | 150 | 150 | 145 | 100 | 150 | 240 | 280 | 270 | 265 | 255 | 250 | 255 | 235 | 255 | 260 | 240 | 160 | 160 | 155 | 155 | 197.5 | 24 | 280 | 100 |
| 20 | 155 | 160 | 160 | 155 | 165 | 165 | 140 | 90 | 20 | 5 | 250 | 255 | 240 | 230 | 240 | 245 | 255 | 265 | 270 | 255 | 165 | 165 | 165 | 160 | 182.3 | 24 | 270 | 5 |
| 21 | 155 | 155 | 155 | 160 | 155 | 160 | 160 | 150 | 265 | 270 | 270 | 270 | 260 | 255 | 260 | 265 | 255 | 270 | 270 | 210 | 175 | 160 | 155 | 160 | 210.0 | 24 | 285 | 150 |
| 22 | 150 | 160 | 165 | 165 | 165 | 165 | 160 | 110 | 270 | 280 | 250 | 250 | 255 | 255 | 255 | 255 | 255 | 260 | 250 | 190 | 165 | 165 | 160 | 160 | 204.8 | 24 | 280 | 110 |
| 23 | 155 | 155 | 150 | 150 | 145 | 145 | 140 | 130 | 170 | 180 | 320 | 290 | 260 | 270 | 275 | 260 | 255 | 265 | 245 | 200 | 180 | 155 | 155 | 160 | 198.3 | 24 | 320 | 120 |
| 24 | 160 | 155 | 160 | 150 | 145 | 145 | 140 | 110 | 255 | 180 | 260 | 255 | 250 | 270 | 255 | 260 | 260 | 265 | 270 | 210 | 190 | 180 | 160 | 150 | 201.5 | 24 | 270 | 110 |
| 25 | 150 | 160 | 160 | 155 | 150 | 150 | 150 | 135 | 225 | 210 | 260 | 270 | 265 | 255 | 255 | 270 | 265 | 255 | 235 | 210 | 190 | 135 | 155 | 155 | 200.8 | 24 | 270 | 135 |
| 26 | 155 | 160 | 145 | 155 | 150 | 150 | 145 | 140 | 245 | 255 | 240 | 270 | 280 | 280 | 255 | 150 | 0 | 265 | 260 | 235 | 160 | 160 | 130 | 130 | 188.1 | 24 | 280 | 0 |
| 27 | 155 | 160 | 155 | 165 | 160 | 160 | 160 | 240 | 290 | 280 | 270 | 260 | 255 | 250 | 255 | 250 | 255 | 270 | 275 | 240 | 175 | 165 | 180 | 185 | 217.1 | 24 | 290 | 155 |
| 28 | 150 | 165 | 160 | 160 | 160 | 165 | 165 | 105 | 150 | 280 | 270 | 255 | 255 | 255 | 250 | 260 | 240 | 250 | 255 | 220 | 200 | 150 | 160 | 150 | 201.3 | 24 | 280 | 105 |
| 29 | 150 | 150 | 155 | 160 | 165 | 160 | 135 | 110 | 300 | 270 | 270 | 255 | 255 | 260 | 265 | 240 | 250 | 270 | 270 | 270 | 250 | 165 | 150 | 160 | 211.9 | 24 | 300 | 110 |
| 30 | 165 | 160 | 165 | 160 | 145 | 145 | 150 | 90 | 240 | 120 | 270 | 260 | 250 | 255 | 230 | 240 | 260 | 225 | 260 | 255 | 165 | 160 | 155 | 165 | 195.4 | 24 | 270 | 90 |
| 31 | 160 | 160 | 165 | 165 | 160 | 165 | 165 | 155 | 255 | 240 | 255 | 255 | 255 | 240 | 240 | 230 | 225 | 230 | 255 | 240 | 160 | 165 | 165 | 160 | 203.5 | 24 | 260 | 155 |
| AVE | 154 | 156 | 157 | 157 | 156 | 155 | 149 | 141 | 210 | 227 | 259 | 260 | 254 | 254 | 254 | 250 | 243 | 259 | 258 | 232 | 181 | 161 | 158 | 158 | 202.4 | | 278 | 110 |
| N | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | 565 | 24 | |
| MAX | 165 | 165 | 165 | 165 | 165 | 165 | 165 | 270 | 300 | 280 | 320 | 290 | 280 | 280 | 275 | 280 | 280 | 280 | 280 | 270 | 250 | 195 | 180 | 185 | 222.3 | | 320 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION DISTANCE

DEMOCRAT

WIND POINTS JULY, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 3 | 0 | 0 | 0 | 17 | 11 | 19 | 0 | 0 | 0 | 0 | 0 | 13 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 20 | 3 | 3 | 0 | 0 | 0 | 25 | 31 | 20 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 20 | 6 | 0 | 3 | 0 | 0 | 11 | 40 | 12 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 26 | 0 | 3 | 0 | 0 | 5 | 28 | 27 | 2 | 3 | 0 | 0 | 0 | 0 | 24 |
| 12 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 12 | 15 | 5 | 0 | 0 | 4 | 0 | 8 | 43 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 12 | 1 | 0 | 0 | 5 | 14 | 22 | 13 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 6 | 0 | 0 | 0 | 13 | 11 | 24 | 7 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 8 | 5 | 6 | 1 | 0 | 10 | 17 | 32 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 24 | 0 | 4 | 3 | 0 | 0 | 21 | 14 | 27 | 0 | 0 | 0 | 0 | 0 | 24 |
| 17 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 31 | 0 | 0 | 0 | 3 | 0 | 17 | 34 | 6 | 0 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 27 | 0 | 0 | 2 | 5 | 5 | 19 | 16 | 15 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 35 | 0 | 0 | 0 | 0 | 5 | 11 | 30 | 8 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 17 | 17 | 0 | 0 | 0 | 5 | 22 | 21 | 6 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 3 | 0 | 0 | 4 | 0 | 0 | 33 | 24 | 1 | 0 | 0 | 0 | 0 | 24 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 17 | 18 | 3 | 0 | 0 | 0 | 16 | 38 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 33 | 0 | 5 | 3 | 0 | 0 | 6 | 27 | 17 | 4 | 0 | 3 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 8 | 19 | 0 | 9 | 0 | 4 | 0 | 8 | 40 | 14 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 27 | 0 | 2 | 0 | 5 | 5 | 0 | 46 | 17 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 24 | 0 | 0 | 0 | 0 | 4 | 6 | 23 | 18 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 8 | 8 | 0 | 0 | 0 | 16 | 23 | 18 | 2 | 0 | 0 | 0 | 0 | 24 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 23 | 9 | 0 | 2 | 3 | 0 | 16 | 34 | 7 | 0 | 0 | 0 | 0 | 0 | 24 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 21 | 6 | 0 | 0 | 0 | 0 | 17 | 27 | 20 | 0 | 1 | 0 | 0 | 0 | 24 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 15 | 12 | 0 | 0 | 0 | 11 | 14 | 32 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 20 | 0 | 0 | 0 | 16 | 15 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| TOT(2) | 9 | 2 | 2 | 0 | 0 | 1 | 3 | 7 | 11 | 47 | 524 | 137 | 44 | 17 | 29 | 74 | 328 | 682 | 310 | 10 | 1 | 3 | 0 | 0 | 2262 |
| DAYS | 3 | 1 | 1 | 0 | 0 | 1 | 3 | 4 | 6 | 14 | 24 | 15 | 11 | 6 | 8 | 10 | 22 | 24 | 23 | 4 | 1 | 1 | 0 | 0 | |

255 (POINT 18) HAD 682 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

DEMOCRAT

DAY — HOUR PST — AUGUST, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 2 | 1 | 6 | 7 | 7 | 7 | 6 | | | | | | | | | | | 4.3 | 14 | 7 | 1 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | 7 | 7 | 7 | 8 | 9 | 9 | 7 | 7 | 5 | 3 | 3 | 3 | 3 | 4 | 5.9 | 14 | 9 | 3 |
| 5 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 4 | 7 | 8 | 7 | 7 | 6 | 6 | 6 | 3 | 2 | 3 | 3 | 3 | 3.8 | 24 | 8 | 1 |
| 6 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 4 | 4 | 3 | 1 | 2 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2.7 | 24 | 4 | 1 |
| 7 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 4 | 3 | 5 | 6 | 5 | 6 | 7 | 6 | 6 | 3 | 3 | 4 | 3 | 3 | 3.7 | 24 | 7 | 2 |
| 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 5 | 3 | 3 | 3 | 3 | 3 | 3.9 | 24 | 7 | 1 |
| 9 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 1 | 1 | 2 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 3 | 3 | 3 | 3 | 3 | 4.2 | 24 | 7 | 1 |
| 10 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 1 | 1 | 2 | 6 | 6 | 7 | 8 | 8 | 7 | 8 | 7 | 6 | 3 | 3 | 3 | 4 | 4 | 4.5 | 24 | 8 | 1 |
| 11 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 5 | 7 | 8 | 8 | 8 | 8 | 8 | 7 | 6 | 7 | 5 | 2 | 3 | 4 | 3 | 4.8 | 24 | 8 | 2 |
| 12 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 4 | 8 | 9 | 8 | 9 | 7 | 5 | 5 | 3 | 2 | 3 | 3 | 3 | 4.1 | 24 | 9 | 1 |
| 13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | | 7 | 11 | 10 | 8 | 6 | 6 | 7 | 5 | 3 | 2 | 3 | 4 | 3 | 4.3 | 23 | 11 | 1 |
| 14 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | 1 | 2 | 3 | 6 | 8 | 7 | 7 | 7 | 8 | 6 | 4 | 3 | 2 | 3 | 3 | 4 | 3.9 | 24 | 8 | 0 |
| 15 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 6 | 6 | 9 | 10 | 8 | 6 | 6 | 4 | 3 | 2 | 3 | 4 | 3 | 4.0 | 24 | 10 | 1 |
| 16 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | | | | | | | | | | | | | 2.6 | 12 | 4 | 1 |
| 17 | | | | | | | 3 | 2 | 1 | 1 | 2 | 3 | 6 | 9 | 12 | 11 | 9 | 6 | 6 | 3 | 2 | 3 | 3 | 3 | 4.7 | 18 | 12 | 1 |
| 18 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 5 | 5 | | 8 | 8 | 7 | 7 | 5 | 4 | 3 | 2 | 2 | 3 | 3 | 4.0 | 23 | 8 | 2 |
| 19 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 4 | 6 | 5 | 10 | 9 | 7 | 7 | 6 | 4 | 1 | 2 | 2 | 3 | 3 | 3.9 | 24 | 10 | 1 |
| 20 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 5 | 7 | 8 | 8 | 7 | 6 | 5 | 3 | 1 | 2 | 3 | 3 | 3 | 3.7 | 24 | 8 | 1 |
| 21 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 5 | 7 | 6 | 7 | 5 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3.2 | 24 | 7 | 1 |
| 22 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3.3 | 24 | 6 | 1 |
| 23 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 1 | 1 | 2 | 5 | 5 | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 2 | 3 | 3 | 2 | 3 | 3.5 | 24 | 6 | 1 |
| 24 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 0 | 0 | 5 | 6 | 5 | 5 | 6 | 5 | 5 | 4 | 7 | 5 | 2 | 2 | 3 | 2 | 2 | 3.5 | 24 | 7 | 0 |
| 25 | 3 | 3 | 2 | 2 | 3 | 3 | 6 | 2 | 1 | 1 | 4 | 7 | 6 | 6 | | 5 | 5 | 6 | 3 | 3 | 2 | 4 | 4 | 3 | 3.7 | 23 | 7 | 1 |
| 26 | 4 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 5 | 9 | 11 | 9 | 8 | 7 | 5 | 5 | 3 | 2 | 3 | 3 | 4 | 4.2 | 24 | 11 | 1 |
| 27 | 3 | 4 | 2 | 3 | 3 | 2 | 3 | 1 | 2 | 2 | 3 | 6 | 8 | 10 | 9 | 7 | 5 | 3 | 4 | 6 | 1 | 2 | 3 | 2 | 3.9 | 24 | 10 | 1 |
| 28 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 4 | 8 | 6 | 4 | 4 | 6 | 3 | 1 | 3 | 3 | 2 | 1 | 3.0 | 24 | 8 | 1 |
| 29 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 | 5 | 7 | 7 | 7 | 5 | 6 | 6 | 6 | 5 | 3 | 3 | 3 | 3 | 3 | 4.0 | 24 | 7 | 1 |
| 30 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 1 | 1 | 2 | 4 | 6 | 8 | 7 | 8 | 7 | 6 | 5 | 3 | 2 | 4 | 4 | 3 | 4 | 4.1 | 24 | 8 | 1 |
| 31 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 4 | 6 | 7 | 6 | 7 | 6 | 4 | 2 | 3 | 3 | 3 | 2 | 3.5 | 24 | 7 | 2 |
| AVE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 4 | 5 | 7 | 8 | 7 | 7 | 6 | 6 | 4 | 3 | 2 | 3 | 3 | 3 | 3.9 | | 8 | 1 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 28 | 28 | 28 | 28 | 28 | 29 | 27 | 28 | 26 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | | 655 | 29 | |
| MAX | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 3 | 3 | 6 | 7 | 8 | 11 | 11 | 12 | 11 | 9 | 7 | 7 | 6 | 4 | 4 | 4 | 4 | 5.9 | | 12 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

DEMOCRAT

WIND POINTS — AUGUST, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 14 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 9 | 1 | 0 | 1 | 1 | 1 | 2 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 24 |
| 6 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 8 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 1 | 4 | 1 | 0 | 1 | 0 | 3 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 24 |
| 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 1 | 1 | 0 | 0 | 0 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 3 | 0 | 0 | 0 | 0 | 2 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 4 | 0 | 0 | 1 | 0 | 1 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 24 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 3 | 0 | 0 | 0 | 1 | 2 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 3 | 1 | 1 | 2 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 2 | 1 | 1 | 0 | 1 | 2 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 1 | 0 | 4 | 0 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 2 | 0 | 2 | 0 | 1 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 18 |
| 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 9 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 24 |
| 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 6 | 1 | 0 | 0 | 2 | 0 | 4 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 2 | 1 | 0 | 0 | 2 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 8 | 2 | 0 | 0 | 2 | 0 | 4 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 1 | 0 | 1 | 1 | 2 | 4 | 2 | 0 | 0 | 0 | 1 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 1 | 1 | 1 | 1 | 0 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 24 |
| 25 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 9 | 1 | 1 | 1 | 0 | 0 | 2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 7 | 3 | 0 | 0 | 1 | 1 | 3 | 5 | 1 | 0 | 0 | 0 | 1 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 7 | 1 | 0 | 0 | 1 | 1 | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 6 | 1 | 1 | 0 | 3 | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 24 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 2 | 0 | 0 | 0 | 4 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 1 | 0 | 1 | 1 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 3 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 24 |
| TOT(2) | 35 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 13 | 44 | 205 | 60 | 17 | 7 | 25 | 13 | 65 | 83 | 70 | 6 | 6 | 1 | 3 | 0 | 658 |
| DAYS | 15 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 11 | 19 | 28 | 26 | 14 | 7 | 15 | 12 | 25 | 27 | 27 | 5 | 5 | 1 | 3 | 0 | |

150 (POINT 11) HAD 205 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

DEMOCRAT

DAY — HOUR PST — AUGUST, 1982

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160 | 160 | 165 | 160 | 160 | 160 | 165 | 160 | 285 | 270 | 260 | 260 | 260 | 260 | | | | | | | | | | | 206.1 | 14 | 285 | 160 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | 270 | 240 | 255 | 250 | 250 | 240 | 255 | 260 | 260 | 180 | 180 | 165 | 170 | 228.8 | 13 | 270 | 165 |
| 5 | 165 | 155 | 155 | 150 | 150 | 150 | 150 | 145 | 0 | 0 | 295 | 225 | 290 | 260 | 260 | 240 | 265 | 240 | 195 | 210 | 120 | 155 | 150 | 150 | 178.1 | 24 | 295 | 0 |
| 6 | 150 | 150 | 150 | 150 | 150 | 140 | 135 | 140 | 260 | 225 | 0 | 280 | 270 | 270 | 245 | 120 | 90 | 0 | 150 | 135 | 165 | 160 | 165 | 150 | 160.4 | 24 | 280 | 0 |
| 7 | 165 | 150 | 140 | 145 | 120 | 120 | 145 | 140 | 0 | 0 | 0 | 0 | 250 | 260 | 240 | 210 | 270 | 300 | 270 | 250 | 180 | 165 | 165 | 165 | 160.4 | 24 | 300 | 0 |
| 8 | 155 | 160 | 150 | 150 | 140 | 150 | 150 | 150 | 180 | 0 | 0 | 250 | 255 | 255 | 255 | 240 | 270 | 240 | 290 | 270 | 150 | 160 | 150 | 170 | 180.8 | 24 | 290 | 0 |
| 9 | 155 | 160 | 155 | 170 | 150 | 150 | 140 | 140 | 240 | 270 | 260 | 270 | 255 | 255 | 250 | 255 | 255 | 260 | 260 | 265 | 160 | 165 | 165 | 160 | 206.9 | 24 | 270 | 140 |
| 10 | 160 | 150 | 170 | 165 | 170 | 150 | 150 | 150 | 260 | 300 | 280 | 260 | 255 | 260 | 270 | 220 | 260 | 270 | 260 | 240 | 160 | 170 | 160 | 140 | 209.6 | 24 | 300 | 140 |
| 11 | 150 | 160 | 160 | 165 | 160 | 170 | 165 | 155 | 270 | 270 | 270 | 260 | 255 | 260 | 265 | 250 | 250 | 255 | 265 | 270 | 230 | 150 | 155 | 150 | 212.9 | 24 | 270 | 150 |
| 12 | 155 | 155 | 165 | 165 | 145 | 160 | 140 | 130 | 0 | 0 | 0 | 0 | 270 | 270 | 260 | 270 | 270 | 210 | 210 | 200 | 180 | 170 | 160 | 160 | 160.2 | 24 | 270 | 0 |
| 13 | 140 | 165 | 150 | 155 | 160 | 140 | 150 | 135 | 270 | 0 | 0 | 270 | 270 | 270 | 260 | 230 | 240 | 270 | 240 | 200 | 180 | 150 | 160 | 165 | 182.1 | 24 | 270 | 0 |
| 14 | 165 | 155 | 165 | 160 | 160 | 165 | 160 | 190 | 210 | 270 | 270 | 270 | 270 | 260 | 240 | 220 | 240 | 250 | 240 | 220 | 210 | 150 | 150 | 160 | 206.3 | 24 | 270 | 150 |
| 15 | 160 | 150 | 150 | 155 | 150 | 150 | 150 | 140 | 140 | 275 | 270 | 270 | 270 | 270 | 270 | 270 | 250 | 270 | 220 | 215 | 195 | 150 | 160 | 150 | 202.1 | 24 | 275 | 140 |
| 16 | 160 | 150 | 160 | 150 | 145 | 150 | 150 | 145 | 30 | 275 | 0 | 0 | 270 | | | | | | | | | | | | 138.5 | 13 | 270 | 0 |
| 17 | | | | | | | 150 | 155 | 125 | 0 | 315 | 180 | 270 | 240 | 270 | 270 | 265 | 220 | 260 | 210 | 180 | 150 | 160 | 150 | 198.3 | 18 | 315 | 0 |
| 18 | 160 | 170 | 150 | 150 | 155 | 140 | 160 | 155 | 150 | 0 | 0 | 0 | 0 | 270 | 270 | 270 | 265 | 265 | 240 | 150 | 195 | 150 | 155 | 155 | 157.3 | 24 | 270 | 0 |
| 19 | 150 | 120 | 150 | 150 | 150 | 150 | 150 | 140 | 165 | 0 | 0 | 300 | 270 | 270 | 270 | 225 | 255 | 240 | 265 | 285 | 150 | 135 | 150 | 155 | 179.0 | 24 | 300 | 0 |
| 20 | 135 | 135 | 140 | 135 | 150 | 140 | 150 | 150 | 130 | 0 | 0 | 240 | 270 | 270 | 265 | 240 | 240 | 240 | 210 | 210 | 175 | 150 | 150 | 150 | 169.8 | 24 | 270 | 0 |
| 21 | 150 | 145 | 165 | 145 | 150 | 150 | 140 | 140 | 0 | 0 | 0 | 270 | 270 | 240 | 260 | 240 | 240 | 230 | 225 | 180 | 165 | 150 | 150 | 150 | 164.8 | 24 | 270 | 0 |
| 22 | 160 | 165 | 150 | 150 | 130 | 145 | 150 | 150 | 90 | 0 | 0 | 270 | 240 | 250 | 265 | 210 | 270 | 250 | 240 | 210 | 165 | 155 | 150 | 150 | 171.5 | 24 | 270 | 0 |
| 23 | 150 | 165 | 160 | 170 | 150 | 155 | 150 | 165 | 180 | 330 | 240 | 270 | 210 | 265 | 240 | 260 | 225 | 255 | 255 | 270 | 150 | 155 | 155 | 155 | 203.3 | 24 | 330 | 150 |
| 24 | 155 | 165 | 165 | 160 | 150 | 150 | 155 | 180 | 210 | 265 | 260 | 285 | 270 | 270 | 255 | 255 | 230 | 260 | 260 | 200 | 160 | 150 | 150 | 155 | 204.8 | 24 | 285 | 150 |
| 25 | 150 | 165 | 100 | 150 | 160 | 160 | 150 | 150 | 130 | 0 | 0 | 265 | 260 | 240 | 260 | 265 | 255 | 270 | 240 | 200 | 180 | 155 | 155 | 160 | 175.8 | 24 | 270 | 0 |
| 26 | 170 | 165 | 160 | 170 | 160 | 150 | 140 | 130 | 250 | 330 | 270 | 255 | 265 | 265 | 265 | 245 | 240 | 240 | 230 | 220 | 160 | 150 | 155 | 160 | 206.5 | 24 | 330 | 130 |
| 27 | 160 | 155 | 150 | 150 | 150 | 140 | 135 | 90 | 240 | 240 | 265 | 265 | 260 | 245 | 240 | 265 | 225 | 240 | 240 | 270 | 210 | 165 | 160 | 150 | 200.4 | 24 | 270 | 90 |
| 28 | 150 | 150 | 155 | 140 | 130 | 140 | 140 | 150 | 210 | 180 | 330 | 300 | 240 | 250 | 260 | 300 | 240 | 240 | 210 | 210 | 150 | 165 | 155 | 130 | 196.9 | 24 | 330 | 130 |
| 29 | 155 | 160 | 165 | 155 | 170 | 160 | 155 | 150 | 180 | 280 | 245 | 260 | 265 | 240 | 245 | 260 | 265 | 270 | 250 | 185 | 165 | 160 | 160 | 155 | 202.3 | 24 | 280 | 150 |
| 30 | 165 | 165 | 160 | 160 | 170 | 170 | 165 | 150 | 180 | 270 | 270 | 270 | 250 | 245 | 250 | 265 | 265 | 240 | 225 | 210 | 160 | 155 | 165 | 160 | 203.5 | 24 | 270 | 150 |
| 31 | 160 | 160 | 150 | 150 | 150 | 135 | 150 | 135 | 135 | 0 | 300 | 270 | 270 | 280 | 265 | 265 | 240 | 255 | 260 | 150 | 165 | 170 | 165 | 160 | 189.2 | 24 | 300 | 0 |
| AVE | 156 | 156 | 154 | 155 | 151 | 150 | 150 | 147 | 161 | 143 | 157 | 227 | 251 | 259 | 257 | 245 | 245 | 242 | 240 | 218 | 172 | 157 | 157 | 155 | 187.8 | | 285 | 69 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 28 | 28 | 28 | 28 | 28 | 29 | 29 | 28 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | | 658 | 29 | |
| MAX | 170 | 170 | 170 | 170 | 170 | 170 | 165 | 190 | 285 | 330 | 330 | 300 | 290 | 280 | 270 | 300 | 270 | 300 | 290 | 285 | 230 | 180 | 165 | 170 | 228.8 | | 330 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

DEMOCRAT

WIND POINTS — AUGUST, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 6 | 0 | 0 | 0 | 0 | 0 | 27 | 6 | 1 | 0 | 0 | 0 | 0 | 14 |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 6 | 0 | 0 | 0 | 32 | 23 | 7 | 0 | 0 | 0 | 0 | 0 | 18 |
| 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 26 | 3 | 0 | 6 | 3 | 4 | 13 | 21 | 0 | 9 | 0 | 0 | 0 | 0 | 24 |
| 6 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 9 | 23 | 6 | 0 | 0 | 0 | 2 | 1 | 1 | 11 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 10 | 2 | 13 | 3 | 0 | 6 | 0 | 13 | 6 | 13 | 0 | 6 | 0 | 0 | 0 | 24 |
| 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 28 | 3 | 1 | 0 | 0 | 0 | 21 | 20 | 9 | 5 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 24 | 9 | 0 | 0 | 0 | 0 | 8 | 47 | 9 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 22 | 13 | 0 | 0 | 7 | 0 | 3 | 36 | 21 | 0 | 2 | 0 | 0 | 0 | 24 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 10 | 0 | 0 | 0 | 2 | 15 | 45 | 19 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 16 | 9 | 2 | 3 | 10 | 0 | 0 | 8 | 33 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 19 | 6 | 2 | 3 | 0 | 6 | 11 | 8 | 36 | 0 | 0 | 0 | 0 | 0 | 23 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 9 | 0 | 0 | 13 | 0 | 25 | 7 | 19 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 31 | 0 | 0 | 2 | 7 | 0 | 6 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 17 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 14 | 0 | 5 | 0 | 9 | 0 | 9 | 15 | 29 | 0 | 0 | 2 | 0 | 0 | 18 |
| 18 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 31 | 3 | 0 | 2 | 0 | 0 | 4 | 12 | 23 | 0 | 0 | 0 | 0 | 0 | 23 |
| 19 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 25 | 2 | 0 | 0 | 0 | 7 | 6 | 11 | 24 | 1 | 6 | 0 | 0 | 0 | 24 |
| 20 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 16 | 2 | 0 | 0 | 4 | 0 | 23 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 16 | 5 | 2 | 0 | 0 | 6 | 15 | 7 | 12 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 19 | 6 | 0 | 0 | 8 | 0 | 21 | 6 | 11 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 5 | 1 | 0 | 6 | 5 | 10 | 23 | 7 | 0 | 0 | 0 | 2 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 6 | 0 | 2 | 0 | 4 | 0 | 33 | 11 | 5 | 0 | 0 | 0 | 0 | 24 |
| 25 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 30 | 3 | 2 | 3 | 0 | 0 | 9 | 23 | 6 | 0 | 0 | 0 | 0 | 0 | 23 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 19 | 10 | 0 | 0 | 3 | 5 | 13 | 42 | 2 | 0 | 0 | 0 | 2 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 70 | 2 | 0 | 0 | 1 | 5 | 30 | 24 | 6 | 0 | 0 | 0 | 0 | 0 | 24 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 16 | 3 | 1 | 0 | 5 | 0 | 22 | 6 | 0 | 0 | 6 | 0 | 2 | 0 | 24 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 9 | 4 | 0 | 0 | 0 | 22 | 26 | 9 | 0 | 0 | 0 | 0 | 0 | 24 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 20 | 1 | 0 | 2 | 3 | 28 | 13 | 12 | 0 | 0 | 0 | 0 | 0 | 24 |
| 31 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 22 | 9 | 0 | 0 | 0 | 0 | 7 | 23 | 13 | 0 | 2 | 0 | 0 | 0 | 24 |
| TOT(2) | 89 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 27 | 101 | 594 | 179 | 30 | 21 | 84 | 51 | 367 | 521 | 412 | 21 | 22 | 2 | 6 | 0 | 2531 |
| DAYS | 15 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 11 | 19 | 28 | 24 | 12 | 7 | 14 | 12 | 25 | 27 | 26 | 5 | 5 | 1 | 3 | 0 | |

150 (POINT 11) HAD 594 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

DEMOCRAT

DAY — HOUR PST — SEPTEMBER, 1982

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 6 | 7 | 7 | 7 | 8 | 7 | 3 | 2 | 3 | 3 | 3 | 3 | 3.6 | 24 | 8 | 1 |
| 2 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 4 | | 7 | 6 | 9 | 8 | 9 | 8 | 3 | 3 | 4 | 3 | 3 | 3.9 | 23 | 9 | 1 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 4 | 8 | 6 | 7 | 10 | 5 | 6 | 5 | 6 | 3 | 3 | 3 | 3 | 3 | 4 | 4.2 | 24 | 10 | 1 |
| 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 1 | 1 | 4 | 7 | 8 | 8 | 7 | 7 | 7 | 9 | 5 | 3 | 3 | 3 | 4 | 3 | 4.4 | 24 | 9 | 1 |
| 5 | 3 | 3 | 2 | 3 | 2 | 3 | 4 | 3 | 2 | 3 | 3 | 4 | 5 | 4 | 5 | 7 | 7 | 5 | 6 | 3 | 3 | 3 | 3 | 3 | 3.7 | 24 | 7 | 2 |
| 6 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 1 | 2 | 2 | 3 | 5 | 7 | 7 | 7 | 5 | 4 | 2 | 3 | 3 | 4 | 3 | 3 | 3.6 | 24 | 7 | 1 |
| 7 | 3 | 3 | 1 | 2 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 5 | 6 | 3 | 1 | 4 | 1 | 3 | 3 | 3 | 2 | 2 | 2.5 | 24 | 6 | 1 |
| 8 | 3 | 4 | 2 | 3 | 4 | 3 | 4 | 2 | 3 | 5 | 5 | 6 | 5 | 6 | 7 | 6 | 5 | 7 | 5 | 2 | 2 | 3 | 1 | 1 | 3.9 | 24 | 7 | 1 |
| 9 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 1 | 0 | 3 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 2 | 1 | 2 | 1 | 1 | | 2.6 | 23 | 5 | 0 |
| 10 | | | | | | | | | | 3 | 4 | 5 | 6 | 5 | 6 | 8 | 6 | 6 | 5 | 4 | 5 | 3 | 3 | 2 | 4.7 | 15 | 8 | 2 |
| 11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 5 | 9 | 9 | 7 | 6 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 4.0 | 24 | 9 | 1 |
| 12 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 6 | 5 | 6 | 5 | 7 | 7 | 5 | 4 | 3 | 4 | 3 | 2 | 4 | 3.7 | 24 | 7 | 1 |
| 13 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3.8 | 24 | 7 | 1 |
| 14 | 3 | 3 | 3 | | | | 2 | 1 | 1 | 2 | 5 | 6 | 8 | 6 | 6 | 5 | | | | 3 | 3 | 3 | 3 | 2 | 3.6 | 18 | 8 | 1 |
| 15 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | 2 | 6 | 8 | 8 | | 7 | 9 | 6 | 6 | 5 | 4 | 3 | 2 | 3 | | | | 4.3 | 20 | 9 | 0 |
| 16 | | | | | | | | | | | | | | | 4 | 3 | 4 | 7 | 4 | 2 | 3 | 3 | 2 | 2 | 3.4 | 10 | 7 | 2 |
| 17 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | .6 | | 6 | 6 | 7 | 9 | 8 | 7 | 5 | 2 | 3 | 2 | 3 | 2 | 3 | 3.8 | 23 | 9 | 2 |
| 18 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 4 | 3 | 2 | 6 | 6 | 6 | 4 | 3 | 2 | 3 | 3 | 2 | 3 | 2.6 | 24 | 6 | 1 |
| 19 | 2 | 3 | 2 | 3 | 3 | .3 | 1 | 2 | 5 | 4 | 6 | 6 | 8 | 5 | 5 | 6 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 3.4 | 24 | 8 | 1 |
| 20 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 | 2 | 7 | 7 | 8 | 7 | 6 | 5 | 5 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3.8 | 24 | 8 | 1 |
| 21 | 3 | 3 | 2 | 4 | 4 | 5 | 3 | 3 | 4 | 6 | 5 | 5 | 7 | 7 | 10 | 7 | 5 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4.4 | 24 | 10 | 2 |
| 22 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 3 | 2 | 6 | 5 | 6 | 5 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3.7 | 24 | 6 | 2 |
| 23 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 1 | 2 | 4 | | | | | | | | | | | | | | | 3.2 | 10 | 4 | 1 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | 2 | 3 | 6 | 10 | 7 | 5 | 5 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 4.1 | 14 | 10 | 2 |
| AVE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 4 | 5 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3.7 | | 8 | 1 |
| N | 21 | 21 | 21 | 20 | 20 | 20 | 21 | 21 | 21 | 22 | 21 | 21 | 21 | 22 | 23 | 23 | 22 | 22 | 22 | 23 | 23 | 22 | 22 | 21 | | 516 | 23 | |
| MAX | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 6 | 8 | 8 | 9 | 9 | 10 | 10 | 9 | 8 | 9 | 8 | 4 | 5 | 4 | 4 | 4 | 4.7 | | 10 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

DEMOCRAT

WIND POINTS — SEPTEMBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 8 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 9 | 0 | 1 | 0 | 0 | 0 | 3 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 1 | 0 | 0 | 1 | 1 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 1 | 2 | 2 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 4 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 24 |
| 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 1 | 1 | 0 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 9 | 0 | 1 | 0 | 2 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 9 | 1 | 0 | 0 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 2 | 2 | 1 | 4 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 5 | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 15 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 3 | 0 | 0 | 1 | 2 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 10 | 1 | 0 | 0 | 1 | 0 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 4 | 0 | 0 | 0 | 2 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 3 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 20 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 10 |
| 17 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 7 | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 23 |
| 18 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 10 | 3 | 2 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 2 | 1 | 0 | 1 | 1 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 1 | 0 | 0 | 0 | 2 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 0 | 0 | 0 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 14 |
| TOT(2) | 22 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 12 | 54 | 183 | 26 | 10 | 5 | 11 | 30 | 57 | 67 | 32 | 2 | 1 | 2 | 0 | 0 | 517 |
| DAYS | 11 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 9 | 19 | 24 | 15 | 8 | 4 | 10 | 14 | 20 | 22 | 14 | 2 | 1 | 2 | 0 | 0 | |

150 (POINT 11) HAD 183 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

DEMOCRAT

SEPTEMBER, 1982

| DAY | HOUR PST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
| 1 | 165 | 150 | 155 | 160 | 145 | 135 | 135 | 135 | 130 | 0 | 300 | 270 | 265 | 250 | 260 | 260 | 270 | 270 | 240 | 150 | 155 | 155 | 150 | 155 | 185.8 | 24 | 300 | 0 |
| 2 | 160 | 155 | 150 | 150 | 145 | 135 | 145 | 130 | 150 | 270 | 250 | 270 | 270 | 240 | 240 | 260 | 260 | 260 | 240 | 190 | 150 | 150 | 150 | 155 | 195.6 | 24 | 270 | 130 |
| 3 | 150 | 150 | 150 | 145 | 140 | 140 | 140 | 140 | 250 | 260 | 255 | 250 | 250 | 260 | 240 | 240 | 240 | 230 | 210 | 160 | 160 | 165 | 155 | 160 | 193.3 | 24 | 260 | 140 |
| 4 | 160 | 150 | 160 | 155 | 160 | 155 | 155 | 150 | 230 | 210 | 270 | 270 | 260 | 255 | 240 | 230 | 255 | 260 | 255 | 240 | 150 | 155 | 155 | 150 | 201.3 | 24 | 270 | 150 |
| 5 | 155 | 140 | 130 | 140 | 135 | 140 | 150 | 140 | 120 | 320 | 290 | 250 | 260 | 265 | 260 | 240 | 230 | 240 | 235 | 210 | 160 | 145 | 155 | 140 | 193.8 | 24 | 320 | 120 |
| 6 | 140 | 130 | 135 | 140 | 140 | 140 | 145 | 150 | 120 | 0 | 280 | 270 | 260 | 230 | 230 | 240 | 240 | 200 | 190 | 150 | 150 | 160 | 160 | 160 | 173.3 | 24 | 280 | 0 |
| 7 | 150 | 160 | 130 | 145 | 140 | 140 | 150 | 150 | 160 | 150 | 180 | 0 | 270 | 265 | 265 | 260 | 220 | 260 | 210 | 150 | 150 | 150 | 130 | 140 | 171.9 | 24 | 270 | 0 |
| 8 | 150 | 150 | 150 | 140 | 145 | 150 | 155 | 120 | 0 | 0 | 0 | 0 | 270 | 240 | 260 | 250 | 250 | 255 | 240 | 150 | 160 | 160 | 160 | 165 | 155.0 | 24 | 270 | 0 |
| 9 | 155 | 210 | 230 | 180 | 150 | 150 | 150 | 140 | 260 | 240 | 250 | 230 | 250 | 245 | 240 | 260 | 240 | 230 | 225 | 200 | 200 | 180 | 175 | | 208.3 | 23 | 260 | 140 |
| 10 | | | | | | | | | | 230 | 240 | 230 | 225 | 225 | 230 | 255 | 255 | 255 | 250 | 220 | 205 | 190 | 295 | 160 | 231.0 | 15 | 295 | 160 |
| 11 | 160 | 155 | 165 | 150 | 145 | 145 | 155 | 145 | 255 | 270 | 260 | 265 | 260 | 250 | 230 | 230 | 240 | 220 | 240 | 160 | 155 | 165 | 160 | 165 | 197.7 | 24 | 270 | 145 |
| 12 | 160 | 155 | 150 | 150 | 150 | 145 | 145 | 130 | 150 | 255 | 270 | 255 | 240 | 240 | 240 | 240 | 255 | 240 | 210 | 160 | 155 | 160 | 165 | 160 | 190.8 | 24 | 270 | 130 |
| 13 | 160 | 155 | 160 | 160 | 160 | 160 | 150 | 155 | 240 | 240 | 255 | 250 | 235 | 250 | 230 | 240 | 260 | 250 | 260 | 165 | 165 | 160 | 165 | 165 | 199.6 | 24 | 260 | 150 |
| 14 | 160 | 165 | 165 | | | | 150 | 140 | 260 | 255 | 260 | 240 | 255 | 240 | 260 | 240 | | | | 150 | 165 | 150 | 160 | 155 | 198.3 | 18 | 260 | 140 |
| 15 | 150 | 150 | 150 | 155 | 150 | 150 | 160 | 270 | 270 | 260 | 270 | | 270 | 270 | 270 | 260 | 260 | 260 | 255 | 175 | 165 | | | | 216.0 | 20 | 270 | 150 |
| 16 | | | | | | | | | | | | | | | 270 | 270 | 265 | 270 | 270 | 165 | 150 | 145 | 150 | 150 | 210.5 | 10 | 270 | 145 |
| 17 | 160 | 145 | 140 | 140 | 155 | 140 | 150 | 135 | 120 | 40 | | 0 | 320 | 280 | 250 | 260 | 260 | 270 | 200 | 170 | 160 | 150 | 160 | 160 | 170.2 | 23 | 320 | 0 |
| 18 | 150 | 160 | 170 | 160 | 150 | 155 | 165 | 180 | 150 | 190 | 0 | 0 | 90 | 0 | 250 | 230 | 250 | 225 | 220 | 170 | 150 | 155 | 160 | 160 | 153.8 | 24 | 250 | 0 |
| 19 | 155 | 160 | 150 | 150 | 160 | 165 | 150 | 260 | 260 | 260 | 260 | 265 | 255 | 245 | 245 | 230 | 210 | 190 | 170 | 160 | 150 | 150 | 140 | 160 | 195.8 | 24 | 265 | 140 |
| 20 | 155 | 160 | 150 | 150 | 150 | 145 | 140 | 150 | 0 | 260 | 270 | 270 | 260 | 260 | 240 | 230 | 225 | 170 | 150 | 160 | 150 | 155 | 150 | 150 | 179.2 | 24 | 270 | 0 |
| 21 | 150 | 150 | 150 | 155 | 160 | 150 | 150 | 0 | 0 | 0 | 0 | 0 | 270 | 270 | 260 | 250 | 240 | 225 | 150 | 155 | 150 | 150 | 145 | 150 | 145.0 | 24 | 270 | 0 |
| 22 | 145 | 150 | 150 | 150 | 155 | 150 | 150 | 150 | 0 | 0 | 0 | 255 | 265 | 230 | 240 | 230 | 230 | 160 | 150 | 160 | 155 | 155 | 150 | 145 | 155.2 | 24 | 265 | 0 |
| 23 | 145 | 150 | 150 | 150 | 150 | 140 | 135 | 130 | 110 | 0 | | | | | | | | | | | | | | | 126.0 | 10 | 150 | 0 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | 0 | 280 | 270 | 270 | 260 | 250 | 260 | 135 | 180 | 150 | 165 | 160 | 160 | 150 | 192.1 | 14 | 280 | 0 |
| AVE | 154 | 155 | 154 | 151 | 149 | 147 | 149 | 148 | 154 | 169 | 198 | 196 | 253 | 238 | 248 | 246 | 246 | 231 | 217 | 170 | 160 | 158 | 161 | 155 | 184.5 | | 269 | 77 |
| N | 21 | 21 | 21 | 20 | 20 | 20 | 21 | 21 | 21 | 22 | 21 | 21 | 22 | 22 | 23 | 23 | 22 | 22 | 22 | 23 | 23 | 22 | 22 | 21 | | 517 | 23 | |
| MAX | 165 | 210 | 230 | 180 | 160 | 165 | 165 | 270 | 270 | 320 | 300 | 280 | 320 | 270 | 270 | 270 | 270 | 270 | 270 | 240 | 205 | 190 | 295 | 165 | 231.0 | | 320 | |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

DEMOCRAT

WIND POINTS — SEPTEMBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 | 21 | 3 | 0 | 0 | 0 | 0 | 10 | 20 | 18 | 0 | 2 | 0 | 0 | 0 | 24 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 24 | 0 | 3 | 0 | 0 | 0 | 15 | 34 | 6 | 0 | 0 | 0 | 0 | 0 | 23 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 22 | 3 | 0 | 0 | 3 | 6 | 30 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 1 | 8 | 10 | 37 | 11 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 20 | 13 | 0 | 0 | 0 | 3 | 13 | 16 | 14 | 0 | 3 | 0 | 3 | 0 | 0 | 24 |
| 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 20 | 19 | 0 | 2 | 4 | 0 | 14 | 12 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 22 | 0 | 2 | 0 | 2 | 0 | 0 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 24 | 1 | 0 | 0 | 0 | 0 | 22 | 14 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 1 | 3 | 3 | 2 | 14 | 25 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 5 | 4 | 25 | 9 | 20 | 0 | 3 | 0 | 0 | 0 | 0 | 15 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 22 | 10 | 0 | 0 | 4 | 11 | 16 | 24 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 30 | 2 | 0 | 0 | 4 | 0 | 28 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 12 | 0 | 0 | 0 | 13 | 25 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 16 | 9 | 0 | 0 | 0 | 0 | 17 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 5 | 0 | 0 | 0 | 0 | 0 | 26 | 38 | 0 | 0 | 0 | 0 | 0 | 20 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 18 | 0 | 0 | 0 | 0 | 0 | 10 |
| 17 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 16 | 3 | 0 | 2 | 0 | 7 | 9 | 15 | 5 | 0 | 0 | 6 | 0 | 0 | 23 |
| 18 | 10 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 18 | 4 | 3 | 0 | 3 | 10 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 23 | 5 | 3 | 0 | 3 | 6 | 10 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 2 | 0 | 0 | 0 | 10 | 6 | 17 | 14 | 0 | 0 | 0 | 0 | 0 | 24 |
| 21 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 41 | 0 | 0 | 0 | 0 | 3 | 12 | 10 | 14 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 47 | 0 | 0 | 0 | 0 | 13 | 6 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 10 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 3 | 3 | 0 | 0 | 0 | 5 | 12 | 19 | 0 | 0 | 0 | 0 | 0 | 14 |
| TOT(2) | 79 | 0 | 6 | 0 | 0 | 0 | 3 | 2 | 21 | 145 | 515 | 65 | 22 | 14 | 29 | 153 | 295 | 386 | 159 | 6 | 2 | 9 | 0 | 0 | 1911 |
| DAYS | 11 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 12 | 24 | 15 | 8 | 4 | 10 | 14 | 20 | 22 | 14 | 2 | 1 | 2 | 0 | 0 | |

150 (POINT 11) HAD 515 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND SPEED / HOURLY AVERAGE OR AT HOUR/ IN MPH

DEMOCRAT

DAY | HOUR PST | OCTOBER, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 7 | 6 | 7 | 8 | 5 | 3 | 2 | 3 | 3 | 2 | 3 | 3.4 | 24 | 8 | 1 |
| 2 | 3 | 3 | 5 | 3 | 4 | 3 | 4 | 3 | 2 | 3 | 4 | 5 | 4 | 7 | 9 | 10 | 8 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 4.3 | 24 | 10 | 2 |
| 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 2 | 3 | 6 | 8 | 6 | 6 | 4 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3.5 | 24 | 8 | 1 |
| 4 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 4 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 3.5 | 24 | 5 | 1 |
| 5 | 4 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 5 | 5 | 6 | 6 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3.5 | 24 | 6 | 1 |
| 6 | 4 | 4 | 5 | 4 | 5 | 3 | 5 | 3 | 2 | 1 | 3 | 2 | 2 | 8 | 7 | 4 | 4 | 3 | 3 | 4 | 2 | 3 | 3 | 3 | 3.6 | 24 | 8 | 1 |
| 7 | 4 | 1 | 3 | 4 | 2 | 3 | 4 | 3 | 4 | 5 | 5 |  | 6 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3.4 | 23 | 6 | 1 |
| 8 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 7 | 8 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.0 | 24 | 8 | 1 |
| 9 | 2 | 3 | 5 | 4 | 5 | 4 | 3 | 2 | 3 | 4 | 5 | 5 | 6 | 6 | 5 | 5 | 3 | 4 | 4 | 2 | 3 | 3 | 3 | 4 | 3.9 | 24 | 6 | 2 |
| 10 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 1 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 3.4 | 24 | 5 | 1 |
| 11 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 2 | 3 | 3 | 2 | 2 | 5 | 5 | 4 | 3 | 5 | 3 | 3 | 3 | 4 | 4 | 3 | 3.4 | 24 | 5 | 2 |
| 12 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 2 | 2 | 3 | 4 | 6 | 5 | 6 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 3.6 | 24 | 6 | 2 |
| 13 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 3 | 1 | 2 | 2 | 2 | 5 | 6 | 6 | 6 | 4 | 3 | 4 | 2 | 3 | 3 | 4 | 4 | 3.6 | 24 | 6 | 1 |
| 14 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 6 | 4 | 5 | 5 | 3 | 4 |  | 3 | 3 | 4 | 4 | 4 | 3.6 | 23 | 6 | 2 |
| 15 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3.3 | 24 | 5 | 2 |
| 16 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3.3 | 24 | 5 | 2 |
| 17 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 2 | 4 | 7 | 6 | 7 | 4 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 2 | 3.1 | 24 | 7 | 1 |
| 18 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 1 | 2 | 1 | 2 | 6 | 6 | 5 | 7 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3.3 | 24 | 7 | 1 |
| 19 | 3 | 3 | 2 | 2 | 3 | .2 | 2 | 1 | 0 | 2 | 2 | 4 | 6 | 8 | 8 | 5 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 3.3 | 24 | 8 | 0 |
| 20 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 0 | 1 | 2 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | .2 | 2.9 | 24 | 5 | 0 |
| 21 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 1 | 7 | 6 | 4 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.1 | 24 | 7 | 1 |
| 22 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 4 | 7 | 4 | 3 | 3 | 1 | 4 | 3 | 3 | 2 | 2 | 2 | 2.5 | 24 | 7 | 1 |
| 23 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 5 | 5 | 5 | 5 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 2.8 | 24 | 5 | 1 |
| 24 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 1 | 2.0 | 24 | 3 | 1 |
| 25 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 1 | 2 | 4 | 3 | 4 | 5 | 7 | 6 | 4 | 3 | 3 | 2 | 3 | 1 | 1 | 2 | 1 | 2.7 | 24 | 7 | 1 |
| 26 | 1 | 1 | 2 | 2 | 2 | 5 | 5 | 3 | 2 | 6 | 5 | 5 | 5 | 6 | 7 | 5 | 5 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 3.5 | 24 | 7 | 1 |
| 27 | 1 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 6 | 5 | 5 | 4 | 3 |  |  |  |  |  |  |  | 2.9 | 17 | 6 | 1 |
| AVE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.3 |  | 6 | 1 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 27 | 27 | 27 | 27 | 27 | 26 | 25 | 26 | 26 | 26 | 26 | 26 |  | 639 | 27 |  |
| MAX | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 6 | 5 | 5 | 7 | 8 | 9 | 10 | 8 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4.3 |  | 10 |  |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND ROSE FOR NUMBER OF HOURS

DEMOCRAT

WIND POINTS — OCTOBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 1 | 0 | 0 | 0 | 24 |
| 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 6 | 3 | 2 | 0 | 0 | 1 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 1 | 3 | 1 | 2 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 1 | 3 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 5 | 6 | 1 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 10 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 10 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 10 | 0 | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 3 | 1 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 9 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 1 | 2 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 23 |
| 15 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 11 | 5 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 5 | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 24 |
| 17 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 7 | 4 | 0 | 1 | 3 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 1 | 0 | 0 | 1 | 1 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 7 | 1 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 9 | 3 | 2 | 0 | 0 | 1 | 4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 24 |
| 21 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 12 | 2 | 0 | 0 | 1 | 0 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 24 |
| 22 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 3 | 3 | 2 | 5 | 0 | 0 | 1 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 5 | 2 | 0 | 0 | 2 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 2 | 10 | 2 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 3 | 1 | 1 | 4 | 0 | 1 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 1 | 2 | 7 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 17 |
| TOT(2) | 37 | 0 | 1 | 1 | 2 | 0 | 5 | 1 | 12 | 46 | 225 | 85 | 25 | 15 | 27 | 13 | 42 | 28 | 63 | 10 | 2 | 0 | 0 | 0 | 640 |
| DAYS | 13 | 0 | 1 | 1 | 2 | 0 | 5 | 1 | 8 | 19 | 27 | 26 | 16 | 7 | 11 | 9 | 21 | 16 | 25 | 6 | 2 | 0 | 0 | 0 | |

150 (POINT 11) HAD 225 HOURS

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) NUMBER OF HOURLY OBSERVATIONS AT EACH POINT ALL MONTH

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION/HOURLY AVERAGE OR AT HOUR/IN PTS

DEMOCRAT

DAY — HOUR PST — OCTOBER, 1982

| DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | AVE | N | MAX | MIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 160 | 140 | 150 | 150 | 145 | 140 | 140 | 155 | 150 | 0 | 300 | 270 | 270 | 265 | 260 | 270 | 270 | 265 | 150 | 160 | 165 | 160 | 145 | 150 | 184.6 | 24 | 300 | 0 |
| 2 | 150 | 150 | 150 | 160 | 155 | 160 | 150 | 150 | 155 | 0 | 0 | 0 | 0 | 270 | 270 | 270 | 270 | 220 | 165 | 160 | 165 | 165 | 160 | 150 | 151.9 | 24 | 270 | 0 |
| 3 | 150 | 150 | 140 | 145 | 145 | 150 | 145 | 130 | 180 | 90 | 270 | 270 | 275 | 265 | 260 | 250 | 230 | 190 | 165 | 150 | 160 | 160 | 165 | 165 | 183.3 | 24 | 275 | 90 |
| 4 | 160 | 160 | 165 | 160 | 165 | 165 | 170 | 170 | 280 | 270 | 240 | 240 | 230 | 240 | 225 | 220 | 240 | 240 | 200 | 200 | 195 | 180 | 160 | 165 | 201.7 | 24 | 280 | 160 |
| 5 | 160 | 160 | 165 | 160 | 160 | 140 | 140 | 150 | 200 | 280 | 240 | 260 | 270 | 270 | 260 | 270 | 270 | 240 | 160 | 150 | 160 | 150 | 145 | 150 | 196.3 | 24 | 280 | 140 |
| 6 | 150 | 150 | 150 | 150 | 150 | 160 | 150 | 150 | 140 | 135 | 0 | 0 | 270 | 270 | 260 | 200 | 205 | 180 | 150 | 165 | 150 | 190 | 180 | 160 | 161.0 | 24 | 270 | 0 |
| 7 | 210 | 160 | 210 | 200 | 200 | 225 | 220 | 210 | 240 | 270 | 275 | 255 | 245 | 220 | 240 | 215 | 200 | 205 | 195 | 165 | 170 | 150 | 165 | 150 | 208.1 | 24 | 275 | 150 |
| 8 | 150 | 160 | 135 | 155 | 150 | 145 | 145 | 135 | 150 | 270 | 0 | 0 | 0 | 265 | 270 | 250 | 270 | 160 | 165 | 165 | 155 | 155 | 160 | 150 | 156.7 | 24 | 270 | 0 |
| 9 | 150 | 155 | 160 | 165 | 165 | 160 | 140 | 145 | 120 | 60 | 0 | 0 | 0 | 0 | 0 | 250 | 240 | 170 | 155 | 160 | 150 | 150 | 150 | 150 | 124.8 | 24 | 250 | 0 |
| 10 | 145 | 135 | 130 | 145 | 150 | 150 | 150 | 150 | 0 | 0 | 0 | 0 | 180 | 260 | 255 | 250 | 245 | 180 | 150 | 160 | 155 | 150 | 150 | 155 | 143.5 | 24 | 260 | 0 |
| 11 | 150 | 150 | 155 | 150 | 150 | 150 | 150 | 150 | 135 | 0 | 0 | 0 | 240 | 270 | 250 | 250 | 180 | 160 | 165 | 165 | 165 | 150 | 150 | 150 | 151.5 | 24 | 270 | 0 |
| 12 | 145 | 150 | 155 | 150 | 155 | 150 | 155 | 150 | 140 | 140 | 0 | 0 | 0 | 0 | 280 | 235 | 165 | 145 | 145 | 165 | 150 | 150 | 145 | 140 | 133.8 | 24 | 280 | 0 |
| 13 | 145 | 155 | 155 | 160 | 150 | 150 | 150 | 150 | 135 | 180 | 270 | 180 | 255 | 255 | 265 | 270 | 255 | 160 | 150 | 170 | 155 | 150 | 150 | 150 | 181.9 | 24 | 270 | 135 |
| 14 | 150 | 150 | 150 | 150 | 145 | 150 | 150 | 150 | 150 | 270 | 0 | 0 | 0 | 270 | 240 | 255 | 190 | 145 |  | 165 | 150 | 155 | 155 | 160 | 152.2 | 23 | 270 | 0 |
| 15 | 150 | 155 | 155 | 155 | 150 | 155 | 170 | 145 | 160 | 120 | 0 | 0 | 0 | 180 | 0 | 270 | 240 | 165 | 170 | 175 | 160 | 160 | 155 | 155 | 140.2 | 24 | 270 | 0 |
| 16 | 155 | 150 | 160 | 150 | 150 | 160 | 160 | 160 | 150 | 150 | 0 | 300 | 270 | 285 | 240 | 240 | 190 | 180 | 165 | 160 | 165 | 170 | 165 | 165 | 176.7 | 24 | 300 | 0 |
| 17 | 160 | 170 | 160 | 150 | 160 | 165 | 145 | 100 | 30 | 260 | 285 | 295 | 280 | 270 | 255 | 220 | 210 | 205 | 210 | 165 | 150 | 150 | 160 | 165 | 188.3 | 24 | 295 | 30 |
| 18 | 160 | 150 | 150 | 150 | 155 | 145 | 150 | 145 | 150 | 240 | 225 | 270 | 275 | 260 | 240 | 260 | 260 | 210 | 160 | 160 | 165 | 160 | 155 | 150 | 189.4 | 24 | 275 | 145 |
| 19 | 160 | 165 | 160 | 170 | 160 | 150 | 180 | 150 | 180 | 270 | 280 | 270 | 270 | 270 | 270 | 250 | 210 | 165 | 165 | 165 | 165 | 170 | 160 | 150 | 194.0 | 24 | 280 | 130 |
| 20 | 150 | 160 | 180 | 160 | 160 | 150 | 160 | 140 | 100 | 290 | 280 | 240 | 240 | 240 | 240 | 230 | 260 | 190 | 160 | 170 | 165 | 165 | 160 | 160 | 189.6 | 24 | 290 | 100 |
| 21 | 160 | 150 | 150 | 155 | 145 | 150 | 160 | 155 | 150 | 90 | 0 | 240 | 290 | 270 | 240 | 250 | 260 | 210 | 160 | 165 | 160 | 165 | 160 | 160 | 174.8 | 24 | 290 | 0 |
| 22 | 160 | 140 | 120 | 140 | 120 | 110 | 140 | 130 | 90 | 45 | 0 | 0 | 255 | 270 | 280 | 240 | 250 | 210 | 165 | 170 | 165 | 165 | 160 | 165 | 153.8 | 24 | 280 | 0 |
| 23 | 150 | 160 | 150 | 150 | 155 | 160 | 165 | 135 | 225 | 270 | 270 | 250 | 240 | 260 | 270 | 260 | 225 | 180 | 170 | 180 | 165 | 165 | 160 | 170 | 195.2 | 24 | 270 | 135 |
| 24 | 165 | 170 | 170 | 170 | 160 | 130 | 180 | 160 | 130 | 120 | 210 | 60 | 280 | 280 | 240 | 230 | 240 | 190 | 170 | 165 | 165 | 165 | 170 | 170 | 178.8 | 24 | 280 | 60 |
| 25 | 160 | 150 | 170 | 120 | 210 | 200 | 160 | 210 | 270 | 280 | 290 | 270 | 270 | 270 | 270 | 240 | 270 | 210 | 160 | 165 | 170 | 150 | 210 | 180 | 210.6 | 24 | 290 | 120 |
| 26 | 155 | 140 | 170 | 160 | 180 | 220 | 210 | 210 | 210 | 225 | 225 | 210 | 210 | 255 | 280 | 240 | 230 | 210 | 200 | 200 | 170 | 150 | 150 | 160 | 198.8 | 24 | 280 | 140 |
| 27 | 180 | 165 | 165 | 165 | 160 | 150 | 160 | 160 | 140 | 250 | 280 | 290 | 290 | 290 | 290 | 270 | 280 |  |  |  |  |  |  |  | 216.8 | 17 | 290 | 140 |
| AVE | 157 | 154 | 157 | 155 | 157 | 157 | 159 | 154 | 152 | 169 | 146 | 154 | 200 | 241 | 239 | 246 | 235 | 192 | 167 | 167 | 162 | 160 | 159 | 158 | 175.1 |  | 278 | 62 |
| N | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 25 | 26 | 26 | 26 | 26 | 26 |  | 640 | 27 |  |
| MAX | 210 | 170 | 210 | 200 | 210 | 225 | 220 | 210 | 280 | 290 | 300 | 300 | 290 | 290 | 290 | 270 | 280 | 265 | 210 | 200 | 195 | 190 | 210 | 180 | 216.8 |  | 300 |  |

STATEWIDE AIR POLLUTION RESEARCH CENTER - RIVERSIDE, CALIFORNIA

WIND DIRECTION - DISTANCE

DEMOCRAT

WIND POINTS — OCTOBER, 1982

| DAY | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 | 330 | 345 | SUM(1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 23 | 3 | 0 | 0 | 0 | 0 | 0 | 18 | 20 | 0 | 2 | 0 | 0 | 0 | 24 |
| 2 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 10 | 0 | 0 | 4 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 24 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 11 | 20 | 11 | 3 | 0 | 0 | 4 | 6 | 14 | 11 | 0 | 0 | 0 | 0 | 0 | 24 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 16 | 3 | 13 | 4 | 9 | 23 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 30 | 4 | 0 | 1 | 0 | 0 | 7 | 11 | 23 | 0 | 0 | 0 | 0 | 0 | 24 |
| 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 41 | 4 | 9 | 8 | 0 | 0 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 24 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 0 | 15 | 22 | 3 | 14 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 23 |
| 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 25 | 6 | 0 | 0 | 0 | 0 | 5 | 7 | 13 | 0 | 0 | 0 | 0 | 0 | 24 |
| 9 | 27 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 3 | 5 | 33 | 13 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 36 | 0 | 6 | 0 | 0 | 0 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 44 | 9 | 3 | 0 | 0 | 0 | 11 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 31 | 7 | 0 | 0 | 0 | 4 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 48 | 2 | 4 | 0 | 0 | 0 | 0 | 21 | 8 | 0 | 0 | 0 | 0 | 0 | 24 |
| 14 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 41 | 3 | 3 | 0 | 0 | 0 | 5 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 23 |
| 15 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 42 | 17 | 2 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 24 |
| 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 17 | 7 | 0 | 0 | 0 | 9 | 0 | 2 | 5 | 2 | 0 | 0 | 0 | 24 |
| 17 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 18 | 11 | 0 | 3 | 11 | 0 | 0 | 8 | 13 | 6 | 0 | 0 | 0 | 0 | 24 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 32 | 3 | 0 | 0 | 4 | 1 | 7 | 19 | 8 | 0 | 0 | 0 | 0 | 0 | 24 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 20 | 2 | 0 | 4 | 0 | 5 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 23 | 10 | 5 | 0 | 0 | 4 | 18 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 24 |
| 21 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 34 | 6 | 0 | 0 | 3 | 0 | 12 | 5 | 7 | 1 | 0 | 0 | 0 | 0 | 24 |
| 22 | 4 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 4 | 7 | 4 | 14 | 0 | 0 | 1 | 0 | 6 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 24 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 13 | 5 | 0 | 0 | 4 | 8 | 10 | 9 | 0 | 0 | 0 | 0 | 0 | 24 |
| 24 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 3 | 22 | 3 | 0 | 1 | 3 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 24 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 | 5 | 1 | 1 | 9 | 0 | 4 | 0 | 31 | 3 | 0 | 0 | 0 | 0 | 24 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 5 | 2 | 5 | 28 | 16 | 5 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 24 |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 9 | 1 | 0 | 0 | 0 | 1 | 0 | 9 | 18 | 0 | 0 | 0 | 0 | 17 |
| TOT(2) | 123 | 0 | 1 | 2 | 6 | 0 | 5 | 2 | 18 | 118 | 683 | 249 | 59 | 46 | 91 | 48 | 172 | 147 | 288 | 34 | 4 | 0 | 0 | 0 | 2096 |
| DAYS | 13 | 0 | 1 | 1 | 2 | 0 | 4 | 1 | 7 | 19 | 27 | 26 | 16 | 7 | 11 | 9 | 21 | 15 | 25 | 6 | 2 | 0 | 0 | 0 | |

150 (POINT 11) HAD 683 MILES

(1) NUMBER OF HOURLY OBSERVATIONS PER DAY
(2) TOTAL MILES AT EACH POINT ALL MONTH

OK,

# APPENDIX 3

Stable Sulfur Isotope Determinations for Soils and Plant Tissue Based on Total Sulfur in Samples Collected in 1981 and 1982.

Appendix 3. Stable Sulfur Isotope Determinations for Soils and Plant Tissues Based on Total Sulfur for Samples Collected in July, 1981.

| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| Panorama Park (N) 600 | 1.8 | — | — | — | Canary Isle Pine | +1.2<br>+2.0<br>+0.9<br>+1.6 |
| Kern Park 500 | 5.3 | — | — | — | Canary Isle Pine | -0.8<br>-0.3<br>+0.6<br>-2.4 |
| Round Mountain Road #1 700 | 6.7 | -28.3<br>-26.3<br>-26.8<br>-25.5 | -27.7<br>-27.8<br>-24.5<br>-27.4 | -25.5<br>—<br>—<br>— | No Trees | —<br>—<br>— |
| Round Mountain Road #2 700 | 6.7 | -12.0<br>-8.6<br>-9.9<br>-14.0 | -12.0<br>-11.9<br>-12.7<br>— | -13.4<br>—<br>-12.9<br>— | No Trees | |
| Syc #1 | 10.7 | — | — | — | Sycamore | -1.4<br>+1.4 |
| Syc #2 | 13.7 | — | — | — | Sycamore | +0.3 |
| Syc #3 | 16.7 | — | — | — | Sycamore | -0.7<br>-0.3 |
| Democrat Springs 2000 | 20.8 | +1.8<br>—<br>+1.5<br>+0.4 | +0.2<br>-0.9<br>-0.1<br>— | —<br>—<br>-2.2<br>— | Digger Pine | +3.0<br>+2.0<br>+2.4 |
| Miracle Hot Springs 2400 | 27.0 | +2.8<br>+1.4<br>+0.9<br>+2.7 | +2.9<br>+0.7<br>+1.8<br>+1.8 | -2.3<br>—<br>—<br>— | Digger Pine | +1.5<br>+2.0<br>+1.4 |

Appendix 3 (1981) continued

| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| Ant Hill | 6.2 | +0.1 | -3.1 | -3.2 | No Trees | |
| 800 | | -0.4 | -3.2 | -4.4 | | |
| | | -0.1 | -2.0 | — | | |
| | | -1.4 | -5.8 | | | |
| Comanche | 9.2 | -0.2 | -5.2 | -2.8 | No Trees | |
| Road | | -0.7 | -3.8 | — | | |
| 1000 | | -1.8 | — | -2.0 | | |
| | | -0.7 | -2.6 | — | | |
| BR #2 | 16.0 | +7.2 | -0.3 | +0.6 | Digger | +0.1 |
| 2930 | | +1.4 | +0.8 | — | Pine | +1.0 |
| | | +2.7 | -1.8 | +2.1 | | +3.4 |
| | | +1.7 | — | — | | |
| BR #3 | 18.5 | +0.9 | +0.7 | +0.1 | Digger | +1.5 |
| 3915 | | +1.4 | -0.1 | — | Pine | +0.5 |
| | | 0.0 | +2.2 | +0.4 | | +1.9 |
| | | +1.4 | +0.8 | — | | |
| PRONO | 19.7 | +2.3 | -0.8 | +1.2 | Jeffrey | — |
| 6-4 | | +0.7 | +1.8 | — | Pine | +3.6 |
| 6040 | | +6.7 | +2.0 | +1.1 | | — |
| | | +2.3 | +1.5 | — | | — |
| BR #5 | 22.4 | — | — | — | Jeffrey | — |
| 7544 | | — | — | — | Pine | +0.8 |
| | | — | — | — | | +2.9 |
| | | — | — | — | | +3.4 |

Appendix 3 (1981) continued

| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| HAV | 24.9 | — | +2.7 | — | Digger | — |
| 3000 | | +0.6 | +2.4 | — | Pine | +1.6 |
| | | — | +4.5 | — | | — |
| | | +2.0 | — | — | | — |
| PR7-1 | 32.9 | -1.5 | -2.5 | -1.5 | Digger | +3.6 |
| 6600 | | — | +2.1 | — | Pine | +3.0 |
| | | +2.6 | +1.1 | -0.7 | | +1.1 |
| | | -0.2 | +1.0 | — | | +1.4 |
| GH #5 | 7 | -1.3 | +0.9 | -0.2 | No Trees | — |
| 2800 | | -0.2 | +0.3 | — | | — |
| | | +1.7 | +0.7 | +0.2 | | — |
| | | +0.4 | -0.4 | — | | — |
| GH #4 | 24 | — | — | — | Digger | +0.8 |
| 4000 | | — | — | — | Pine | -0.8 |
| | | — | — | — | | -0.3 |
| GH #3 | 25 | +1.8 | -0.2 | — | Digger | +1.5 |
| 4973 | | +1.2 | +0.7 | — | Pine | +0.7 |
| | | +0.6 | +0.2 | — | | +1.6 |
| | | +3.0 | -0.6 | -0.5 | | |
| PRONOS | 29.5 | — | — | — | Jeffrey | +4.1 |
| 6-6 | | — | — | — | Pine | +5.9 |
| 5968 | | — | — | — | | +13.1 |
| | | — | — | — | | +4.3 |
| | | | | | | +4.3 |

Appendix 3 (1981) continued

| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| GH #2 | 26.1 | +4.2 | +3.6 | — | Jeffrey | +1.0 |
| 6250 | | +3.4 | +2.4 | — | Pine | +1.8 |
| | | +2.8 | -4.0 | — | | +2.6 |
| | | +3.4 | +4.4 | +0.6 | | +2.6 |
| GH #1 | 29.9 | +3.0 | +3.6 | +4.4 | Jeffrey | +3.3 |
| 6520 | | +3.0 | +3.7 | 2.5 | Pine | +2.6 |
| | | +3.5 | +4.0 | — | | +3.1 |
| | | +3.7 | +5.2 | +2.5 | | +3.2 |
| PR 6-11 | 36.0 | — | | — | Jeffrey | -2.6 |
| 102 | | — | | — | Pine | +5.4 |
| | | — | | — | | +4.5 |
| | | — | | — | | +8.4 |
| | | | | | | +4.9 |
| | | | | | | +4.9 |

Appendix 3. Stable Sulfur Isotope Determinations for Soils and Plant Tissues Based on Total Sulfur for Samples Collected in 1982.

| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| Lene Place 850 | 8.0 | -1.5 | -2.9 | -1.2 | — | — |
| Democrat Springs 2400 | 20.8 | +1.7 | +0.3 | -1.6 | Digger Pine | +2.4 |
| BR 15 1540 | 10.7 | -0.5<br>-0.6 | — | — | — | — |
| BR 20 2000 | 12.0 | +2.9<br>+4.2<br>+3.0 | — | — | — | — |
| BR 25 2500 | 12.7 | +1.4<br>+1.9<br>+0.7 | — | — | — | — |
| BR 30 3000 | 13.7 | +1.7<br>+2.6 | — | — | Digger Pine | +1.5 |
| BR 35 3500 | 16.0 | +0.8<br>+2.5<br>-1.2 | — | — | Digger Pine | +1.8 |
| BR 40 4000 | 17.7 | +1.9<br>+2.5<br>+2.3 | — | — | — | — |
| BR 45 4500 | 18.2 | +1.6<br>+2.0 | — | +2.8 | Digger Pine | +1.7 |
| BR 50 5000 | 18.7 | +2.2<br>+2.5<br>+3.2 | — | — | | — |

Appendix 3 (1982) continued

| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| BR 55 | 19.1 | +3.0 | — | — | Ponderosa Pine | +3.2 |
| 5500 | | +3.0 | | | | |
| | | +3.2 | | | | |
| BR 60 | 19.7 | +2.3 | +4.0 | +3.0 | Ponderosa Pine | +3.2 |
| 5920 | | +2.7 | +4.4 | +2.3 | Letharia Vulpina (LV) | +5.0 |
| (PRONOS 6-4) | | +2.4 | | | Hypogymnia Entermorpha (HE) | +4.9 |
| | | +4.4 | | | | |
| BR 65 | 20.4 | +1.9 | — | — | Jeffrey Pine | +3.2 |
| 6500 | | +2.7 | | | Sugar Pine | +3.9 |
| | | | | | LV | +3.0 |
| | | | | | HE | +4.8 |
| BR 70 | 22.2 | +3.0 | — | — | Jeffrey Pine | +3.7 |
| 7000 | | +2.5 | | | LV | +4.7 |
| | | +3.1 | | | HE | +5.5 |
| GH 6 | 10.5 | -6.2 | -11.0 | -12.0 | — | — |
| 822 | | | | | | |
| GH 15 | 11.5 | +0.4 | -4.1 | -3.4 | — | — |
| 1520 | | | | | | |
| GH 25 | 14 | -1.3 | -1.6 | -2.2 | — | — |
| 2240 | | | | | | |
| GH 27 | 16.5 | — | — | — | — | — |
| 2700 | | | | | | |
| GH 4 | 17 | +3.2 | +1.8 | -1.5 | Digger Pine | +2.2 |
| 3100 | | | | | | |
| GH 35 | 17.4 | — | — | — | — | — |
| 3290 | | | | | | |

Appendix 3 (1982) continued

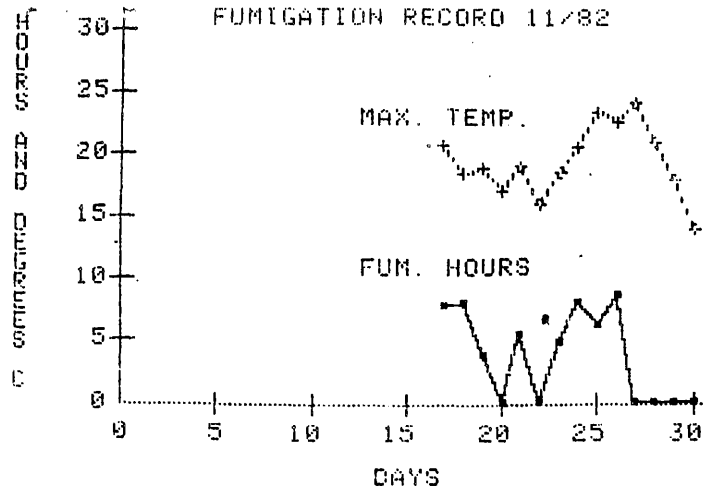
| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| GH 3 4466 | 19.5 | +3.6 | 0 | — | Digger Pine<br>LV | +3.4<br>+3.0 |
| GH 50 4910 | 25.2 | +3.3 | — | -1.3 | — | — |
| GH 55 5500 | 27.0 | — | — | — | Jeffrey Pine<br>LV | +3.4<br>+4.2 |
| PRONOS 6-6 5968 | 29.5 | +0.9<br>+5.1 | — | — | — | — |
| Shirley PK 7092 | 33 | +5.4 | +5.0 | +5.5 | Jeffrey Pine<br>LV | +5.2<br>+4.3 |
| Shirley Molw 6400 | 33.5 | +6.0 | +5.7 | +5.2 | Sugar Pine<br>LV | +4.3<br>+5.4 |
| Greenhorn Summit 6050 | 35.0 | +5.5 | +4.1 | +6.0 | Sugar Pine<br>LV<br>HE | +5.6<br>+4.4<br>+3.9 |
| PRONOS 6-11 6102 | 36.0 | +5.4 | +4.9 | +4.9 | Jeffrey Pine<br>LV<br>HE | <br>+5.0<br>+4.4 |
| SR 30 3000 | 36.5 | +2.3 | +3.2 | +2.8 | — | — |
| SR 35 3500 | 34.8 | — | — | — | — | — |
| SR 40 4000 | 33.5 | +3.0 | — | — | — | — |

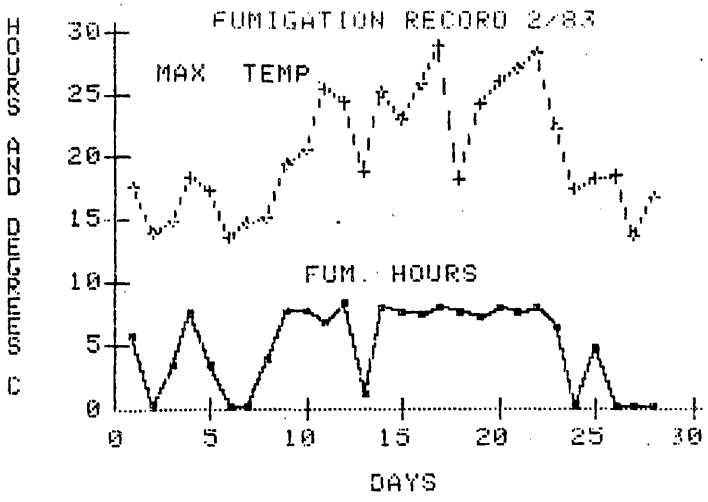
Appendix 3 (1982) continued

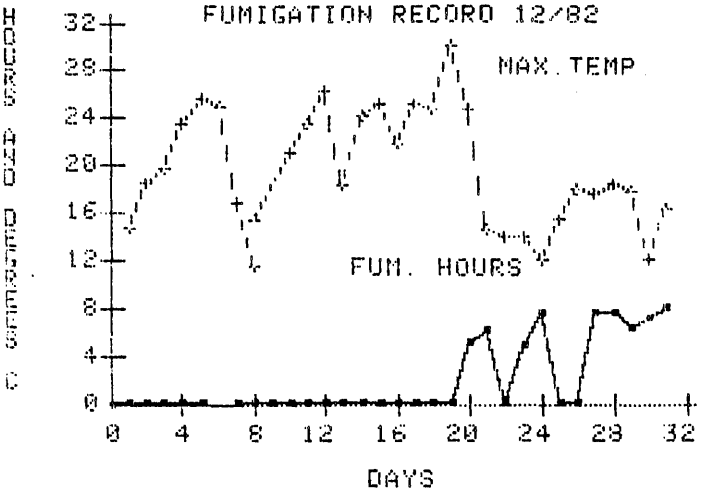
| Site and Elevation (Feet) | Miles From Oildale | Soil Depth (cm) $\delta^{34}S$ 0 - 5 | 5 - 15 | 15 - 30 | Plant Tissue Species | $\delta^{34}S$ |
|---|---|---|---|---|---|---|
| SR 45 4500 | 32.5 | +3.6 | — | — | — | — |
| SR 50 4890 | 31.0 | +4.6 | +4.4 | +4.3 | — | — |
| SR 55 5500 | 30.2 | +3.3 | +1.8 | +7.6 | — | — |
| SR 60 5840 | 29.5 | +3.8 | +3.7 | -0.7 | LV<br>HE | +4.8<br>+5.4 |

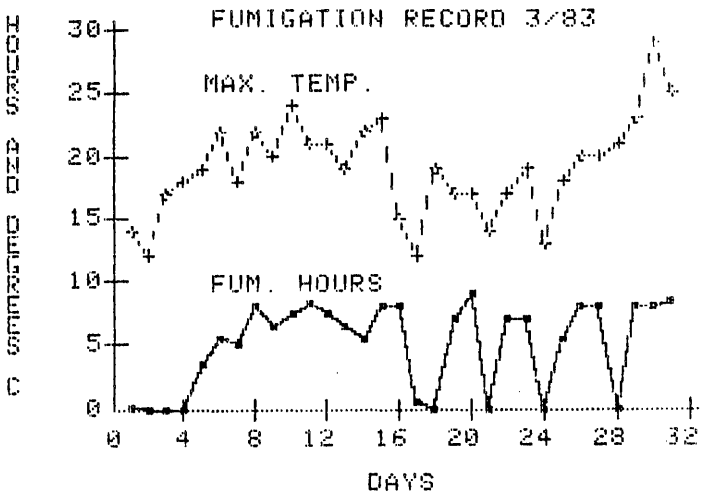
# APPENDIX 4

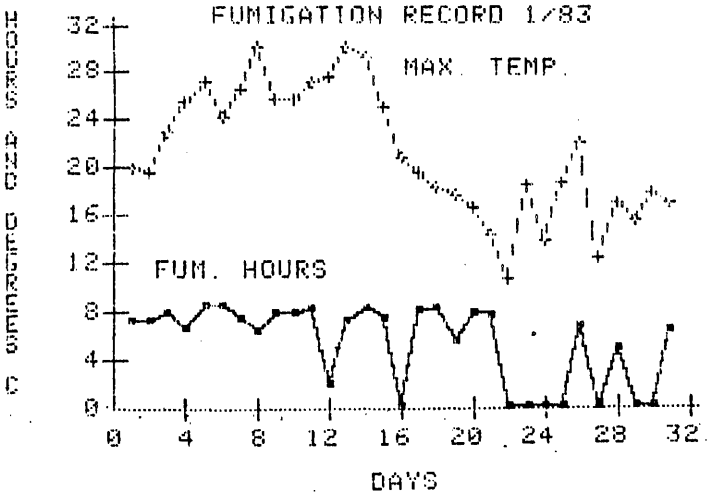
Record of Daily Fumigation Duration and Weather Conditions from November 16, 1983 to April 11, 1983.

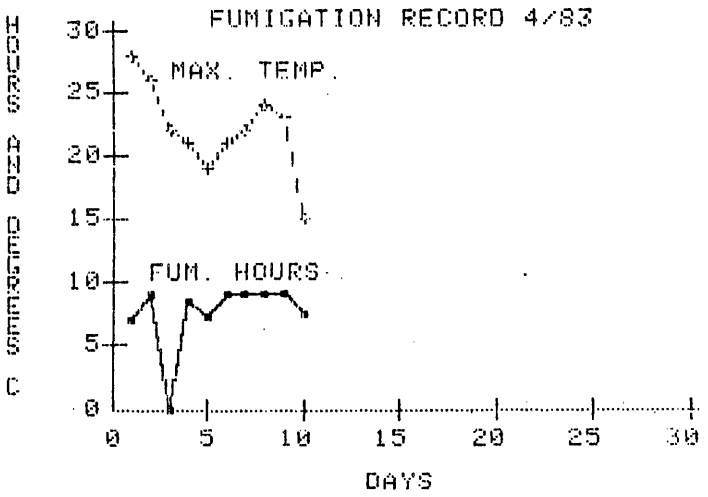



Appendix 4. Daily record of sulfur dioxide-ozone fumigation of conifer seedlings from November 16, 1982 to April 11, 1983, showing the number of hours each day that weather conditions were suitable for fumigation, and the maximum daily air temperature.

Appendix 4. Dates and Amount of Rainfall at the Open-Top Chamber Facility, University of California, Riverside. Rainfall pH is Included for Some Events.

| Date | Amount (Hundredths of an Inch) | pH |
|---|---|---|
| 11/29 | 25 | --[a] |
| 11/30 | 121 | --[a] |
| 12/22 | 5 | --[a] |
| 12/23 | 45 | --[a] |
| 12/29 | 2 | --[a] |
| 1/19 | 14 | --[a] |
| 1/22 | 3 | --[a] |
| 1/23 | 86 | --[a] |
| 1/24 | 30 | --[a] |
| 1/25 | 2 | --[a] |
| 1/27 | 82 | --[a] |
| 1/29 | 41 | --[a] |
| 2/2 | 43 | --[a] |
| 2/3 | 15 | --[a] |
| 2/5 | 12 | --[a] |
| 2/7 | 11 | --[a] |
| 2/8 | 17 | --[a] |
| 2/9 | 1 | --[a] |
| 2/24 | 85 | 4.41 |
| 2/25 | 110 | 4.6 |
| 2/28 | 225 | 5.6 |
| 3/1 | 15 | 4.3 |
| 3/2 | 149 | 5.2 |
| 3/3 | 350 | 5.3 |
| 3/4 | 24 | 4.8 |
| 3/6 | 6 | 5.1 |
| 3/13 | 11 | 6.1 |
| 3/17 | 9 | 5.3 |
| 3/18 | 45 | 5.0 |
| 3/21 | 23 | 5.7 |
| 3/23 | 8 | 5.6 |
| 3/23 | 34 | 5.4 |
| Total | 1649 | |
| Mean | | 5.1 |

[a]No pH data obtained.