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NOAA Technical Report ERL 428–ARL 8

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## (16 September 1973 to 31 December 1979)

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Air Resources Laboratory
Geophysical Monitoring for Climatic Change
Boulder, Colorado

June 1985

**U.S. DEPARTMENT OF COMMERCE**
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# PREFACE

The National Oceanic and Atmospheric Administration's Air Resources Laboratory (NOAA/ARL) began measuring chlorofluorocarbon-11 in 1973 because of the interest in this anthropogenic pollutant as a tracer for the study of mass transfer processes in the atmosphere and the oceans. Interest in chlorofluorocarbon-11, and in chlorofluorocarbon-12 and nitrous oxide, was heightened during the mid-1970's with the realization that these compounds can be decomposed by photolysis in the stratosphere to cause stratospheric ozone destruction by released chlorine atoms. Measurements of chlorofluorocarbon-12 and nitrous oxide were begun by NOAA/ARL in 1977. This report describes the evolution of the chlorofluorocarbon and $N_2O$ measurement programs through 1979. By that time, the sample collection and analysis techniques became standardized, and have remained the same to the present.

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# Chlorofluorocarbon-11, -12, and Nitrous Oxide Measurements at the NOAA/GMCC Baseline Stations (16 September 1973 to 31 December 1979)

**T. M. Thompson, W. D. Komhyr, and E. G. Dutton**

**ABSTRACT.** Time-dependent atmospheric chlorofluorocarbon-11 ($CCl_3F$), chlorofluorocarbon-12 ($CCl_2F_2$), and nitrous oxide ($N_2O$) measurement data are presented for five stations of the NOAA/ERL Air Resources Laboratory's Geophysical Monitoring for Climatic Change (GMCC) program. They include (1) $CCl_3F$ data for September 1973 through December 1979 for Point Barrow, Alaska; Mauna Loa, Hawaii; and American Samoa, South Pacific; (2) $CCl_3F$ data for early 1976 through December 1979 for Niwot Ridge, Colorado, and for early 1977 through December 1979 for South Pole, Antarctica; (3) $CCl_2F_2$ data for early 1977 through December 1979 for all stations; and (4) $N_2O$ data for early 1977 through December 1979 for all stations. Details of the sampling and analysis program are presented as well. Statistical and meteorological data selection criteria are applied to the raw data to improve data quality. The improved data sets should be useful in studies of atmospheric $CCl_3F$, $CCl_2F_2$, and $N_2O$ meridional distributions, mixing ratios, global abundances, growth rates, interhemispheric exchange rates, and tropospheric residence times.

## 1. INTRODUCTION

Interest in atmospheric concentrations of the halogenated hydrocarbons $CCl_3F$ (chlorofluorocarbon-11) and $CCl_2F_2$ (chlorofluorocarbon-12) began in the early 1970's with the realization that these compounds are highly inert chemically, have no known natural sources, and therefore are ideally suited as tracers for the study of mass transfer processes in the atmosphere and oceans. Actual use of these gases as tracers became feasible with the development of a novel electron-capture gas chromatograph detector capable of accurate measurements down to a few parts in $10^{12}$ (Lovelock et al., 1971; Lovelock, 1974). Measurements of $CCl_3F$ over the North and South Atlantic Ocean during 1971-1972 were subsequently used by Lovelock et al. (1973) to test a numerical model (developed by Machta, 1958) of the global distribution in space and time of an ideal inert gas.

The interest in atmospheric chlorofluorocarbons was heightened in 1974 when Molina and Rowland (1974) theorized that $CCl_2F_2$ and $CCl_3F$ are likely to be decomposed by photolysis in the stratosphere, causing catalytic destruction of the atmospheric ozone layer by released chlorine atoms. Ramanathan (1975) and Wang et al. (1976) later showed that $CCl_2F_2$ and $CCl_3F$ are potentially capable of influencing the thermal structure of the atmosphere (i.e., inducing climatic change), since they possess strong absorption bands within the 7- to 14-μm atmospheric window through which most thermal radiation from the Earth's surface and lower atmosphere is transmitted.

Another atmospheric trace constituent that has strong absorption bands in the 7- to 14-μm atmospheric window is nitrous oxide ($N_2O$). Wang et al. (1976) estimated that doubling atmospheric $N_2O$ would raise temperatures near the Earth's surface by about 0.5°C. Nitrous oxide, furthermore, enters into stratospheric photochemical reactions that lead to catalytic destruction of ozone (Crutzen, 1970), much as the halogenated hydrocarbons do. Nitrous oxide is emitted from land by bacterial nitrification of fixed nitrogen. Concern has been expressed about a possible increase in nitrification processes and hence increased atmospheric $N_2O$ concentrations through greater use of fertilizers (Crutzen, 1974; McElroy et al., 1976).

The National Oceanic and Atmospheric Administration's Air Resources Laboratory (NOAA/ARL) began measuring $CCl_3F$ late in 1973 because of interest in this anthropogenic atmospheric pollutant as an inert tracer gas. $CCl_2F_2$ and $N_2O$ measurements were added to the program in 1977 after the atmospheric concentrations of these gases and $CCl_3F$ became of interest because of their chemical and radiative properties. A crucial factor in the potential ability of these gases to destroy ozone or modify lower-atmosphere temperatures is their tropospheric residence time (Turco and Whitten, 1975). If important tropospheric sinks for $CCl_3F$, $CCl_2F_2$, and $N_2O$ exist, then significant atmospheric buildup of these gases will not occur. Researchers (e.g., Gelinas et al., 1977; Jesson et al., 1977; Meakin et al., 1978; Cunnold et al., 1978) have shown that estimates of tropospheric residence times and identification of sinks are possible from reliable information on atmospheric abundances, growth rates, and latitudinal gradients of these gases. Such information is obtainable from high-quality, long-term global background measurements of $CCl_3F$, $CCl_2F_2$, and $N_2O$.

This report presents program details and results for approximately 6 years of $CCl_3F$ flask sampling beginning late in 1973, and nearly 3 years of $CCl_2F_2$ and $N_2O$ flask sampling beginning early in 1977 at several NOAA/ARL clean-air (baseline) stations. Table 1 shows the sampling stations and a

Table 1.--Record of measurements of $CCl_3F$, $CCl_2F_2$, and $N_2O$

| | Pt. Barrow, Alaska | Niwot Ridge, Colorado | Mauna Loa, Hawaii | American Samoa, South Pacific | South Pole, Antarctica |
|---|---|---|---|---|---|
| Lat. | 71.32°N | 40.05°N | 19.53°N | 14.25°S | 89.98°S |
| Long. | 130.60°W | 105.63°W | 155.58°W | 170.56°W | 24.80°W |
| Elev. | 12 m | 3749 m | 3397 m | 82 m | 2810 m |
| $CCl_3F$ record | 9/73-12/79 | 1/76-12/79 | 9/73-12/79 | 9/73-12/79 | 1/77-12/79 |
| $CCl_2F_2$ record | 5/77-12/79 | 5/77-12/79 | 5/77-12/79 | 4/77-12/79 | 2/77-12/79 |
| $N_2O$ record | 8/77-12/79 | 6/77-12/79 | 6/77-12/79 | 6/77-12/79 | 2/77-12/79 |

record of available data. Included in the report are temperature, dewpoint, wind speed, and wind direction data, recorded at the time of sampling, that are pertinent to data processing and selecting final results. Because of improvements in sampling and analysis procedures with time, $CCl_3F$ data obtained after 1976 are considered superior to earlier data. The earlier data are nevertheless included because of the sparsity of such data for early to mid 1970's.

# 2. SAMPLING AND ANALYSIS

Collection of cylinder air samples for $CCl_3F$ analyses was initiated in September 1973 at the NOAA baseline stations of Point Barrow (hereafter, Barrow), Alaska; Mauna Loa, Hawaii; and American Samoa (hereafter, Samoa), South Pacific. At that time, the logistics and analysis center for operations was the NOAA/ARL Field Research Office, Idaho Falls, Idaho. In May 1975, this center was transferred to the ARL Geophysical Monitoring for Climatic Change (GMCC) Program in Boulder, Colorado.

In January 1976, the $CCl_3F$ measurement program was extended to Niwot Ridge, Colorado, a mountain site west of Boulder. Collection of air samples for $CCl_3F$ analyses began at the fourth NOAA baseline station, South Pole, Antarctica, in January 1977.

Analysis of collected air samples for $CCl_2F_2$ and $N_2O$ began in January 1977 for South Pole, May 1977 for Niwot Ridge, and August 1977 for Barrow, Mauna Loa, and Samoa. These new measurements were undertaken after methods of collection and analysis of $CCl_3F$ air samples were significantly improved, and after calibrating gases became available for use. Details of sample collection and analysis procedures used throughout the monitoring program are summarized in Table 2.

## 2.1 Sample Collections

Air samples for $CCl_3F$ analyses were initially collected in 300-ml Whitey type 304 stainless steel cylinders fitted with Whitey "DK" series forged-body, packed, stainless steel valves. Before use, all cylinders and valves were cleaned with 5% phosphoric acid solution, distilled water, and ethanol, followed by purging with ultrapure nitrogen.

In preparation for sampling, the cylinders were first evacuated at the Idaho Falls or Boulder central facility to a residual pressure of $\leq 0.05$ mm Hg, and then mailed to the field stations in cylindrical cardboard tubes padded with plastic foam for protection. The sampling procedure at the stations was as follows. With wind blowing from the station's clean-air sector to minimize local pollution effects, and with wind speed greater than 2.2 m $s^{-1}$, the observer opened (for about 10 s) and then closed the sample cylinder valve while pointing the cylinder into the wind. After sample collection the observer completed a data sheet by recording the station name, time of sampling, wind speed and direction, atmospheric pressure, air temperature and moisture, and precipitation, if any. The exposed cylinder was then mailed as soon as possible to the central facility, where its air sample was analyzed, and the cylinder was again evacuated and mailed to the station for collection of a new sample.

Table 2.--Details of program sampling and analysis apparatus and procedures

| | 16 September 1973 to 15 May 1975* | 16 May 1975 to 15 March 1976* | 18 March 1976 to 6 March 1977* | 7 March 1977 to 30 November 1977* | 1 August 1977 to 31 December 1979† |
|---|---|---|---|---|---|
| Analysis facility | Idaho Falls | Boulder | Boulder | Boulder | Boulder |
| Gases analyzed | $CCl_3F$ $CCl_3F$ | $CCl_3F$ | | $CCl_3F$, $CCl_2F_2$, $N_2O$ | $CCl_3F$, $CCl_2F_2$, $N_2O$ |
| Chromatograph | Laboratory-assembled | Hewlett-Packard | Hewlett-Packard | Hewlett-Packard | Hewlett-Packard |
| Electron capture detector | 15 mCi Ni 63 (Idaho Falls) | 15 mCi Ni 63 (Idaho Falls) | 15 mCi Ni 63 (Hewlett-Packard) | 15 mCi Ni 63 (Hewlett-Packard) | 15 mCi Ni 63 (Hewlett-Packard) |
| Detector temperature | 30°C | 100°C | 350°C | 350°C | 350°C |
| Chromatograph column | (3 × 0.006)-m Carbowax 400/ Porasil F; 80-100 mesh | (3 × 0.003)-m Carbowax 400/ Porasil F; 80-100 mesh | (1 × 0.006)-m Carbowax 400/ Porasil C; 80-100 mesh | (3 × 0.005)-m Porasil B; 80-100 mesh** | (1.2 × 0.003)-m Porasil A; 80-100 mesh** |
| Column temperature | 30°C | 40°C | 50°C | 50°C | 70°C |
| Carrier gas | Ultrapure $N_2$ | 95% Ar-5% $CH_4$ | Ultrapure $N_2$ | Ultrapure $N_2$ | Ultrapure $N_2$ |
| Gas flow rate | 50 $cm^3$ $min^{-1}$ | 15 $cm^3$ $min^{-1}$ | 50 $cm^3$ $min^{-1}$ | 40 $cm^3$ $min^{-1}$ | 25 $cm^3$ $min^{-1}$ |
| Sample volume | 5 $cm^3$ | 1 $cm^3$ | 5 $cm^3$ | 5 $cm^3$ | 5 $cm^3$ |
| Electronics | | | | | |
| Operation mode | Fixed-pulse | Fixed-pulse | Variable-frequency | Variable-frequency | Variable-frequency |
| Pulse width | 2 μs | 2 μs | -- | -- | -- |
| Pulse period | 200 μs | 200 μs | -- | -- | -- |
| Pulse height | -20 V | -20 V | -- | -- | -- |
| Standing current | 4.5 nA | 4.5 nA | 1 nA | 1 nA | 1 nA |
| Calibration method | Coulometric | Coulometric | Coulometric | 3072 reference gas | 3072 reference gas |

* Sample collection: evacuated single flasks. Sample cylinders: 300 mℓ capacity; type 304 stainless steel; acid cleaned; packed stainless steel valves.

† Sample collection: evacuated pair flasks at Niwot Ridge; pressurized dual flasks elsewhere (at South Pole, beginning January 1977). Sample cylinders: 300 mℓ capacity; type 304 stainless steel; electropolished; bellows stainless steel valves.

** See text for additional information.

To minimize contamination of the sample cylinders, each cylinder was designated for use at a particular station and only at that station. Six cylinders per station (excluding South Pole station) were sufficient for the rotating scheme of travel time and analysis. In general, elapsed time between sample collection and analysis was not more than 2 weeks, although it occasionally increased to 1 month (and up to 10 months at South Pole station).

As observational data began to accumulate, considerable data variability became evident. At least part of the variability was believed to result from cylinder wall effects, which could cause modification, absorption, or desorption of collected trace gases. (Early in the program, atmospheric carbon tetrachloride [$CCl_4$] was measured, but the stored samples were so unstable that the measurements were discontinued.) To minimize wall effects, the Whitey stainless steel cylinders were passivated by a SUMMA electropolishing process developed by Molectric, Inc., of Englewood, California. This process cleans and passivates the raw stainless steel cylinder surface, producing a pure chrome/nickel-oxide surface with a microfinish of ±1.0 nm.

Another consideration of sample instability was the possibility that elastomers or halogenated polymers, components of the sample cylinder valves, were absorbing or desorbing $CCl_3F$. The cylinders were therefore equipped with stainless steel Nupro-Type SS-4H bellows valves, which contain no elastomers or polymers that could serve as trace-gas sources or sinks.

A third factor possibly contributing to the observed variability in the data was the use of evacuated cylinders for sampling. Because of reduced pressure within the cylinders, either from cylinder evacuation or sample collection at high-altitude stations, contaminated air can leak into such cylinders during transit to and from the field stations. An even greater possibility for contamination occurs when the sample cylinders are vacuum pumped and chlorofluoromethane-rich laboratory air can seep into the evacuation system through leaky plumbing. Vacuum pumping of the stainless steel cylinders can, furthermore, strip molecules from the cylinder walls leaving active sites onto which selective absorption of molecules can occur after sampling is completed. Although this problem is not believed to be serious for $CCl_3F$ measurements, it merits consideration whenever gas samples of extremely low concentration are collected.

To avoid sample contamination problems arising from use of evacuated cylinders, a method of simultaneous collection of dual, pressurized air samples was devised late in 1976. A schematic diagram of the sampling apparatus is shown in Fig. 1. Samples are routinely collected as follows. Valves 7 to 10 are opened, and sample cylinders 5 and 6 are flushed by pump 3 (stainless steel Metal Bellows Co. model MB-21) for at least 10 minutes with clean, ambient air to be sampled. Air enters the sampling apparatus via stainless steel sampling line 1 and 7-μm particle filter 2, at a flow rate of approximately 4 $\ell$ $min^{-1}$. At the end of the flushing interval, valves 9 and 10 are closed, and air pressurization begins. A few seconds later valves 7 and 8 are closed to isolate the required pair sample. Valves 7 to 10 are further tightened with a torque wrench adjusted to 2.8 N·m (newton meters) torque to ensure positive valve closure and prolong valve life by preventing overtightening. Valve 4 is a pressure relief valve protecting the bellows pump from pressures in excess of 1.7 atm.

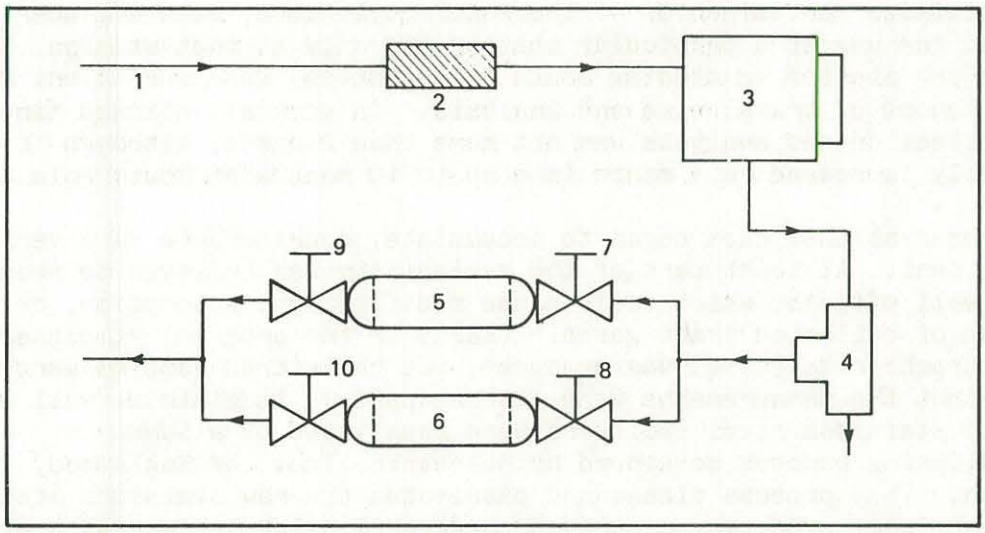



Figure 1.--Dual-sample cylinder pumpup apparatus for collecting air samples. See text for a description of components.

After sample collection, the cylinders are shipped to Boulder where a small portion of air is extracted from each cylinder for analysis. The cylinders, still containing air near ambient pressure, are then returned to their field stations for repeat flushing and sampling.

As indicated in Table 2, collection of pressurized, dual-cylinder air samples in electropolished cylinders fitted with packless bellows valves began at the NOAA/GMCC stations in August 1977, except at South Pole station where the new sampling technique was implemented in January 1977. At Niwot Ridge, where electrical power is not available for operating the sampling apparatus illustrated in Fig. 1, evacuated flask sampling was continued after August 1977, but with the newly electropolished flasks.

At Barrow, Mauna Loa, and Samoa, the old method of collecting air samples in evacuated, phosphoric-acid-cleaned flasks was continued through November 1977 to obtain overlapping data for comparison. Results during this 4-mo period showed the mean percent differences in $CCl_3F$ concentrations derived from evacuated and pressurized air samples at Barrow, Mauna Loa, and Samoa to be (8.1 ± 1.4)%, (5.1 ± 1.1)%, and (6.4 ± 1.7)%, respectively, with the evacuated (nonelectropolished) cylinder samples yielding the higher values. Statistical analysis of the data indicated that the mean differences at all stations were significantly different from zero, but that they were not significantly different from each other at the 95% confidence level. The measured higher concentrations are assumed to represent surface contamination effects within the nonelectropolished sample cylinders; therefore, a mean correction factor of 0.936 was applied to all $CCl_3F$ data from air samples collected in nonelectropolished cylinders. Corresponding correction factors for $CCl_2F_2$ and $N_2O$ concentrations were found to be 0.900 and 0.965, respectively.

Air samples collected by the evacuated-cylinder method are taken about 2 m above station ground level. When the mechanical technique of pressurizing dual cylinders with sample air is used, the intake tube of the sampling

apparatus is connected inside the observatory building to a manifold of a gas sampling stack (Komhyr, 1983) available at each GMCC station. Air is conducted through the stack from above the building at a rate of about 2 $m^3$ $s^{-1}$. The heights above ground level of the stack intakes at Barrow, Mauna Loa, Samoa, and South Pole are approximately 9, 11, 14, and 12 m, respectively, these being the effective heights of air sample collection at the stations.

## 2.2 Sample Analyses

The $CCl_3F$, $CCl_2F_2$, and $N_2O$ air samples were analyzed by electron-capture gas chromatography. As shown in Table 2, analysis of $CCl_3F$ air samples began at Idaho Falls in September 1973, using a laboratory-type electron-capture gas chromatograph. The chromatograph was operated under the assumption that its detector was a gas phase coulometer. Even though the coulometric efficiency of the detector was not known to be 100%, the reproducibility of its results, when operating at a fixed temperature and flow rate with clean carrier gas, was believed to be high enough to allow absolute calibration of the measurement system when accurately calibrated gas standards became available.

Transfer of operations from Idaho Falls to Boulder in May 1975 resulted in several changes in basic chromatograph operating conditions, as indicated in Table 2. During original work in Idaho Falls, the laboratory-assembled gas chromatograph used ultrapure carrier gas, a Porasil F column, and detector electronics that operated in the fixed-pulse mode. Soon after the move to Boulder, sample analyses were attempted with a commercially available Hewlett-Packard chromatograph that operated with argon-methane carrier gas and variable frequency electronics, but sensitivity was found to be inadequate. $CCl_3F$ sample analyses became possible, however, when conversion was made to fixed-pulse-mode detector operation. In March 1976, sensitivity was additionally increased by a factor of 2.5 through an electronics conversion that permitted variable-frequency detector operation to be used with ultrapure nitrogen carrier gas and a Porasil C chromatograph column. Although an even larger gain in sensitivity would have been possible by reverting to fixed-pulse-mode detector operation, the overall system linearity would have been degraded. When a (3 × 0.005)-m Porasil B column was installed into the chromatograph late in April 1977, measurements of $CCl_2F_2$ became possible. Finally, implementation of a (1.2 × 0.003)-m Porasil A column in late July 1977 gave satisfactory separation of the $N_2O$ peak, allowing analysis of collected air samples for $CCl_3F$, $CCl_2F_2$, and $N_2O$.

Figure 2 illustrates a typical configuration of the chromatographic gas analysis apparatus. Ultrapure carrier gas from cylinder 1 flows through the chromatograph column 11 and electron capture-detector 14 via a two-stage diffusion-resistant stainless steel regulator 2, a gas purifying catalytic combustor 3, a mass flow controller 4, and sampling valve 5. It exits through flow meter 15. Heaters and temperature controllers 12 and 13 maintain the column and detector temperatures, respectively, at fixed levels. During analysis, sample cylinder 8 is connected to sample valve 5, and the sample loop 6 and associated plumbing are evacuated by vacuum pump 10. The sample cylinder valve is opened, allowing air to expand into sample loop 6, and then closed. After the sample loop gas temperature and pressure are recorded with meters 7 and 9, the sample valve is rotated to insert the air-filled sample loop into the carrier-gas stream flow. (In practice, the sample loop is

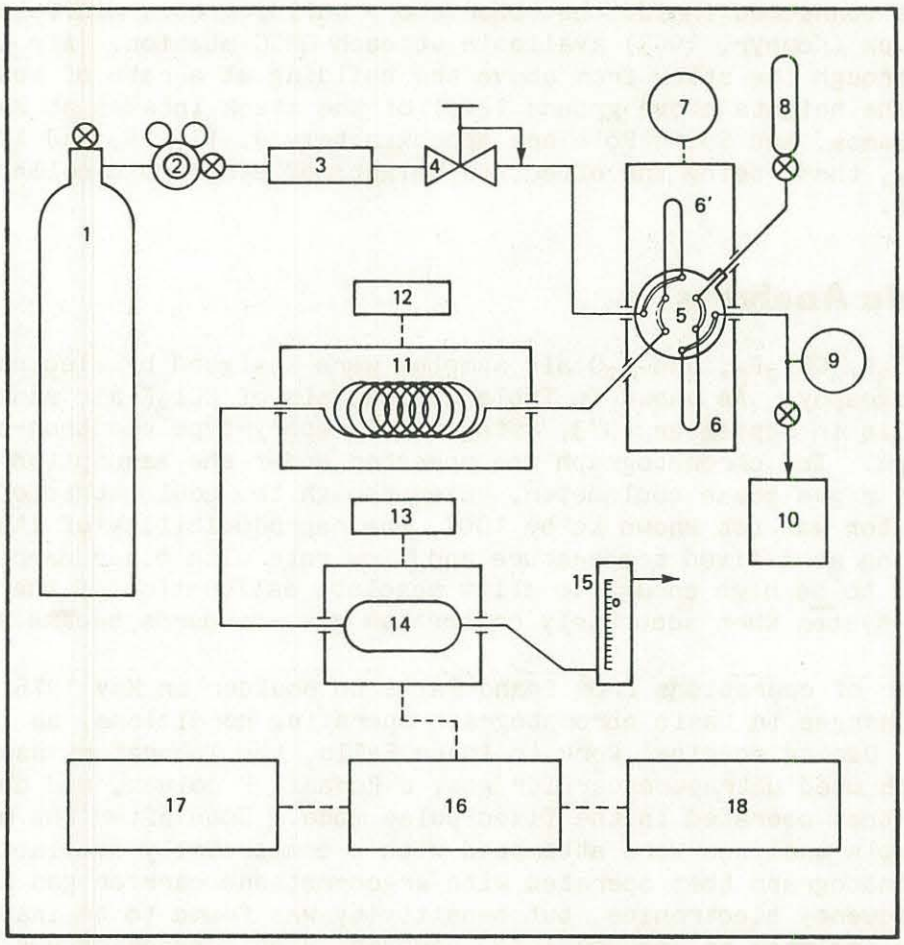



Figure 2.--Chromatographic gas analysis apparatus. See text for a description of components.

flushed once with sample air before the air sample is inserted into the carrier-gas stream.) Detectable components of the air sample exit from the chromatograph column sequentially, and are sensed by the electron-capture detector 14 and associated electronics 16. The voltage output peaks, proportional to electrons captured within the detector, are recorded on a chart recorder 17 and integrated by a digital integrator 18.

The chromatographic apparatus shown in Fig. 2 does not contain a dryer for drying collected ambient air samples before analyses. The results obtained are, therefore, chlorofluorocarbon or nitrous oxide concentrations in air containing water vapor. To express the resultant concentration with respect to dry air, the moisture content of the collected air samples must be taken into account (see Sec. 2.4).

Before calibration gases were used during sample analyses, the typical procedure was to analyze each air sample three times to obtain a measure (standard deviation) of the analysis precision. After 7 March 1977, sample concentrations were determined relative to a reference calibration gas assuming linear chromatographic response. Several schemes, shown below, were

used for the reference gas (R) and air sample (S) analyses, the air samples being subsamples of air from either cylinder of a given sample cylinder pair:

(a) RR $S_1S_1$ R $S_1S_2$ R $S_2S_2$ R

(b) RR $S_1$ R $S_1$ R $S_1$ R $S_2$ R $S_2$ R $S_2$ R

(c) RRR $S_1S_1S_1$ RR $S_2S_2S_2$ RR .

In each of the above schemes the sequence of analyses required approximately 6-h analysis time, or about a day's work on the chromatograph. Although the anaysis precision for the various sequences is about the same, analysis scheme (c) is both statistically sound and most convenient in operation, and has been adopted as standard.

Chlorofluorocarbon or nitrous oxide concentrations are determined from measurements of the output signal peak heights or integrated areas from the chromatograph. Figure 3 is a typical chromatograph chart record trace showing

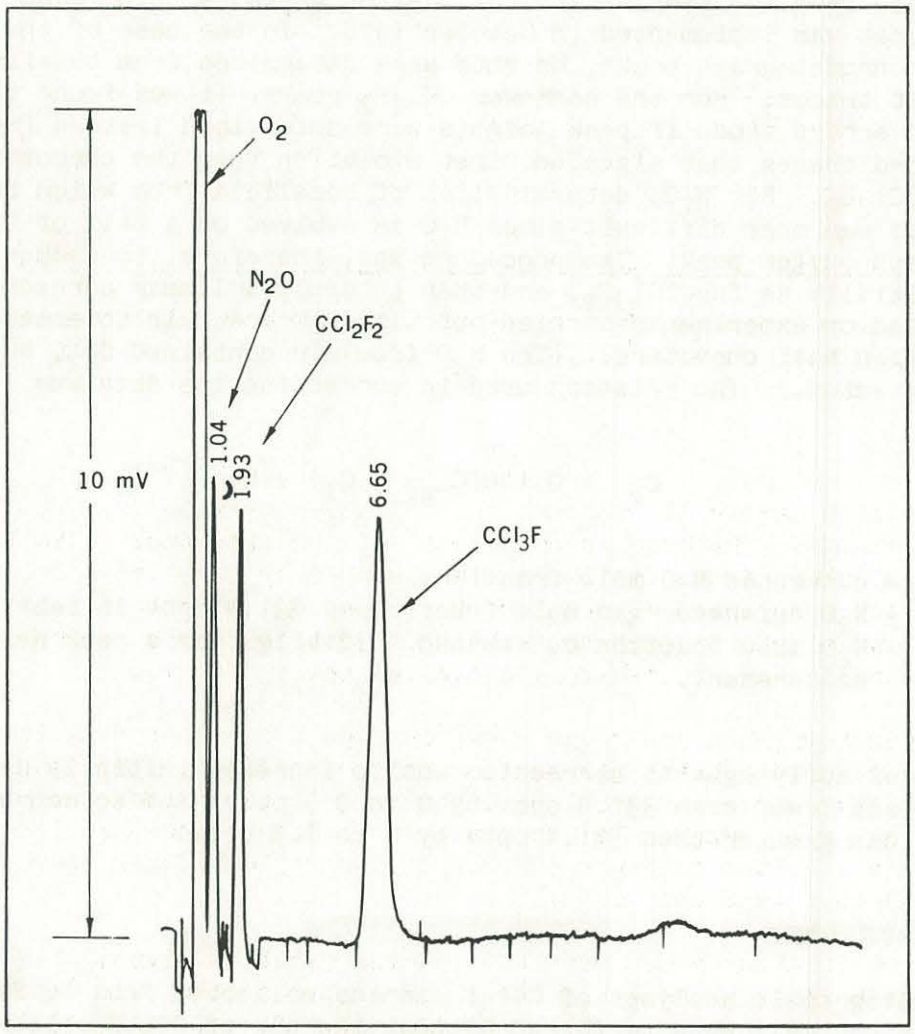



Figure 3.--Typical chromatographic record showing $CCl_3F$, $CCl_2F_2$, and $N_2O$ signal peaks.

$CCl_3F$, $CCl_2F_2$, and $N_2O$ signal peaks. When the chromatograph was first operated in Idaho Falls, peak areas were determined manually by using the following relation:

$$\text{Peak Area} = \text{Height} \times \text{Width} \times 0.5\left(\frac{\pi}{\ln 2}\right)^{1/2} , \qquad (1)$$

where the peak width is measured at a distance of one-half the peak height, and the peak shape is assumed to be Gaussian. After 2 December 1973, the peak areas were computed using a digital electronic integrator whose performance was monitored several times weekly by comparing the automatically derived data with manually calculated results.

In early 1977, when measurements of $CCl_2F_2$ and $N_2O$ were begun, the relation shown by Eq. (1) could not be used completely satisfactorily, since the signal traces for these gases were not symmetrical and hence were non-Gaussian. Experimentation indicated, however, that satisfactory results could be obtained for $CCl_3F$ and $CCl_2F_2$ simply by comparing peak heights of the output traces from the samples and calibration gases, a data reduction procedure that was implemented in October 1978. In the case of the relatively wide $CCl_3F$ chromatograph peaks, heights were determined from baselines drawn on the chart traces. For the narrower $CCl_2F_2$ peaks, it was found that no significant errors arose if peak heights were determined instead from points on the record traces that signaled first evolution from the chromatograph column of $CCl_2F_2$. For $N_2O$, determination of baselines from which to measure peak heights was more difficult since $N_2O$ is evolved on a tail of the chromatograph oxygen peak. The procedure was, therefore, to deduce peak heights initially as for $CCl_2F_2$, and then to apply a linear correction to results based on experiments carried out with $N_2O$-free air to establish a typical oxygen tail curvature. (The $N_2O$-free air contained $CO_2$, but no $CO_2$ peak was detected.) The relation used in correcting the data was

$$C_c = 0.146(C_{ref} - C_i) + C_i \qquad (2)$$

where $C_c$ = corrected $N_2O$ mole fraction,
$C_{ref}$ = $N_2O$ reference-gas mole fraction of 331.4 ppbv in tank T3072.
$C_i$ = $N_2O$ mole fraction determined initially from a peak height measurement.

The effect of applying this correction was to increase initially deduced $N_2O$ concentrations lower than 331.4 ppbv by 0 to 0.9 ppbv, and to decrease $N_2O$ concentrations greater than 331.4 ppbv by 0 to 1.3 ppbv.

## 2.3 Calibrations

Chromatographic analyses of $CCl_3F$ samples collected from 16 September 1973 to 6 March 1977 were performed without the use of $CCl_3F$ calibration gas. Instead, the Lovelock-type, electron-capture detector of the chromatograph was assumed to operate as an absolute gas phase coulometer with long-term stability. In practice, continued optimum performance of the

chromatograph was difficult to maintain because of gradual or occasionally abrupt changes in the detector temperature, system flow rate, and impurity levels in the carrier gas. During analyses at Idaho Falls, precautions were taken to keep the Carbowax 400/Porasil F chromatograph column clean by heating it to 180°C at monthly intervals. This heating served to drive absorbed chemicals less volatile than $CCl_3F$ from the column, thereby stabilizing the electron-capture detector's background current at about 4.5 nA and minimizing peak spreading. Chromatograph performance was monitored by observing the stability with time of this background current.

With the introduction in Boulder of a variable-frequency chromatograph that kept the detector's background current fixed at 1.0 nA, output voltage stability served as an indicator of overall system performance. The voltage remained essentially constant as long as the carrier gas stream remained clean. A gas-purifying catalytic combustor was used to help keep the carrier gas stream clean, and a burnout procedure was adopted whereby the column was heated to 125°C at 3-mo intervals. When calibration gas was introduced into the analysis procedure, the problem of chromatograph contamination became less severe, since both sample and calibration gases are likely to be affected similarly by contamination. In the present procedure, column burnout is only performed at irregular intervals whenever significant contamination is indicated by drifting and excessive noise of the chromotograph output voltage trace.

Additional complications, in the performance of the chromatographic apparatus in Boulder as a stable coulometer, arose when operations were switched over from Idaho Falls to Boulder. Since the analysis apparatus in Boulder was new and different from the Idaho Falls instrumentation, the $CCl_3F$ measurement calibration "constant" of the Idaho Falls chromatograph had to be transferred to that of the Boulder instrument. This transfer was accomplished by initially intercomparing $CCl_3F$ sample analyses performed with both sets of instrumentation. However, only a limited set of comparison data was obtained, and its quality has been difficult to assess. Additional measurements planned for a later date were unfeasible because of alterations made to the Idaho Falls instrumentation.

That the Boulder chromatographic apparatus did not always operate at a constant calibration level is attested to by results of periodic analyses of samples of calibration gas. For example, while agreement to within $\leq$1.8% was obtained with Washington State University (WSU) results when analyzing WSU $CCl_3F$ air samples in canisters 121 and 108 during January 1976 and April 1977, respectively, a discrepant result of 15% was noted when analyzing WSU PB4 canister air in March 1976 at the Workshop on Halocarbon Analysis and Measurement Techniques held in Boulder (R. A. Rasmussen, 1978). Large, periodic departures from constant analyzer performance are indicated also by $CCl_3F$ measurement results obtained during 16 September 1973 to 6 March 1977. These early data show considerably larger fluctuations than do measurements obtained later when chromatograph calibration gases began to be used.

In early 1977, two tanks of calibration gas were established for use in the $CCl_3F$, $CCl_2F_2$, and $N_2O$ monitoring program. The gases were obtained by pumping clean, dry air from the mountains west of Boulder into size A (6.8 $m^3$ at S.T.P.), specially cleaned, chrome-molybdenum steel tanks. The tanks were prepared for use by first partially filling them with Carborundum grit and tumbling them for 1 day to remove mill scale and smooth inside tank surfaces. Subsequent cleaning included treatment of the inside of the tanks

with hydrochloric acid, sodium nitrate, and water/steam at a pressure of 27 atm. The tanks were next dried with industrial-grade nitrogen containing less than 10 ppm $H_2O$. Finally, after tank valves were installed, the tanks were filled to a pressure of 150 atm with Airco grade 4.5 prepurified nitrogen, having a dewpoint less than -60°C, to check for leaks and contamination. The nitrogen was bled and evacuated from the tanks prior to filling the tanks with reference air.

Air was pumped into the tanks with a model 1S3B-3 Rix Industries three-stage air compressor. This pump operates without lubrication of its piston-cylinder assembly, which is constructed of metal and polytetrafluoroethylene (Teflon TFE resin). The pump is essentially noncontaminating once residual cleaning fluids used during its fabrication are flushed from it. During pumping, an in-line type 3A Union Carbide molecular sieve filter was used to dry the air entering the tanks to a dewpoint temperature of about -75°C.

The concentrations of $CCl_3F$, $CCl_2F_2$, and $N_2O$ in the two calibration gas tanks, relative to calibration standards established by R. A. Rasmussen at WSU, are shown in Table 3. Tank 3072, originally filled with air to a

Table 3.--Calibration of NOAA reference gases in tanks 3072 and 3078 using standards of R. A. Rasmussen

| Tank no. | Gas type | Calibration date | Conc. ± s.d. | n | Conc., 1 Mar. 1977 to 31 Dec. 1979 |
|---|---|---|---|---|---|
| 3072 | $CCl_3$ | 13 Dec. 1977 | (149.~~1~~ 5 ± ~~1.9~~ 2.3) pptv | 9 | (148.33 ± 0.91) pptv |
| | | 23 Oct. 1978 | (147.4 ± 1.0) pptv | 12 | |
| | | 20 Nov. 1979 | (149.4 ± 2.2) pptv | 4 | |
| | $CCl_2F_2$ | 13 Dec. 1977 | (253.4 ± 1.7) pptv | 5 | (253.48 + 1.96t) pptv* |
| | | 23 Oct. 1978 | (255.3 ± 1.3) pptv | 6 | |
| | | 20 Nov. 1979 | (257.2 ± 0.5) pptv | 4 | |
| | $N_2O$ | 13 Dec. 1977 | (331.4 ± 0.9) ppbv | 3 | (331.38 ± 0.94) ppbv† |
| | | 23 Oct. 1978 | (331.3 ± 1.0) ppbv | 6 | |
| | | 20 Nov. 1979 | (331.5 ± 2.6) ppbv | 4 | |
| 3078 | $CCl_3F$ | 13 Dec. 1977 | (355.8 ± 2.8) pptv | 11 | Conc. drift |
| | | 23 Oct. 1978 | (354.2 ± 1.1) pptv | 4 | |
| | | 20 Nov. 1979 | (336.2 ± 2.9) pptv | 4 | |
| | $CCl_2F_2$ | 13 Dec. 1977 | (285.7 ± 0.6) pptv | 6 | Conc. drift |
| | | 23 Oct. 1978 | (297.0 ± 2.4) pptv | 5 | |
| | | 20 Nov. 1979 | (296.2 ± 0.5) pptv | 4 | |
| | $N_2O$ | 13 Dec. 1977 | (329.0 ± 2.1) ppbv | 4 | Conc. drift |
| | | 23 Oct. 1978 | (334.8 ± 1.0) ppbv | 5 | |
| | | 20 Nov. 1979 | (334.0 ± 0.8) ppbv | 4 | |

* t = number of years since 13 December 1977.

† More accurate concentration value (see Sec. 2.3) is believed to be (297.7 ± 1.47) ppbv.

pressure of 150 atm, is used as the primary reference standard in routine monitoring program analyses of field air samples. Tank 3078, filled with air to a pressure of 25 atm, was originally intended to serve as a secondary reference standard. Use of this tank for that purpose proved unsuccessful, however, when trace-gas concentrations within it were found (Table 3) to drift relative to the WSU standards. As a result, new secondary standard reference gases were established, in tank 3088. $CCl_3F$ and $CCl_2F_2$ mole fractions within this tank are approximately 252 and 286 pptv, respectively, while the $N_2O$ mole fraction is 342 ppbv. Gases in tanks 3072 and 3088, as well as in several other tanks, have been periodically intercalibrated to obtain information on trace gas concentration drifts as well as on changes with time of chromatograph linearity characteristics.

The NOAA 3072 and 3078 tank gases were calibrated in December 1977, October 1978, and November 1979 using the secondary standard reference gases in tanks 006 and 034 established by Rasmussen through intercalibrations with primary standard reference gases established earlier in tanks BY1 and BY3 (see Table 4). Tanks BY1 and BY3 contained cryogenically pumped air whose $CCl_3F$, $CCl_2F_2$, and $N_2O$ concentrations were deduced relative to calibration gas samples prepared by static dilution and permeation tube techniques. Estimated absolute uncertainties associated with the BY1 and BY3 tank gas concentrations are believed by Rasmussen to be ±5% for $CCl_3F$, ±10% for $CCl_2F_2$, and ±5% for $N_2O$ (R. A. Rasmussen; WSU, Pullman, Wash.; personal communication, 1979).

Analysis of intercalibration data for tank 3072 reference gas shown in Table 3 indicates that, within the precision of measurement, $N_2O$ concentrations remained stable. A question existed, however, about the validity of the absolute calibration values originally assigned by Rasmussen to his $N_2O$ gas standards, since for example the $N_2O$ calibration scale associated with gas standards prepared by R. F. Weiss (Scripps Institution of Oceanography, La Jolla, Calif.; personal communication, 1980) was approximately 10% lower than that of Rasmussen. To resolve the discrepancy, a new technique was developed in our laboratory (Komhyr and Dutton, 1980) for preparing $N_2O$ and other calibration gas standards. As applied to $N_2O$, the method involves preparation by gravimetric means of an $N_2O/CO_2$ gas mixture of highly accurately known mass ratio, and subsequent dilution of this mixture

Table 4.--Washington State University calibration gas data*

| Tank no. | $CCl_3F$ (pptv) | $CCl_2F_2$ (pptv) | $N_2O$ (ppbv) |
|---|---|---|---|
| BY1 | 153.3 ± 5% | 254.5 ± 10% | 331.4 ± 5% |
| BY3 | 152.2 ± 5% | 252.8 ± 10% | 330.0 ± 5% |
| 006 | 165.8 ± 6% | 257.9 ± 11% | 329.5 ± 6% |
| 034 | 170.7 ± 6% | 287.1 ± 11% | 334.6 ± 6% |

* Indicated errors are estimated absolute uncertainties.

with $N_2O$- and $CO_2$-free air to approximately ambient air concentrations of these trace gases. From a determination of the absolute $CO_2$ concentration in this dilution gas mixture using highly accurately calibrated $CO_2$ gas standards and an infrared measurement technique, the $N_2O$ concentration in the dilution mixture is readily inferred.

Application of this calibration method to our tank 3072 $N_2O$ calibration gas yielded an $N_2O$ mole fraction of (297.7 ± 6.0) ppbv compared with the originally assigned Rasmussen value of (331.4 ± 16.6) ppbv. (The 2% error is an estimate based on possible systematic errors associated with the performance of this preliminary calibration.) This new result agrees with $N_2O$ calibration values of Weiss, as well as of Connell et al. (1980) who employed a tunable diode laser to measure $N_2O$ in air. Goldan et al. (1981) obtained similar results following recalibration of their $N_2O$ primary standards prepared in 1975 by static and dynamic dilution techniques.

Throughout our $N_2O$ measurement program, air sample analyses were performed using tank 3072 $N_2O$ reference gas with the $N_2O$ concentration of 331.4 ppbv assigned by R. A. Rasmussen. Final results (see data sets 2 to 4 of Appendix D) have been corrected by the ratio 297.7/331.4 = 0.8983 to reflect the updated NOAA/GMCC calibration of tank 3072 $N_2O$ reference gas.

Analysis of reference gas calibration data of Table 3 indicates, also, that $CCl_3F$ concentrations in tank 3072 remained constant during December 1977 through November 1979. As for $N_2O$, this stability is assumed by extrapolation to hold for the time interval 1 March 1977 to 31 December 1979. For $CCl_2F_2$, however, statistical evaluation of the data indicates drifting concentration with time--a drift that has been verified by additional information derived from intercalibrations of gases in tanks 3079, 3080, and 3088. Accordingly, $CCl_2F_2$ mole fractions in tank 3072 air have been corrected for drift by

$$C_f = (253.48 \pm 0.15) + (1.96 \pm 0.12)t \qquad (3)$$

where $C_f$ = corrected tank 3072 $CCl_2F_2$ mole fraction in pptv,
$t$ = number of years since 13 December 1977.

An intercomparison with another laboratory took place in September 1978 when we analyzed gases in reference tanks 26-04-78 and 07-07-78 provided by P. J. B. Fraser of the Commonwealth Scientific and Industrial Research Organization (CSIRO), Division of Atmospheric Physics, Aspendale, Victoria, Australia. The CSIRO gases had previously been calibrated relative to Washington State University gas standards. As shown in Table 5, the Boulder $CCl_3F$ concentration values for the two gas tanks differed at most by only 1.7% from the CSIRO gas concentration values. Statistical analysis of the data indicated that the CSIRO and NOAA data sets were identical at the 95% confidence level.

Several of our chlorofluorocarbon reference gases have also been calibrated by P. D. Goldan of the NOAA Aeronomy Laboratory. Analysis of tank 3079 air in October 1979, for example, yielded results for $CCl_3F$ and $CCl_2F_2$ that agreed with NOAA/GMCC calibration values to within about 2%.

Tests performed to date on variations in chromatograph linearity characteristics with time have yielded satisfactory data for $CCl_3F$ sample analyses, but inconclusive results for $CCl_2F_2$ and $N_2O$ sample analyses. (Nonlinearity errors are minimized by maintaining approximately equal measurement and calibration gas concentrations.) Although linearity tests in the past were conducted using gases in tanks 3072 and 3078 only, the work has been upgraded to include bimonthly tests with calibration gases of various concentrations in five tanks.

Table 5.--NOAA calibrations of CSIRO $CCl_3F$, $CCl_2F_2$, and $N_2O$ standard reference gases, 18 September and 3 October 1978

| CSIRO tank no. | Calib. lab | $CCl_3F$ (pptv) | s.d. (pptv) | n | $CCl_2F_2$ (pptv) | s.d. (pptv) | n | $N_2O$ (ppbv) | s.d. (ppbv) | n |
|---|---|---|---|---|---|---|---|---|---|---|
| 260478 | CSIRO | 146.7 | ±1.0 | 31 | 255.1 | -- | 1 | 331.6 | -- | 1 |
| | | | | | 257.0 | ±0.9 | 3 | 328.5 | ±5.3 | 3 |
| | NOAA/GMCC | 144.3 | ±1.5 | 3 | 251.1 | ±3.5 | 3 | 335.4 | ±2.2 | 3 |
| 070778 | CSIRO | 158.9 | ±0.8 | 14 | 258.3 | -- | 1 | -- | -- | -- |
| | NOAA/GMCC | 157.6 | ±0.9 | 2 | 258.8 | ±2.1 | 12 | -- | -- | -- |
| | | 156.7 | ±1.4 | 10 | | | | | | |

## 2.4 Corrections for Humidity

For certain types of research (e.g., investigations of trace-gas global abundances and latitudinal gradients) it is expedient to express measured trace gas mole fractions relative to dry air. As indicated in Sec. 2.2, air dryers were not used during the collection and analysis of $CCl_3F$, $CCl_2F_2$, and $N_2O$ air samples. Initial results have, therefore, been expressed as trace-gas mole fractions in ambient (moist) air.

Dryers were not used in our air sample collection program because gas losses up to several percent can occur within contaminated or improperly conditioned traps when very dilute trace-gas amounts ranging in concentrations from parts per billion to parts per trillion are measured. (On the other hand, the presence of water vapor in air samples may exaggerate sample cylinder wall effects, leading to sample concentration instabilities.) Our approach has been to measure the trace gas concentrations in ambient air and then express the results in terms of dry air using relevant air pressure, temperature, and humidity information.

The following equation relates measured moist-air trace-gas mole fractions to dry-air mole fractions:

$$\frac{n_1}{n_3} = \left(1 + \frac{n_2}{n_3}\right)\left(\frac{n_1}{n_2 + n_3}\right) \tag{4}$$

where $n_1$ = no. moles of trace gas,
$n_2$ = no. moles of water vapor,
$n_3$ = no. moles of dry air,
$\frac{n_1}{n_3}$ = mole fraction of trace gas in dry air,

$$\frac{n_1}{n_2 + n_3} \approx \frac{n_1}{n_1 + n_2 + n_3} = \text{mole fraction of trace gas in moist air.}$$

In using this equation, the following monitoring program sampling conditions were considered: (a) the collection of relatively dry air samples at Barrow, Niwot Ridge, and Mauna Loa where moisture condensation does not generally occur within the sample cylinders when samples are collected, and (b) the collection of wet air samples at Samoa where collected air samples at analysis laboratory temperature are at saturation vapor pressure.

### 2.4.1 Case a

Since in this case water vapor mixing ratio is generally conserved during air sample collection, Eq. (4) may be rewritten as follows:

$$\frac{n_1}{n_3} = \left(1 + \frac{e(T_a)}{P_a - e(T_a)}\right)\left(\frac{n_1}{n_2 + n_3}\right) \tag{5}$$

where $P_a$ = ambient station air pressure,
$T_a$ = ambient station air temperature,
$e(T_a)$ = water vapor pressure at ambient station air temperature,

$$C.F. = 1 + \frac{e(T_a)}{P_a - e(T_a)} \tag{6}$$

= wet-air to dry-air trace-gas mole fraction conversion factor.

Relation (6) was evaluated by using ambient air temperature and humidity data from Barrow, Niwot Ridge, and Mauna Loa; average wet-air to dry-air trace-gas conversion factors for 1 January 1977 to 31 December 1978 were found to be 1.002 ± 0.003, 1.008 ± 0.008, and 1.004 ± 0.004, respectively, with the indicated variablities being standard deviations. These mean conversion factors were used when processing data for which observed moisture information was not available. For Barrow and Mauna Loa, the conversion factors may be slightly overestimated for occasions of high ambient relative humidity for the stations. The overestimates result when water vapor condensation occurs during the air sample pumping-up process to a pressure of about 450 mb above

ambient air pressure. This problem does not arise at Niwot Ridge where air samples are collected at ambient pressure.

To evaluate Eq. (5), the water vapor pressure $e(T_a)$ at ambient station temperature was determined from the following equation (L. A. Rasmussen, 1978), which relates water vapor pressure to measured ambient dewpoint temperature:

$$e(T_a) = \sum_{i=0}^{6} C_i T^i \tag{7}$$

The constants $C_i$ in Eq. (7) correspond to the condition of saturation vapor pressure over water. In the few cases where measured dewpoint temperatures were not available, climatological humidity data were used in determining the correction factors.

## 2.4.2 Case b

In this case water vapor is not conserved during the collection-analysis of air samples. At Samoa, for example, mean air and dewpoint temperatures were(27.0 ± 0.65)°C and (24.5 ± 2.08)°C, respectively, as measured during sample collections in 1977 and 1978, with the indicated variabilities being standard deviations. These temperatures correspond to a relative humidity of 86%. When such highly humid air is pressurized in sample cylinders to 450 mb above ambient air pressure and then cooled to 23°C, the Boulder analysis laboratory mean temperature, some of the water vapor in the cylinders condenses, causing a reduction in the water vapor mixing ratio of the sampled air.

For the Samoa air samples, which contain water vapor at saturation vapor pressure, Eq. (5) converts to the following expression:

$$\frac{n_1}{n_3} = \left(1 + \frac{e_w(T_1)}{P_f - e_w(T_1)}\right)\left(\frac{n_1}{n_2 + n_3}\right) \tag{8}$$

where $P_f$ = 1160 mb
= mean air sample pressure determined from initial and final pressure measurements during sample analyses,
$T_1$ = (23 ± 3)°C, the Boulder analysis laboratory room temperature,
$e_w(T_1)$ = saturation water vapor pressure of sample air (28.09 ± 5) mb,

$$C.F. = 1 + \frac{e_w(T_1)}{P_f - e_w(T_1)} = 1.025 \pm 0.005. \tag{9}$$

Thus, values of the conversion factor used to convert moist-air trace-gas mole fractions to dry-air mole fractions varied from about 1.020 to 1.030 for Samoa air samples. In instances where observational moisture data were missing, the mean conversion factor of 1.025 was used.

To verify that the theoretically determined conversion factors for moist-air to dry-air trace gas concentrations given above are applicable to real air sample data, laboratory tests (Dutton, 1981) were conducted on Samoa air samples and on water-saturated tank 3079 air. When magnesium perchlorate was used as the drying agent, no conclusions could be drawn because trace gas losses were found to occur within the drying material. When a dry-ice water vapor trap was used, the magnitudes of the conversion factors were found to be roughly one-half those derived theoretically from Eq. (8). Although the discrepancy between the laboratory results and theoretical calculations could not be satisfactorily explained, the possibility was considered that the observed small loss of trace gases in the dried air stream was occurring through absorption of the gases either onto the glass surface of the trap or onto the water-ice formed during condensation and freeze-out. In a revised procedure that did not use a trap for removing moisture from the air, the theoretically derived moisture corrections were substantiated. Here, trace-gas concentrations were determined for tank 3079 reference gas that was alternately passed through a clean, empty Erlenmeyer flask and the same flask partially filled with distilled water. The reference gas was monitored with a high-quality optical hygrometer, and was found to have a dewpoint temperature of 50°C for dry air and +25°C for the moistened air. In light of these results, and the direct verification with the optical dewpoint hygrometer of the moisture content of air samples collected in Samoa, the theoretical conversion factors for moist-air to dry-air trace-gas mole fractions were used in final processing of the data.

# 3. THE DATA

$CCl_3F$ data are tabulated in Appendixes A and B, and $CCl_2F_2$ and $N_2O$ data are tabulated in Appendixes C and D, respectively. All data are presented, as well as improved-quality data obtained through application to the raw data of data selection criteria described below. In each appendix, a Description of Data Sets is given for the various data sets presented.

## 3.1 Data Selection

It has been the policy within the NOAA/GMCC chlorofluorocarbon and nitrous oxide monitoring program to record all sample analysis results, which comprise the raw data sets presented herein. Considerable scatter is present in the raw data, as is evident, for example, in the $CCl_3F$ data plots of Fig. 4. That this scatter is due primarily to sampling and analysis errors is attested to by the observation that the variability of the 1977-1979 data is considerably reduced compared with fluctuations present in earlier results. (It is unlikely that the natural variability of $CCl_3F$ in the atmosphere changed early in 1977.) As indicated in previous sections, sampling errors that cause scatter in the data arise from sample cylinder contamination and from trace-gas storage problems. Analysis errors that cause apparent data variability stem from substandard analysis apparatus performance, calibration drifts, and operator bias. Such sampling and analysis errors are similar to measurement inaccuracies that occur when continuously recording monitoring equipment partially malfunctions.

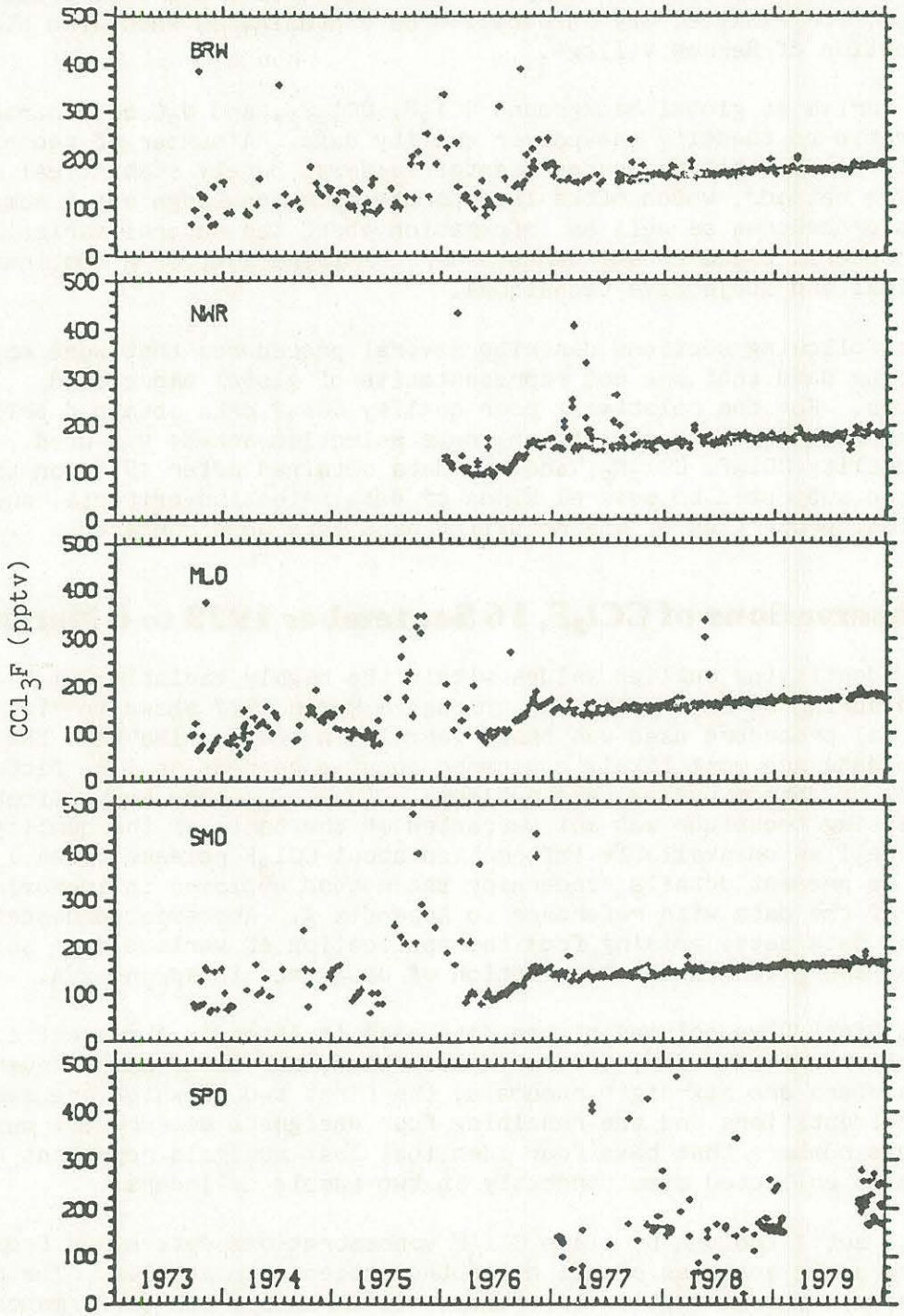



Figure 4.--Raw $CCl_3F$ data (excluding concentrations $\geq$500 pptv) obtained during 1973-1979 at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole.

Increased data variability arises also when locally polluted air is inadvertently collected for analysis. Air sampled at the GMCC station located at Barrow, for example, may on occasion be contaminated when wind blows from the direction of Barrow Village.

To arrive at global background $CCl_3F$, $CCl_2F_2$, and $N_2O$ concentrations, it is desirable to identify the poorer quality data. A number of techniques are available for identifying unrepresentative data: purely statistical methods; subjective methods, which often incorporate some knowledge about sampling and analysis procedures as well as information about the natural variability of the atmospheric trace constituents under consideration; or a combination of statistical and subjective techniques.

The following sections describe several procedures that were employed in identifying data that are not representative of global background conditions. For the relatively poor quality $CCl_3F$ data obtained prior to 1977,a straightforward, statistical data selection scheme was used. The higher quality $CCl_3F$, $CCl_2F_2$, and $N_2O$ data obtained after 1976, on the other hand, were subjected to several kinds of data selection criteria, and the statistical properties of the resulting data sets were compared.

## 3.2 Observations of $CCl_3F$, 16 September 1973 to 6 March 1977

In identifying outlier values within the highly variable $CCl_3F$ data obtained during 16 September 1973 through 6 March 1977 shown in Fig. 4, the statistical procedure used was based largely on the premise that the most reliable data are most likely clustered about a regression line fitted to the main body of data minus extreme outliers. (Use of a more sophisticated data curve-fitting technique was not warranted on the basis of the quality of the data as well as on available information about $CCl_3F$ release rates.) In this section we present details concerning the method employed in improving the quality of the data with reference to Appendix A. Abbreviated descriptions of resulting data sets, arising from the application of various data selection criteria, are given in the Description of Data Sets in Appendix A.

The first five columns of the data base in Appendix A present station, year, Julian calendar day, Greenwich mean time, and $CCl_3F$ sample number. Sample numbers are six-digit numerals, the first two of which are sample cylinder identifiers and the remaining four designate measurement numbers. Two sample numbers that have four identical last numerals represent a pair of air samples collected simultaneously in two sample cylinders.

Data set 1 (column 6) lists $CCl_3F$ concentrations determined from chromatographic analyses of all collected ambient-air samples. The analyses were based on the assumption of coulometric chromatograph performance.

In data set 2 (column 7) are results corrected for sample contamination stemming from use of nonelectropolished sample cylinders (see Sec. 2.1). Associated with these concentration values are standard deviations (s.d.) given in column 8. They represent the spread of single sample analysis results where, in general, three chromatographic analyses were performed on each collected sample.

Wind speed and direction data, and air temperature and dewpoint data are presented in columns 9 to 12. The wind information is subsequently used as a

criterion for possible sample contamination by local pollution sources, whereas the air temperature and dewpoint data are used to convert $CCl_3F$ mole fractions in ambient (moist) air to mole fractions in dry air.

The data in set 3 (column 13) are corrected $CCl_3F$ mole fractions expressed in parts per trillion by volume (pptv) of dry air. At this stage no data selection criteria have been applied, and no data have been discarded or combined. These pristine data, containing sampling and analysis errors, are intended for use by researchers who will apply their own statistical or meteorological data selection criteria to improve data quality and identify background measurement conditions. Plots of set 3 $CCl_3F$ data for 16 September 1973 to 6 March 1977 for Barrow (BRW), Mauna Loa (MLO), and Samoa (SMO) are shown in Fig. 4. Also plotted in this figure are similar $CCl_3F$ data for 7 March 1977 through 31 December 1979 for these stations and for Niwot Ridge (NWR) and South Pole (SPO).

As stated earlier, the plots of Fig. 4 indicate that the quality of recent data is considerably better than that of data obtained earlier in the monitoring program (except for South Pole). The improvement after 6 March 1977 stemmed primarily from the use of reference calibration gas during sample analyses, although changes in sample collection techniques contributed. To improve the quality of data obtained prior to 7 March 1977, outlying values in data set 3 were eliminated by using statistical means described below. Results are given in data sets 4, 5, and 6.

From the 1977 through 1979 data plotted in Fig. 4, it may be inferred that $CCl_3F$ concentration values greater than roughly 200 pptv or smaller than 50 pptv represent highly contaminated air samples or erroneous data. As a first step in improving the data, such outliers were eliminated. Resulting data are shown in data set 4 (column 14). It can be seen from the Summary of Data Quantity in Appendix A that application of this data selection criterion resulted in a 14.1% to 24.0% loss of sample data for Barrow, Mauna Loa, and Samoa.

As a second step in improving data quality, standard deviations of the means associated with individual sample analyses were examined to identify unreliable data resulting from problems occurring during the analyses. Derived concentrations having standard deviations greater than 12.0 pptv, corresponding to a typical analysis precision of ±5%, were discarded.

As noted in the Summary of Data Quantity application of this data selection criterion resulted in a 4.2% to 8.0% loss of data for the stations. Remaining data are tabulated in data set 5 (column 15).

After far-outlying and highly unreliable values were eliminated, regression lines were fitted to the remaining data for all three stations. Residual standard deviations were then computed for the regression lines, and sample values lying outside 2 residual standard deviations were discarded (i.e., roughly 5% of the remaining data were arbitrarily eliminated as outliers). The resulting data are tabulated in data set 6 (column 16). As shown in the Summary of Data Quantity, when this data selection criterion was applied, 2.0% to 3.3% loss of sample data occurred for the various stations.

To improve data quality further by eliminating measurement values obtained during possible local air pollution episodes, two meteorological data

selection criteria were applied to data set 6. Values outside 1.65 residual standard deviations of the data set 6 regression line were discarded if they were derived from air samples collected when wind speed was less than 1.34 m $s^{-1}$ or when the wind was blowing from possible sources of local contamination. (Additional trajectory analyses of the origins of the air samples were not warranted because of the stations' isolated locations as well as the generally poor quality of the data.) Resulting data are shown in data sets 7 and 8 (columns 17 and 18). Sources for possible local contamination are the Eskimo village at Barrow, Hilo at Mauna Loa, and Pago Pago and Tula Village in Samoa. Unfavorable wind directions at each site are shown in the Description of Data Sets in Appendix A.

The cumulative loss of data, resulting from application of the various data selection criteria described above, is shown in the Description of Data Sets to be 24.6%, 25.5%, and 34.7% at Barrow, Mauna Loa, and Samoa, respectively. As expected, data loss from application of the meteorological wind speed and direction criteria is small primarily because all three stations are located in highly clean environments so that local pollution is generally not a problem. Data representative of highly polluted air samples, if they existed, would furthermore have been eliminated by the previously applied statistical data selection criteria. Moderately polluted air samples data, on the other hand, would not be readily identified by the wind speed and direction criteria, owing to the relatively high variability remaining in the final data.

Data set 8 consists of improved $CCl_3F$ measurement results compared with the quality of the raw data of set 3. The data are recommended for use by researchers who accept the data selection procedures described herein. Although these data are considerably less reliable than $CCl_3F$ measurement results obtained following 6 March 1977 (see Appendix B), they are presented here in consideration that they may be of some use in research concerning $CCl_3F$ abundances, growth rates, latitudinal gradients, and interhemispheric exchange, particularly since a sparsity of similar data exists from other researchers for 1974-1976.

## 3.3 Observations of $CCl_3F$, 7 March 1977 to 31 December 1979

$CCl_3F$ data obtained during March 1977 through December 1979 at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole are presented in Appendix B, discussed in this section, and plotted in Fig. 5. As in Appendix A, the first five columns of the data base in Appendix B present station, year, Julian calendar day, Greenwich mean time, and sample number of collected $CCl_3F$ sample. Two sample numbers that have four identical last numerals represent a pair of air samples collected simultaneously. Data from such pair samples are subsequently combined to yield individual $CCl_3F$ measurement results.

Data set 1 (column 6) lists $CCl_3F$ concentrations determined from chromatographic analyses of collected ambient (moist) air samples. The analysis results are referenced to tank 3072 calibration gas with a nominal $CCl_3F$ concentration of 149.50 pptv.

Data set 2 (column 7) lists results corrected for an improved (see Sec. 2.3) value of tank 3072 $CCl_3F$ calibration gas. Here, also, data from evacuated cylinder samples have been adjusted by the factor 0.936 to

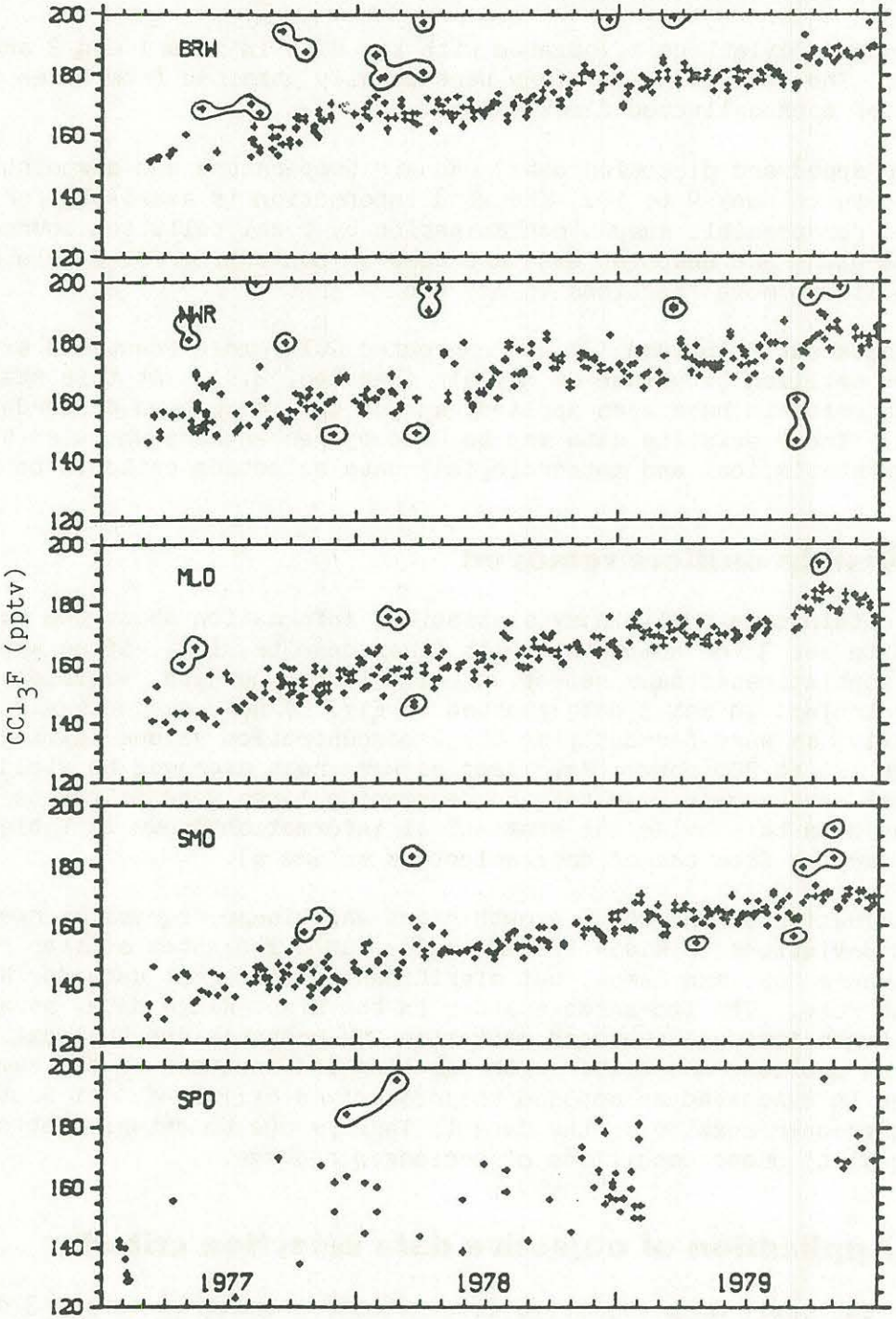



Figure 5.--Raw $CCl_3F$ data (excluding concentrations $\leq$120 pptv and $\geq$200 pptv) obtained during 1977-1979 at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole. Visible outliers are shown "circled."

correspond to data derived from air samples collected in dual, pressurized sample cylinders (see Sec. 2.1).

Standard deviations associated with the data in sets 1 and 2 are given in column 8. The standard deviations were usually obtained from three individual analyses of each collected flask sample.

Wind speed and direction data, and air temperature and dewpoint data are presented in columns 9 to 12. The wind information is available for use as a criterion for possible sample contamination by local pollution sources, and the temperature and dewpoint data are used in converting $CCl_3F$ mole fractions in moist air to mole fractions in dry air.

In data set 3 (column 13) are corrected $CCl_3F$ mole fractions expressed in parts per trillion by volume of dry air (see Sec. 2.4). At this stage no data selection criteria have been applied, and no data have been discarded or combined. These pristine data may be used by researchers who wish to apply their own statistical and meteorological data selection criteria to the data.

### 3.3.1 Visible outliers removed

To obtain some preliminary statistical information about the quality of the data in set 3 for comparison with final results, i.e., after application of more sophisticated data selection criteria to the data, visible outliers (shown "circled" in set 3 data plotted in Fig. 5) were subjectively removed temporarily, as were far-outlying $CCl_3F$ concentration values falling outside the range 120 to 200 pptv. Pair samples were next averaged to yield individual measurement results, and regression lines were fitted to the resulting data to provide the statistical information shown in Table 6 (see results derived from use of data selection scheme a).

Examination of the $CCl_3F$ growth rates and linear regression residual standard deviations (r.s.d.) listed in the table indicates similar results for Barrow, Mauna Loa, and Samoa, but significantly different data for Niwot Ridge and South Pole. The increased scatter in the Niwot Ridge data, as attested to by the larger residual standard deviation, is probably due to local pollution as well as problems associated with sampling and analysis of air samples collected in evacuated as opposed to pressurized cylinders. At South Pole, the much greater scatter in the data is largely due to deterioriation of air sample quality under conditions of prolonged storage.

### 3.3.2 Application of objective data selection criteria

We next apply more objective data selection criteria to set 3 data, and compare linear regression statistics derived for the newly selected data with those obtained above for the subjectively selected data.

In general, high-quality $CCl_3F$ data can be identified by their associated low standard deviations as well as by relatively small differences in pair-sample concentrations. Sample concentration standard deviations are primarily a function of sample analysis precision, whereas pair-sample concentration differences reflect the quality of sampling. Since our methods of sampling and analysis improved with time, and since highest quality data were obtained

Table 6.--Linear regression information for selected $CCl_3F$ data for 1977 through 1979

| Station | Data selection scheme* | Slope (pptv $yr^{-1}$) | s.d. (pptv $yr^{-1}$) | r.s.d. (pptv) | Corr. coeff. | No obs. |
|---|---|---|---|---|---|---|
| | a | 13.13 | 0.66 | 3.44 | .817 | -- |
| | b | 11.46 | 0.67 | 3.20 | .814 | 69 |
| BRW | c | 11.98 | 0.36 | 3.09 | .819 | 124 |
| | d | 11.76 | 0.39 | 3.37 | .880 | 129 |
| | e | 11.78 | 0.39 | 3.39 | .879 | 129 |
| | a | 10.39 | 0.50 | 4.48 | .772 | -- |
| | b | 9.66 | 0.77 | 4.30 | .740 | 58 |
| NWR | c | 10.80 | 0.41 | 3.92 | .852 | 122 |
| | d | 10.37 | 0.48 | 4.66 | .789 | 127 |
| | e | 10.56 | 0.47 | 4.61 | .797 | 127 |
| | a | 12.98 | 0.41 | 3.80 | .883 | -- |
| | b | 12.38 | 0.53 | 3.03 | .873 | 82 |
| MLO | c | 13.00 | 0.37 | 3.03 | .913 | 122 |
| | d | 12.62 | 0.41 | 3.56 | .883 | 128 |
| | e | 12.51 | 0.40 | 3.47 | .887 | 127 |
| | a | 12.67 | 0.40 | 3.84 | .881 | -- |
| | b | 11.75 | 0.49 | 2.98 | .874 | 85 |
| SMO | c | 12.31 | 0.33 | 2.98 | .918 | 127 |
| | d | 12.47 | 0.36 | 3.40 | .902 | 135 |
| | e | 12.79 | 0.35 | 3.37 | .908 | 135 |
| | a | 11.97 | 1.95 | 10.95 | .488 | -- |
| | b | 13.16 | 3.74 | 9.19 | .579 | 11 |
| SPO | c | 11.56 | 1.64 | 8.71 | .581 | 38 |
| | d | 12.04 | 1.93 | 11.04 | .493 | 42 |
| | e | 9.93 | 2.28 | 11.15 | .353 | 37 |

* a: Outliers subjectively removed.
b: Pair-sample data only. Concentration standard deviation (s.d.) $\leq$4.8 pptv; concentration pair difference $\leq$7.8 pptv.
c: As b, but including data falling within ±2.0 residual standard deviations (r.s.d.) of the regression line fitted to b data.
d: As b, but including data falling within ±3.0 r.s.d. of the regression line fitted to b data.
e: As b, but including data falling within ±3.0 r.s.d. of the regression parabola fitted to b data.
Note: Accepted data selection scheme is d.

at Barrow, Mauna Loa, and Samoa in 1979, these data were used, as follows, to characterize optimum sampling and analysis procedures within the GMCC $CCl_3F$ monitoring program and, hence, to identify highly reliable data.

The top histogram in Fig. 6 illustrates the distribution of standard deviations associated with $CCl_3F$ mole fractions for the combined Barrow, Mauna Loa, and Samoa data for the year 1979. If we take 96% of the entire body of data with the smallest standard deviations to be representative of optimum $CCl_3F$ sampling and analysis procedures, this histogram defines maximum acceptable standard deviations for sample concentrations to be 4.8 pptv. (That the $CCl_3F$ monitoring program improved with time is attested to by application of this standard deviation criterion to similar 1977 and 1978 data, which identified 91% of 1978 samples as highly reliable but only 80% of 1977 samples as highly reliable.)

Corresponding to the maximum acceptable standard deviation of 4.8 pptv for $CCl_3F$ sample analyses is a maximum acceptable concentration difference for pair samples of 7.8 pptv. This value, derived from the statistical t-test, defines pair-sample concentration means belonging to the same population. Thus, if the concentration difference for a pair of samples is greater than 7.8 pptv, then it is likely that some sampling problem occurred, e.g., contamination, rendering the populations different for the two simultaneously collected samples.

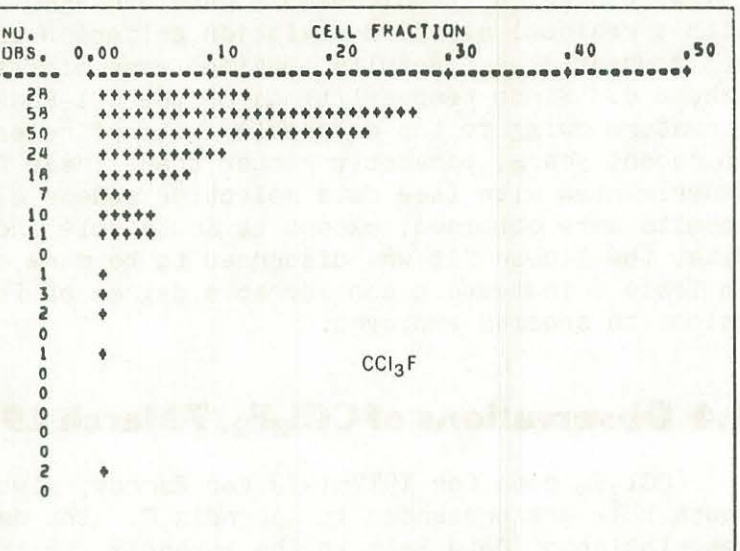
Highly reliable $CCl_3F$ data are, therefore, taken to be pair-sample concentrations having associated standard deviations of 4.8 pptv or less, with the concentration difference for each pair being less than or equal to 7.8 pptv. In data set 3 of Appendix B, such data are identified by flags 0 given in column 14, labeled F3. Less-reliable set 3 data are characterized by F3 flags 1 to 5 described in the Description of Data Sets in the appendix.

Since individual $CCl_3F$ concentration values of pair-sample data not meeting the high reliability criterion may be of high quality, as may also be concentration values derived from singly collected air samples, the following procedure was employed to include such data in the select data set. First, the highly reliable $CCl_3F$ pair-sample values (flagged 0) of data set 3 were averaged to yield individual measurement results (see data set 4 and flag column F4). Next, regression lines were fitted to those measurement data for each station, and corresponding regression-line residual standard deviations were computed. Less-reliable $CCl_3F$ mole fractions of data set 3, flagged 1 to 4, were then deemed acceptable if they fell within the range of ±3 residual standard deviations of the linear-regression values. Such acceptable $CCl_3F$ data, with pair values averaged where they exist, are included in data set 4, with flags 0 in column F4.

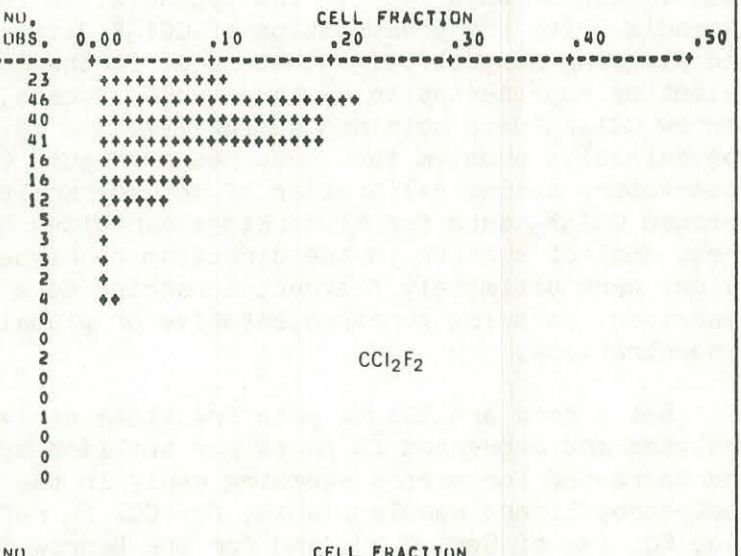
$CCl_3F$ measurement results presented in data set 4, with associated flags 0 in column F4, are presumed to be representative of background atmospheric conditions at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole. They are recommended for use by researchers who accept the data selection procedures described here as satisfactory. Linear-regression statistics for these data are shown in Table 6 (corresponding to results derived from use of data selection scheme d).

As indicated in Table 6, use of several other data selection schemes was investigated. In scheme b, only highly reliable data (coded 0 in flag column

| INTERVAL MID POINT | CUM. FRACT. | 1-CUM. FRACT. | CELL FRACT. | NO. OBS. |
|---|---|---|---|---|
| .300000 | .130 | 1.000 | .130 | 28 |
| .900000 | .400 | .870 | .270 | 58 |
| 1.50000 | .633 | .600 | .233 | 50 |
| 2.10000 | .744 | .367 | .112 | 24 |
| 2.70000 | .828 | .256 | .084 | 18 |
| 3.30000 | .860 | .172 | .033 | 7 |
| 3.90000 | .907 | .140 | .047 | 10 |
| 4.50000 | .958 | .093 | .051 | 11 |
| 5.10000 | .958 | .042 | 0.000 | 0 |
| 5.70000 | .963 | .042 | .005 | 1 |
| 6.30000 | .977 | .037 | .014 | 3 |
| 6.90000 | .986 | .023 | .009 | 2 |
| 7.50000 | .986 | .014 | 0.000 | 0 |
| 8.10000 | .991 | .014 | .005 | 1 |
| 8.70000 | .991 | .009 | 0.000 | 0 |
| 9.30000 | .991 | .009 | 0.000 | 0 |
| 9.90000 | .991 | .009 | 0.000 | 0 |
| 10.5000 | .991 | .009 | 0.000 | 0 |
| 11.1000 | .991 | .009 | 0.000 | 0 |
| 11.7000 | 1.000 | .009 | .009 | 2 |
| 12.3000 | 1.000 | .000 | 0.000 | 0 |




| INTERVAL MID POINT | CUM. FRACT. | 1-CUM. FRACT. | CELL FRACT. | NO. OBS. |
|---|---|---|---|---|
| .300000 | .107 | 1.000 | .107 | 23 |
| .900000 | .322 | .893 | .215 | 46 |
| 1.50000 | .509 | .678 | .187 | 40 |
| 2.10000 | .701 | .491 | .192 | 41 |
| 2.70000 | .776 | .299 | .075 | 16 |
| 3.30000 | .850 | .224 | .075 | 16 |
| 3.90000 | .907 | .150 | .056 | 12 |
| 4.50000 | .930 | .093 | .023 | 5 |
| 5.10000 | .944 | .070 | .014 | 3 |
| 5.70000 | .958 | .056 | .014 | 3 |
| 6.30000 | .967 | .042 | .009 | 2 |
| 6.90000 | .986 | .033 | .019 | 4 |
| 7.50000 | .986 | .014 | 0.000 | 0 |
| 8.10000 | .986 | .014 | 0.000 | 0 |
| 8.70000 | .995 | .014 | .009 | 2 |
| 9.30000 | .995 | .005 | 0.000 | 0 |
| 9.90000 | .995 | .005 | 0.000 | 0 |
| 10.5000 | 1.000 | .005 | .005 | 1 |
| 11.1000 | 1.000 | .000 | 0.000 | 0 |
| 11.7000 | 1.000 | .000 | 0.000 | 0 |
| 12.3000 | 1.000 | .000 | 0.000 | 0 |




| INTERVAL MID POINT | CUM. FRACT. | 1-CUM. FRACT. | CELL FRACT. | NO. OBS. |
|---|---|---|---|---|
| .300000 | .149 | 1.000 | .149 | 32 |
| .900000 | .377 | .851 | .228 | 49 |
| 1.50000 | .651 | .623 | .274 | 59 |
| 2.10000 | .800 | .349 | .149 | 32 |
| 2.70000 | .888 | .200 | .088 | 19 |
| 3.30000 | .953 | .112 | .065 | 14 |
| 3.90000 | .977 | .047 | .023 | 5 |
| 4.50000 | .986 | .023 | .009 | 2 |
| 5.10000 | .986 | .014 | 0.000 | 0 |
| 5.70000 | .986 | .014 | 0.000 | 0 |
| 6.30000 | .991 | .014 | .005 | 1 |
| 6.90000 | .995 | .009 | .005 | 1 |
| 7.50000 | .995 | .005 | 0.000 | 0 |
| 8.10000 | .995 | .005 | 0.000 | 0 |
| 8.70000 | .995 | .005 | 0.000 | 0 |
| 9.30000 | .995 | .005 | 0.000 | 0 |
| 9.90000 | .995 | .005 | 0.000 | 0 |
| 10.5000 | .995 | .005 | 0.000 | 0 |
| 11.1000 | 1.000 | .005 | .005 | 1 |
| 11.7000 | 1.000 | .000 | 0.000 | 0 |
| 12.3000 | 1.000 | .000 | 0.000 | 0 |

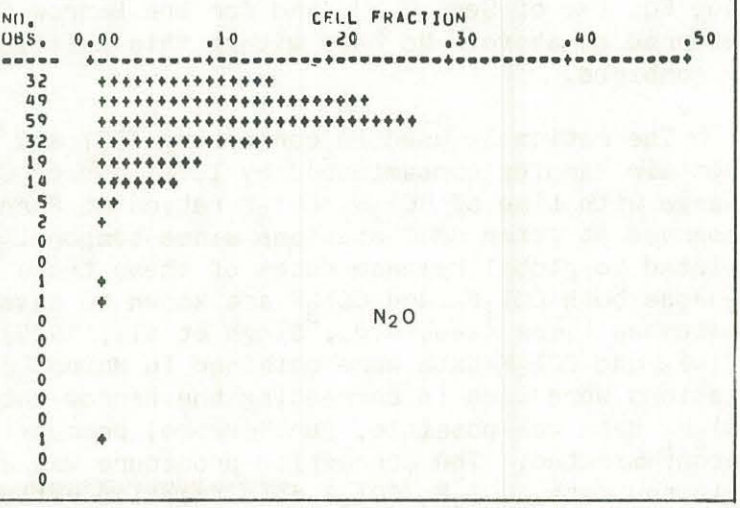



Figure 6.--Histograms showing the distribution of standard deviations associated with $CCl_3F$, $CCl_2F_2$, and $N_2O$ concentrations measured at Barrow, Mauna Loa, and Samoa during 1979.

F3) were used, with pair-sample data averaged. Scheme c was similar to d, but with a residual standard deviation criterion of ±2 instead of ±3 in the data replacement step. Results obtained were similar to those obtained using scheme d. Since temporal plots of the $CCl_3F$ data appeared to exhibit curvature owing to the decreasing rate of release of $CCl_3F$ into the atmosphere in recent years, parabolic rather than linear fits to the data were experimented with (see data selection scheme e). Again, basically similar results were obtained, except at South Pole where, because of the sparsity of data, the linear fit was discerned to be more acceptable. In general, results in Table 6 indicate a considerable degree of insensitivity to the various data selection schemes employed.

## 3.4 Observations of $CCl_2F_2$, 7 March 1977 to 31 December 1979

$CCl_2F_2$ data for 1977-1979 for Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole are presented in Appendix C. The data format, described in the Description of Data Sets in the appendix, is the same as that employed in Appendix B for the presentation of $CCl_3F$ data. Procedures used in identifying and flagging suspect $CCl_2F_2$ data are, furthermore, identical to those used in selecting representative background $CCl_3F$ data, with two exceptions. First, Barrow $CCl_2F_2$ data obtained during 1977 and 1978 were corrected for a contamination problem that occurred when pure $CCl_2F_2$ was released at the observatory during calibration of aerosol monitoring equipment. Second, because $CCl_2F_2$ data for Niwot Ridge exhibited a well-defined baseline but a great deal of scatter in the direction of higher concentrations, the high values were ultimately flagged, according to a data selection method to be described, as being nonrepresentative of global background $CCl_2F_2$ concentrations.

Set 3 data are $CCl_2F_2$ mole fractions derived from individual sample analyses and expressed in parts per trillion by volume in dry air. Results are corrected for errors stemming early in the program from use of unelectropolished sample flasks, for $CCl_2F_2$ reference gas calibration drift [see Eq. (3) of Sec. 2.3], and for the Barrow $CCl_2F_2$ contamination problem referred to above. No data within this pristine data set have been discarded or combined.

The rationale used in correcting 1977 and 1978 Barrow $CCl_2F_2$ data derived from air samples contaminated by local use of $CCl_2F_2$ was that the rate of change with time of $CCl_2F_2/CCl_3F$ ratios at Barrow should be similar to that observed at other GMCC stations since temporal variations in such ratios are related to global release rates of these trace gases (CMAFPP, 1982) and because both $CCl_2F_2$ and $CCl_3F$ are known to have relatively long atmospheric residence times (see, e.g., Singh et al., 1979). Because highest quality $CCl_2F_2$ and $CCl_3F$ data were obtained in Mauna Loa and Samoa, results from these stations were used in correcting the Barrow data. Correction of the Barrow $CCl_2F_2$ data was possible, furthermore, because the $CCl_3F$ data there were uncontaminated. The correction procedure was as follows. First, using selected data, $CCl_2F_2/CCl_3F$ mole fraction ratios were plotted for Barrow, Mauna Loa, and Samoa as shown in Fig. 7. Least-squares regression lines [Eqs. (10) and (11)] were then fitted to the Mauna Loa and Samoa data, while a least-squares fourth-degree polynomial curve [Eq. (12)] was fitted to the results from Barrow:

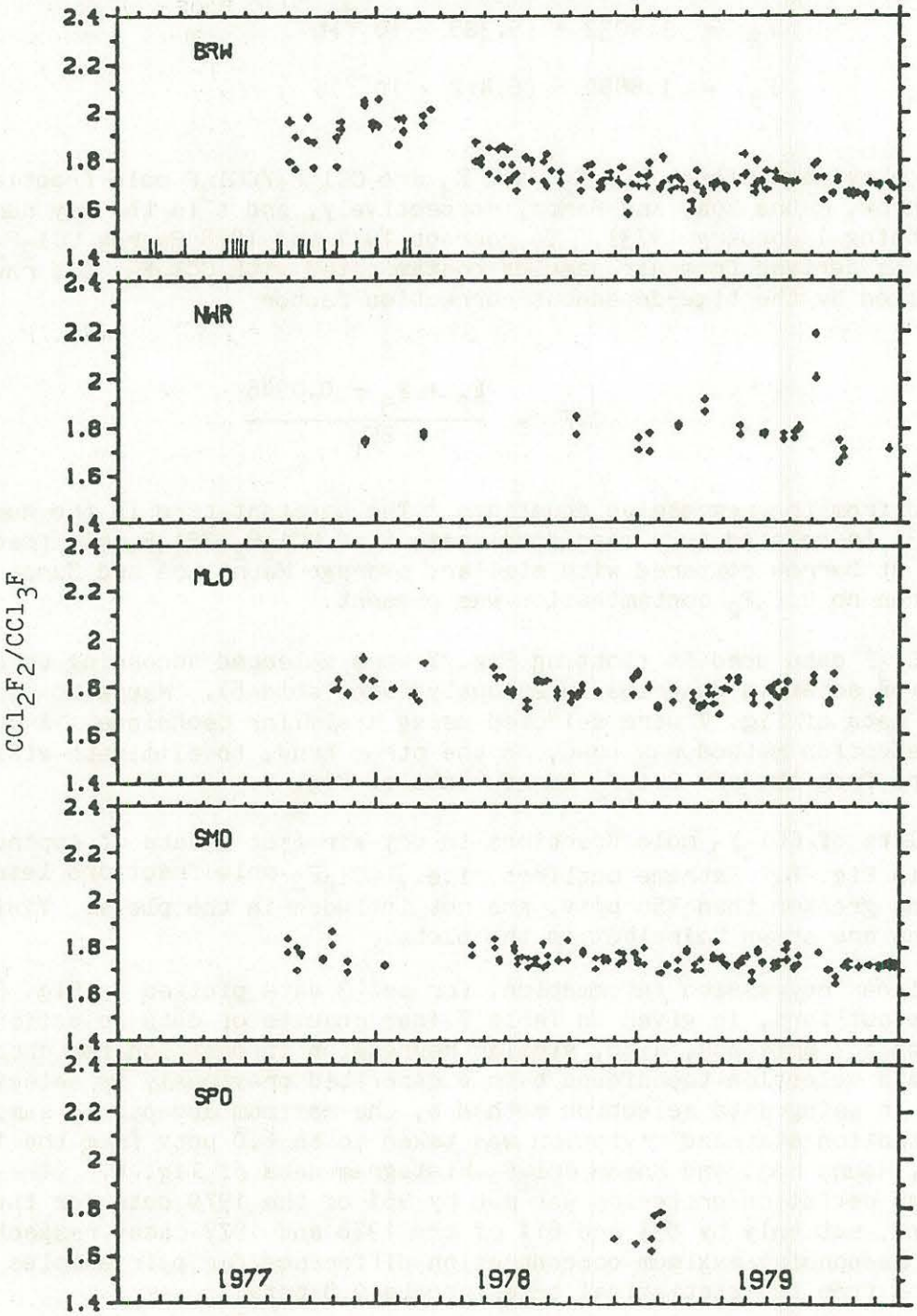



Figure 7.--$CCl_2F_2/CCl_3F$ ratio plots for Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole. Vertical bars shown near the abscissa of the Barrow data plot indicate times when nephelometer calibrations were performed with $CCl_2F_2$, causing contamination of flask air samples.

$$F_1 = -285.27 + 0.5460t - (3.86 \times 10^{-4})t^2 + (1.205 \times 10^{-7})t^3 - (1.399 \times 10^{-11})t^4 \quad (10)$$

$$F_2 = 1.9032 - (5.325 \times 10^{-5})t \quad (11)$$

$$F_3 = 1.8880 - (6.412 \times 10^{-5})t \ . \quad (12)$$

In the above equations, $F_1$, $F_2$, and $F_3$ are $CCl_2F_2/CCl_3F$ mole fraction ratios for Barrow, Mauna Loa, and Samoa, respectively, and t is the day number (with t = 0 being 1 January 1973). To correct 1977 and 1978 Barrow $CCl_2F_2$ mole fractions derived from air samples contaminated with $CCl_2F_2$, the raw data were multiplied by the time-dependent correction factor

$$C.F. = \frac{F_2 + F_3 - 0.0948}{2F_1} \quad (13)$$

derived from the regression equations. The constant term in the numerator of Eq. (13) is related to a mean displacement of $CCl_2F_2/CCl_3F$ mole fraction ratios at Barrow compared with similar, average Mauna Loa and Samoa data for 1979 when no $CCl_2F_2$ contamination was present.

$CCl_3F$ data used in plotting Fig. 7 were selected according to data selection scheme d described previously (see Table 6). Mauna Loa and Samoa $CCl_2F_2$ data of Fig. 7 were selected using a similar technique. A subjective data selection method was used, on the other hand, to eliminate visible outliers from the raw $CCl_2F_2$ Barrow data of Fig. 7.

Plots of $CCl_2F_2$ mole fractions in dry air (set 3 data of Appendix C) are shown in Fig. 8. Extreme outliers, i.e., $CCl_2F_2$ mole fractions less than 200 pptv and greater than 450 pptv, are not included in the plots. Visible outliers are shown "circled" in the plots.

Linear regression information, for set 3 data plotted in Fig. 8 minus visible outliers, is given in Table 7 (see results of data selection scheme a). Table 7 presents, also, similar regression information for data derived from data selection techniques b to e described previously in selecting $CCl_3F$ data. In using data selection method b, the maximum acceptable sample concentration standard deviation was taken to be 6.0 pptv from the 1979 Barrow, Mauna Loa, and Samoa $CCl_2F_2$ histogram data of Fig. 6. (The 6.0 pptv standard deviation criterion was met by 96% of the 1979 data for these stations, but only by 83% and 81% of the 1978 and 1977 data, respectively.) The corresponding maximum concentration difference for pair samples was computed from the statistical t-test to be 9.8 pptv.

Note from Table 7 that the four data selection schemes b to e yield, for Mauna Loa, Samoa, and South Pole, very similar $CCl_2F_2$ growth rates and residual standard deviations. Corresponding Barrow $CCl_2F_2$ growth rates are lower, perhaps because of imperfect correction of 1977 and 1978 Barrow data derived from samples contaminated with $CCl_2F_2$.

A peculiarity of the linear-regression statistics for Niwot Ridge data selected using schemes b and c is that the residual standard deviations are

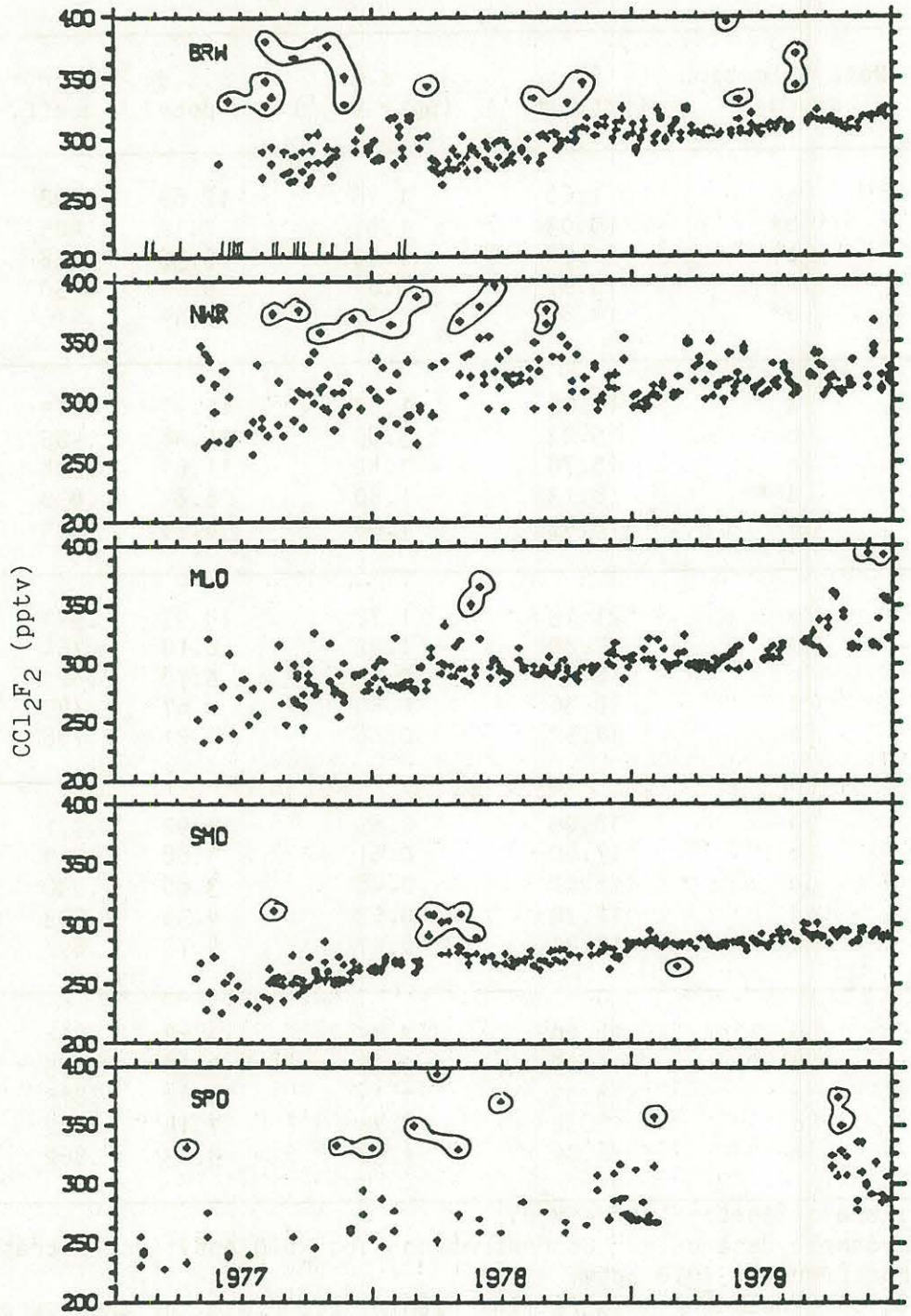



Figure 8.--Raw $CCl_2F_2$ data (excluding concentrations $\leq$200 pptv and $\geq$450 pptv) obtained at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole during 1977-1979. Visible outliers are shown "circled." The Barrow data have been corrected for a contamination problem that occurred during 1977 and 1978 when pure $CCl_2F_2$ was used at the Barrow observatory to calibrate a nephelometer. See Fig. 7 legend for a discussion about the vertical bars on the Barrow plot.

Table 7.--Linear regression information for selected $CCl_2F_2$ data for 1977 through 1979

| Station | Data selection scheme* | Slope (pptv $yr^{-1}$) | s.d. (pptv $yr^{-1}$) | r.s.d. (pptv) | Corr. coeff. | No obs. |
|---|---|---|---|---|---|---|
| | a | 1.66 | 1.75 | 12.69 | .008 | -- |
| | b† | 10.03 | 1.61 | 7.12 | .405 | 59 |
| BRW | c† | 11.71 | 0.90 | 6.36 | .618 | 106 |
| | d† | 15.57 | 0.89 | 6.17 | .750 | 107 |
| | e† | 14.89 | 0.91 | 6.49 | .716 | 108 |
| | a | 10.55 | 1.87 | 15.97 | .219 | -- |
| | b | 15.22 | 3.09 | 11.48 | .455 | 31 |
| NWR | c | 15.70 | 1.42 | 11.61 | .544 | 105 |
| | d** | 18.13 | 1.80 | 6.82 | .830 | 58 |
| | e** | 18.43 | 1.08 | 6.79 | .834 | 60 |
| | a | 21.13 | 1.72 | 14.93 | .541 | -- |
| | b | 17.80 | 1.42 | 6.14 | .764 | 51 |
| MLO | c | 18.01 | 0.82 | 5.78 | .827 | 104 |
| | d | 18.36 | 0.90 | 6.67 | .797 | 109 |
| | e | 17.52 | 0.86 | 6.21 | .798 | 107 |
| | a | 18.05 | 0.85 | 7.92 | .771 | -- |
| | b | 17.90 | 0.61 | 3.68 | .919 | 79 |
| SMO | c | 18.01 | 0.48 | 3.80 | .930 | 110 |
| | d | 17.30 | 0.53 | 4.35 | .903 | 118 |
| | e | 18.31 | 0.57 | 4.73 | .897 | 119 |
| | a | 24.20 | 2.35 | 14.28 | .694 | -- |
| | b | 18.05 | 3.25 | 5.65 | .755 | 12 |
| SPO | c | 18.03 | 1.33 | 5.42 | .873 | 29 |
| | d | 18.82 | 1.73 | 7.16 | .792 | 33 |
| | e | 18.01 | 1.58 | 5.03 | .862 | 23 |

* a: Outliers subjectively removed.
b: Pair-sample data only. Concentration s.d. $\leq$6.0 pptv; concentration pair difference $\leq$9.8 pptv.
c: As b, but including data falling within ±2.0 r.s.d. of the regression line fitted to b data.
d: As b, but including data falling within ±3.0 r.s.d. of the regression line fitted to b data.
e: As b, but including data falling within ±3.0 r.s.d. of the regression parabola fitted to b data.
Note: Accepted data selection scheme is d.

† 1977 and 1978 Barrow data corrected for inadvertent contamination of air with $CCl_2F_2$ (see text).

**Values falling above the regression parabola fitted to d and e data discarded.

unusually large. This large scatter in the data is believed to stem from local (and perhaps continental) $CCl_2F_2$ pollution sources, and from collection at Niwot Ridge of air samples in evacuated cylinders that are more prone to contamination than are the pressurized cylinders used at all other GMCC stations. Note also that in Fig. 8 the Niwot Ridge $CCl_2F_2$ data exhibit a well-defined baseline. To determine a background $CCl_2F_2$ data set for Niwot Ridge, data selection scheme d** was employed (see Table 7). This involved, first, application to the data set of data selection criterion d. Because the resulting data exhibited curvature as well as considerable scatter, a parabolic regression line was fitted to them, and all values lying above this line were flagged as being nonrepresentative of global background conditions. A linear regression fitted to the remaining data then exhibited a residual standard deviation comparable with those observed at other GMCC stations.

Select $CCl_2F_2$ data, presumably representative of background atmospheric conditions at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole, are presented in data set 4 of Appendix C with associated flags 0 in column F4. They comprise optimum pair-sample data with the standard deviation of each sample mole fraction being $\leq 6.0$ pptv and the mole fraction difference for each sample pair being $\leq 9.8$ pptv and other data, presented in data set 3, that lie within ±3 residual standard deviations of regression lines fitted to the optimum pair-sample data (excluding selected Niwot Ridge data, flagged 6 in column F4, that were deemed to be nonrepresentative of atmospheric global background conditions). In this data set, 1977 and 1978 data have been corrected for a contamination problem that occurred due to use at Barrow of pure $CCl_2F_2$ to calibrate a nephelometer. Also, $CCl_2F_2$ mole fractions in this data set, derived from pair air samples collected simultaneously, have been averaged to yield individual measurement results.

## 3.5 Observations of $N_2O$, 7 March 1977 to 31 December 1979

$N_2O$ data for 1977-1979 for Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole are presented in Appendix D. The data format, described in the Description of Data Sets in the appendix, is the same as that employed in Appendixes B and C for the presentation of $CCl_3F$ and $CCl_2F_2$ data. Procedures used in identifying and flagging nonbaseline $N_2O$ data are, furthermore, virtually identical to those used in screening $CCl_3F$ data.

Set 3 data are $N_2O$ mole fractions, in parts per billion by volume (ppbv) of dry air, derived from individual sample analyses. Results are corrected for errors stemming early in the program from use of unelectropolished sample flasks, for sample analysis errors resulting from the location of chromatograph $N_2O$ peaks on the tails of $O_2$ peaks [see Eq. (2) Sec. 2.2], and for a change in the $N_2O$ calibration scale from that of R. A. Rasmussen to that of NOAA/GMCC (see Sec. 2.3). No data have been discarded or combined. These pristine data may be used by researchers who wish to apply their own statistical and meteorological data selection criteria to the data.

Plots of $N_2O$ mole fractions in dry air (set 3 data) are shown in Fig. 9. Extreme outliers, i.e., $N_2O$ mole fractions less than 280 ppbv and greater than 320 ppbv, are not included in the plots. Visible outliers are shown circled in the plots.

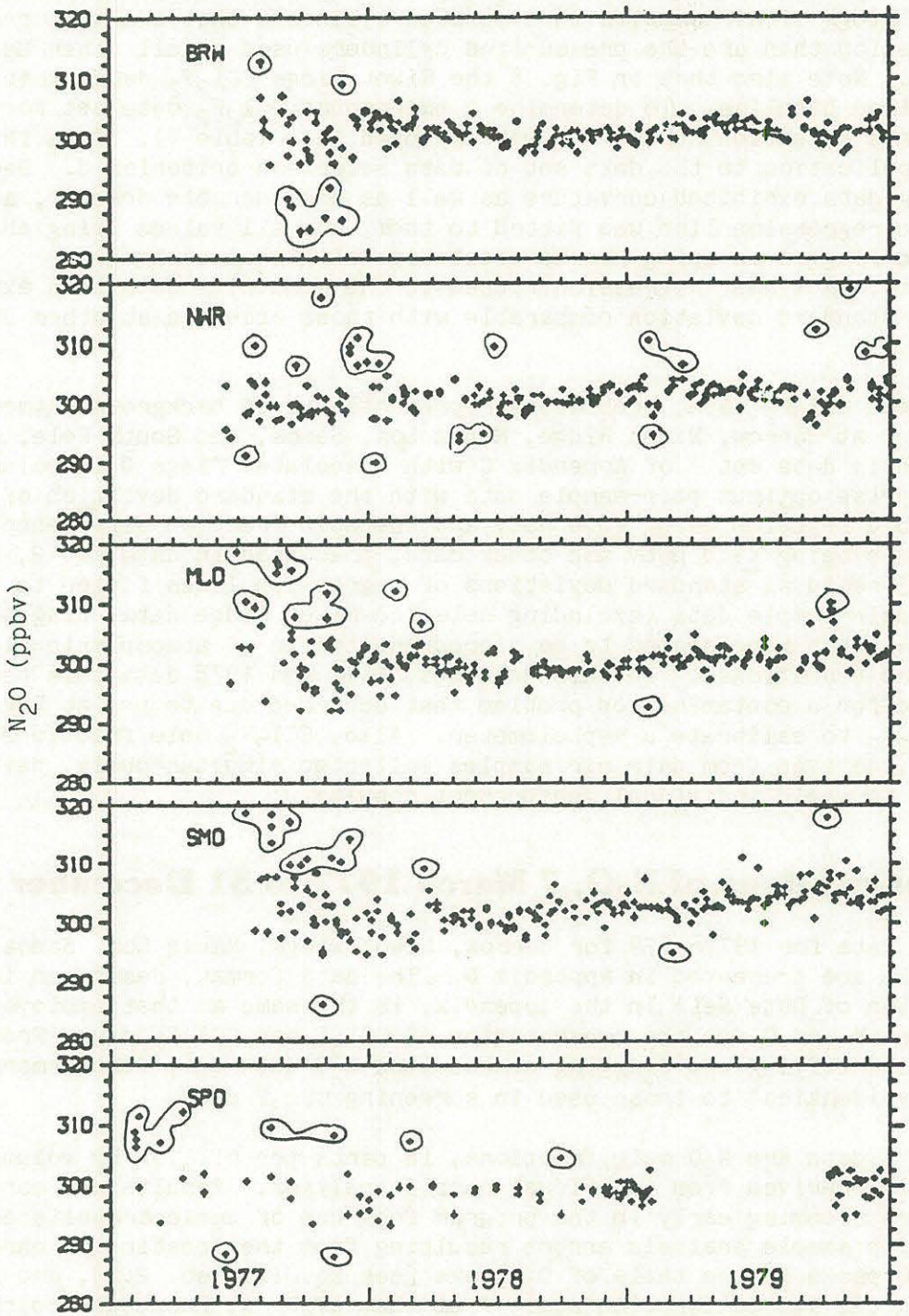



Figure 9.--Raw $N_2O$ data (excluding concentrations $\leq$280 ppbv and $\geq$320 ppbv) obtained at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole during 1977-1979. Visible outliers are shown "circled."

Linear-regression information, for set 3 data plotted in Fig. 8 minus visible outliers, are given in Table 8 (see data selection scheme a results). Table 8 presents, also, similar information for data derived from use of data selection techniques b to d described previously. (Data selection method e, which employs a parabolic regression fit, was not used since the addition of a second-order term did not significantly improve the predictive power of the straight-line model).

In using data selection method b to screen for baseline data, the maximum acceptable sample concentration standard deviation was taken to be (see Sec. 3.3.2) 3.8 ppbv from the 1979 Barrow, Mauna Loa, and Samoa $N_2O$ histogram data of Fig. 6. The corresponding maximum pair-sample concentration difference was computed from the statistical t-test to be 6.2 ppbv.

That sample analysis procedures improved in the $N_2O$ monitoring program following 1977 is attested to by the observation that 96% and 92% of the 1979 and 1978 sample data, respectively, met the standard deviation criterion of $\leq$3.8 ppbv, while only 37% of the 1977 data did.

As indicated in Table 8, the data selection schemes b to d used for identifying acceptable data yield similar $N_2O$ growth rates and linear-regression residual deviations. Since application of data selection method d screens out the least amount of data, this scheme was chosen for use in arriving at a final, select $N_2O$ data set.

Select $N_2O$ data, presumably representative of background atmospheric conditions at Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole, are presented in data set 4 of Appendix D with associated flags 0 in column F4. Here, $N_2O$ mole fractions derived from pair samples collected simultaneously have been averaged. The data have, furthermore, been adjusted by the correction factor 0.8933 to express results in the new NOAA/GMCC $N_2O$ calibration scale (see Sec. 2.3).

# 4. DATA ARCHIVING

$CCl_3F$, $CCl_2F_2$, and $N_2O$ data presented in Appendixes A, B, C, and D of this report are archived on magnetic tape at the

National Climatic Data Center
Climatological Services Section
Federal Building
Asheville, NC 28801-2696

Telephone: FTS 672-0682
Commercial: (704) 259-0682

When requesting the data, ask for tape No. A80365 located in GMCC Tape Deck No. 9708. A charge for supplying tapes is normally made to cover costs of reproduction and handling. The FORTRAN format for reading the data will be automatically supplied with the tape.

Table 8.--Linear regression information for selected $N_2O$ Data for 1977 through 1979

| Station | Data selection scheme* | Slope (ppbv $yr^{-1}$) | s.d. (ppbv $yr^{-1}$) | r.s.d. (ppbv) | Corr. coeff. | No obs. |
|---|---|---|---|---|---|---|
| BRW | a | 0.15 | 0.24 | 1.72 | .003 | 117 |
| | b | 0.03 | 0.24 | 1.31 | .000 | 89 |
| | c | -0.05 | 0.20 | 1.36 | .001 | 107 |
| | d | -0.05 | 0.21 | 1.51 | .000 | 114 |
| NWR | a | 0.74 | 0.20 | 1.50 | .119 | 106 |
| | b | 0.62 | 0.28 | 1.24 | .082 | 57 |
| | c | 0.86 | 0.19 | 1.30 | .187 | 95 |
| | d | 0.85 | 0.20 | 1.51 | .150 | 103 |
| MLO | a | 1.12 | 0.30 | 2.31 | .107 | 117 |
| | b | 1.01 | 0.33 | 1.73 | .107 | 81 |
| | c | 0.92 | 0.26 | 1.73 | .114 | 104 |
| | d | 0.83 | 0.29 | 2.12 | .071 | 112 |
| SMO | a | 1.91 | 0.29 | 2.34 | .265 | 119 |
| | b | 3.21 | 0.34 | 1.57 | .556 | 74 |
| | c | 2.98 | 0.22 | 1.49 | .648 | 104 |
| | d | 2.88 | 0.24 | 1.79 | .570 | 111 |
| SPO | a | 0.57 | 0.30 | 1.74 | .072 | 50 |
| | b | 1.24 | 0.38 | 1.15 | .287 | 29 |
| | c | 1.11 | 0.27 | 1.11 | .316 | 38 |
| | d | 1.12 | 0.29 | 1.26 | .282 | 41 |

* a: Outliers subjectively removed.
b: Pair-sample data only. Concentration s.d. $\leq$3.8 ppbv; concentration pair difference $\leq$6.2 ppbv.
c: As b, but including data falling within ±2.0 r.s.d. of the regression line fitted to b data.
d: As b, but including data falling within ±3.0 r.s.d. of the regression line fitted to b data.
Note: Accepted data selection scheme is d.

# 5. SUMMARY OF RESULTS

Selected $CCl_3F$, $CCl_2F_2$, and $N_2O$ data fitted with regression lines are shown in Figs. 10 to 13. Included on the plots are statistics pertaining to the growth rates and mixing ratios of these gases, including 95% confidence limit errors.

Considerable scatter is evident in the 1973-1977 $CCl_3F$ data shown in Fig. 10. The apparently systematic variations in the data should not be interpreted as representing atmospheric conditions. Rather, they stem from temporal sensitivity changes in the chromatograph gas analyzer, which could not be accounted for without the use of calibration gases. Note that the biases in the data are similar for all three stations. This is because samples collected on a weekly basis at the stations were generally analyzed within a few days of each other. In such data, information about the latitudinal distribution of a trace gas species tends to be preserved. The data of Fig. 10 clearly exhibit a pronounced latitudinal gradient, as might be expected from our knowledge that the midlatitude region in the Northern Hemisphere is the primary source of anthropogenically produced $CCl_3F$.

The mean $CCl_3F$ growth rate deduced from the data plotted in Fig. 10 is $(17.3 \pm 4.3)\%\ yr^{-1}$. This result falls within the range of growth rates $(13\text{-}28)\%\ yr^{-1}$ determined by other researchers during the early to mid 1970's (see, e.g., Pack et al., 1977; Fraser and Pearman, 1978). Owing to the large 95% confidence limit uncertainty of $4.3\%\ yr^{-1}$ associated with the 17.3% growth rate, however, the data are not precise enough to permit a highly reliable estimate to be made of the atmospheric lifetime of $CCl_3F$.

$CCl_3F$ data for 1977-1979 shown in Fig. 11, except for those from South Pole station, are considerably improved in quality compared with those obtained earlier in the monitoring program. This is attested to by the much smaller residual standard deviations associated with regression lines fitted to the data. Here, the linear-regression analysis data are intended only to provide information on data quality, rather than to characterize the temporal behavior of $CCl_3F$ in the atmosphere. Note, for example, that the data plots of Fig. 11 exhibit curvature. Thus, although the mean $CCl_3F$ growth rate for 1977-1979 is deduced from the linear regression statistics to be 11.85 pptv $yr^{-1}$, the growth rate throughout this period is, in fact, decreasing as might be expected from the rate of input of $CCl_3F$ into the atmosphere, which peaked in 1974 (CMAFPP, 1982). The $CCl_3F$ distributions shown in Fig. 11 exhibit, furthermore, a marked latitudinal gradient. Another data feature, currently under investigation, is the cyclic (annual) variation discernable in the Barrow data. Additional data analyses in progress will yield more definitive information on $CCl_3F$ secular trends and latitudinal gradients, as well as an estimate of the atmospheric residence time of $CCl_3F$.

The inferior quality of the South Pole $CCl_3F$ data plotted in Fig. 11 most likely stems from deterioration of samples during extended storage times. Because of logistics constraints, up to 10 months can elapse between times of sample collection and analysis.

Selected $CCl_2F_2$ data are plotted in Fig. 12. Here again, linear-regression statistics reveal the data to be of high quality, from which reliable information is obtainable about $CCl_2F_2$ growth rates, concentrations, abundances, latitudinal distributions, and atmospheric residence time. $CCl_2F_2$ growth rates determined from the individual stations' data are remarkably

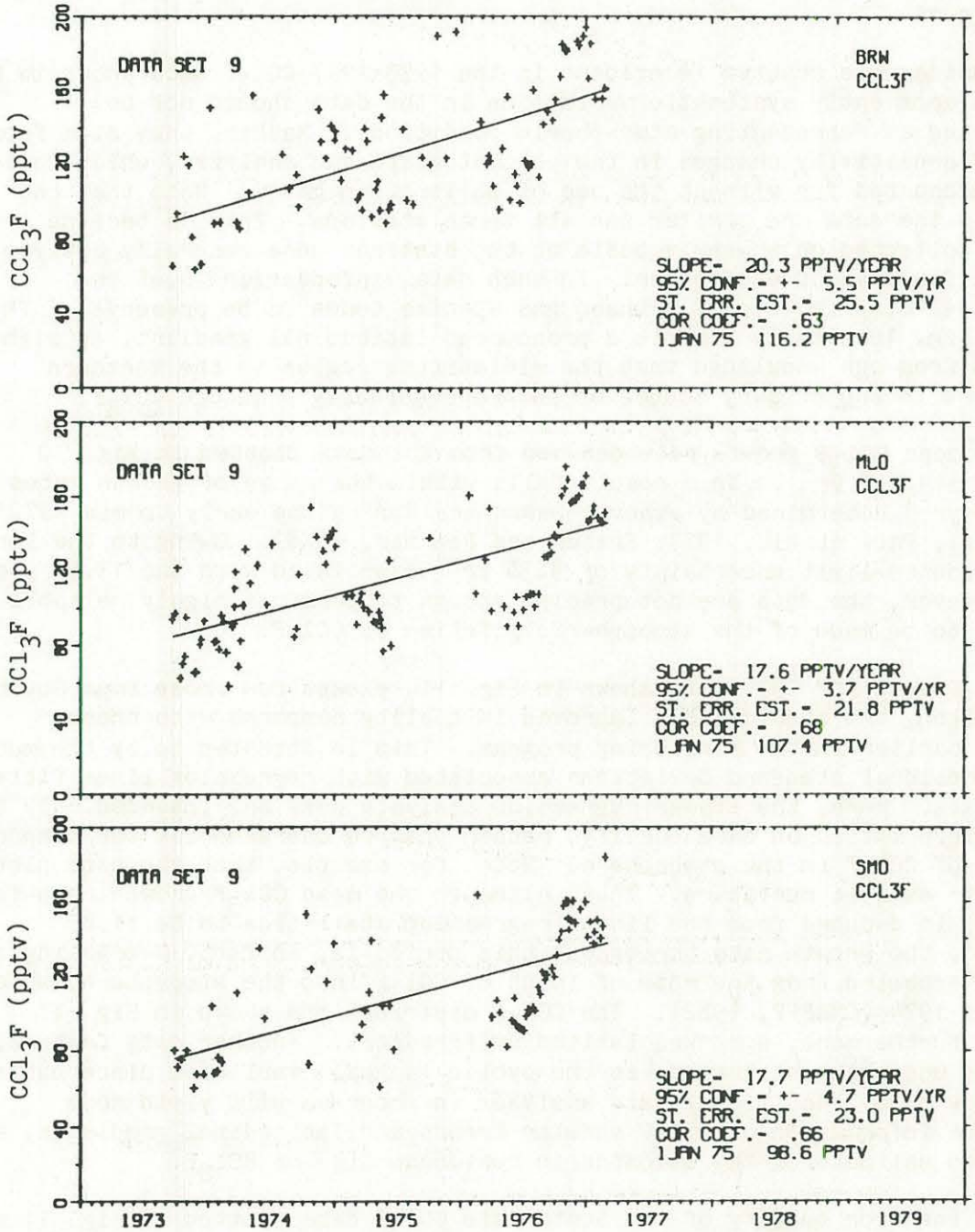



Figure 10.--Plots of selected 1973-1977 Barrow, Mauna Loa, and Samoa $CCl_3F$ data fitted with regression lines.

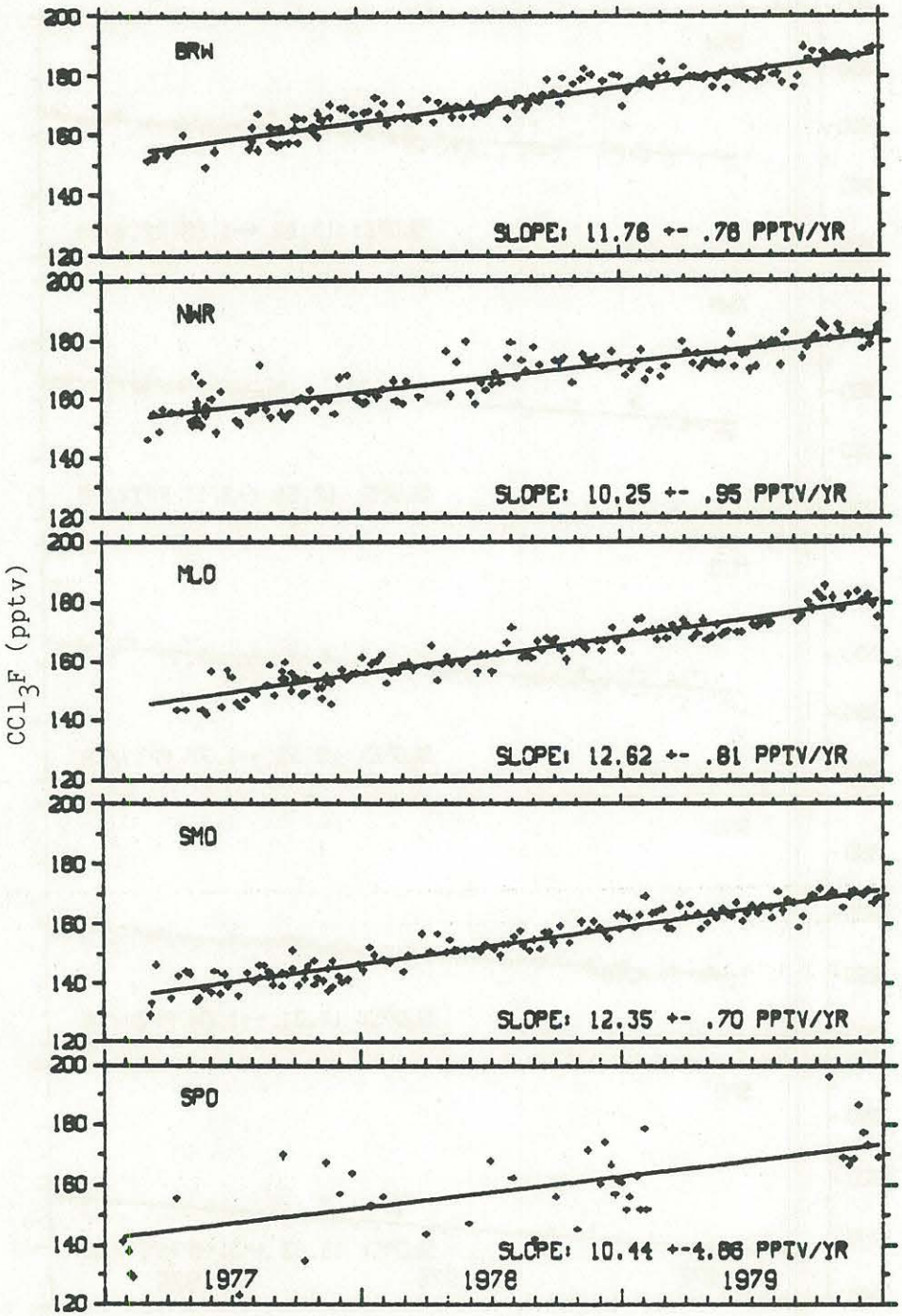



Figure 11.--Plots of selected 1977-1979 Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole $CCl_3F$ data fitted with regression lines.

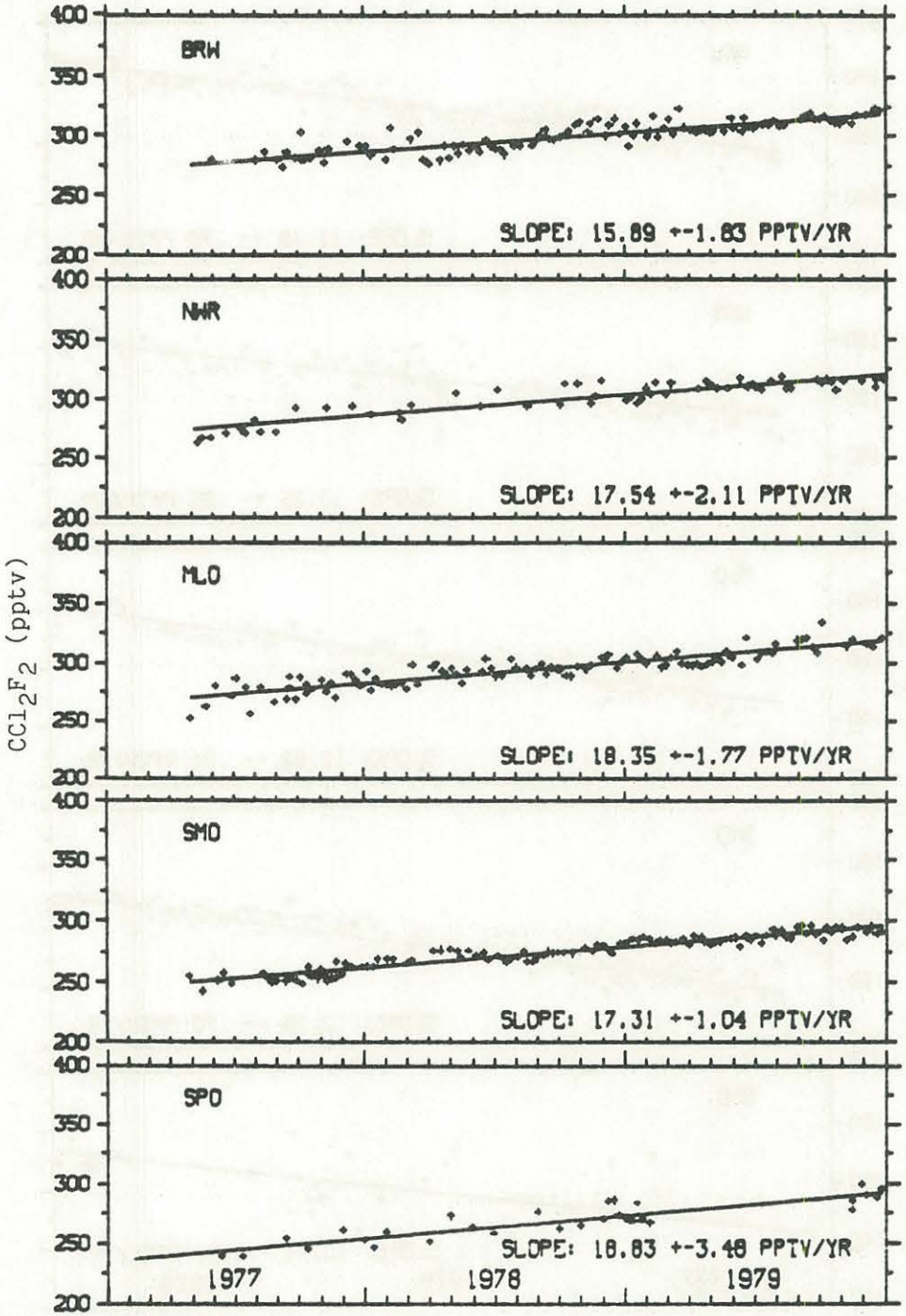



Figure 12.--Plots of selected 1977-1979 Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole $CCl_2F_2$ data fitted with regression lines.

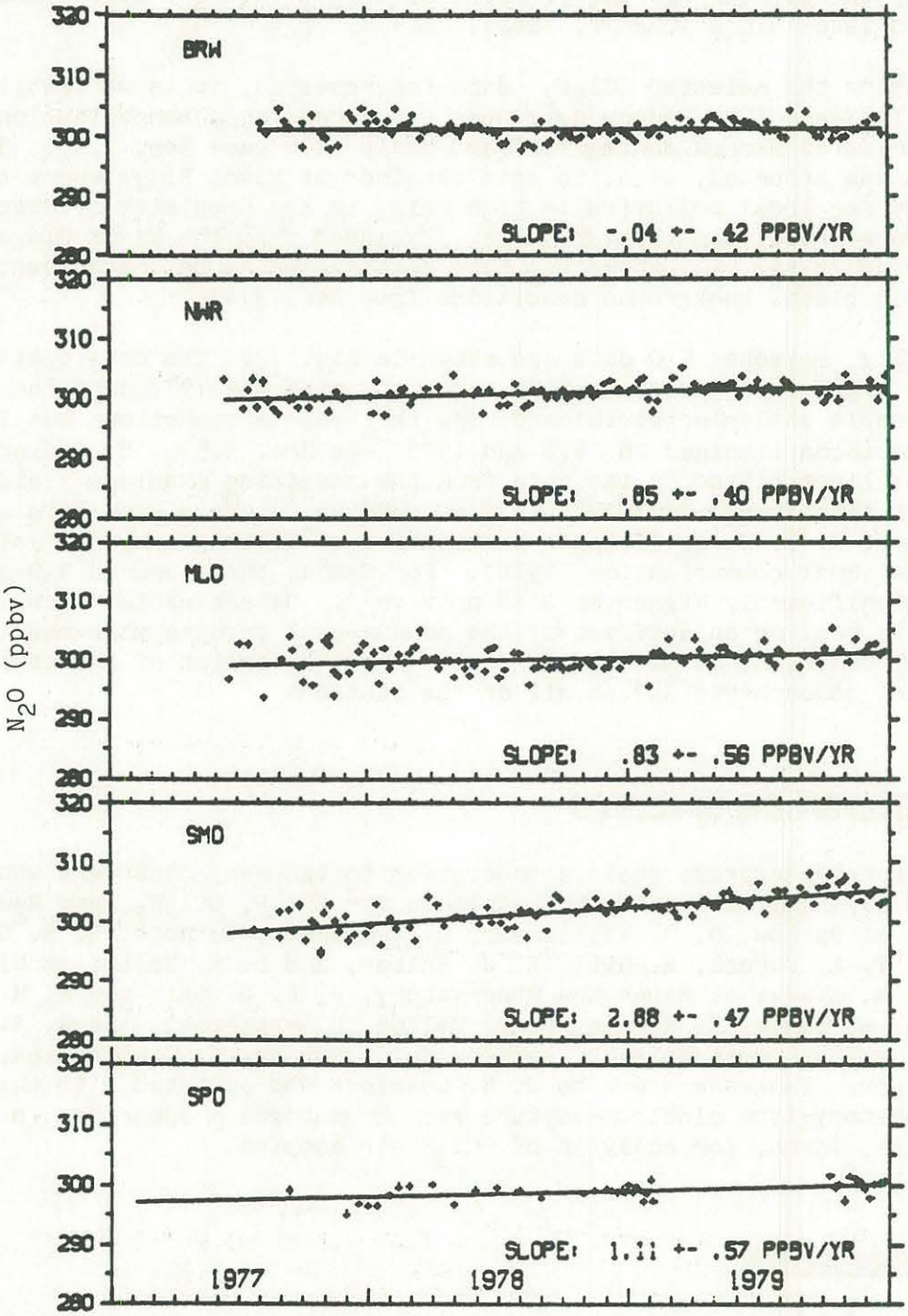



Figure 13.--Plots of selected 1977-1979 Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole $N_2O$ data fitted with regression lines.

similar, with the mean growth rate being 17.58 pptv $yr^{-1}$. As in the case of the $CCl_3F$ data, curvatures in the $CCl_2F_2$ data plots are clearly evident, reflecting the decreasing rate of input of $CCl_2F_2$ into the atmosphere during the mid to late 1970's (CMAFPP, 1982).

In using the selected $CCl_2F_2$ data for research, it is worthwhile noting that the 1977 and 1978 Barrow data were corrected for a contamination problem that occurred at Barrow during 1977 and early 1978 (see Sec. 3.4). Special treatment was afforded, also, to data obtained at Niwot Ridge where the propensity for local pollution is high owing to the proximity of Niwot Ridge to a large metropolitan (Denver) area. Excluded from the Niwot Ridge $CCl_2F_2$ data plotted in Fig. 12, therefore, are data deemed to be unrepresentative of atmospheric global background conditions (see Sec. 3.4).

Finally, selected $N_2O$ data are shown in Fig. 13. The data quality is generally high, though care must be taken in using the 1977 data for research, in that sample analysis precision during that year's operations was inferior to the precision attained in 1978 and 1979 (see Sec. 3.5). Excluding Samoa, regression lines fitted to the data from the remaining stations yield a mean $N_2O$ growth rate during 1977-1979 of 0.69 ppbv $yr^{-1}$. This result is compatible with data of R. F. Weiss (Scripps Institution of Oceanography, La Jolla, Calif.; personal communication, 1980). For Samoa, the measured $N_2O$ growth rate is significantly higher at 2.88 ppbv $yr^{-1}$. Determination of whether this increase is real or an artifact of the measurement process will require additional research, as will an in-depth characterization of the temporal behavior of atmospheric $N_2O$ at all of the stations.

## 6. ACKNOWLEDGMENTS

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# Appendix A: $CCl_3F$ Data for Barrow, Mauna Loa, and Samoa, 16 September 1973 to 6 March 1977

Description of Data Sets:

1. Data analyzed on chromatograph; coulometric calibration.

2. Data corrected for use of unelectropolished sample flasks (correction factor = 0.936).

3. $CCl_3F$ mole fractions expressed in pptv dry air. Data set 3 is composed of corrected, unselected data. It is intended for use by researchers who desire to apply their own statistical and/or meteorological data selection criteria for improvement of data quality and identification of background measurement conditions.

4. Values less than 50.0 pptv and greater than 200.00 pptv discarded.

5. Values having standard deviations (s.d.) greater than 12.0 discarded.

6. Data lying outside 2 residual standard deviations (r.s.d.) of the regression line fitted to data set 5 discarded.

7. For wind speed less than 1.34 m $s^{-1}$, data discarded lying above 1.65 r.s.d. of the data set (d.s.) 6 regression line.

8. For wind direction at BRW of 210° to 310°, MLO of 270° to 20°, and SMO of 225° to 315°, data discarded lying above 1.65 r.s.d. of data set 6 regression line. Data set 8 is composed of corrected, selected data presumably representing atmospheric background measurement conditions at the various stations. It is intended for use by researchers who accept the data selection procedures outlined in this report. Data quality is poor.

Summary of Data Quantity (Data Loss Expressed in Percent):

| | Total meas. | Loss d.s. 4 | Loss d.s. 5 | Loss d.s. 6 | Loss d.s. 7 | Loss d.s. 8 | Cum. loss |
|---|---|---|---|---|---|---|---|
| BRW | 118 | 17.8 | 4.2 | 2.5 | 0.0 | 0.0 | 24.6 |
| MLO | 149 | 14.1 | 8.0 | 2.0 | 0.0 | 1.3 | 25.5 |
| SMO | 121 | 24.0 | 7.4 | 3.3 | 0.0 | 0.0 | 34.7 |

Data Base Codes:

| | | | |
|---|---|---|---|
| MSG | Missing datum | * | Climatological data used |
| CLM | Wind calm, direction indeterminate | D | Datum discarded |
| -99.9 | Low unrecorded dewpoint | U | Undetermined standard deviation |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 73 | 259 | 2155 | 010001 | 69.5 | 65.1 | 1.6 | 6.3 | 90 | 5.0 | 3.0 | 65.5 | 65.5 | 65.5 | 65.5 | 65.5 | 65.5 | 1.6 |
| BRW | 73 | 273 | 0120 | 030002 | 99.8 | 93.4 | 4.0 | 12.5 | 90 | -.6 | -1.6 | 93.9 | 93.9 | 93.9 | 93.9 | 93.9 | 93.9 | 4.0 |
| BRW | 73 | 284 | 0020 | 020003 | 412.7 | 386.3 | 52.4 | 6.3 | 50 | -4.4 | -14.2 | 387.1 | D | D | D | D | D | D |
| BRW | 73 | 292 | 2240 | 040004 | 133.0 | 124.5 | 4.9 | 1.8 | 45 | -4.5 | -7.9 | 124.9 | 124.9 | 124.9 | 124.9 | 124.9 | 124.9 | 4.9 |
| BRW | 73 | 306 | 2230 | 050005 | 128.1 | 119.9 | 5.5 | 8.1 | 90 | -12.0 | -99.9 | 120.1 | 120.1 | 120.1 | 120.1 | 120.1 | 120.1 | 5.5 |
| BRW | 73 | 317 | 1930 | 060006 | 86.6 | 81.1 | 7.9 | 1.3 | 4 | -10.0 | -13.3 | 81.2 | 81.2 | 81.2 | 81.2 | 81.2 | 81.2 | 7.9 |
| BRW | 73 | 324 | 2325 | 010007 | 67.8 | 63.5 | 6.7 | 1.8 | 45 | -22.0 | -32.8 | 63.5 | 63.5 | 63.5 | 63.5 | 63.5 | 63.5 | 6.7 |
| BRW | 73 | 334 | 2345 | 020008 | 152.7 | 142.9 | 18.0 | 3.1 | 60 | -24.0 | -38.5 | 143.0 | 143.0 | D | D | D | D | D |
| BRW | 73 | 343 | 0030 | 030009 | 70.7 | 66.2 | 7.5 | 8.5 | 65 | -21.0 | -99.9 | 66.3 | 66.3 | 66.3 | 66.3 | 66.3 | 66.3 | 7.5 |
| BRW | 74 | 4 | 0000 | 040010 | 160.5 | 150.2 | 5.9 | 4.0 | 180 | -4.2 | -11.1 | 150.6 | 150.6 | 150.6 | 150.6 | 150.6 | 150.6 | 5.9 |
| BRW | 74 | 16 | 2227 | 050011 | 94.5 | 88.5 | 6.2 | 3.5 | 70 | -26.0 | -99.9 | 88.6 | 88.6 | 88.6 | 88.6 | 88.6 | 88.6 | 6.2 |
| BRW | 74 | 32 | 2240 | 060012 | 95.2 | 89.1 | 3.1 | 3.6 | 80 | -19.0 | -99.9 | 89.3 | 89.3 | 89.3 | 89.3 | 89.3 | 89.3 | 3.1 |
| BRW | 74 | 80 | 1830 | 020013 | 95.1 | 89.0 | 1.3 | 7.6 | 60 | -25.5 | -99.9 | 89.2 | 89.2 | 89.2 | 89.2 | 89.2 | 89.2 | 1.3 |
| BRW | 74 | 89 | 1920 | 010014 | 91.5 | 85.6 | 5.4 | 5.4 | 50 | -21.0 | -99.9 | 85.8 | 85.8 | 85.8 | 85.8 | 85.8 | 85.8 | 5.4 |
| BRW | 74 | 115 | 2325 | 030015 | 112.4 | 105.2 | 4.1 | 8.5 | 120 | -15.0 | -99.9 | 105.4 | 105.4 | 105.4 | 105.4 | 105.4 | 105.4 | 4.1 |
| BRW | 74 | 128 | 1917 | 040016 | 167.5 | 156.8 | 4.8 | 6.7 | 60 | -8.5 | MSG | 157.1 | 157.1 | 157.1 | 157.1 | 157.1 | 157.1 | 4.8 |
| BRW | 74 | 166 | 2230 | 050017 | 5986.0 | 5602.9 | 72.0 | 4.3 | 20 | 5.0 | -8.3 | 5621.2 | D | D | D | D | D | D |
| BRW | 74 | 184 | 0023 | 060018 | 111.1 | 104.0 | 13.2 | 4.0 | 320 | 9.2 | -1.8 | 104.5 | 104.5 | D | D | D | D | D |
| BRW | 74 | 190 | 2003 | 020019 | 381.3 | 356.9 | 15.2 | 6.7 | 30 | 5.0 | -.2 | 359.0 | D | D | D | D | D | D |
| BRW | 74 | 213 | 0132 | 010020 | 133.5 | 124.8 | 8.2 | 6.7 | 80 | 9.5 | 7.3 | 126.0 | 126.0 | 126.0 | 126.0 | 126.0 | 126.0 | 8.2 |
| BRW | 74 | 232 | 2207 | 030021 | 114.1 | 106.8 | 7.9 | 2.2 | 80 | 8.5 | 6.5 | 107.8 | 107.8 | 107.8 | 107.8 | 107.8 | 107.8 | 7.9 |
| BRW | 74 | 253 | 2244 | 040022 | 122.0 | 114.2 | 4.0 | 5.8 | 100 | 3.2 | 2.3 | 115.0 | 115.0 | 115.0 | 115.0 | 115.0 | 115.0 | 4.0 |
| BRW | 74 | 260 | 2330 | 050023 | 103.2 | 96.6 | 3.4 | 3.6 | 270 | 9.2 | 8.8 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 3.4 |
| BRW | 74 | 295 | 2319 | 050027 | 195.8 | 183.3 | 11.1 | 4.0 | 50 | -21.1 | -99.9 | 183.6 | 183.6 | 183.6 | D | D | D | D |
| BRW | 74 | 316 | 0028 | 040028 | 159.7 | 149.5 | 9.3 | 11.5 | 105 | -22.0 | -99.9 | 149.8 | 149.8 | 149.8 | 149.8 | 149.8 | 149.8 | 9.3 |
| BRW | 74 | 324 | 2355 | 060029 | 141.4 | 132.4 | 10.7 | 7.5 | 50 | -20.1 | -99.9 | 132.6 | 132.6 | 132.6 | 132.6 | 132.6 | 132.6 | 10.7 |
| BRW | 74 | 337 | 2327 | 010030 | 132.2 | 123.7 | 4.2 | 3.1 | 46 | -31.7 | -99.9 | 124.0 | 124.0 | 124.0 | 124.0 | 124.0 | 124.0 | 4.2 |
| BRW | 74 | 352 | 2330 | 050031 | 150.3 | 140.7 | 7.8 | 3.1 | 25 | -23.8 | -99.9 | 141.0 | 141.0 | 141.0 | 141.0 | 141.0 | 141.0 | 7.8 |
| BRW | 74 | 363 | 0320 | 040032 | 142.3 | 133.2 | 6.2 | 5.4 | 160 | -42.2 | -99.9 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 6.2 |
| BRW | 74 | 365 | 2317 | 010033 | 147.2 | 137.8 | 2.0 | 6.3 | 180 | -43.9 | -99.9 | 138.1 | 138.1 | 138.1 | 138.1 | 138.1 | 138.1 | 2.0 |
| BRW | 75 | 16 | 1918 | 040034 | 119.7 | 112.0 | 5.3 | 6.3 | 60 | -38.2 | -44.3 | 112.1 | 112.1 | 112.1 | 112.1 | 112.1 | 112.1 | 5.3 |
| BRW | 75 | 29 | 0015 | 030035 | 137.4 | 128.6 | 7.4 | 11.5 | 110 | -23.1 | -99.9 | 128.9 | 128.9 | 128.9 | 128.9 | 128.9 | 128.9 | 7.4 |
| BRW | 75 | 42 | 2329 | 020036 | 142.9 | 133.8 | 12.8 | 5.4 | 100 | -33.5 | -99.9 | 134.0 | 134.0 | D | D | D | D | D |
| BRW | 75 | 50 | 0128 | 050037 | 136.4 | 127.7 | 4.1 | 8.9 | 30 | -31.1 | -99.9 | 127.9 | 127.9 | 127.9 | 127.9 | 127.9 | 127.9 | 4.1 |
| BRW | 75 | 57 | 1845 | 010038 | 112.2 | 105.0 | 15.1 | 8.5 | 350 | -31.8 | -99.9 | 105.2 | 105.2 | D | D | D | D | D |
| BRW | 75 | 63 | 1842 | 060039 | 108.3 | 101.4 | 2.2 | 9.4 | 10 | -25.0 | -99.9 | 101.6 | 101.6 | 101.6 | 101.6 | 101.6 | 101.6 | 2.2 |
| BRW | 75 | 73 | 2309 | 040040 | 111.3 | 104.2 | 3.7 | 9.4 | 110 | -17.0 | -24.7 | 104.3 | 104.3 | 104.3 | 104.3 | 104.3 | 104.3 | 3.7 |
| BRW | 75 | 77 | 2020 | 030041 | 102.4 | 95.8 | 1.7 | 5.8 | 100 | -28.0 | -99.9 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 1.7 |
| BRW | 75 | 84 | 2220 | 020042 | 148.9 | 139.4 | 6.7 | 4.9 | 120 | -23.9 | -99.9 | 139.6 | 139.6 | 139.6 | 139.6 | 139.6 | 139.6 | 6.7 |
| BRW | 75 | 91 | 1848 | 050043 | 141.6 | 132.5 | 2.5 | 4.5 | 40 | -23.1 | -99.9 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 2.5 |
| BRW | 75 | 106 | 0115 | 010044 | 98.5 | 92.2 | 7.8 | 4.5 | 220 | -20.7 | -99.9 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 7.8 |
| BRW | 75 | 115 | 2022 | 060045 | 114.2 | 106.9 | 6.9 | 7.2 | 50 | -15.3 | -99.9 | 107.1 | 107.1 | 107.1 | 107.1 | 107.1 | 107.1 | 6.9 |
| BRW | 75 | 121 | 1821 | 040046 | 118.8 | 111.2 | 3.0 | 4.5 | 40 | -13.4 | -99.9 | 111.4 | 111.4 | 111.4 | 111.4 | 111.4 | 111.4 | 3.0 |
| BRW | 75 | 129 | 2320 | 030047 | 101.9 | 95.4 | 3.9 | 4.9 | 80 | -.8 | -9.2 | 95.7 | 95.7 | 95.7 | 95.7 | 95.7 | 95.7 | 3.9 |
| BRW | 75 | 133 | 2330 | 020048 | 155.0 | 145.1 | 3.0 | 10.7 | 90 | -6.4 | -18.7 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 3.0 |
| BRW | 75 | 140 | 1845 | 050049 | 167.8 | 157.1 | 7.0 | 5.4 | 100 | -5.0 | -18.5 | 157.3 | 157.3 | 157.3 | 157.3 | 157.3 | 157.3 | 7.0 |
| BRW | 75 | 147 | 2235 | 010050 | 94.9 | 88.8 | 6.5 | 8.0 | 130 | -1.0 | -8.5 | 89.1 | 89.1 | 89.1 | 89.1 | 89.1 | 89.1 | 6.5 |
| BRW | 75 | 156 | 0025 | 060051 | 102.6 | 96.0 | 3.6 | 6.3 | 70 | 2.3 | -7.7 | 96.4 | 96.4 | 96.4 | 96.4 | 96.4 | 96.4 | 3.6 |
| BRW | 75 | 161 | 2045 | 030052 | 105.5 | 98.7 | 5.0 | 5.8 | 100 | 1.3 | -9.5 | 99.0 | 99.0 | 99.0 | 99.0 | 99.0 | 99.0 | 5.0 |
| BRW | 75 | 196 | 2322 | 040053 | 147.3 | 137.9 | 8.8 | 6.0 | 80 | 5.5 | 5.2 | 139.1 | 139.1 | 139.1 | 139.1 | 139.1 | 139.1 | 8.8 |
| BRW | 75 | 206 | 2335 | 020054 | 107.5 | 100.6 | 5.9 | 6.0 | 60 | 3.0 | 2.3 | 101.3 | 101.3 | 101.3 | 101.3 | 101.3 | 101.3 | 5.9 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 75 | 215 | 1915 | 030055 | 117.3 | 109.8 | 14.8 | 4.5 | 100 | 4.2 | 1.6 | 110.5 | 110.5 | D | D | D | D | D |
| BRW | 75 | 226 | 2315 | 050056 | 104.8 | 98.1 | 7.2 | 5.4 | 120 | 7.5 | 7.5 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 7.2 |
| BRW | 75 | 250 | 0145 | 010057 | 132.1 | 123.6 | 8.5 | 7.5 | 150 | -1.0 | -1.0 | 124.3 | 124.3 | 124.3 | 124.3 | 124.3 | 124.3 | 8.5 |
| BRW | 75 | 262 | 0000 | 020058 | 203.1 | 190.1 | 5.5 | 8.0 | 30 | -4.0 | -4.0 | 191.0 | 191.0 | 191.0 | D | D | D | D |
| BRW | 75 | 269 | 1900 | 030059 | 219.9 | 205.8 | 9.5 | 6.3 | 70 | -2.8 | -3.9 | 206.8 | D | D | D | D | D | D |
| BRW | 75 | 274 | 1945 | 040060 | 128.2 | 120.0 | 8.0 | 8.5 | 100 | -6.0 | -7.1 | 120.4 | 120.4 | 120.4 | 120.4 | 120.4 | 120.4 | 8.0 |
| BRW | 75 | 283 | 0100 | 050061 | 540.2 | 505.6 | 10.1 | 8.0 | 80 | -10.5 | -12.5 | 506.8 | D | D | D | D | D | D |
| BRW | 75 | 287 | 1815 | 060062 | 231.4 | 216.6 | 4.7 | 8.1 | 50 | -19.4 | -21.7 | 216.8 | D | D | D | D | D | D |
| BRW | 75 | 296 | 0130 | 010063 | 201.6 | 188.7 | 10.7 | 6.7 | 90 | -15.0 | -16.7 | 189.0 | 189.0 | 189.0 | 189.0 | 189.0 | 189.0 | 10.7 |
| BRW | 75 | 316 | 1930 | 020064 | 271.6 | 254.2 | 6.1 | 4.0 | 40 | -26.5 | -27.0 | 254.4 | D | D | D | D | D | D |
| BRW | 75 | 323 | 0030 | 030065 | 132.4 | 123.9 | 4.7 | 4.5 | 80 | -28.0 | -28.0 | 124.0 | 124.0 | 124.0 | 124.0 | 124.0 | 124.0 | 4.7 |
| BRW | 75 | 350 | 2330 | 040066 | 204.1 | 191.0 | 7.9 | 10.3 | 70 | -21.1 | -23.9 | 191.2 | 191.2 | 191.2 | 191.2 | 191.2 | 191.2 | 7.9 |
| BRW | 75 | 358 | 0130 | 050067 | 947.9 | 887.2 | 6.1 | 2.7 | 40 | -25.8 | -33.7 | 887.7 | D | D | D | D | D | D |
| BRW | 75 | 364 | 2310 | 060068 | 250.8 | 234.7 | 7.4 | 6.7 | 105 | -28.5 | 31.3 | 245.8 | D | D | D | D | D | D |
| BRW | 76 | 6 | 2230 | 010069 | 361.1 | 338.0 | 2.4 | 6.7 | 110 | -24.4 | -27.2 | 338.2 | D | D | D | D | D | D |
| BRW | 76 | 19 | 2240 | 020070 | 240.8 | 225.4 | 3.2 | 3.1 | 6 | -40.0 | -44.0 | 225.5 | D | D | D | D | D | D |
| BRW | 76 | 48 | 2300 | 010071 | 250.2 | 234.2 | 5.6 | 3.1 | 110 | -31.1 | -35.0 | 234.3 | D | D | D | D | D | D |
| BRW | 76 | 56 | 2130 | 040072 | 152.8 | 143.0 | 7.3 | 5.8 | 80 | -35.0 | -38.9 | 143.1 | 143.1 | 143.1 | 143.1 | 143.1 | 143.1 | 7.8 |
| BRW | 76 | 74 | 0000 | 030073 | 129.0 | 120.7 | 1.8 | 1.8 | 20 | -22.8 | -25.6 | 120.8 | 120.8 | 120.8 | 120.8 | 120.8 | 120.8 | 1.8 |
| BRW | 76 | 79 | 2055 | 020074 | 133.9 | 125.3 | 9.1 | 5.4 | 60 | -23.3 | -26.7 | 125.4 | 125.4 | 125.4 | 125.4 | 125.4 | 125.4 | 9.1 |
| BRW | 76 | 83 | 2250 | 010075 | 130.9 | 122.5 | .8 | 7.2 | 20 | -21.1 | -23.3 | 122.6 | 122.6 | 122.6 | 122.6 | 122.6 | 122.6 | .8 |
| BRW | 76 | 93 | 0052 | 030076 | 116.2 | 108.8 | 4.2 | 7.2 | 70 | -24.0 | -99.9 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 4.2 |
| BRW | 76 | 110 | 2125 | 010077 | 102.8 | 96.2 | 1.5 | 4.5 | 30 | -14.2 | -30.0 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 1.5 |
| BRW | 76 | 119 | 0032 | 020078 | 137.5 | 128.7 | 1.9 | 4.5 | 350 | -8.3 | -10.0 | 129.1 | 129.1 | 129.1 | 129.1 | 129.1 | 129.1 | 1.9 |
| BRW | 76 | 127 | 2335 | 050079 | 547.6 | 512.6 | 12.0 | 10.3 | 50 | -3.1 | -3.6 | 514.9 | D | D | D | D | D | D |
| BRW | 76 | 133 | 2238 | 030080 | 166.8 | 155.1 | 1.2 | 6.3 | 70 | -7.2 | -12.0 | 156.5 | 156.5 | 156.5 | 156.5 | 156.5 | 156.5 | 1.2 |
| BRW | 76 | 142 | 2052 | 060081 | 108.2 | 101.3 | 1.9 | 4.9 | 100 | -7.5 | -11.1 | 101.5 | 101.5 | 101.5 | 101.5 | 101.5 | 101.5 | 1.9 |
| BRW | 76 | 146 | 2222 | 010082 | 89.4 | 83.7 | .5 | 7.2 | 20 | 1.0 | 0.0 | 84.2 | 84.2 | 84.2 | D | D | D | D |
| BRW | 76 | 155 | 2149 | 020083 | 122.4 | 114.6 | 4.7 | 11.5 | 90 | 2.0 | 1.8 | 115.4 | 115.4 | 115.4 | 115.4 | 115.4 | 115.4 | 4.7 |
| BRW | 76 | 161 | 0100 | 030084 | 115.7 | 108.3 | .8 | 6.7 | 90 | 2.8 | 2.0 | 109.1 | 109.1 | 109.1 | 109.1 | 109.1 | 109.1 | .8 |
| BRW | 76 | 171 | 2059 | 050085 | 105.9 | 99.1 | .4 | 4.0 | 100 | 3.9 | 3.2 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | .4 |
| BRW | 76 | 185 | 2235 | 010086 | 129.6 | 121.3 | 1.7 | 8.1 | 80 | 5.6 | 5.6 | 122.4 | 122.4 | 122.4 | 122.4 | 122.4 | 122.4 | 1.7 |
| BRW | 76 | 189 | 2334 | 060087 | 330.9 | 309.7 | 1.0 | 3.5 | 60 | 4.4 | 4.4 | 312.3 | D | D | D | D | D | D |
| BRW | 76 | 195 | 2037 | 020088 | 126.1 | 118.0 | 1.5 | 3.1 | 40 | 5.2 | 5.0 | 119.1 | 119.1 | 119.1 | 119.1 | 119.1 | 119.1 | 1.5 |
| BRW | 76 | 203 | 2138 | 030089 | 127.8 | 119.6 | .8 | 5.4 | 80 | 8.0 | 8.0 | 120.9 | 120.9 | 120.9 | 120.9 | 120.9 | 120.9 | .8 |
| BRW | 76 | 209 | 2247 | 050090 | 169.6 | 158.7 | 3.1 | 3.5 | 80 | 5.0 | 4.8 | 160.1 | 160.1 | 160.1 | 160.1 | 160.1 | 160.1 | 3.1 |
| BRW | 76 | 225 | 2035 | 010091 | 120.8 | 113.1 | 1.5 | 6.3 | 80 | 4.4 | 3.9 | 114.0 | 114.0 | 114.0 | 114.0 | 114.0 | 114.0 | 1.5 |
| BRW | 76 | 238 | 0100 | 060092 | 150.1 | 140.5 | 1.0 | 5.8 | 100 | 7.2 | 7.2 | 141.9 | 141.9 | 141.9 | 141.9 | 141.9 | 141.9 | 1.0 |
| BRW | 76 | 251 | 2300 | 020093 | 157.1 | 147.0 | 3.4 | 7.2 | 160 | 8.3 | 8.3 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 3.4 |
| BRW | 76 | 259 | 0045 | 030094 | 414.3 | 387.8 | 3.0 | 11.2 | 70 | 4.4 | 4.4 | 391.0 | D | D | D | D | D | D |
| BRW | 76 | 266 | 0015 | 050095 | 152.0 | 142.3 | 2.1 | 10.3 | 220 | 11.1 | 11.1 | 144.1 | 144.1 | 144.1 | 144.1 | 144.1 | 144.1 | 2.1 |
| BRW | 76 | 273 | 1850 | 010096 | 164.7 | 154.2 | 1.0 | 9.3 | 50 | -1.8 | -1.8 | 155.0 | 155.0 | 155.0 | 155.0 | 155.0 | 155.0 | 1.0 |
| BRW | 76 | 279 | 2240 | 060097 | 223.8 | 209.5 | .9 | 7.2 | 110 | -3.5 | -10.0 | 210.1 | D | D | D | D | D | D |
| BRW | 76 | 289 | 2125 | 020098 | 178.2 | 166.8 | .3 | 9.8 | 110 | -8.9 | -12.8 | 167.2 | 167.2 | 167.2 | 167.2 | 167.2 | 167.2 | .8 |
| BRW | 76 | 293 | 1830 | 030099 | 197.0 | 184.4 | 2.6 | 13.9 | 120 | -10.6 | -15.0 | 184.8 | 184.8 | 184.8 | 184.8 | 184.8 | 184.8 | 2.6 |
| BRW | 76 | 301 | 2147 | 050100 | 236.1 | 221.0 | 2.6 | 12.0 | 10 | -20.0 | -99.9 | 221.4 | D | D | D | D | D | D |
| BRW | 76 | 303 | 2215 | 010101 | 193.2 | 180.8 | 3.1 | 7.2 | 360 | -13.9 | -18.9 | 181.1 | 181.1 | 181.1 | 181.1 | 181.1 | 181.1 | 3.1 |
| BRW | 76 | 303 | 2215 | 200101 | 209.5 | 196.1 | U | 7.2 | 360 | -13.9 | -18.9 | 196.4 | 196.4 | 196.4 | 196.4 | 196.4 | 196.4 | U |
| BRW | 76 | 303 | 2330 | 040102 | 193.2 | 180.8 | .3 | 8.1 | 360 | -14.4 | -16.7 | 181.1 | 181.1 | 181.1 | 181.1 | 181.1 | 181.1 | .3 |
| BRW | 76 | 303 | 2330 | 220102 | 610.4 | 571.3 | U | 8.1 | 360 | -14.4 | -16.7 | 572.3 | D | D | D | D | D | D |
| BRW | 76 | 304 | 0135 | 060103 | 194.7 | 182.2 | 2.6 | 6.7 | 10 | -16.1 | -22.2 | 182.4 | 182.4 | 182.4 | 182.4 | 182.4 | 182.4 | 2.6 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 76 | 304 | 0135 | 230103 | 1369.9 | 1282.2 | U | 6.7 | 10 | -16.1 | -22.2 | 1283.7 | D | D | D | D | D | D |
| BRW | 76 | 307 | 2158 | 020104 | 193.3 | 180.9 | 1.2 | 5.4 | 120 | -26.0 | -48.0 | 181.0 | 181.0 | 181.0 | 181.0 | 181.0 | 181.0 | 1.2 |
| BRW | 76 | 321 | 2005 | 030105 | 256.7 | 240.3 | 2.6 | 8.9 | 60 | -12.0 | -99.9 | 240.8 | D | D | D | D | D | D |
| BRW | 76 | 338 | 2130 | 020106 | 198.9 | 186.2 | 1.6 | 4.3 | 130 | -36.0 | -40.0 | 186.2 | 186.2 | 186.2 | 186.2 | 186.2 | 186.2 | 1.6 |
| BRW | 76 | 343 | 2330 | 030107 | 196.6 | 184.0 | 1.8 | 4.0 | 90 | -31.7 | -36.7 | 184.1 | 184.1 | 184.1 | 184.1 | 184.1 | 184.1 | 1.8 |
| BRW | 76 | 350 | 2325 | 050108 | 259.8 | 243.2 | 1.6 | 9.4 | 60 | -23.3 | -29.4 | 243.3 | D | D | D | D | D | D |
| BRW | 76 | 355 | 2245 | 020109 | 201.7 | 188.8 | 1.3 | 3.5 | 90 | -30.0 | -36.7 | 188.9 | 188.9 | 188.9 | 188.9 | 188.9 | 188.9 | 1.3 |
| BRW | 76 | 363 | 2100 | 030110 | 206.8 | 193.6 | 2.6 | 4.4 | 80 | -24.0 | -31.7 | 193.7 | 193.7 | 193.7 | 193.7 | 193.7 | 193.7 | 2.6 |
| BRW | 77 | 6 | 2030 | 020111 | 177.3 | 166.0 | .5 | 5.4 | 110 | -16.0 | -21.0 | 166.2 | 166.2 | 166.2 | 166.2 | 166.2 | 166.2 | .5 |
| BRW | 77 | 12 | 0005 | 050112 | 197.6 | 185.0 | .8 | 4.0 | 80 | -30.0 | -35.6 | 185.0 | 185.0 | 185.0 | 185.0 | 185.0 | 185.0 | .8 |
| BRW | 77 | 26 | 0008 | 030113 | 165.7 | 155.1 | U | 11.6 | 70 | -22.0 | -99.9 | 155.4 | 155.4 | 155.4 | 155.4 | 155.4 | 155.4 | U |
| BRW | 77 | 46 | 2313 | 020114 | 166.0 | 155.4 | .6 | 7.2 | 80 | -23.6 | -99.9 | 155.7 | 155.7 | 155.7 | 155.7 | 155.7 | 155.7 | .6 |
| BRW | 77 | 53 | 2238 | 050115 | 171.8 | 160.8 | .6 | 13.0 | 66 | -20.5 | -99.9 | 161.1 | 161.1 | 161.1 | 161.1 | 161.1 | 161.1 | .6 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 73 | 262 | 2215 | 010001 | 100.0 | 93.6 | 4.7 | 5.2 | 0 | 14.4 | -8.3 | 94.1 | 94.1 | 94.1 | 94.1 | 94.1 | 94.1 | 4.7 |
| MLO | 73 | 271 | 2100 | 020002 | 103.9 | 97.3 | 11.4 | 4.1 | 70 | 14.4 | MSG | 97.6 | 97.6 | 97.6 | 97.6 | 97.6 | 97.6 | 11.4 |
| MLO | 73 | 278 | 2010 | 030003 | 129.4 | 121.1 | 7.2 | 6.2 | 70 | 13.3 | -6.7 | 121.8 | 121.8 | 121.8 | 121.8 | 121.8 | 121.8 | 7.2 |
| MLO | 73 | 285 | 2000 | 040004 | 66.4 | 62.2 | 1.8 | 6.2 | 300 | 17.8 | -6.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 1.8 |
| MLO | 73 | 292 | 2015 | 050005 | 73.6 | 68.9 | 4.1 | 4.1 | 310 | 11.4 | 8.1 | 70.0 | 70.0 | 70.0 | 70.0 | 70.0 | 70.0 | 4.1 |
| MLO | 73 | 299 | 2021 | 060006 | 78.2 | 73.2 | 6.9 | 6.2 | 120 | 15.3 | 5.6 | 74.2 | 74.2 | 74.2 | 74.2 | 74.2 | 74.2 | 6.9 |
| MLO | 73 | 302 | 2300 | 010007 | 100.2 | 93.8 | 1.6 | 4.1 | 350 | 14.2 | 8.7 | 95.4 | 95.4 | 95.4 | 95.4 | 95.4 | 95.4 | 1.6 |
| MLO | 73 | 311 | 2145 | 020008 | 395.2 | 369.9 | 32.9 | 4.1 | 30 | 11.4 | 3.5 | 374.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| MLO | 73 | 327 | 2050 | 040010 | 69.2 | 64.8 | 3.3 | 7.7 | 120 | 8.6 | -2.5 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 3.3 |
| MLO | 73 | 330 | 2207 | 050011 | 69.5 | 65.1 | 6.5 | 5.1 | 90 | 9.2 | 6.3 | 66.0 | 66.0 | 66.0 | 66.0 | 66.0 | 66.0 | 6.5 |
| MLO | 73 | 341 | 2030 | 060012 | 85.5 | 80.0 | 10.5 | 4.6 | 340 | 11.1 | MSG | 80.3 | 80.3 | 80.3 | 80.3 | 80.3 | 80.3 | 10.5 |
| MLO | 73 | 346 | 2150 | 010013 | 87.5 | 81.9 | 7.1 | 8.7 | 150 | 13.3 | 7.5 | 83.2 | 83.2 | 83.2 | 83.2 | 83.2 | 83.2 | 7.1 |
| MLO | 73 | 355 | 2220 | 020014 | 98.6 | 92.3 | 8.9 | 15.5 | 140 | 13.8 | 3.5 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 8.9 |
| MLO | 74 | 17 | 0000 | 040015 | 86.5 | 81.0 | 6.5 | 7.8 | 270 | 13.3 | 2.8 | 81.9 | 81.9 | 81.9 | 81.9 | 81.9 | 81.9 | 6.5 |
| MLO | 74 | 25 | 2305 | 030016 | 87.5 | 81.9 | 5.1 | 4.1 | 90 | 3.6 | -5.2 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 5.1 |
| MLO | 74 | 32 | 2350 | 050017 | 82.4 | 77.1 | 5.2 | 4.1 | 0 | 5.6 | .9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 5.2 |
| MLO | 74 | 39 | 2315 | 010018 | 101.9 | 95.4 | 2.6 | 7.7 | 80 | 5.8 | 4.0 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 2.6 |
| MLO | 74 | 46 | 2105 | 020019 | 98.6 | 92.3 | 2.3 | 2.6 | 0 | 11.1 | 1.5 | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 | 2.3 |
| MLO | 74 | 53 | 2115 | 030020 | 80.8 | 75.6 | 1.3 | 7.7 | 140 | 9.7 | -1.5 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 1.3 |
| MLO | 74 | 60 | 2015 | 040021 | 61.7 | 57.3 | 2.7 | 2.5 | 330 | 7.8 | -1.4 | 58.2 | 58.2 | 58.2 | 58.2 | 58.2 | 58.2 | 2.7 |
| MLO | 74 | 70 | 2105 | 060022 | 96.3 | 90.1 | 5.3 | 1.8 | 0 | 10.0 | -19.4 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 5.3 |
| MLO | 74 | 74 | 2050 | 050023 | 97.5 | 91.3 | 2.2 | 7.7 | 270 | 7.8 | -7.8 | 91.7 | 91.7 | 91.7 | 91.7 | 91.7 | 91.7 | 2.2 |
| MLO | 74 | 78 | 2028 | 080024 | 5792.7 | 5422.0 | U | 4.6 | 120 | 4.2 | -6.9 | 5451.4 | 0 | 0 | 0 | 0 | 0 | 0 |
| MLO | 74 | 78 | 2031 | 070025 | 156.9 | 146.9 | 4.0 | 4.5 | 120 | 3.9 | -6.7 | 147.7 | 147.7 | 147.7 | 0 | 0 | 0 | 0 |
| MLO | 74 | 78 | 2035 | 090026 | 5244.0 | 4908.4 | U | 4.6 | 120 | 3.9 | -5.6 | 4937.7 | 0 | 0 | 0 | 0 | 0 | 0 |
| MLO | 74 | 78 | 2035 | 100026 | 117.8 | 110.3 | 10.4 | 4.5 | 120 | 3.9 | -5.6 | 110.9 | 110.9 | 110.9 | 110.9 | 110.9 | 110.9 | 10.4 |
| MLO | 74 | 78 | 2040 | 110027 | 121.8 | 114.0 | 7.6 | 4.1 | 110 | 4.4 | -5.3 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 7.6 |
| MLO | 74 | 78 | 2040 | 120027 | 107.2 | 100.3 | 2.5 | 4.1 | 110 | 4.4 | -5.3 | 101.0 | 101.0 | 101.0 | 101.0 | 101.0 | 101.0 | 2.5 |
| MLO | 74 | 81 | 0000 | 130028 | 126.9 | 118.8 | 14.5 | 7.7 | 270 | 10.0 | -1.1 | 119.8 | 119.8 | U | 0 | 0 | 0 | 0 |
| MLO | 74 | 81 | 0000 | 140028 | 126.7 | 118.6 | 9.8 | 7.7 | 270 | 10.0 | -1.1 | 119.6 | 119.6 | 119.6 | 119.6 | 119.6 | 119.6 | 9.8 |
| MLO | 74 | 88 | 2058 | 060029 | 73.3 | 68.6 | 1.6 | 4.1 | 30 | 13.3 | -17.2 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 1.6 |
| MLO | 74 | 95 | 2230 | 010030 | 88.0 | 82.4 | 9.9 | 4.2 | 130 | 11.7 | -13.3 | 82.6 | 82.6 | 82.6 | 82.6 | 82.6 | 82.6 | 9.9 |
| MLO | 74 | 102 | 2050 | 020031 | 107.8 | 100.9 | 2.5 | 8.2 | 300 | 8.9 | -.6 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 2.5 |
| MLO | 74 | 109 | 2030 | 030032 | 139.5 | 130.6 | 2.5 | 9.3 | 150 | 4.4 | 0.0 | 131.8 | 131.8 | 131.8 | 131.8 | 131.8 | 131.8 | 2.5 |
| MLO | 74 | 123 | 2207 | 050033 | 120.3 | 112.6 | 12.0 | 6.2 | 15 | 9.4 | 0.0 | 113.6 | 113.6 | 113.6 | 113.6 | 113.6 | 113.6 | 12.0 |
| MLO | 74 | 137 | 2130 | 010034 | 131.9 | 123.5 | 15.2 | 5.1 | 300 | 6.7 | 1.7 | 124.7 | 124.7 | 0 | 0 | 0 | 0 | 0 |
| MLO | 74 | 143 | 2105 | 060035 | 131.1 | 122.7 | 9.8 | 5.1 | 45 | 15.0 | -13.9 | 123.1 | 123.1 | 123.1 | 123.1 | 123.1 | 123.1 | 9.8 |
| MLO | 74 | 151 | 2100 | 020036 | 164.5 | 154.0 | 6.8 | 5.1 | 300 | 11.7 | .6 | 155.4 | 155.4 | 155.4 | 0 | 0 | 0 | 0 |
| MLO | 74 | 158 | 2010 | 030037 | 122.0 | 114.2 | 14.7 | 12.3 | 130 | 12.2 | -6.1 | 114.8 | 114.8 | 0 | 0 | 0 | 0 | 0 |
| MLO | 74 | 172 | 2050 | 050038 | 108.9 | 101.9 | 10.0 | 10.3 | 120 | 13.3 | -18.9 | 102.1 | 102.1 | 102.1 | 102.1 | 102.1 | 102.1 | 10.0 |
| MLO | 74 | 179 | 2045 | 060039 | 150.9 | 141.2 | 25.4 | 5.1 | 0 | 8.9 | 2.2 | 142.7 | 142.7 | 0 | 0 | 0 | 0 | 0 |
| MLO | 74 | 186 | 2145 | 010040 | 143.2 | 134.0 | 4.5 | 7.7 | 90 | 13.9 | -14.4 | 134.4 | 134.4 | 134.4 | 134.4 | 134.4 | 134.4 | 4.5 |
| MLO | 74 | 249 | 2155 | 020041 | 89.8 | 84.1 | 4.3 | 6.2 | 90 | 14.4 | -2.8 | 84.7 | 84.7 | 84.7 | 84.7 | 84.7 | 84.7 | 4.3 |
| MLO | 74 | 256 | 2210 | 050042 | 95.2 | 89.1 | 3.0 | 7.2 | 30 | 14.4 | -11.1 | 89.5 | 89.5 | 89.5 | 89.5 | 89.5 | 89.5 | 3.0 |
| MLO | 74 | 263 | 2040 | 030043 | 125.9 | 117.8 | 2.9 | 5.1 | 45 | 12.2 | -11.7 | 118.3 | 118.3 | 118.3 | 118.3 | 118.3 | 118.3 | 2.9 |
| MLO | 74 | 291 | 2035 | 020047 | 149.5 | 139.9 | 13.1 | 3.5 | 0 | 10.6 | -1.1 | 141.1 | 141.1 | 0 | 0 | 0 | 0 | 0 |
| MLO | 74 | 298 | 2015 | 050048 | 164.3 | 153.8 | 9.1 | 10.3 | 120 | 13.9 | -14.4 | 154.3 | 154.3 | 154.3 | 154.3 | 154.3 | 154.3 | 9.1 |
| MLO | 74 | 305 | 2043 | 030049 | 161.9 | 151.5 | 5.0 | 4.1 | 0 | 11.1 | -11.2 | 152.1 | 152.1 | 152.1 | 152.1 | 152.1 | 0 | 0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 74 | 313 | 1845 | 060050 | 147.3 | 137.9 | 6.9 | 3.1 | 300 | 8.3 | -11.7 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 6.9 |
| MLO | 74 | 319 | 2030 | 070051 | 204.1 | 191.0 | 15.0 | 7.2 | 270 | 7.2 | -21.7 | 191.4 | 191.4 | D | D | D | D | D |
| MLO | 74 | 333 | 2030 | 010052 | 139.3 | 130.4 | 3.1 | 7.2 | 90 | 13.3 | -12.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 130.8 | 3.1 |
| MLO | 74 | 340 | 2145 | 020053 | 131.3 | 122.9 | 3.4 | 6.2 | 90 | 8.9 | -2.8 | 123.8 | 123.8 | 123.8 | 123.8 | 123.8 | 123.8 | 3.4 |
| MLO | 74 | 347 | 2015 | 050054 | 145.3 | 136.0 | 3.1 | 14.4 | 120 | 6.7 | -1.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 3.1 |
| MLO | 74 | 354 | 1955 | 030055 | 147.8 | 138.3 | 6.3 | 11.3 | 150 | 6.1 | -5.6 | 139.2 | 139.2 | 139.2 | 139.2 | 139.2 | 139.2 | 6.3 |
| MLO | 74 | 361 | 2016 | 070056 | 150.0 | 140.4 | 1.3 | 7.7 | 160 | 6.1 | -2.2 | 141.5 | 141.5 | 141.5 | 141.5 | 141.5 | 141.5 | 1.3 |
| MLO | 75 | 3 | 2120 | 010057 | 141.6 | 132.5 | 3.8 | 14.4 | 140 | 5.0 | -9.4 | 133.1 | 133.1 | 133.1 | 133.1 | 133.1 | 133.1 | 3.8 |
| MLO | 75 | 10 | 2030 | 060058 | 148.8 | 139.3 | 12.8 | 1.5 | 300 | 7.9 | -1.1 | 140.4 | 140.4 | D | D | D | D | D |
| MLO | 75 | 17 | 2035 | 020059 | 117.7 | 110.2 | 13.9 | 4.1 | 120 | 8.3 | -20.6 | 110.4 | 110.4 | D | D | D | D | D |
| MLO | 75 | 34 | 1950 | 050060 | 112.7 | 105.5 | 8.2 | .5 | 330 | 7.2 | -.6 | 106.4 | 106.4 | 106.4 | 106.4 | 106.4 | 106.4 | 8.2 |
| MLO | 75 | 38 | 2030 | 070062 | 161.2 | 150.9 | 5.7 | 2.1 | 320 | 8.9 | -18.9 | 151.2 | 151.2 | 151.2 | 151.2 | 151.2 | D | D |
| MLO | 75 | 51 | 0430 | 010063 | 113.5 | 106.2 | 6.8 | 5.0 | 180 | 3.3 | -1.7 | 107.1 | 107.1 | 107.1 | 107.1 | 107.1 | 107.1 | 6.8 |
| MLO | 75 | 65 | 0520 | 020065 | 97.4 | 91.2 | 2.6 | 2.6 | 180 | 5.0 | -9.4 | 91.6 | 91.6 | 91.6 | 91.6 | 91.6 | 91.6 | 2.6 |
| MLO | 75 | 72 | 0430 | 050066 | 110.4 | 103.3 | 6.1 | 6.2 | 120 | 3.9 | -1.7 | 104.2 | 104.2 | 104.2 | 104.2 | 104.2 | 104.2 | 6.1 |
| MLO | 75 | 79 | 0430 | 070067 | 115.2 | 107.8 | 4.2 | 14.4 | 90 | 4.4 | -17.8 | 108.1 | 108.1 | 108.1 | 108.1 | 108.1 | 108.1 | 4.2 |
| MLO | 75 | 85 | 0600 | 030068 | 107.2 | 100.3 | 9.2 | 5.1 | 180 | 5.6 | -13.3 | 100.7 | 100.7 | 100.7 | 100.7 | 100.7 | 100.7 | 9.2 |
| MLO | 75 | 100 | 0720 | 010069 | 104.8 | 98.1 | 2.6 | 2.6 | 220 | 2.8 | -13.3 | 98.4 | 98.4 | 98.4 | 98.4 | 98.4 | 98.4 | 2.6 |
| MLO | 75 | 107 | 0515 | 060070 | 1835.9 | 1718.4 | 20.9 | 3.1 | 180 | 8.3 | -16.1 | 1723.0 | D | D | D | D | D | D |
| MLO | 75 | 114 | 0530 | 020071 | 99.3 | 92.9 | 4.0 | 3.1 | 180 | 5.6 | -17.8 | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 | 4.0 |
| MLO | 75 | 119 | 0710 | 050072 | 98.0 | 91.7 | 2.2 | 3.6 | 182 | 4.4 | -6.7 | 92.2 | 92.2 | 92.2 | 92.2 | 92.2 | 92.2 | 2.2 |
| MLO | 75 | 123 | 0520 | 070073 | 114.0 | 106.7 | 4.9 | 6.2 | 160 | 10.0 | -9.4 | 107.2 | 107.2 | 107.2 | 107.2 | 107.2 | 107.2 | 4.9 |
| MLO | 75 | 128 | 0605 | 030074 | 104.5 | 97.8 | 3.5 | 3.1 | 90 | 7.8 | -26.1 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 3.5 |
| MLO | 75 | 133 | 0630 | 010075 | 100.3 | 93.9 | 6.8 | 3.6 | 140 | 4.4 | -6.7 | 94.4 | 94.4 | 94.4 | 94.4 | 94.4 | 94.4 | 6.8 |
| MLO | 75 | 137 | 0600 | 060076 | 95.3 | 89.2 | 6.9 | 3.1 | 210 | 6.1 | -6.7 | 89.7 | 89.7 | 89.7 | 89.7 | 89.7 | 89.7 | 6.9 |
| MLO | 75 | 141 | 0600 | 020077 | 82.1 | 76.8 | 10.3 | 3.1 | 195 | 4.4 | -13.3 | 77.1 | 77.1 | 77.1 | 77.1 | 77.1 | 77.1 | 10.3 |
| MLO | 75 | 149 | 0630 | 050078 | 106.3 | 99.5 | 16.0 | 5.7 | 180 | 9.4 | -11.1 | 99.9 | 99.9 | D | D | D | D | D |
| MLO | 75 | 158 | 0710 | 070079 | 133.9 | 125.3 | 9.8 | 4.1 | 180 | 7.8 | -12.2 | 125.8 | 125.8 | 125.8 | 125.8 | 125.8 | 125.8 | 9.8 |
| MLO | 75 | 163 | 0645 | 030080 | 85.2 | 79.7 | 9.6 | 2.1 | 120 | 8.9 | -12.8 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 9.6 |
| MLO | 75 | 182 | 0600 | 010081 | 775.9 | 726.2 | 24.4 | 10.8 | 155 | 0.0 | 0.0 | 732.8 | D | D | D | D | D | D |
| MLO | 75 | 189 | 0430 | 020082 | 185.5 | 173.6 | 22.2 | 0.0 | CLM | 11.5 | 2.5 | 175.5 | 175.5 | D | D | D | D | D |
| MLO | 75 | 226 | 0550 | 030083 | 104.6 | 97.9 | 18.2 | 10.3 | 120 | 10.0 | -22.2 | 98.1 | 98.1 | D | D | D | D | D |
| MLO | 75 | 233 | 0400 | 050084 | 277.5 | 259.7 | 20.4 | 9.3 | 135 | 12.4 | 3.6 | 262.8 | D | D | D | D | D | D |
| MLO | 75 | 239 | 2030 | 060085 | 320.2 | 299.7 | 11.0 | 6.2 | 50 | 12.2 | -18.9 | 300.3 | D | D | D | D | D | D |
| MLO | 75 | 248 | 1916 | 070086 | 185.0 | 173.2 | 15.5 | 9.3 | 120 | 13.3 | -18.9 | 173.5 | 173.5 | D | D | D | D | D |
| MLO | 75 | 254 | 0610 | 060087 | 224.7 | 210.3 | 30.6 | 2.1 | 230 | 8.9 | -23.3 | 210.6 | D | D | D | D | D | D |
| MLO | 75 | 261 | 0745 | 010088 | 242.9 | 227.4 | 4.3 | 6.2 | 130 | 8.9 | -21.1 | 227.8 | D | D | D | D | D | D |
| MLO | 75 | 275 | 0430 | 030090 | 146.9 | 137.5 | 6.6 | 7.2 | 100 | 7.8 | -14.4 | 137.9 | 137.9 | 137.9 | 137.9 | 137.9 | 137.9 | 6.6 |
| MLO | 75 | 282 | 0730 | 050091 | 345.6 | 323.5 | 11.6 | 4.1 | 140 | 5.0 | -5.0 | 325.5 | D | D | D | D | D | D |
| MLO | 75 | 289 | 0605 | 060092 | 371.1 | 347.3 | 20.7 | 10.3 | 90 | 4.4 | -20.6 | 348.0 | D | D | D | D | D | D |
| MLO | 75 | 297 | 2005 | 070093 | 331.2 | 310.0 | 5.1 | 9.8 | 125 | 11.1 | -1.2 | 312.6 | D | D | D | D | D | D |
| MLO | 75 | 310 | 0500 | 010094 | 370.1 | 346.4 | 8.2 | 4.1 | 120 | 6.7 | -13.9 | 347.5 | D | D | D | D | D | D |
| MLO | 76 | 9 | 0425 | 020095 | 1877.6 | 1757.4 | 2.6 | 10.3 | 120 | .6 | -17.8 | 1761.5 | D | D | D | D | D | D |
| MLO | 76 | 17 | 0330 | 030096 | 215.0 | 201.2 | 1.8 | 4.1 | 290 | 2.8 | -2.2 | 202.8 | D | D | D | D | D | D |
| MLO | 76 | 24 | 0145 | 050097 | 170.2 | 159.3 | 1.8 | 3.1 | 320 | 4.4 | -1.1 | 160.6 | 160.6 | 160.6 | 160.6 | 160.6 | 160.6 | 1.8 |
| MLO | 76 | 44 | 0530 | 060098 | 115.5 | 108.1 | 1.2 | 5.1 | 180 | 5.6 | -28.9 | 108.2 | 108.2 | 108.2 | 108.2 | 108.2 | 108.2 | 1.2 |
| MLO | 76 | 71 | 2013 | 070099 | 133.7 | 125.1 | 1.1 | 10.3 | 180 | 6.7 | -2.2 | 126.1 | 126.1 | 126.1 | 126.1 | 126.1 | 126.1 | 1.1 |
| MLO | 76 | 83 | 1920 | 010100 | 163.1 | 152.7 | 1.4 | 7.7 | 150 | 6.1 | -3.3 | 153.7 | 153.7 | 153.7 | 153.7 | 153.7 | 153.7 | 1.4 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 76 | 90 | 0608 | 030101 | 104.9 | 98.2 | .6 | 5.1 | 110 | 1.7 | -4.4 | 98.8 | 98.8 | 98.8 | 98.8 | 98.8 | 98.8 | .6 |
| MLO | 76 | 107 | 2245 | 050102 | 213.5 | 199.8 | 2.3 | 3.1 | 45 | 10.0 | -2.8 | 201.3 | D | D | D | D | D | D |
| MLO | 76 | 126 | 2250 | 010104 | 107.1 | 100.2 | 1.7 | 7.2 | 330 | 7.2 | .6 | 101.2 | 101.2 | 101.2 | 101.2 | 101.2 | 101.2 | 1.7 |
| MLO | 76 | 135 | 2330 | 020105 | 96.3 | 90.1 | 2.1 | 3.6 | 30 | 11.7 | -5.6 | 90.7 | 90.7 | 90.7 | 90.7 | 90.7 | 90.7 | 2.1 |
| MLO | 76 | 147 | 0007 | 060106 | 88.5 | 82.8 | 1.2 | 3.1 | 240 | 5.6 | -14.4 | 83.1 | 83.1 | 83.1 | D | D | D | D |
| MLO | 76 | 155 | 1950 | 030107 | 104.5 | 97.8 | 4.3 | 5.1 | 310 | 15.6 | -11.1 | 98.2 | 98.2 | 98.2 | 98.2 | 98.2 | 98.2 | 4.3 |
| MLO | 76 | 162 | 2048 | 050108 | 112.6 | 105.4 | 2.3 | 5.1 | 340 | 11.7 | -1.1 | 106.3 | 106.3 | 106.3 | 106.3 | 106.3 | 106.3 | 2.3 |
| MLO | 76 | 169 | 2047 | 060109 | 96.8 | 90.6 | 2.9 | 10.3 | 70 | 16.1 | -16.7 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 2.9 |
| MLO | 76 | 183 | 2027 | 070110 | 105.9 | 99.1 | 4.1 | 5.1 | 0 | 15.6 | -17.2 | 99.4 | 99.4 | 99.4 | 99.4 | 99.4 | 99.4 | 4.1 |
| MLO | 76 | 191 | 2355 | 010111 | 113.3 | 106.0 | .7 | 6.2 | 50 | 15.6 | -13.3 | 106.4 | 106.4 | 106.4 | 106.4 | 106.4 | 106.4 | .7 |
| MLO | 76 | 204 | 2315 | 020112 | 114.2 | 106.9 | 3.7 | 9.3 | 100 | 16.7 | -2.8 | 107.7 | 107.7 | 107.7 | 107.7 | 107.7 | 107.7 | 3.7 |
| MLO | 76 | 211 | 2140 | 030113 | 114.6 | 107.3 | 2.0 | 5.1 | 310 | 12.2 | -6.1 | 107.9 | 107.9 | 107.9 | 107.9 | 107.9 | 107.9 | 2.0 |
| MLO | 76 | 216 | 2159 | 050114 | 107.7 | 100.8 | .7 | 10.3 | 120 | 16.1 | -16.7 | 101.1 | 101.1 | 101.1 | 101.1 | 101.1 | 101.1 | .7 |
| MLO | 76 | 225 | 1940 | 060115 | 114.6 | 107.3 | .8 | 5.1 | 120 | 12.2 | -8.3 | 107.8 | 107.8 | 107.8 | 107.8 | 107.8 | 107.8 | .8 |
| MLO | 76 | 231 | 2055 | 070116 | 288.0 | 269.6 | 5.0 | 6.2 | 60 | 13.3 | -7.8 | 270.9 | D | D | D | D | D | D |
| MLO | 76 | 238 | 2130 | 010117 | 546.4 | 511.4 | 4.9 | 6.0 | 320 | 12.2 | -2.2 | 515.4 | D | D | D | D | D | D |
| MLO | 76 | 243 | 2120 | 020118 | 135.9 | 127.2 | 1.9 | 5.1 | 340 | 15.0 | -11.1 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 1.9 |
| MLO | 76 | 254 | 2010 | 030119 | 135.9 | 127.2 | .6 | 5.1 | 360 | 13.9 | -5.6 | 128.0 | 128.0 | 128.0 | 128.0 | 128.0 | 128.0 | .6 |
| MLO | 76 | 260 | 1941 | 050120 | 142.5 | 133.4 | .3 | 2.1 | 310 | 12.2 | -5.6 | 134.2 | 134.2 | 134.2 | 134.2 | 134.2 | 134.2 | .3 |
| MLO | 76 | 265 | 2035 | 060121 | 138.3 | 129.4 | 1.5 | 2.1 | 30 | 13.3 | -13.9 | 129.9 | 129.9 | 129.9 | 129.9 | 129.9 | 129.9 | 1.5 |
| MLO | 76 | 272 | 2105 | 070122 | 147.5 | 138.1 | 1.5 | 7.2 | 340 | 14.4 | 0.0 | 139.3 | 139.3 | 139.3 | 139.3 | 139.3 | 139.3 | 1.5 |
| MLO | 76 | 280 | 2125 | 010123 | 146.4 | 137.0 | 1.1 | 3.1 | 330 | 13.9 | -2.2 | 138.1 | 138.1 | 138.1 | 138.1 | 138.1 | 138.1 | 1.1 |
| MLO | 76 | 286 | 2000 | 020124 | 153.9 | 144.1 | 1.2 | 2.5 | 360 | 12.2 | -3.3 | 145.1 | 145.1 | 145.1 | 145.1 | 145.1 | 145.1 | 1.2 |
| MLO | 76 | 294 | 2031 | 030125 | 171.1 | 160.1 | 1.0 | 2.6 | 360 | 11.1 | -17.8 | 160.5 | 160.5 | 160.5 | 160.5 | 160.5 | 160.5 | 1.0 |
| MLO | 76 | 303 | 2102 | 050126 | 174.5 | 163.3 | 1.8 | 3.1 | 310 | 9.4 | -7.2 | 164.2 | 164.2 | 164.2 | 164.2 | 164.2 | 164.2 | 1.8 |
| MLO | 76 | 306 | 0000 | 360127 | 1811.8 | 1695.8 | U | 4.1 | 210 | 3.3 | -20.0 | 1699.2 | D | D | D | D | D | D |
| MLO | 76 | 306 | 0000 | 240127 | 1136.1 | 1063.4 | U | 4.1 | 210 | 3.3 | -20.0 | 1065.5 | D | D | D | D | D | D |
| MLO | 76 | 306 | 2020 | 010128 | 182.5 | 170.8 | .7 | 4.1 | 290 | 13.9 | 16.7 | 175.7 | 175.7 | 175.7 | 175.7 | 175.7 | 175.7 | .7 |
| MLO | 76 | 306 | 2020 | 390128 | 4684.4 | 4384.6 | U | 4.1 | 290 | 13.9 | 16.7 | 4510.1 | D | D | D | D | D | D |
| MLO | 76 | 310 | 2230 | 060129 | 179.9 | 168.4 | 2.0 | 3.1 | 350 | 14.4 | -13.3 | 168.9 | 168.9 | 168.9 | 168.9 | 168.9 | 168.9 | 2.0 |
| MLO | 76 | 315 | 2058 | 030130 | 198.6 | 185.9 | .6 | 2.1 | 360 | 11.7 | 1.7 | 187.8 | 187.8 | 187.8 | 187.8 | 187.8 | D | D |
| MLO | 76 | 321 | 2001 | 050131 | 167.1 | 156.4 | .8 | 6.2 | 270 | 11.7 | -20.0 | 156.7 | 156.7 | 156.7 | 156.7 | 156.7 | 156.7 | .8 |
| MLO | 76 | 327 | 2002 | 060132 | 168.0 | 157.2 | 1.5 | 4.1 | 90 | 9.4 | -21.7 | 157.5 | 157.5 | 157.5 | 157.5 | 157.5 | 157.5 | 1.5 |
| MLO | 76 | 334 | 2033 | 030133 | 168.8 | 158.0 | 1.9 | 3.1 | 300 | 11.1 | -15.0 | 158.5 | 158.5 | 158.5 | 158.5 | 158.5 | 158.5 | 1.9 |
| MLO | 76 | 344 | 1955 | 050134 | 170.4 | 159.5 | 2.1 | 2.1 | 360 | 6.7 | -6.7 | 160.4 | 160.4 | 160.4 | 160.4 | 160.4 | 160.4 | 2.1 |
| MLO | 76 | 350 | 1954 | 060135 | 177.1 | 165.8 | 2.6 | 2.1 | 270 | 10.0 | -20.6 | 166.1 | 166.1 | 166.1 | 166.1 | 166.1 | 166.1 | 2.6 |
| MLO | 76 | 357 | 1835 | 030136 | 176.7 | 165.4 | 1.5 | 1.6 | 110 | 9.0 | -10.0 | 166.1 | 166.1 | 166.1 | 166.1 | 166.1 | 166.1 | 1.5 |
| MLO | 76 | 364 | 1833 | 050137 | 182.3 | 170.6 | 2.3 | 3.2 | 100 | 4.0 | -17.0 | 171.1 | 171.1 | 171.1 | 171.1 | 171.1 | 171.1 | 2.3 |
| MLO | 77 | 6 | 2202 | 060138 | 156.4 | 146.4 | 1.5 | 5.1 | 300 | 15.0 | -17.8 | 146.7 | 146.7 | 146.7 | 146.7 | 146.7 | 146.7 | 1.5 |
| MLO | 77 | 11 | 1949 | 030139 | 157.7 | 147.6 | .9 | 1.0 | 330 | 8.9 | -20.6 | 147.9 | 147.9 | 147.9 | 147.9 | 147.9 | 147.9 | .9 |
| MLO | 77 | 19 | 2158 | 050140 | 162.6 | 152.2 | 1.5 | 3.1 | 300 | 12.2 | -19.4 | 152.5 | 152.5 | 152.5 | 152.5 | 152.5 | 152.5 | 1.5 |
| MLO | 77 | 24 | 2009 | 060141 | 165.2 | 154.6 | 1.3 | 5.1 | 270 | 12.2 | -21.1 | 154.9 | 154.9 | 154.9 | 154.9 | 154.9 | 154.9 | 1.3 |
| MLO | 77 | 35 | 2230 | 030142 | 158.4 | 148.3 | 1.2 | 3.1 | 330 | 14.4 | -11.1 | 148.8 | 148.8 | 148.8 | 148.8 | 148.8 | 148.8 | 1.2 |
| MLO | 77 | 45 | 2042 | 050143 | 155.8 | 145.8 | .7 | 1.5 | 360 | 12.8 | -14.4 | 146.3 | 146.3 | 146.3 | 146.3 | 146.3 | 146.3 | .7 |
| MLO | 77 | 54 | 2045 | 060144 | 161.2 | 150.9 | U | 7.7 | 90 | 6.7 | -12.2 | 151.4 | 151.4 | 151.4 | 151.4 | 151.4 | 151.4 | U |
| MLO | 77 | 59 | 2115 | 030145 | 178.0 | 166.6 | U | 10.3 | 130 | 5.0 | -8.3 | 167.4 | 167.4 | 167.4 | 167.4 | 167.4 | 167.4 | U |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 73 | 269 | 0150 | 010001 | 64.0 | 78.6 | 2.0 | 0.0 | CLM | 28.4 | 27.5 | 80.4 | 80.4 | 80.4 | 80.4 | 80.4 | 80.4 | 2.0 |
| SMO | 73 | 277 | 2355 | 020002 | 75.1 | 70.3 | 3.6 | 9.4 | 30 | 31.2 | 29.2 | 71.8 | 71.8 | 71.8 | 71.8 | 71.8 | 71.8 | 3.6 |
| SMO | 73 | 289 | 0045 | 030003 | 79.2 | 74.1 | 4.6 | 2.2 | 270 | 28.9 | 27.3 | 75.8 | 75.8 | 75.8 | 75.8 | 75.8 | 75.8 | 4.6 |
| SMO | 73 | 297 | 0050 | 040004 | 135.8 | 127.1 | 15.6 | 3.6 | 90 | 28.3 | 27.4 | 129.9 | 129.9 | D | D | D | D | D |
| SMO | 73 | 304 | 0115 | 050005 | 84.1 | 78.7 | 6.8 | 5.4 | 50 | 27.8 | 27.0 | 80.4 | 80.4 | 80.4 | 80.4 | 80.4 | 80.4 | 6.8 |
| SMO | 73 | 311 | 2100 | 060006 | 164.9 | 154.3 | 15.2 | 6.3 | 90 | 28.9 | 27.7 | 157.7 | 157.7 | D | D | D | D | D |
| SMO | 73 | 318 | 2115 | 010007 | 157.6 | 147.5 | 14.1 | 8.9 | 100 | 29.7 | 28.8 | 150.8 | 150.8 | D | D | D | D | D |
| SMO | 73 | 325 | 2320 | 020008 | 63.7 | 59.6 | 10.6 | 10.7 | 110 | 27.8 | 26.7 | 60.9 | 60.9 | 60.9 | 60.9 | 60.9 | 60.9 | 10.6 |
| SMO | 73 | 333 | 0015 | 030009 | 71.3 | 66.7 | 5.4 | 7.2 | 120 | 30.0 | 28.7 | 68.2 | 68.2 | 68.2 | 68.2 | 68.2 | 68.2 | 5.4 |
| SMO | 73 | 340 | 0120 | 040010 | 154.4 | 144.5 | 4.5 | 9.8 | 250 | 25.0 | 24.4 | 147.7 | 147.7 | 147.7 | D | D | D | D |
| SMO | 73 | 353 | 2130 | 050011 | 71.2 | 66.6 | 6.6 | 6.7 | 110 | 29.0 | 28.0 | 68.1 | 68.1 | 68.1 | 68.1 | 68.1 | 68.1 | 6.6 |
| SMO | 74 | 2 | 2110 | 060012 | 159.9 | 149.7 | 4.8 | 4.5 | 60 | 27.0* | 24.5* | 153.0 | 153.0 | 153.0 | D | D | D | D |
| SMO | 74 | 12 | 0040 | 010013 | 108.4 | 101.5 | 4.5 | 9.8 | 90 | 27.0* | 24.5* | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 4.5 |
| SMO | 74 | 19 | 2100 | 020014 | 71.6 | 67.2 | 2.0 | 8.1 | 290 | 29.2 | 28.4 | 68.7 | 68.7 | 68.7 | 68.7 | 68.7 | 68.7 | 2.0 |
| SMO | 74 | 27 | 0200 | 030015 | 72.8 | 68.1 | 4.3 | 4.5 | 270 | 29.3 | 28.1 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 4.3 |
| SMO | 74 | 30 | 2340 | 040016 | 80.3 | 75.2 | 2.6 | 6.7 | 260 | 29.3 | 28.1 | 76.8 | 76.8 | 76.8 | 76.8 | 76.8 | 76.8 | 2.6 |
| SMO | 74 | 41 | 0110 | 050017 | 78.0 | 73.0 | 2.6 | 6.3 | 100 | 27.0* | 24.5* | 74.6 | 74.6 | 74.6 | 74.6 | 74.6 | 74.6 | 2.6 |
| SMO | 74 | 85 | 0200 | 060018 | 115.9 | 108.5 | 4.7 | 8.9 | 270 | 25.8 | 25.4 | 110.9 | 110.9 | 110.9 | 110.9 | 110.9 | 110.9 | 4.7 |
| SMO | 74 | 95 | 0245 | 070019 | 2640.0 | 2471.0 | U | 2.2 | 110 | 28.4 | 27.2 | 2525.4 | D | D | D | D | D | D |
| SMO | 74 | 95 | 0245 | 080019 | 1054.0 | 986.5 | 85.0 | 2.2 | 110 | 28.4 | 27.2 | 1008.2 | D | D | D | D | D | D |
| SMO | 74 | 104 | 0130 | 090020 | 6546.0 | 6127.1 | U | 4.5 | 90 | 29.4 | 28.3 | 6261.8 | D | D | D | D | D | D |
| SMO | 74 | 104 | 0130 | 100020 | 3035.0 | 2840.8 | U | 4.5 | 90 | 29.4 | 28.3 | 2903.2 | D | D | D | D | D | D |
| SMO | 74 | 115 | 0225 | 110021 | 1464.0 | 1370.3 | U | 6.7 | 280 | 29.1 | 28.4 | 1400.4 | D | D | D | D | D | D |
| SMO | 74 | 115 | 0225 | 120021 | 4933.0 | 4617.3 | U | 6.7 | 280 | 29.1 | 28.4 | 4718.8 | D | D | D | D | D | D |
| SMO | 74 | 118 | 0212 | 010022 | 171.9 | 160.9 | 4.9 | 4.5 | 100 | 28.9 | 27.9 | 164.4 | 164.4 | 164.4 | D | D | D | D |
| SMO | 74 | 124 | 2359 | 020023 | 103.6 | 97.0 | 13.1 | 4.5 | 90 | 29.0 | 28.3 | 99.1 | 99.1 | D | D | D | D | D |
| SMO | 74 | 136 | 0210 | 030024 | 112.8 | 105.6 | 29.7 | 4.5 | 10 | 28.4 | 27.3 | 107.9 | 107.9 | D | D | D | D | D |
| SMO | 74 | 149 | 0100 | 040025 | 140.7 | 131.7 | 3.7 | 8.9 | 90 | 28.9 | 27.9 | 134.6 | 134.6 | 134.6 | 134.6 | 134.6 | 134.6 | 3.7 |
| SMO | 74 | 164 | 0040 | 050026 | 101.7 | 95.2 | 4.4 | 4.5 | 10 | 28.4 | 27.4 | 97.3 | 97.3 | 97.3 | 97.3 | 97.3 | 97.3 | 4.4 |
| SMO | 74 | 205 | 2200 | 060027 | 161.8 | 151.4 | 13.5 | 2.7 | 80 | 28.4 | 27.4 | 154.8 | 154.8 | D | D | D | D | D |
| SMO | 74 | 276 | 0205 | 030030 | 248.7 | 232.8 | 20.2 | 11.2 | 40 | 28.6 | 27.6 | 237.9 | D | D | D | D | D | D |
| SMO | 74 | 284 | 0125 | 040031 | 159.8 | 149.6 | 9.7 | 9.4 | 120 | 28.9 | 27.7 | 152.9 | 152.9 | 152.9 | 152.9 | 152.9 | 152.9 | 9.7 |
| SMO | 74 | 292 | 2205 | 050032 | 76.8 | 71.9 | 3.3 | 7.2 | 30 | 27.9 | 27.1 | 73.5 | 73.5 | 73.5 | 73.5 | 73.5 | 73.5 | 3.3 |
| SMO | 74 | 299 | 2025 | 060033 | 129.0 | 120.7 | 8.9 | 2.7 | 340 | 26.3 | 26.3 | 123.4 | 123.4 | 123.4 | 123.4 | 123.4 | 123.4 | 8.9 |
| SMO | 74 | 307 | 2128 | 010034 | 157.1 | 147.0 | 16.4 | 4.5 | 120 | 28.0 | 28.0 | 150.3 | 150.3 | D | D | D | D | D |
| SMO | 74 | 344 | 2040 | 030036 | 121.8 | 114.0 | 6.0 | 2.2 | 270 | 25.6 | 25.6 | 116.5 | 116.5 | 116.5 | 116.5 | 116.5 | 116.5 | 6.0 |
| SMO | 74 | 355 | 0210 | 040037 | 1579.0 | 1477.9 | U | 1.8 | 350 | 27.0* | 24.5* | 1510.4 | D | D | D | D | D | D |
| SMO | 74 | 365 | 0240 | 050038 | 143.2 | 134.0 | 7.6 | 2.2 | 90 | 30.0 | 29.1 | 137.0 | 137.0 | 137.0 | 137.0 | 137.0 | 137.0 | 7.6 |
| SMO | 75 | 4 | 2355 | 060039 | 155.4 | 145.5 | 7.1 | 1.3 | 10 | 27.0* | 24.5* | 148.7 | 148.7 | 148.7 | 148.7 | D | D | D |
| SMO | 75 | 15 | 0130 | 010040 | 163.9 | 153.4 | 21.3 | 2.2 | 270 | 27.0* | 24.5* | 156.8 | 156.8 | D | D | D | D | D |
| SMO | 75 | 22 | 0220 | 030041 | 940.8 | 880.6 | 44.0 | 2.2 | 150 | 27.0* | 24.5* | 900.0 | D | D | D | D | D | D |
| SMO | 75 | 31 | 2230 | 040042 | 170.3 | 159.4 | 20.8 | 2.2 | 150 | 27.0* | 24.5* | 162.9 | 162.9 | D | D | D | D | D |
| SMO | 75 | 72 | 2310 | 050043 | 91.5 | 85.6 | 10.3 | 4.5 | 120 | 28.3 | 27.5 | 87.5 | 87.5 | 87.5 | 87.5 | 87.5 | 87.5 | 10.3 |
| SMO | 75 | 81 | 0140 | 060044 | 98.6 | 92.3 | 10.4 | 2.2 | 20 | 27.0* | 24.5* | 94.3 | 94.3 | 94.3 | 94.3 | 94.3 | 94.3 | 10.4 |
| SMO | 75 | 90 | 2325 | 010045 | 106.0 | 99.2 | 7.2 | 2.2 | 40 | 27.0* | 24.5* | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | 7.2 |
| SMO | 75 | 101 | 0445 | 020046 | 116.1 | 108.7 | 4.1 | 2.2 | 160 | 27.0* | 24.5* | 111.1 | 111.1 | 111.1 | 111.1 | 111.1 | 111.1 | 4.1 |
| SMO | 75 | 109 | 0100 | 030047 | 145.0 | 135.7 | 9.6 | 4.5 | 110 | 27.0* | 24.5* | 138.7 | 138.7 | 138.7 | 138.7 | 138.7 | 138.7 | 9.6 |
| SMO | 75 | 126 | 0210 | 040048 | 5153.8 | 4824.0 | 1.0 | 8.0 | 170 | 29.6 | 27.8 | 4930.0 | D | D | D | D | D | D |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 75 | 132 | 2214 | 050049 | 64.5 | 60.4 | 6.2 | 4.5 | 170 | 27.2 | 25.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 6.2 |
| SMO | 75 | 140 | 0055 | 060050 | 108.5 | 101.6 | 7.8 | 8.0 | 110 | 28.9 | 28.3 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 7.8 |
| SMO | 75 | 159 | 0035 | 010051 | 108.7 | 101.7 | 5.6 | 10.3 | 90 | 28.3 | 27.8 | 104.0 | 104.0 | 104.0 | 104.0 | 104.0 | 104.0 | 5.6 |
| SMO | 75 | 159 | 0035 | 020051 | 83.4 | 78.1 | 5.5 | 10.3 | 90 | 28.3 | 27.8 | 79.8 | 79.8 | 79.8 | 79.8 | 79.8 | 79.8 | 5.5 |
| SMO | 75 | 172 | 2225 | 030052 | 84.6 | 79.2 | 5.0 | 2.2 | 120 | 29.4 | 28.7 | 80.9 | 80.9 | 80.9 | 80.9 | 80.9 | 80.9 | 5.0 |
| SMO | 75 | 193 | 2222 | 040053 | 780.7 | 730.7 | 13.2 | 5.4 | 100 | 27.8 | 27.0 | 746.8 | D | D | D | D | D | D |
| SMO | 75 | 213 | 2350 | 050054 | 260.3 | 243.6 | 7.4 | 8.0 | 10 | 30.0 | 29.1 | 249.0 | D | D | D | D | D | D |
| SMO | 75 | 226 | 0135 | 060055 | 597.7 | 559.4 | 5.6 | 7.0 | 100 | 27.0* | 24.5* | 571.7 | D | D | D | D | D | D |
| SMO | 75 | 234 | 0235 | 010056 | 233.5 | 218.6 | 8.8 | 17.0 | 115 | 28.9 | 27.3 | 223.4 | D | D | D | D | D | D |
| SMO | 75 | 249 | 0130 | 020057 | 220.0 | 205.9 | 8.7 | 20.0 | 100 | 28.3 | 27.1 | 210.4 | D | D | D | D | D | D |
| SMO | 75 | 256 | 0215 | 030058 | 680.9 | 637.3 | 16.5 | 5.0 | 100 | 26.7 | 25.6 | 651.3 | D | D | D | D | D | D |
| SMO | 75 | 275 | 0045 | 050059 | 502.7 | 470.5 | 6.7 | 8.5 | 110 | 28.3 | 27.9 | 480.9 | D | D | D | D | D | D |
| SMO | 75 | 283 | 0135 | 060060 | 220.3 | 206.2 | 11.1 | 7.0 | 110 | 27.0* | 24.5* | 210.7 | D | D | D | D | D | D |
| SMO | 75 | 291 | 0100 | 040061 | 415.0 | 388.4 | 12.1 | 6.0 | 110 | 27.0* | 24.5* | 397.0 | D | D | D | D | D | D |
| SMO | 75 | 304 | 0130 | 010062 | 306.6 | 287.0 | 3.3 | 10.0 | 100 | 27.0* | 24.5* | 293.3 | D | D | D | D | D | D |
| SMO | 75 | 312 | 2045 | 020063 | 284.3 | 266.1 | .5 | 15.0 | 330 | 28.3 | 27.5 | 272.0 | D | D | D | D | D | D |
| SMO | 75 | 348 | 0310 | 030064 | 256.3 | 239.9 | 1.8 | 6.0 | 340 | 28.5 | 27.5 | 245.2 | D | D | D | D | D | D |
| SMO | 76 | 25 | 0200 | 040065 | 199.6 | 186.8 | 1.3 | 6.0 | 165 | 27.0* | 24.5* | 190.9 | 190.9 | 190.9 | D | D | D | D |
| SMO | 76 | 50 | 0300 | 050066 | 170.7 | 159.8 | .2 | 8.0 | 350 | 27.9 | 27.1 | 163.3 | 163.3 | 163.3 | 163.3 | 163.3 | 163.3 | .2 |
| SMO | 76 | 69 | 0230 | 060067 | 225.5 | 211.1 | .6 | 4.0 | 20 | 27.0* | 24.5* | 215.7 | D | D | D | D | D | D |
| SMO | 76 | 78 | 0235 | 010068 | 533.8 | 499.6 | 11.5 | 5.0 | 90 | 28.3 | 28.1 | 510.6 | D | D | D | D | D | D |
| SMO | 76 | 86 | 0230 | 020069 | 87.2 | 81.6 | .6 | 4.5 | 60 | 28.5 | 28.3 | 83.4 | 83.4 | 83.4 | 83.4 | 83.4 | 83.4 | .6 |
| SMO | 76 | 93 | 0110 | 030070 | 102.3 | 95.8 | 1.4 | 6.5 | 90 | 29.4 | 29.0 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 1.4 |
| SMO | 76 | 98 | 0200 | 040071 | 223.4 | 209.1 | 4.6 | 2.0 | 10 | 29.4 | 29.0 | 213.7 | D | D | D | D | D | D |
| SMO | 76 | 106 | 0210 | 050072 | 111.6 | 104.5 | 1.1 | 5.5 | 110 | 29.0 | 28.8 | 106.8 | 106.8 | 106.8 | 106.8 | 106.8 | 106.8 | 1.1 |
| SMO | 76 | 115 | 2000 | 060073 | 104.9 | 98.2 | 1.5 | 10.0 | 130 | 29.0 | 28.6 | 100.3 | 100.3 | 100.3 | 100.3 | 100.3 | 100.3 | 1.5 |
| SMO | 76 | 130 | 0130 | 010074 | 392.0 | 366.9 | 5.0 | 3.5 | 30 | 29.0 | 28.1 | 375.0 | D | D | D | D | D | D |
| SMO | 76 | 136 | 2145 | 020075 | 86.0 | 80.5 | 1.3 | 15.0 | 150 | 27.0* | 24.5* | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 1.3 |
| SMO | 76 | 150 | 2000 | 030076 | 100.6 | 94.2 | .9 | 4.5 | 90 | 27.2 | 26.4 | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 | .9 |
| SMO | 76 | 158 | 0245 | 040077 | 112.9 | 105.7 | 2.9 | 4.5 | 90 | 27.0 | 26.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 2.9 |
| SMO | 76 | 162 | 1945 | 050078 | 98.3 | 92.0 | .9 | 8.0 | 120 | 27.0 | 26.4 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | .9 |
| SMO | 76 | 171 | 0220 | 060079 | 96.3 | 90.1 | 2.2 | 7.0 | 90 | 27.5 | 25.7 | 92.1 | 92.1 | 92.1 | 92.1 | 92.1 | 92.1 | 2.2 |
| SMO | 76 | 176 | 0140 | 010080 | 95.8 | 89.7 | 2.8 | 3.0 | 0 | 29.7 | 28.3 | 91.6 | 91.6 | 91.6 | 91.6 | 91.6 | 91.6 | 2.8 |
| SMO | 76 | 185 | 0120 | 020081 | 94.9 | 88.8 | .5 | 7.0 | 140 | 27.5 | 26.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | 90.8 | .5 |
| SMO | 76 | 190 | 0035 | 030082 | 102.8 | 96.2 | 1.0 | 13.0 | 140 | 26.6 | 25.8 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 1.0 |
| SMO | 76 | 197 | 0235 | 040083 | 106.4 | 99.6 | 1.8 | 9.0 | 160 | 25.7 | 25.0 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 101.8 | 1.8 |
| SMO | 76 | 204 | 0300 | 050084 | 105.6 | 98.8 | 1.5 | 7.0 | 110 | 27.0 | 26.0 | 101.0 | 101.0 | 101.0 | 101.0 | 101.0 | 101.0 | 1.5 |
| SMO | 76 | 211 | 0250 | 060085 | 107.5 | 100.6 | 2.5 | 8.0 | 0 | 22.4 | 22.4 | 102.8 | 102.8 | 102.8 | 102.8 | 102.8 | 102.8 | 2.5 |
| SMO | 76 | 218 | 0135 | 010086 | 106.0 | 99.2 | .7 | 2.5 | 140 | 27.5 | 26.6 | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | .7 |
| SMO | 76 | 225 | 2100 | 020087 | 118.6 | 111.0 | .9 | 7.0 | 170 | 26.9 | 26.1 | 113.5 | 113.5 | 113.5 | 113.5 | 113.5 | 113.5 | .9 |
| SMO | 76 | 232 | 2115 | 030088 | 115.0 | 107.6 | 2.2 | 12.0 | 130 | 26.1 | 25.1 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 2.2 |
| SMO | 76 | 239 | 0030 | 040089 | 127.3 | 119.2 | 2.7 | 12.0 | 130 | 28.1 | 27.1 | 121.8 | 121.8 | 121.8 | 121.8 | 121.8 | 121.8 | 2.7 |
| SMO | 76 | 246 | 1950 | 050090 | 122.8 | 114.9 | 1.0 | 7.0 | 330 | 27.0* | 24.5* | 117.5 | 117.5 | 117.5 | 117.5 | 117.5 | 117.5 | 1.0 |
| SMO | 76 | 252 | 2145 | 060091 | 125.6 | 117.6 | 2.2 | 5.0 | 40 | 27.0* | 24.5* | 120.1 | 120.1 | 120.1 | 120.1 | 120.1 | 120.1 | 2.2 |
| SMO | 76 | 267 | 0140 | 010092 | 129.2 | 120.9 | .6 | 7.5 | 150 | 24.9 | 24.1 | 123.6 | 123.6 | 123.6 | 123.6 | 123.6 | 123.6 | .6 |
| SMO | 76 | 274 | 0220 | 020093 | 124.8 | 116.8 | .5 | 6.0 | 130 | 26.4 | 25.5 | 119.4 | 119.4 | 119.4 | 119.4 | 119.4 | 119.4 | .5 |
| SMO | 76 | 281 | 0115 | 030094 | 136.8 | 128.0 | 1.3 | 13.0 | 140 | 25.5 | 24.9 | 130.9 | 130.9 | 130.9 | 130.9 | 130.9 | 130.9 | 1.3 |
| SMO | 76 | 287 | 2030 | 040095 | 145.3 | 136.0 | 1.3 | 6.0 | 100 | 27.7 | 26.4 | 139.0 | 139.0 | 139.0 | 139.0 | 139.0 | 139.0 | 1.3 |
| SMO | 76 | 295 | 0130 | 050096 | 150.0 | 140.4 | 1.2 | 10.0 | 130 | 27.2 | 26.0 | 143.5 | 143.5 | 143.5 | 143.5 | 143.5 | 143.5 | 1.2 |
| SMO | 76 | 301 | 2010 | 060097 | 164.2 | 153.7 | .8 | 9.0 | 130 | 27.2 | 26.2 | 157.1 | 157.1 | 157.1 | 157.1 | 157.1 | 157.1 | .8 |
| SMO | 76 | 309 | 0015 | 040098 | 167.4 | 156.7 | 2.0 | 6.0 | 360 | 27.0* | 24.5* | 160.1 | 160.1 | 160.1 | 160.1 | 160.1 | 160.1 | 2.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP AIR | DEG C DEW PT | 3 PPTV | 4 PPTV | 5 PPTV | 6 PPTV | 7 PPTV | 8 PPTV | S.D. PPTV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 76 | 313 | 0050 | 020099 | 157.4 | 147.3 | 2.8 | 4.0 | 160 | 25.5 | 25.1 | 150.6 | 150.6 | 150.6 | 150.6 | 150.6 | 150.6 | 2.8 |
| SMO | 76 | 313 | 0050 | 420099 | 813.8 | 761.7 | U | 4.0 | 160 | 25.5 | 25.1 | 778.5 | D | D | D | D | D | D |
| SMO | 76 | 313 | 0150 | 010100 | 166.7 | 156.0 | 2.8 | 7.5 | 140 | 27.2 | 26.8 | 159.5 | 159.5 | 159.5 | 159.5 | 159.5 | 159.5 | 2.8 |
| SMO | 76 | 313 | 0150 | 480100 | 459.7 | 430.3 | U | 7.5 | 140 | 27.2 | 26.8 | 439.7 | D | D | D | D | D | D |
| SMO | 76 | 313 | 0240 | 030101 | 157.2 | 147.1 | 3.3 | 6.0 | 140 | 26.6 | 25.9 | 150.4 | 150.4 | 150.4 | 150.4 | 150.4 | 150.4 | 3.3 |
| SMO | 76 | 313 | 0240 | 500101 | 411.1 | 384.8 | U | 6.0 | 140 | 26.6 | 25.8 | 393.2 | D | D | D | D | D | D |
| SMO | 76 | 316 | 2005 | 050102 | 151.1 | 141.4 | 1.2 | 5.5 | 90 | 28.9 | 27.7 | 144.5 | 144.5 | 144.5 | 144.5 | 144.5 | 144.5 | 1.2 |
| SMO | 76 | 323 | 0235 | 060103 | 156.3 | 146.3 | 1.3 | 6.0 | 110 | 29.2 | 27.9 | 149.5 | 149.5 | 149.5 | 149.5 | 149.5 | 149.5 | 1.3 |
| SMO | 76 | 330 | 0210 | 040104 | 167.3 | 156.6 | 2.6 | 3.7 | 100 | 27.8 | 27.2 | 160.0 | 160.0 | 160.0 | 160.0 | 160.0 | 160.0 | 2.6 |
| SMO | 76 | 336 | 2155 | 050105 | 154.7 | 144.8 | 1.2 | 10.0 | 130 | 28.4 | 27.4 | 148.0 | 148.0 | 148.0 | 148.0 | 148.0 | 148.0 | 1.2 |
| SMO | 76 | 351 | 0230 | 040106 | 162.6 | 152.2 | 1.5 | 1.0 | 0 | 28.5 | 27.2 | 155.5 | 155.5 | 155.5 | 155.5 | 155.5 | 155.5 | 1.5 |
| SMO | 76 | 365 | 0140 | 050107 | 166.7 | 156.0 | .8 | 6.0 | 120 | 28.3 | 27.3 | 159.5 | 159.5 | 159.5 | 159.5 | 159.5 | 159.5 | .8 |
| SMO | 77 | 6 | 0130 | 040108 | 147.0 | 137.6 | 1.2 | 10.0 | 150 | 29.0 | 27.6 | 140.6 | 140.6 | 140.6 | 140.6 | 140.6 | 140.6 | 1.2 |
| SMO | 77 | 13 | 0315 | 010109 | 155.6 | 145.6 | 1.0 | 10.0 | 120 | 29.4 | 28.3 | 148.8 | 148.8 | 148.8 | 148.8 | 148.8 | 148.8 | 1.0 |
| SMO | 77 | 23 | 0320 | 050110 | 143.2 | 134.0 | 2.0 | 4.0 | 100 | 29.7 | 28.7 | 137.0 | 137.0 | 137.0 | 137.0 | 137.0 | 137.0 | 2.0 |
| SMO | 77 | 27 | 0235 | 040111 | 149.8 | 140.2 | .4 | 2.0 | 360 | 27.0* | 24.5* | 143.3 | 143.3 | 143.3 | 143.3 | 143.3 | 143.3 | .4 |
| SMO | 77 | 34 | 0230 | 010112 | 156.6 | 146.6 | 1.6 | 5.0 | 20 | 29.7 | 28.0 | 149.8 | 149.8 | 149.8 | 149.8 | 149.8 | 149.8 | 1.6 |
| SMO | 77 | 43 | 2020 | 050113 | 146.3 | 136.9 | .6 | 8.0 | 90 | 29.2 | 28.2 | 139.9 | 139.9 | 139.9 | 139.9 | 139.9 | 139.9 | .6 |
| SMO | 77 | 49 | 0240 | 010114 | 153.1 | 143.3 | .2 | 3.0 | 110 | 27.0* | 24.5* | 146.5 | 146.5 | 146.5 | 146.5 | 146.5 | 146.5 | .2 |
| SMO | 77 | 57 | 2040 | 040115 | 191.8 | 179.5 | 2.1 | 10.0 | 120 | 29.1 | 28.1 | 183.5 | 183.5 | 183.5 | 183.5 | 183.5 | 183.5 | 2.1 |

# Appendix B: $CCl_3F$ Data for Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole, 7 March 1977 to 31 December 1979

Description of Data Sets:

1. Data analyzed on chromatograph; calibrations performed using reference gas 3072 (December 1977), 149.5 pptv.

2. Data corrected for use of unelectropolished sample flasks (correction factor = 0.936), and for an improved tank 3072 reference gas calibration value of 148.35 pptv.

3. $CCl_3F$ mole fractions in dry air. Flags F3 (column 14) associated with data set 3 are the following.

   0: Optimum pair-sample data--s.d. $\leq$4.8 pptv and concentration difference $\leq$7.8 pptv.

   1: Exceeded s.d. of 4.8 pptv.

   2: Single sample, or pair member of a sample already flagged.

   3: Concentration difference for samples of pair exceeded 7.8 pptv.

   4: Meteorological criteria not satisfied. Applied only to Niwot Ridge data. Acceptable wind speeds and directions are $>1.5$ m $s^{-1}$ and 180° through 45°, respectively.

   5: Previously unflagged data, subjectively determined to be outlying.

   Data set 3 is intended for use by researchers who desire to apply their own data selection criteria for improvement of data quality and identification of background measurement conditions.

4. Select data set--$CCl_3F$ mole fractions in dry air. Flags F4 (column 16) associated with data set 4 are the following.

   0: Optimum pair-sample data, with pair values averaged. Also, $CCl_3F$ mole fractions (with pair values averaged), flagged 1 to 4 in data set 3, that lie within ±3 r.s.d. of the regression line fitted to the optimum pair-sample data.

   1-5: As flags 1 to 5 of data set 3.

   Data flagged 0 in data set 4 presumably represent atmospheric background measurement conditions at the various stations. They are intended for use by researchers who accept as satisfactory the data selection procedures outlined in this report.

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 77 | 70 | 2100 | 020116 | 163.3 | 151.7 | U | 1.8 | 30 | -30.0 | -30.0 | 151.7 | 1 | 151.7 | 0 | .0 |
| BRW | 77 | 78 | 2225 | 030117 | 164.3 | 152.6 | .6 | 11.3 | 75 | -24.6 | -29.4 | 152.7 | 2 | 152.7 | 0 | .6 |
| BRW | 77 | 83 | 2117 | 050118 | 164.5 | 152.8 | .4 | 4.2 | 48 | -31.4 | -33.9 | 152.8 | 2 | 152.8 | 0 | .4 |
| BRW | 77 | 98 | 2115 | 020119 | 165.1 | 153.3 | 3.8 | 5.3 | 67 | -21.3 | -26.4 | 153.4 | 2 | 153.4 | 0 | 3.8 |
| BRW | 77 | 103 | 2100 | 030120 | 166.7 | 154.8 | 2.5 | 4.2 | 75 | -22.0 | -27.7 | 154.9 | 2 | 154.9 | 0 | 2.5 |
| BRW | 77 | 110 | 0145 | 050121 | 714.0 | 663.1 | 3.7 | 5.8 | 90 | -12.0 | -15.0 | 664.4 | 2 | 664.4 | 2 | 3.7 |
| BRW | 77 | 122 | 2236 | 020122 | 172.2 | 159.9 | 2.6 | 6.4 | 54 | -11.2 | -16.5 | 160.2 | 2 | 160.2 | 0 | 2.6 |
| BRW | 77 | 144 | 2000 | 050124 | 181.5 | 168.6 | 1.2 | 6.6 | 65 | -4.4 | -9.1 | 169.1 | 2 | 169.1 | 2 | 1.2 |
| BRW | 77 | 153 | 0030 | 020125 | 160.3 | 148.9 | 1.9 | 2.4 | 178 | 3.9 | -3.2 | 149.6 | 2 | 149.6 | 2 | 1.9 |
| BRW | 77 | 167 | 2350 | 020127 | 165.7 | 153.9 | 1.1 | 9.1 | 107 | 3.8 | .2 | 154.8 | 2 | 154.8 | 0 | 1.1 |
| BRW | 77 | 215 | 0153 | 050128 | 181.7 | 168.7 | 1.4 | 6.1 | 275 | 10.0 | 6.1 | 170.3 | 2 | 170.3 | 2 | 1.4 |
| BRW | 77 | 220 | 2351 | 030129 | 174.2 | 161.8 | 5.9 | 11.2 | 85 | 4.0 | 3.3 | 163.0 | 1 | 163.0 | 0 | 5.9 |
| BRW | 77 | 229 | 0200 | 020130 | 177.9 | 165.2 | 3.5 | 4.0 | 110 | 15.5 | 11.9 | 167.5 | 2 | 167.5 | 2 | 3.5 |
| BRW | 77 | 247 | 0045 | 050131 | 173.5 | 161.1 | 4.4 | 3.9 | 260 | 8.5 | 7.9 | 162.8 | 2 | 162.8 | 0 | 4.4 |
| BRW | 77 | 254 | 0011 | 020132 | 257.8 | 239.4 | 5.8 | 8.5 | 76 | 2.2 | -1.1 | 240.8 | 1 | 240.8 | 1 | 5.8 |
| BRW | 77 | 260 | 2025 | 030133 | 168.2 | 156.2 | 1.6 | 5.4 | 90 | .2 | -1.1 | 157.1 | 2 | 157.1 | 0 | 1.6 |
| BRW | 77 | 271 | 2205 | 050134 | 1530.0 | 1420.9 | 16.0 | 8.7 | 15 | -2.2 | -4.4 | 1427.1 | 1 | 1427.1 | 1 | 16.0 |
| BRW | 77 | 281 | 0005 | 020135 | 178.0 | 165.3 | 4.8 | 5.3 | 135 | -.6 | -3.1 | 166.1 | 2 | 166.1 | 0 | 4.8 |
| BRW | 77 | 284 | 2353 | 030136 | 169.1 | 157.0 | 5.2 | 16.0 | 80 | -3.3 | -6.8 | 157.6 | 1 | 157.6 | 0 | 5.2 |
| BRW | 77 | 293 | 2302 | 050137 | 201.5 | 187.1 | 2.3 | 12.0 | 70 | -7.2 | -8.3 | 187.7 | 2 | 187.7 | 2 | 2.3 |
| BRW | 77 | 306 | 0055 | 020138 | 173.3 | 160.9 | 3.1 | 5.5 | 30 | -21.3 | -21.7 | 161.1 | 2 | 161.1 | 0 | 3.1 |
| BRW | 77 | 313 | 2238 | 030139 | 171.9 | 159.6 | 3.6 | 6.5 | 10 | -26.1 | -26.4 | 159.8 | 2 | 159.8 | 0 | 3.6 |
| BRW | 77 | 330 | 2200 | 020141 | 183.7 | 170.6 | 4.6 | 3.3 | 217 | -22.5 | -26.7 | 170.7 | 2 | 170.7 | 2 | 4.6 |
| BRW | 77 | 215 | 0153 | 180128 | 152.7 | 151.5 | 1.8 | 6.1 | 275 | 10.0 | 6.1 | 152.9 | 0 | 155.8 | 0 | 2.5 |
| BRW | 77 | 215 | 0153 | 190128 | 158.4 | 157.2 | 3.1 | 6.1 | 275 | 10.0 | 6.1 | 158.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 220 | 2351 | 200129 | 158.6 | 157.4 | 1.8 | 11.2 | 85 | 4.0 | 3.3 | 158.6 | 0 | 157.9 | 0 | 2.2 |
| BRW | 77 | 220 | 2351 | 210129 | 157.2 | 156.0 | 2.6 | 11.2 | 85 | 4.0 | 3.3 | 157.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 229 | 0200 | 220130 | 155.2 | 154.0 | U | 4.0 | 110 | 15.5 | 11.9 | 156.1 | 1 | 155.3 | 0 | .0 |
| BRW | 77 | 229 | 0200 | 230130 | 153.6 | 152.4 | 2.0 | 4.0 | 110 | 15.5 | 11.9 | 154.5 | 2 | -1.0 | 0 | -1.0 |
| BRW | 77 | 247 | 0045 | 180131 | 159.0 | 157.8 | 4.3 | 3.9 | 260 | 8.5 | 7.9 | 159.4 | 0 | 157.5 | 0 | 4.0 |
| BRW | 77 | 247 | 0045 | 190131 | 155.1 | 153.9 | 3.6 | 3.9 | 250 | 8.5 | 7.9 | 155.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 254 | 0011 | 200132 | 153.8 | 152.6 | 3.5 | 8.5 | 76 | 2.2 | -1.1 | 153.5 | 0 | 156.5 | 0 | 2.6 |
| BRW | 77 | 254 | 0011 | 210132 | 159.9 | 158.6 | 1.1 | 8.5 | 76 | 2.2 | -1.1 | 159.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 260 | 2025 | 220133 | 163.2 | 161.9 | 3.0 | 5.4 | 90 | .2 | -1.1 | 162.8 | 3 | 162.8 | 0 | 3.0 |
| BRW | 77 | 260 | 2025 | 230133 | 194.8 | 193.3 | 3.8 | 5.4 | 90 | .2 | -1.1 | 194.4 | 3 | 194.4 | 3 | 3.8 |
| BRW | 77 | 271 | 2205 | 180134 | 157.4 | 156.2 | 7.6 | 8.7 | 15 | -2.2 | -4.4 | 156.9 | 1 | 157.7 | 0 | 7.6 |
| BRW | 77 | 271 | 2205 | 190134 | 159.1 | 157.9 | 2.9 | 8.7 | 15 | -2.2 | -4.4 | 158.5 | 2 | -1.0 | 0 | -1.0 |
| BRW | 77 | 281 | 0005 | 200135 | 163.2 | 161.9 | 7.6 | 5.3 | 135 | -.6 | -3.1 | 162.7 | 1 | 162.5 | 0 | 7.6 |
| BRW | 77 | 281 | 0005 | 210135 | 162.7 | 161.4 | 3.8 | 5.3 | 135 | -.6 | -3.1 | 162.2 | 2 | -1.0 | 0 | -1.0 |
| BRW | 77 | 284 | 2353 | 220136 | 167.0 | 165.7 | 3.3 | 16.0 | 80 | -3.3 | -6.8 | 166.3 | 0 | 165.9 | 0 | 2.8 |
| BRW | 77 | 284 | 2353 | 230136 | 166.2 | 164.9 | 2.1 | 16.0 | 80 | -3.3 | -6.8 | 165.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 293 | 2302 | 180137 | 165.6 | 164.3 | 1.1 | 12.0 | 70 | -7.2 | -8.3 | 164.8 | 0 | 165.7 | 0 | 2.8 |
| BRW | 77 | 293 | 2302 | 190137 | 167.3 | 166.0 | 3.8 | 12.0 | 70 | -7.2 | -8.3 | 166.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 306 | 0055 | 200138 | 164.2 | 162.9 | 2.7 | 5.5 | 30 | -21.3 | -21.7 | 163.1 | 0 | 163.1 | 0 | 2.5 |
| BRW | 77 | 306 | 0055 | 210138 | 164.1 | 162.8 | 2.2 | 5.5 | 30 | -21.3 | -21.7 | 163.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 313 | 2238 | 220139 | 169.5 | 168.2 | 2.2 | 6.5 | 10 | -26.1 | -26.4 | 168.3 | 2 | 167.6 | 0 | 2.2 |
| BRW | 77 | 313 | 2238 | 230139 | 168.0 | 166.7 | 5.5 | 6.5 | 10 | -26.1 | -26.4 | 166.8 | 1 | -1.0 | 0 | -1.0 |
| BRW | 77 | 318 | 2100 | 180140 | 166.3 | 165.0 | 4.7 | 8.0 | 62 | -23.0 | -25.6 | 165.1 | 0 | 165.1 | 0 | 3.6 |
| BRW | 77 | 318 | 2100 | 190140 | 166.2 | 164.9 | 1.9 | 8.0 | 62 | -23.0 | -25.6 | 165.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 330 | 2200 | 200141 | 168.1 | 166.8 | 2.3 | 3.3 | 217 | -22.5 | -26.7 | 166.9 | 0 | 166.3 | 0 | 2.8 |
| BRW | 77 | 330 | 2200 | 210141 | 166.8 | 165.5 | 3.3 | 3.3 | 217 | -22.5 | -26.7 | 165.6 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 77 | 345 | 0142 | 220142 | 170.9 | 169.6 | 1.0 | 9.6 | 320 | -30.0 | -31.7 | 169.7 | 0 | 169.6 | 0 | 1.6 |
| BRW | 77 | 345 | 0142 | 230142 | 170.8 | 159.5 | 2.1 | 9.5 | 320 | -30.0 | -31.7 | 169.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 351 | 0130 | 180143 | 169.2 | 167.9 | 1.7 | 4.5 | 125 | -34.4 | -38.1 | 167.9 | 2 | 169.2 | 0 | 1.7 |
| BRW | 77 | 351 | 0130 | 190143 | 171.8 | 170.5 | 5.0 | 4.5 | 125 | -34.4 | -38.1 | 170.5 | 1 | -1.0 | 0 | -1.0 |
| BRW | 77 | 363 | 0036 | 200144 | 168.2 | 166.9 | 1.4 | 10.2 | 115 | -16.5 | -18.9 | 167.1 | 2 | 167.2 | 0 | 1.4 |
| BRW | 77 | 363 | 0036 | 210144 | 168.3 | 167.0 | 7.7 | 10.2 | 115 | -16.5 | -18.9 | 167.2 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 6 | 0142 | 220145 | 163.8 | 162.5 | 2.5 | 6.4 | 99 | -21.3 | -25.6 | 162.7 | 2 | 162.7 | 0 | 2.5 |
| BRW | 78 | 6 | 0142 | 230145 | 163.8 | 162.5 | 5.1 | 6.4 | 99 | -21.3 | -25.6 | 162.7 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 13 | 0110 | 200146 | 167.8 | 166.5 | 4.6 | 9.1 | 72 | -15.3 | -15.3 | 166.8 | 0 | 167.8 | 0 | 4.2 |
| BRW | 78 | 13 | 0110 | 210146 | 169.8 | 168.5 | 3.7 | 9.1 | 72 | -15.3 | -15.3 | 168.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 18 | 2340 | 180147 | 172.2 | 170.9 | 3.1 | 2.7 | 60 | -21.0 | -23.3 | 171.0 | 0 | 168.5 | 0 | 2.2 |
| BRW | 78 | 18 | 2340 | 190147 | 167.1 | 165.8 | .4 | 2.7 | 60 | -21.0 | -23.3 | 166.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 28 | 0150 | 200148 | 174.4 | 173.0 | 3.5 | 4.2 | 75 | -29.1 | -30.6 | 173.1 | 2 | 173.1 | 2 | 3.5 |
| BRW | 78 | 28 | 0150 | 210148 | 188.5 | 187.0 | 5.2 | 4.2 | 75 | -29.1 | -30.6 | 187.1 | 1 | 187.1 | 1 | 5.2 |
| BRW | 78 | 33 | 0100 | 220149 | 168.7 | 167.4 | 3.7 | 7.0 | 72 | -27.0 | -30.6 | 167.5 | 3 | 167.5 | 0 | 3.7 |
| BRW | 78 | 33 | 0100 | 230149 | 180.4 | 179.0 | .6 | 7.0 | 72 | -27.0 | -30.6 | 179.1 | 3 | 179.1 | 3 | .6 |
| BRW | 78 | 40 | 2158 | 180150 | 172.3 | 171.0 | .4 | 4.5 | 79 | -39.3 | -43.1 | 171.0 | 3 | 171.0 | 0 | .4 |
| BRW | 78 | 40 | 2158 | 190150 | 181.0 | 179.6 | 4.8 | 4.5 | 79 | -39.3 | -43.1 | 179.6 | 3 | 179.6 | 3 | 4.8 |
| BRW | 78 | 45 | 2059 | 220151 | 167.0 | 165.7 | 3.3 | 8.3 | 60 | -21.0 | -26.7 | 165.8 | 0 | 163.9 | 0 | 2.6 |
| BRW | 78 | 45 | 2059 | 230151 | 163.1 | 161.8 | 1.5 | 8.3 | 60 | -21.0 | -26.7 | 162.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 54 | 2350 | 180152 | 167.0 | 165.7 | 3.7 | 4.2 | 57 | -21.7 | -27.2 | 165.8 | 0 | 166.0 | 0 | 3.2 |
| BRW | 78 | 54 | 2350 | 190152 | 167.3 | 166.0 | 2.5 | 4.2 | 57 | -21.7 | -27.2 | 166.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 64 | 0302 | 200153 | 173.1 | 171.7 | 3.7 | 8.9 | 35 | -24.4 | -29.4 | 171.9 | 2 | 170.8 | 0 | 3.7 |
| BRW | 78 | 64 | 0302 | 210153 | 171.0 | 169.7 | 5.8 | 8.9 | 35 | -24.4 | -29.4 | 169.8 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 67 | 2223 | 180154 | 166.6 | 165.3 | 4.4 | 12.3 | 59 | -21.3 | -23.9 | 165.5 | 0 | 166.5 | 0 | 3.8 |
| BRW | 78 | 67 | 2223 | 190154 | 168.6 | 167.3 | 3.2 | 12.3 | 59 | -21.3 | -23.9 | 167.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 78 | 0211 | 180155 | 166.1 | 164.8 | .8 | 4.5 | 10 | -19.3 | -21.7 | 165.0 | 0 | 166.2 | 0 | 1.7 |
| BRW | 78 | 78 | 0211 | 190155 | 168.6 | 167.3 | 2.3 | 4.5 | 10 | -19.3 | -21.7 | 167.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 86 | 2037 | 220156 | 168.6 | 167.3 | 5.5 | 6.4 | 30 | -22.0 | -25.0 | 167.4 | 1 | 165.5 | 0 | 5.5 |
| BRW | 78 | 86 | 2037 | 230156 | 164.8 | 163.5 | 6.4 | 6.4 | 30 | -22.0 | -25.0 | 163.7 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 93 | 2034 | 200157 | 182.7 | 181.3 | 4.4 | 6.5 | 80 | -25.6 | -29.4 | 181.4 | 3 | 181.4 | 3 | 4.4 |
| BRW | 78 | 93 | 2034 | 210157 | 198.9 | 197.3 | 1.5 | 6.5 | 80 | -25.6 | -29.4 | 197.5 | 3 | 197.5 | 3 | 1.5 |
| BRW | 78 | 101 | 2139 | 220158 | 173.9 | 172.5 | 5.2 | 4.9 | 85 | -20.7 | -26.1 | 172.7 | 1 | 172.6 | 0 | 5.2 |
| BRW | 78 | 101 | 2139 | 230158 | 173.8 | 172.4 | 4.0 | 4.9 | 85 | -20.7 | -26.1 | 172.6 | 2 | -1.0 | 0 | -1.0 |
| BRW | 78 | 108 | 2339 | 180159 | 168.6 | 167.3 | 2.8 | 7.3 | 144 | -11.0 | -12.8 | 167.7 | 2 | 167.7 | 0 | 2.8 |
| BRW | 78 | 108 | 2339 | 190159 | 162.8 | 161.5 | 5.9 | 7.3 | 144 | -11.0 | -12.8 | 161.9 | 1 | 161.9 | 1 | 5.9 |
| BRW | 78 | 115 | 0044 | 200160 | 173.0 | 171.6 | 7.4 | 11.6 | 98 | -11.5 | -14.4 | 172.0 | 1 | 171.3 | 0 | 7.4 |
| BRW | 78 | 115 | 0044 | 210160 | 171.5 | 170.2 | 5.0 | 11.6 | 98 | -11.5 | -14.4 | 170.5 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 122 | 2353 | 220161 | 168.8 | 167.5 | 4.8 | 9.0 | 87 | -12.0 | -13.3 | 167.9 | 0 | 168.9 | 0 | 3.6 |
| BRW | 78 | 122 | 2353 | 230161 | 171.0 | 169.7 | 1.6 | 9.0 | 87 | -12.0 | -13.3 | 170.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 128 | 1939 | 180162 | 168.7 | 167.4 | 4.5 | 8.8 | 100 | -11.4 | -16.7 | 167.7 | 0 | 169.9 | 0 | 3.9 |
| BRW | 78 | 128 | 1939 | 190162 | 173.2 | 171.8 | 3.1 | 8.8 | 100 | -11.4 | -16.7 | 172.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 135 | 2340 | 200163 | 168.4 | 167.1 | 2.6 | 7.8 | 79 | -12.4 | -15.0 | 167.4 | 0 | 166.5 | 0 | 2.4 |
| BRW | 78 | 135 | 2340 | 210163 | 166.6 | 165.3 | 2.1 | 7.8 | 79 | -12.4 | -15.0 | 165.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 142 | 2250 | 220164 | 173.9 | 172.5 | 5.4 | 4.2 | 68 | -3.3 | -5.6 | 173.2 | 1 | 170.2 | 0 | 5.4 |
| BRW | 78 | 142 | 2250 | 230164 | 167.8 | 166.5 | 1.6 | 4.2 | 68 | -3.3 | -5.6 | 167.2 | 2 | -1.0 | 0 | -1.0 |
| BRW | 78 | 150 | 2350 | 200165 | 169.9 | 168.6 | .8 | 6.4 | 145 | -1.9 | -1.9 | 169.5 | 0 | 166.5 | 0 | 1.7 |
| BRW | 78 | 150 | 2350 | 210165 | 163.9 | 162.6 | 2.3 | 6.4 | 145 | -1.9 | -1.9 | 163.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 160 | 2039 | 220166 | 172.5 | 171.2 | 1.3 | 4.0 | 110 | 3.7 | -1.7 | 172.1 | 0 | 170.7 | 0 | 1.0 |
| BRW | 78 | 160 | 2039 | 230166 | 169.8 | 168.5 | .5 | 4.0 | 110 | 3.7 | -1.7 | 169.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 164 | 2325 | 200167 | 166.2 | 164.9 | 1.5 | 4.1 | 54 | .6 | -2.2 | 165.8 | 0 | 166.9 | 0 | 1.1 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 78 | 164 | 2325 | 210167 | 168.5 | 167.2 | .2 | 4.1 | 54 | .6 | -2.2 | 168.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 173 | 2017 | 230168 | 169.2 | 167.9 | 2.6 | 10.3 | 80 | -.8 | -5.8 | 168.5 | 0 | 168.5 | 0 | 1.9 |
| BRW | 78 | 173 | 2017 | 220168 | 169.1 | 167.8 | .3 | 10.3 | 80 | -.8 | -5.8 | 168.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 179 | 1935 | 200169 | 168.3 | 167.0 | 1.8 | 3.5 | 95 | 2.7 | -.6 | 168.0 | 0 | 167.5 | 0 | 1.4 |
| BRW | 78 | 179 | 1935 | 210169 | 167.4 | 166.1 | .8 | 3.5 | 95 | 2.7 | -.6 | 167.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 187 | 0115 | 220170 | 169.5 | 168.2 | 1.7 | 5.4 | 65 | 3.0 | 3.0 | 169.4 | 0 | 169.2 | 0 | 1.8 |
| BRW | 78 | 187 | 0115 | 230170 | 169.0 | 167.7 | 1.9 | 5.4 | 65 | 3.0 | 3.0 | 168.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 193 | 1925 | 200171 | 171.8 | 170.5 | 3.6 | 6.7 | 105 | 2.5 | .3 | 171.5 | 0 | 171.0 | 0 | 3.3 |
| BRW | 78 | 193 | 1925 | 210171 | 170.8 | 169.5 | 2.9 | 6.7 | 105 | 2.5 | .3 | 170.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 199 | 0140 | 220172 | 174.3 | 172.9 | .4 | 9.4 | 110 | 1.4 | 1.4 | 174.1 | 0 | 172.6 | 0 | 1.4 |
| BRW | 78 | 199 | 0140 | 230172 | 171.3 | 170.0 | 1.9 | 9.4 | 110 | 1.4 | 1.4 | 171.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 212 | 1959 | 210173 | 163.5 | 162.2 | 3.1 | 5.8 | 170 | 15.4 | 13.3 | 164.7 | 0 | 165.7 | 0 | 2.5 |
| BRW | 78 | 212 | 1959 | 200173 | 165.5 | 164.2 | 1.8 | 5.8 | 170 | 15.4 | 13.3 | 166.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 221 | 2250 | 220174 | 170.1 | 168.8 | 1.0 | 6.7 | 90 | .4 | -1.9 | 169.7 | 0 | 170.3 | 0 | 2.6 |
| BRW | 78 | 221 | 2250 | 230174 | 171.4 | 170.1 | 3.5 | 6.7 | 90 | .4 | -1.9 | 171.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 228 | 1935 | 630175 | 173.2 | 171.8 | 1.0 | 8.5 | 115 | -.7 | -1.4 | 172.8 | 2 | 172.8 | 0 | 1.0 |
| BRW | 78 | 238 | 0130 | 220176 | 166.8 | 165.5 | 2.4 | 4.0 | 75 | 2.3 | 1.1 | 166.6 | 0 | 169.1 | 0 | 1.8 |
| BRW | 78 | 238 | 0130 | 230176 | 171.8 | 170.5 | .9 | 4.0 | 75 | 2.3 | 1.1 | 171.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 242 | 1945 | 200177 | 168.8 | 167.5 | 6.2 | 5.8 | 115 | 7.1 | 6.7 | 169.1 | 1 | 170.5 | 0 | 6.2 |
| BRW | 78 | 242 | 1945 | 210177 | 171.5 | 170.2 | 2.7 | 5.8 | 115 | 7.1 | 6.7 | 171.8 | 2 | -1.0 | 0 | -1.0 |
| BRW | 78 | 248 | 2330 | 630178 | 173.0 | 171.6 | .6 | 3.5 | 115 | 7.5 | 7.5 | 173.4 | 2 | 173.4 | 0 | .6 |
| BRW | 78 | 256 | 2030 | 230179 | 171.8 | 170.5 | 1.4 | 9.3 | 80 | 2.2 | 1.7 | 171.6 | 2 | 171.6 | 0 | 1.4 |
| BRW | 78 | 261 | 2003 | 200180 | 175.9 | 174.5 | 8.3 | 5.8 | 100 | -1.6 | -4.4 | 175.3 | 1 | 173.8 | 0 | 8.3 |
| BRW | 78 | 261 | 2003 | 210180 | 172.9 | 171.5 | 8.6 | 5.8 | 100 | -1.6 | -4.4 | 172.3 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 268 | 1910 | 590181 | 177.8 | 176.4 | 2.0 | 6.7 | 110 | .4 | .4 | 177.5 | 0 | 179.3 | 0 | 2.2 |
| BRW | 78 | 268 | 1910 | 600181 | 181.4 | 180.0 | 2.4 | 6.4 | 110 | .4 | .4 | 181.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 277 | 2005 | 220182 | 175.4 | 174.0 | 2.7 | 6.3 | 100 | -6.2 | -9.4 | 174.6 | 0 | 174.6 | 0 | 3.6 |
| BRW | 78 | 277 | 2005 | 230182 | 175.5 | 174.1 | 4.3 | 6.3 | 100 | -6.2 | -9.4 | 174.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 286 | 2340 | 210183 | 172.7 | 171.3 | 1.2 | 6.7 | 265 | -3.3 | -5.6 | 172.0 | 0 | 171.0 | 0 | 1.1 |
| BRW | 78 | 286 | 2340 | 200183 | 170.7 | 169.4 | 1.0 | 6.7 | 265 | -3.3 | -5.6 | 170.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 290 | 2030 | 600184 | 180.9 | 179.5 | .2 | 4.9 | 70 | -18.9 | -18.9 | 179.7 | 0 | 179.8 | 0 | .5 |
| BRW | 78 | 290 | 2030 | 590184 | 181.0 | 179.6 | .7 | 4.9 | 70 | -18.9 | -18.9 | 179.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 297 | 0055 | 230185 | 176.7 | 175.3 | 2.8 | 6.7 | 85 | -21.1 | -23.9 | 175.5 | 0 | 174.7 | 0 | 2.1 |
| BRW | 78 | 297 | 0055 | 220185 | 175.1 | 173.7 | 1.0 | 6.7 | 85 | -21.1 | -23.9 | 173.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 304 | 2020 | 210186 | 178.8 | 177.4 | 1.3 | 4.5 | 40 | -23.4 | -26.0 | 177.5 | 0 | 177.7 | 0 | 1.0 |
| BRW | 78 | 304 | 2020 | 200186 | 179.2 | 177.8 | .5 | 4.5 | 40 | -23.4 | -26.0 | 177.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 316 | 1622 | 590187 | 178.5 | 177.1 | 1.8 | 3.1 | 135 | -7.0 | -9.4 | 177.6 | 0 | 179.1 | 0 | 2.5 |
| BRW | 78 | 316 | 1622 | 600187 | 181.4 | 180.0 | 3.1 | 3.1 | 135 | -7.0 | -9.4 | 180.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 320 | 0125 | 630188 | 185.0 | 183.6 | 3.2 | 5.4 | 150 | -24.2 | -26.8 | 183.7 | 0 | 182.7 | 0 | 2.3 |
| BRW | 78 | 320 | 0125 | 220188 | 183.0 | 181.6 | .4 | 5.4 | 150 | -24.2 | -26.8 | 181.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 329 | 2325 | 200189 | 182.6 | 181.2 | .8 | 8.9 | 73 | -23.4 | -23.4 | 181.4 | 0 | 180.9 | 0 | 1.8 |
| BRW | 78 | 329 | 2325 | 210189 | 181.6 | 180.2 | 2.4 | 8.9 | 73 | -23.4 | -23.4 | 180.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 341 | 2245 | 590190 | 176.3 | 174.9 | 1.7 | 6.7 | 30 | -21.0 | -23.6 | 175.1 | 2 | 175.1 | 0 | 1.7 |
| BRW | 78 | 346 | 2150 | 200191 | 178.2 | 176.8 | 1.7 | 4.5 | 115 | -27.8 | -31.2 | 176.9 | 0 | 178.7 | 0 | 1.7 |
| BRW | 78 | 346 | 2150 | 210191 | 181.8 | 180.4 | 1.7 | 4.5 | 115 | -27.8 | -31.2 | 180.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 354 | 0205 | 590192 | 201.6 | 200.0 | 1.0 | 4.9 | 75 | -34.5 | -37.8 | 200.1 | 5 | 199.5 | 5 | 1.4 |
| BRW | 78 | 354 | 0205 | 600192 | 200.4 | 198.8 | 1.7 | 4.9 | 75 | -34.5 | -37.8 | 198.9 | 5 | -1.0 | 5 | -1.0 |
| BRW | 78 | 361 | 2005 | 220193 | 179.3 | 177.9 | 1.9 | 4.5 | 105 | -36.6 | -41.0 | 178.0 | 0 | 180.6 | 0 | 2.2 |
| BRW | 78 | 361 | 2005 | 630193 | 184.7 | 183.3 | 2.4 | 4.5 | 105 | -36.6 | -41.0 | 183.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 3 | 0335 | 200194 | 180.9 | 179.5 | 2.1 | 4.9 | 127 | -11.4 | -13.2 | 179.9 | 0 | 180.0 | 0 | 2.6 |
| BRW | 79 | 3 | 0335 | 210194 | 181.1 | 179.7 | 3.1 | 4.9 | 127 | -11.4 | -13.2 | 180.1 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 79 | 8 | 2110 | 600195 | 171.6 | 170.3 | .5 | 5.8 | 105 | -18.9 | -21.7 | 170.5 | 0 | 169.9 | 0 | 1.9 |
| BRW | 79 | 8 | 2110 | 590195 | 170.5 | 169.2 | 2.6 | 5.8 | 105 | -18.9 | -21.7 | 169.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 15 | 2305 | 220196 | 175.4 | 174.0 | 1.7 | 5.8 | 60 | -20.7 | -23.6 | 174.2 | 0 | 175.3 | 0 | 1.3 |
| BRW | 79 | 15 | 2305 | 630196 | 177.7 | 176.3 | .6 | 5.8 | 60 | -20.7 | -23.6 | 176.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 18 | 2040 | 200197 | 177.7 | 176.3 | 1.3 | 10.3 | 70 | -17.2 | -19.8 | 176.5 | 2 | 176.7 | 0 | 1.3 |
| BRW | 79 | 18 | 2040 | 210197 | 178.0 | 176.6 | 11.7 | 10.3 | 70 | -17.2 | -19.8 | 176.8 | 1 | -1.0 | 0 | -1.0 |
| BRW | 79 | 33 | 2110 | 590198 | 176.9 | 175.5 | 1.5 | 3.6 | 300 | -33.1 | -37.7 | 175.6 | 0 | 177.9 | 0 | 1.1 |
| BRW | 79 | 33 | 2110 | 600198 | 181.6 | 180.2 | .1 | 3.6 | 300 | -33.1 | -37.7 | 180.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 39 | 1935 | 220199 | 180.4 | 179.0 | 1.7 | 3.1 | 20 | -25.2 | -28.6 | 179.1 | 0 | 179.1 | 0 | 2.4 |
| BRW | 79 | 39 | 1935 | 630199 | 180.3 | 178.9 | 2.9 | 3.1 | 20 | -25.2 | -28.6 | 179.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 43 | 2035 | 200200 | 178.0 | 176.6 | 1.7 | 7.5 | 90 | -34.9 | -38.6 | 176.7 | 0 | 177.7 | 0 | 3.3 |
| BRW | 79 | 43 | 2035 | 210200 | 180.0 | 178.6 | 4.3 | 7.5 | 90 | -34.9 | -38.6 | 178.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 49 | 2250 | 590201 | 175.9 | 174.5 | 2.1 | 3.5 | 110 | -28.3 | -32.7 | 174.6 | 0 | 176.5 | 0 | 1.7 |
| BRW | 79 | 49 | 2250 | 600201 | 179.6 | 178.2 | 1.2 | 3.5 | 110 | -28.3 | -32.7 | 178.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 57 | 2205 | 630202 | 182.3 | 180.9 | 2.5 | 5.4 | 90 | -27.6 | -32.1 | 181.0 | 0 | 180.1 | 0 | 1.9 |
| BRW | 79 | 57 | 2205 | 220202 | 180.6 | 179.2 | .9 | 5.4 | 90 | -27.6 | -32.1 | 179.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 64 | 2030 | 200203 | 187.5 | 186.0 | 1.4 | 11.6 | 65 | -29.8 | -34.8 | 186.1 | 0 | 185.2 | 0 | 1.5 |
| BRW | 79 | 64 | 2030 | 210203 | 185.6 | 184.1 | 1.5 | 11.6 | 65 | -29.8 | -34.8 | 184.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 71 | 1955 | 600204 | 180.3 | 178.9 | 4.3 | 5.4 | 70 | -30.3 | -35.1 | 179.0 | 0 | 180.5 | 0 | 3.1 |
| BRW | 79 | 71 | 1955 | 590204 | 183.3 | 181.9 | .4 | 5.4 | 70 | -30.3 | -35.1 | 181.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 78 | 2325 | 220205 | 200.9 | 199.3 | 1.0 | 2.2 | 20 | -31.5 | -37.3 | 199.4 | 5 | 202.2 | 5 | 2.9 |
| BRW | 79 | 78 | 2325 | 630205 | 206.6 | 205.0 | 4.0 | 2.2 | 20 | -31.5 | -37.3 | 205.1 | 5 | -1.0 | 5 | -1.0 |
| BRW | 79 | 86 | 2005 | 200206 | 178.1 | 176.7 | 3.5 | 8.2 | 105 | -14.6 | -17.2 | 177.0 | 0 | 178.1 | 0 | 2.6 |
| BRW | 79 | 86 | 2005 | 210206 | 180.3 | 178.9 | .9 | 8.2 | 105 | -14.6 | -17.2 | 179.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 94 | 0215 | 630207 | 183.0 | 181.6 | 1.3 | 10.3 | 80 | -23.0 | -26.5 | 181.7 | 0 | 183.1 | 0 | 1.3 |
| BRW | 79 | 94 | 0215 | 220207 | 185.7 | 184.2 | 1.3 | 10.3 | 80 | -23.0 | -26.5 | 184.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 102 | 0130 | 590208 | 179.8 | 178.4 | 2.1 | 7.1 | 98 | -24.2 | -30.0 | 178.5 | 0 | 180.2 | 0 | 1.6 |
| BRW | 79 | 102 | 0130 | 600208 | 183.2 | 181.8 | .8 | 7.1 | 98 | -24.2 | -30.0 | 181.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 108 | 2155 | 210209 | 181.0 | 179.6 | 1.5 | 6.4 | 70 | -22.7 | -26.5 | 179.7 | 0 | 180.2 | 0 | 1.3 |
| BRW | 79 | 108 | 2151 | 200209 | 181.9 | 180.5 | 1.0 | 6.4 | 70 | -22.7 | -26.5 | 180.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 114 | 0220 | 630210 | 181.4 | 180.0 | 2.0 | 8.9 | 110 | -4.2 | -6.7 | 180.6 | 0 | 179.8 | 0 | 3.0 |
| BRW | 79 | 114 | 0220 | 220210 | 179.8 | 178.4 | 3.7 | 8.9 | 110 | -4.2 | -6.7 | 179.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 121 | 2055 | 600211 | 179.9 | 178.5 | 1.0 | 4.0 | 115 | -4.5 | -7.7 | 179.1 | 2 | 179.1 | 0 | 1.0 |
| BRW | 79 | 127 | 2055 | 200212 | 181.1 | 179.7 | .6 | 7.5 | 100 | -2.3 | -5.8 | 180.4 | 0 | 180.9 | 0 | 1.0 |
| BRW | 79 | 127 | 2055 | 210212 | 182.2 | 180.8 | 1.3 | 7.5 | 100 | -2.3 | -5.8 | 181.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 135 | 1955 | 630213 | 179.4 | 178.0 | 1.4 | 4.0 | 70 | -9.5 | -12.3 | 178.4 | 0 | 176.7 | 0 | 1.1 |
| BRW | 79 | 135 | 1955 | 220213 | 176.0 | 174.6 | .7 | 4.0 | 70 | -9.5 | -12.3 | 175.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 141 | 1855 | 590214 | 181.0 | 179.6 | .6 | 4.9 | 40 | -9.6 | -11.1 | 180.1 | 0 | 179.8 | 0 | 1.2 |
| BRW | 79 | 141 | 1855 | 600214 | 180.4 | 179.0 | 1.6 | 4.9 | 40 | -9.6 | -11.1 | 179.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 151 | 2325 | 210215 | 182.1 | 180.7 | .2 | 4.5 | 220 | 4.8 | -.2 | 181.8 | 0 | 181.8 | 0 | .9 |
| BRW | 79 | 151 | 2325 | 200215 | 182.1 | 180.7 | 1.2 | 4.5 | 220 | 4.8 | -.2 | 181.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 155 | 1925 | 220216 | 177.8 | 176.4 | 1.6 | 5.8 | 75 | .7 | -2.1 | 177.3 | 0 | 176.1 | 0 | 1.3 |
| BRW | 79 | 155 | 1925 | 630216 | 175.4 | 174.0 | .9 | 5.8 | 75 | .7 | -2.1 | 174.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 166 | 0001 | 600217 | 180.4 | 179.0 | 1.2 | 4.0 | 340 | -.8 | -2.6 | 179.9 | 0 | 181.1 | 0 | 2.8 |
| BRW | 79 | 166 | 0001 | 590217 | 182.8 | 181.4 | 3.7 | 4.0 | 340 | -.8 | -2.6 | 182.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 169 | 2042 | 200218 | 178.6 | 177.2 | .3 | 8.9 | 115 | 1.3 | -.5 | 178.2 | 0 | 180.4 | 0 | .9 |
| BRW | 79 | 169 | 2042 | 210218 | 182.9 | 181.5 | 1.2 | 8.9 | 115 | 1.3 | -.5 | 182.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 176 | 1940 | 220219 | 181.6 | 180.2 | 1.2 | 6.7 | 30 | -1.0 | -3.3 | 181.0 | 0 | 180.2 | 0 | .9 |
| BRW | 79 | 176 | 1940 | 630219 | 179.9 | 178.5 | .6 | 6.7 | 30 | -1.0 | -3.3 | 179.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 183 | 2047 | 600220 | 181.4 | 180.0 | .9 | 2.7 | 105 | 7.2 | 4.9 | 181.5 | 0 | 179.0 | 0 | 1.0 |
| BRW | 79 | 183 | 2047 | 590220 | 176.4 | 175.0 | 1.0 | 2.7 | 105 | 7.2 | 4.9 | 176.5 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 79 | 195 | 0215 | 200221 | 178.0 | 176.6 | .8 | 6.7 | 270 | 11.2 | 7.3 | 178.4 | 0 | 178.5 | 0 | 1.0 |
| BRW | 79 | 195 | 0215 | 210221 | 178.2 | 176.8 | 1.2 | 6.7 | 270 | 11.2 | 7.3 | 178.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 200 | 1920 | 600222 | 180.9 | 179.5 | 2.3 | 3.6 | 130 | 11.2 | 8.4 | 181.5 | 0 | 181.7 | 0 | 2.6 |
| BRW | 79 | 200 | 1920 | 590222 | 181.3 | 179.9 | 2.9 | 3.5 | 130 | 11.2 | 8.4 | 181.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 204 | 2108 | 630223 | 179.0 | 177.6 | 1.9 | 5.0 | 115 | 4.0 | 3.0 | 178.9 | 0 | 179.7 | 0 | 2.2 |
| BRW | 79 | 204 | 2108 | 220223 | 180.6 | 179.2 | 2.5 | 5.0 | 115 | 4.0 | 3.0 | 180.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 211 | 0441 | 210224 | 183.2 | 181.8 | 3.9 | 4.9 | 105 | 4.9 | 4.7 | 183.3 | 0 | 183.1 | 0 | 3.4 |
| BRW | 79 | 211 | 0441 | 200224 | 182.8 | 181.4 | 2.7 | 4.9 | 105 | 4.9 | 4.7 | 182.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 218 | 1950 | 590225 | 182.0 | 180.6 | 1.6 | 10.7 | 90 | 1.8 | 1.2 | 181.8 | 0 | 180.9 | 0 | 1.3 |
| BRW | 79 | 218 | 1950 | 600225 | 180.2 | 178.8 | .9 | 10.7 | 90 | 1.8 | 1.2 | 180.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 225 | 1855 | 200226 | 181.4 | 180.0 | .3 | 8.9 | 105 | 7.4 | 5.3 | 181.6 | 0 | 181.0 | 0 | 1.0 |
| BRW | 79 | 225 | 1855 | 210226 | 180.2 | 178.8 | 1.4 | 8.9 | 105 | 7.4 | 5.3 | 180.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 232 | 2059 | 200227 | 178.4 | 177.0 | 1.2 | 4.0 | 135 | 12.4 | 11.2 | 179.4 | 0 | 178.3 | 0 | 1.3 |
| BRW | 79 | 232 | 2059 | 210227 | 176.4 | 175.0 | 1.3 | 4.0 | 135 | 12.4 | 11.2 | 177.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 249 | 1855 | 600229 | 177.5 | 176.1 | .9 | 9.8 | 145 | 4.2 | 2.7 | 177.4 | 2 | 177.4 | 2 | .9 |
| BRW | 79 | 249 | 1855 | 590229 | 176.1 | 174.7 | 6.3 | 9.8 | 145 | 4.2 | 2.7 | 176.0 | 1 | 176.0 | 1 | 6.3 |
| BRW | 79 | 253 | 1900 | 220230 | 183.7 | 182.3 | 4.8 | 4.9 | 140 | .8 | -.5 | 183.3 | 0 | 180.4 | 0 | 4.1 |
| BRW | 79 | 253 | 1900 | 630230 | 177.9 | 176.5 | 3.3 | 4.9 | 140 | .8 | -.5 | 177.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 262 | 1840 | 210231 | 194.1 | 192.6 | 1.6 | 5.4 | 85 | -.4 | -4.1 | 193.4 | 0 | 190.2 | 0 | 1.5 |
| BRW | 79 | 262 | 1840 | 200231 | 187.6 | 186.1 | 1.3 | 5.4 | 85 | -.4 | -4.1 | 187.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 268 | 2015 | 590232 | 186.3 | 184.8 | 3.7 | 8.0 | 115 | 1.8 | -.2 | 185.9 | 2 | 186.4 | 0 | 3.7 |
| BRW | 79 | 268 | 2015 | 600232 | 187.2 | 185.7 | 6.8 | 8.0 | 115 | 1.8 | -.2 | 186.8 | 1 | -1.0 | 0 | -1.0 |
| BRW | 79 | 274 | 1845 | 220233 | 189.1 | 187.6 | 3.7 | 8.1 | 85 | -.6 | -2.2 | 188.6 | 0 | 188.9 | 0 | 3.8 |
| BRW | 79 | 274 | 1845 | 630233 | 189.8 | 188.3 | 3.8 | 8.1 | 85 | -.6 | -2.2 | 189.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 281 | 2105 | 590234 | 185.0 | 183.6 | 1.0 | 7.5 | 80 | -4.5 | -5.7 | 184.3 | 0 | 184.4 | 0 | 1.3 |
| BRW | 79 | 281 | 2105 | 600234 | 185.3 | 183.8 | 1.6 | 7.5 | 80 | -4.5 | -5.7 | 184.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 289 | 2016 | 630235 | 189.8 | 188.3 | .7 | 4.5 | 100 | -11.0 | -14.0 | 188.7 | 0 | 188.2 | 0 | 1.1 |
| BRW | 79 | 289 | 2016 | 220235 | 188.8 | 187.3 | 1.4 | 4.5 | 100 | -11.0 | -14.0 | 187.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 295 | 2140 | 210236 | 187.8 | 186.3 | .9 | 11.6 | 70 | -8.8 | -9.7 | 186.9 | 0 | 186.9 | 0 | .8 |
| BRW | 79 | 295 | 2140 | 200236 | 187.8 | 186.3 | .6 | 11.5 | 70 | -8.8 | -9.7 | 186.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 302 | 0130 | 220237 | 186.0 | 184.5 | .6 | 4.5 | 65 | -18.2 | -19.5 | 184.8 | 0 | 187.0 | 0 | 1.2 |
| BRW | 79 | 302 | 0130 | 630237 | 190.4 | 188.9 | 1.6 | 4.5 | 65 | -18.2 | -19.5 | 189.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 309 | 2030 | 210238 | 187.7 | 186.2 | 2.8 | 6.7 | 90 | -11.0 | -16.0 | 186.6 | 0 | 188.4 | 0 | 2.0 |
| BRW | 79 | 309 | 2030 | 200238 | 191.3 | 189.8 | .6 | 6.7 | 90 | -11.0 | -16.0 | 190.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 319 | 0030 | 600239 | 188.4 | 186.9 | 1.5 | 4.9 | 70 | -12.7 | -18.0 | 187.2 | 0 | 187.9 | 0 | 1.1 |
| BRW | 79 | 319 | 0030 | 590239 | 189.8 | 188.3 | .6 | 4.9 | 70 | -12.7 | -18.0 | 188.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 326 | 2150 | 630240 | 187.8 | 186.3 | 1.2 | 9.1 | 30 | -23.6 | -27.5 | 186.5 | 2 | 186.5 | 0 | 1.2 |
| BRW | 79 | 338 | 2130 | 590241 | 188.9 | 187.4 | .7 | 6.9 | 98 | -23.6 | -27.5 | 187.6 | 0 | 187.2 | 0 | .8 |
| BRW | 79 | 338 | 2130 | 600241 | 188.2 | 186.7 | .9 | 6.9 | 98 | -23.6 | -27.5 | 186.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 348 | 2300 | 630242 | 517.3 | 513.3 | 1.0 | 12.4 | 230 | -10.7 | -12.3 | 514.5 | 2 | 514.5 | 2 | 1.0 |
| BRW | 79 | 352 | 2030 | 210243 | 198.9 | 197.3 | 2.0 | 4.5 | 60 | -20.0 | -24.4 | 197.5 | 3 | 197.5 | 3 | 2.0 |
| BRW | 79 | 352 | 2030 | 200243 | 190.9 | 189.4 | 1.4 | 4.5 | 60 | -20.0 | -24.4 | 189.6 | 3 | 189.6 | 0 | 1.4 |
| BRW | 79 | 358 | 2200 | 590244 | 192.1 | 190.6 | 1.3 | 7.7 | 68 | -31.0 | -37.3 | 190.7 | 0 | 190.1 | 0 | 1.9 |
| BRW | 79 | 358 | 2200 | 600244 | 190.9 | 189.4 | 2.3 | 7.7 | 68 | -31.0 | -37.3 | 189.5 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 77 | 68 | 2000 | 050050 | 146.9 | 145.8 | U | 8.9 | 248 | -3.0 | -22.2 | 146.0 | 1 | 146.0 | 1 | .0 |
| NWR | 77 | 68 | 2000 | 060050 | 410.3 | 407.1 | U | 8.9 | 248 | -3.0 | -22.2 | 407.8 | 1 | 407.8 | 1 | .0 |
| NWR | 77 | 77 | 2030 | 010051 | 155.9 | 154.7 | 2.5 | 4.5 | 270 | -12.8 | -12.8 | 155.2 | 0 | 155.1 | 0 | 1.8 |
| NWR | 77 | 77 | 2030 | 020051 | 155.6 | 154.4 | .2 | 4.5 | 270 | -12.8 | -12.8 | 154.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 84 | 1800 | 030052 | 148.6 | 147.4 | 1.5 | 6.7 | 270 | -1.1 | -17.0 | 147.8 | 0 | 148.9 | 0 | 1.2 |
| NWR | 77 | 84 | 1800 | 040052 | 150.7 | 149.5 | .9 | 6.7 | 270 | -1.1 | -17.0 | 149.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 89 | 2130 | 050053 | 157.1 | 155.9 | U | 3.3 | 270 | -8.6 | -15.8 | 156.3 | 1 | 156.3 | 0 | .0 |
| NWR | 77 | 89 | 2130 | 060053 | 696.9 | 691.4 | U | 3.3 | 270 | -8.6 | -15.8 | 693.4 | 1 | 693.4 | 1 | .0 |
| NWR | 77 | 97 | 0020 | 010054 | 2676.0 | 2655.1 | U | 0.0 | CLM | 2.0 | -15.6 | 2662.6 | 1 | 2662.6 | 1 | .0 |
| NWR | 77 | 97 | 0020 | 020054 | 5447.1 | 5404.5 | U | 0.0 | CLM | 2.0 | -15.6 | 5419.8 | 1 | 5419.8 | 1 | .0 |
| NWR | 77 | 103 | 2300 | 030055 | 155.9 | 154.7 | 1.7 | 11.2 | 270 | -4.0 | -7.2 | 155.5 | 0 | 155.3 | 0 | 2.3 |
| NWR | 77 | 103 | 2300 | 040055 | 155.5 | 154.3 | 2.8 | 11.2 | 270 | -4.0 | -7.2 | 155.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 112 | 0045 | 050056 | 216.1 | 214.4 | .1 | 0.0 | CLM | -4.3 | -7.7 | 215.5 | 2 | 215.5 | 2 | .1 |
| NWR | 77 | 112 | 0045 | 060056 | 331.5 | 328.9 | U | 0.0 | CLM | -4.3 | -7.7 | 330.6 | 1 | 330.6 | 1 | .0 |
| NWR | 77 | 117 | 2120 | 010057 | 155.4 | 154.2 | 2.3 | 3.3 | 270 | 4.4 | -4.5 | 155.2 | 2 | 155.2 | 0 | 2.3 |
| NWR | 77 | 117 | 2120 | 020057 | 188.9 | 187.4 | 6.6 | 3.3 | 270 | 4.4 | -4.5 | 188.7 | 1 | 188.7 | 1 | 6.6 |
| NWR | 77 | 125 | 1900 | 030058 | 181.1 | 179.7 | 2.6 | 1.8 | 180 | 3.8 | -3.2 | 181.0 | 5 | 184.8 | 5 | 2.7 |
| NWR | 77 | 125 | 1900 | 040058 | 188.7 | 187.2 | 2.8 | 1.8 | 180 | 3.8 | -3.2 | 188.6 | 5 | -1.0 | 5 | -1.0 |
| NWR | 77 | 130 | 1613 | 470000 | 153.6 | 152.4 | U | 1.5 | 112 | -3.3 | -6.8 | 153.2 | 1 | 152.1 | 0 | .0 |
| NWR | 77 | 130 | 1613 | 490000 | 151.4 | 150.2 | U | 1.5 | 112 | -7.2 | -8.3 | 151.0 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 132 | 1740 | 050059 | 150.5 | 149.3 | 2.3 | .7 | 203 | 7.0 | -11.5 | 149.9 | 4 | 150.7 | 0 | 1.7 |
| NWR | 77 | 132 | 1740 | 060059 | 152.0 | 150.8 | .4 | .7 | 203 | 7.0 | -11.5 | 151.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 77 | 137 | 1855 | 450000 | 170.6 | 169.3 | U | 2.1 | 112 | -22.5 | -26.7 | 169.5 | 1 | 169.5 | 1 | .0 |
| NWR | 77 | 137 | 1855 | 460000 | 167.4 | 166.1 | U | 2.1 | 112 | 10.0 | 6.1 | 168.5 | 1 | 168.5 | 1 | .0 |
| NWR | 77 | 139 | 0840 | 470000 | 158.3 | 157.1 | U | 5.1 | 225 | 10.0 | 6.1 | 159.3 | 1 | 159.2 | 0 | .0 |
| NWR | 77 | 139 | 0840 | 490000 | 158.5 | 157.3 | U | 5.1 | 225 | 4.0 | 3.3 | 159.1 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 139 | 1330 | 450000 | 156.9 | 155.7 | U | 7.7 | 270 | 4.0 | 3.3 | 157.5 | 1 | 157.6 | 0 | .0 |
| NWR | 77 | 139 | 1330 | 460000 | 155.6 | 154.4 | U | 7.7 | 270 | 15.5 | 11.9 | 157.7 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 139 | 1740 | 010060 | 149.8 | 148.6 | U | 0.0 | CLM | -1.0 | -12.5 | 149.2 | 1 | 153.1 | 0 | .0 |
| NWR | 77 | 139 | 1740 | 020060 | 157.7 | 156.5 | .1 | 0.0 | CLM | -1.0 | -12.5 | 157.0 | 2 | -1.0 | 0 | -1.0 |
| NWR | 77 | 144 | 0935 | 450000 | 150.6 | 149.4 | U | 5.1 | 270 | 8.5 | 7.9 | 151.8 | 1 | 151.0 | 0 | .0 |
| NWR | 77 | 144 | 0935 | 460000 | 150.0 | 148.8 | U | 5.1 | 270 | 2.2 | -1.1 | 150.1 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 144 | 1310 | 470000 | 150.7 | 149.5 | U | 2.6 | 248 | 2.2 | -1.1 | 150.8 | 1 | 151.2 | 0 | .0 |
| NWR | 77 | 144 | 1310 | 490000 | 151.6 | 150.4 | U | 2.6 | 248 | .2 | -1.1 | 151.7 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 146 | 2050 | 040061 | 165.9 | 164.6 | 3.0 | 0.0 | CLM | 3.3 | -3.8 | 165.8 | 4 | 165.6 | 4 | 2.8 |
| NWR | 77 | 146 | 2050 | 030061 | 165.5 | 164.2 | 2.6 | 0.0 | CLM | 3.3 | -3.8 | 165.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 77 | 151 | 2100 | 050062 | 150.1 | 148.9 | 4.5 | 2.2 | 135 | 14.1 | -4.0 | 150.0 | 3 | 157.4 | 0 | 4.5 |
| NWR | 77 | 151 | 2100 | 060062 | 165.1 | 163.8 | .1 | 2.2 | 135 | 14.1 | -4.0 | 164.9 | 3 | -1.0 | 0 | -1.0 |
| NWR | 77 | 152 | 1100 | 450000 | 153.1 | 151.9 | U | 1.3 | 202 | -.6 | -3.1 | 153.0 | 1 | 154.5 | 0 | .0 |
| NWR | 77 | 152 | 1100 | 460000 | 156.3 | 155.1 | U | 1.3 | 202 | -3.3 | -6.8 | 155.9 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 152 | 1400 | 430000 | 155.1 | 153.9 | U | 3.9 | 293 | -3.3 | -6.8 | 154.7 | 1 | 155.5 | 0 | .0 |
| NWR | 77 | 152 | 1400 | 440000 | 156.8 | 155.6 | U | 3.9 | 293 | -7.2 | -8.3 | 156.3 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 159 | 2045 | 010063 | 166.3 | 165.0 | .1 | 0.0 | CLM | 11.8 | 3.3 | 166.9 | 3 | 166.9 | 3 | .1 |
| NWR | 77 | 159 | 2045 | 020063 | 152.3 | 151.1 | .6 | 0.0 | CLM | 11.8 | 3.3 | 152.9 | 3 | 152.9 | 0 | .6 |
| NWR | 77 | 166 | 2150 | 030064 | 149.4 | 148.2 | U | 2.2 | 225 | 17.6 | -11.0 | 148.8 | 1 | 148.8 | 0 | .0 |
| NWR | 77 | 166 | 2150 | 040064 | 148.8 | 147.6 | U | 2.2 | 225 | 17.6 | -11.0 | 148.2 | 1 | 148.2 | 1 | .0 |
| NWR | 77 | 172 | 1800 | 050065 | 162.8 | 161.5 | 5.3 | 4.5 | 270 | 14.0 | -7.2 | 162.4 | 1 | 162.4 | 0 | 5.3 |
| NWR | 77 | 172 | 1800 | 060065 | 497.4 | 493.5 | 7.4 | 4.5 | 270 | 14.0 | -7.2 | 496.2 | 1 | 496.2 | 1 | 7.4 |
| NWR | 77 | 179 | 1845 | 010066 | 5666.0 | 5621.7 | U | 2.2 | 135 | 17.5 | 7.0 | 5707.1 | 1 | 5707.1 | 1 | .0 |
| NWR | 77 | 179 | 1845 | 020066 | 3122.0 | 3097.6 | U | 2.2 | 135 | 17.5 | 7.0 | 3144.7 | 1 | 3144.7 | 1 | .0 |
| NWR | 77 | 194 | 1830 | 030067 | 148.9 | 147.7 | U | 8.9 | 270 | 11.5 | 3.7 | 149.5 | 1 | 152.8 | 0 | .0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 77 | 194 | 1830 | 040067 | 155.4 | 154.2 | U | 8.9 | 270 | 11.5 | 3.7 | 156.0 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 200 | 1840 | 050068 | 150.8 | 149.6 | 2.9 | 0.0 | CLM | 16.0 | 4.2 | 151.5 | 2 | 151.5 | 0 | 2.9 |
| NWR | 77 | 200 | 1840 | 060068 | 206.0 | 204.4 | 5.1 | 0.0 | CLM | 16.0 | 4.2 | 206.9 | 1 | 206.9 | 1 | 5.1 |
| NWR | 77 | 208 | 2125 | 010069 | 3580.5 | 3552.5 | U | 11.2 | 90 | 16.2 | 1.8 | 3589.9 | 1 | 3589.9 | 1 | .0 |
| NWR | 77 | 208 | 2125 | 020069 | 261.4 | 259.4 | .1 | 11.2 | 90 | 16.2 | 1.8 | 262.1 | 2 | 262.1 | 2 | .1 |
| NWR | 77 | 214 | 2030 | 030070 | 152.2 | 151.0 | .4 | 6.7 | 270 | 19.0 | -4.2 | 152.0 | 0 | 155.5 | 0 | 1.2 |
| NWR | 77 | 214 | 2030 | 040070 | 159.1 | 157.9 | 1.6 | 6.7 | 270 | 19.0 | -4.2 | 158.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 222 | 1800 | 050071 | 156.3 | 155.1 | 2.5 | 2.2 | 270 | 15.0 | .5 | 156.6 | 2 | 156.6 | 0 | 2.5 |
| NWR | 77 | 222 | 1800 | 060071 | 199.4 | 197.8 | 19.6 | 2.2 | 270 | 15.0 | .5 | 199.7 | 1 | 199.7 | 1 | 19.6 |
| NWR | 77 | 229 | 1700 | 010072 | 170.5 | 169.2 | 2.9 | 1.3 | 180 | 12.0 | 7.1 | 171.8 | 2 | 171.8 | 2 | 2.9 |
| NWR | 77 | 237 | 1830 | 030073 | 150.8 | 149.6 | .9 | 4.5 | 293 | 11.0 | 6.0 | 151.7 | 3 | 156.4 | 0 | .9 |
| NWR | 77 | 237 | 1830 | 040073 | 160.1 | 158.8 | 2.1 | 4.5 | 293 | 11.0 | 6.0 | 161.1 | 3 | -1.0 | 0 | -1.0 |
| NWR | 77 | 244 | 2120 | 050074 | 154.2 | 153.0 | 2.0 | 0.0 | CLM | 14.5 | -4.5 | 154.0 | 2 | 154.0 | 0 | 2.0 |
| NWR | 77 | 258 | 2000 | 040075 | 155.7 | 154.5 | 6.5 | 2.2 | 270 | -4.0 | -8.5 | 155.2 | 1 | 155.1 | 0 | 6.5 |
| NWR | 77 | 258 | 2000 | 030075 | 155.4 | 154.2 | 5.8 | 2.2 | 270 | -4.0 | -8.5 | 154.9 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 265 | 2245 | 010076 | 154.2 | 153.0 | .4 | 1.3 | 270 | 13.5 | -14.8 | 153.5 | 3 | 153.5 | 0 | .4 |
| NWR | 77 | 265 | 2245 | 020076 | 180.8 | 179.4 | 4.6 | 1.3 | 270 | 13.5 | -14.8 | 179.9 | 3 | 179.9 | 3 | 4.6 |
| NWR | 77 | 272 | 2020 | 030077 | 153.6 | 152.4 | 8.0 | 2.2 | 270 | MSG | MSG | 153.6 | 1 | 155.2 | 0 | 8.0 |
| NWR | 77 | 272 | 2020 | 040077 | 156.8 | 155.6 | 6.9 | 2.2 | 270 | MSG | MSG | 156.8 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 281 | 2300 | 010078 | 163.0 | 161.7 | 5.4 | 6.7 | 270 | -2.0 | -9.8 | 162.4 | 1 | 159.4 | 0 | 5.4 |
| NWR | 77 | 281 | 2300 | 020078 | 156.9 | 155.7 | 6.2 | 6.7 | 270 | -2.0 | -9.8 | 156.4 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 286 | 2140 | 030079 | 160.1 | 158.8 | 4.9 | 4.5 | 270 | 6.0 | -10.5 | 159.5 | 1 | 160.7 | 0 | 4.9 |
| NWR | 77 | 286 | 2140 | 040079 | 162.5 | 161.2 | 3.0 | 4.5 | 270 | 6.0 | -10.5 | 161.9 | 2 | -1.0 | 0 | -1.0 |
| NWR | 77 | 296 | 2215 | 010080 | 158.0 | 156.8 | .5 | 2.2 | 270 | 2.5 | -5.8 | 157.7 | 0 | 159.3 | 0 | 3.1 |
| NWR | 77 | 296 | 2215 | 020080 | 161.2 | 159.9 | 4.4 | 2.2 | 270 | 2.5 | -5.8 | 160.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 300 | 2110 | 030081 | 164.8 | 163.5 | 3.3 | 2.2 | 180 | 6.5 | -8.5 | 164.3 | 0 | 163.2 | 0 | 3.8 |
| NWR | 77 | 300 | 2110 | 040081 | 162.6 | 161.3 | 4.3 | 2.2 | 180 | 6.5 | -8.5 | 162.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 307 | 2315 | 010082 | 159.1 | 157.9 | 3.2 | 2.2 | 225 | 3.5 | -12.2 | 158.4 | 0 | 156.6 | 0 | 3.5 |
| NWR | 77 | 307 | 2315 | 020082 | 155.4 | 154.2 | 3.8 | 2.2 | 225 | 3.5 | -12.2 | 154.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 315 | 2020 | 030083 | 157.7 | 156.5 | 3.3 | 4.5 | 270 | 3.0 | -16.2 | 156.9 | 0 | 159.5 | 0 | 4.0 |
| NWR | 77 | 315 | 2020 | 040083 | 162.9 | 161.6 | 4.6 | 4.5 | 270 | 3.0 | -16.2 | 162.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 325 | 2200 | 010084 | 159.7 | 158.5 | 7.3 | 4.5 | 270 | -7.0 | MSG | 159.7 | 1 | 159.3 | 0 | 7.3 |
| NWR | 77 | 325 | 2200 | 020084 | 158.9 | 157.7 | 2.3 | 4.5 | 270 | -7.0 | MSG | 158.9 | 2 | -1.0 | 0 | -1.0 |
| NWR | 77 | 333 | 2100 | 030085 | 148.9 | 147.7 | 4.1 | 4.5 | 270 | -9.4 | MSG | 148.9 | 2 | 148.9 | 2 | 4.1 |
| NWR | 77 | 333 | 2100 | 040085 | 160.4 | 159.1 | 5.0 | 4.5 | 270 | -9.4 | MSG | 160.4 | 1 | 160.4 | 0 | 5.0 |
| NWR | 77 | 341 | 2030 | 010086 | 168.4 | 167.1 | 3.6 | 2.2 | 270 | -6.5 | -8.8 | 167.9 | 2 | 167.4 | 0 | 3.6 |
| NWR | 77 | 341 | 2030 | 020086 | 167.4 | 166.1 | 14.6 | 2.2 | 270 | -6.5 | -8.8 | 166.9 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 351 | 0000 | 030087 | 168.8 | 167.5 | 4.2 | 11.2 | 270 | -13.0 | -99.9 | 168.8 | 0 | 168.2 | 0 | 3.5 |
| NWR | 77 | 351 | 0000 | 050087 | 167.6 | 166.3 | 2.7 | 11.2 | 270 | -13.0 | -99.9 | 167.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 365 | 0040 | 060088 | 159.8 | 158.5 | .4 | 11.2 | 270 | -5.0 | MSG | 159.8 | 2 | 159.8 | 0 | .4 |
| NWR | 78 | 7 | 2130 | 010089 | 158.1 | 156.9 | 1.8 | 8.9 | 270 | MSG | MSG | 158.1 | 0 | 158.5 | 0 | 3.6 |
| NWR | 78 | 7 | 2130 | 020089 | 158.9 | 157.7 | 4.8 | 8.9 | 270 | MSG | MSG | 158.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 11 | 2150 | 030090 | 162.7 | 161.4 | 7.2 | 8.9 | 270 | -8.6 | -9.5 | 162.2 | 1 | 159.1 | 0 | 7.2 |
| NWR | 78 | 11 | 2150 | 040090 | 156.5 | 155.3 | 5.1 | 8.9 | 270 | -8.6 | -9.5 | 156.0 | 1 | -1.0 | 0 | -1.0 |
| NWR | 78 | 17 | 2020 | 050091 | 161.0 | 159.7 | 4.1 | 4.5 | 270 | -8.5 | -10.8 | 160.4 | 2 | 162.2 | 0 | 4.1 |
| NWR | 78 | 17 | 2020 | 060091 | 164.6 | 163.3 | 5.7 | 4.5 | 270 | -8.5 | -10.8 | 164.0 | 1 | -1.0 | 0 | -1.0 |
| NWR | 78 | 28 | 2200 | 010092 | 161.9 | 160.6 | 1.2 | 17.9 | 270 | -7.0 | -13.1 | 161.2 | 0 | 160.8 | 0 | 2.5 |
| NWR | 78 | 28 | 2200 | 020092 | 161.2 | 159.9 | 3.4 | 17.9 | 270 | -7.0 | -13.1 | 160.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 35 | 0030 | 030093 | 163.6 | 162.3 | 3.6 | 17.9 | 270 | -7.2 | -8.3 | 163.1 | 0 | 163.4 | 0 | 2.5 |
| NWR | 78 | 35 | 0030 | 040093 | 164.1 | 162.8 | .1 | 17.9 | 270 | -7.2 | -8.3 | 163.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 50 | 0000 | 010094 | 163.7 | 162.4 | 6.0 | 6.7 | 270 | MSG | MSG | 163.7 | 1 | 166.4 | 0 | 6.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 78 | 50 | 0000 | 020094 | 169.0 | 167.7 | 2.8 | 6.7 | 270 | MSG | MSG | 169.0 | 2 | -1.0 | 0 | -1.0 |
| NWR | 78 | 54 | 2109 | 030095 | 156.9 | 155.7 | 6.4 | 15.6 | 270 | -6.5 | -15.0 | 156.1 | 1 | 159.3 | 0 | 6.4 |
| NWR | 78 | 54 | 2109 | 040095 | 163.2 | 161.9 | 1.0 | 15.6 | 270 | -6.5 | -15.0 | 162.4 | 2 | -1.0 | 0 | -1.0 |
| NWR | 78 | 63 | 2045 | 050096 | 157.9 | 156.7 | 1.7 | 17.9 | 270 | -5.0 | -7.0 | 157.5 | 0 | 158.3 | 0 | 2.1 |
| NWR | 78 | 63 | 2045 | 060096 | 159.4 | 158.2 | 2.4 | 17.9 | 270 | -5.0 | -7.0 | 159.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 67 | 2150 | 010097 | 166.7 | 165.4 | 4.7 | 7.8 | 270 | -4.0 | -11.2 | 166.1 | 0 | 166.0 | 0 | 3.4 |
| NWR | 78 | 67 | 2150 | 020097 | 166.5 | 165.2 | 1.2 | 7.8 | 270 | -4.0 | -11.2 | 165.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 86 | 1930 | 030098 | 161.4 | 160.1 | 3.9 | 0.0 | CLM | 2.0 | -11.2 | 160.8 | 3 | 160.8 | 0 | 3.9 |
| NWR | 78 | 86 | 1930 | 040098 | 150.0 | 148.8 | 2.2 | 0.0 | CLM | 2.0 | -11.2 | 149.4 | 3 | 149.4 | 3 | 2.2 |
| NWR | 78 | 103 | 2330 | 020099 | 190.9 | 189.4 | 3.3 | 1.1 | 180 | -2.5 | -6.1 | 190.5 | 2 | 190.5 | 2 | 3.3 |
| NWR | 78 | 103 | 2330 | 060099 | 198.5 | 196.9 | U | 1.1 | 180 | -2.5 | -6.1 | 198.1 | 1 | 198.1 | 1 | .0 |
| NWR | 78 | 123 | 1650 | 010100 | 177.0 | 175.6 | 1.1 | 17.5 | 270 | 2.0 | -2.2 | 177.0 | 0 | 176.5 | 0 | 2.2 |
| NWR | 78 | 123 | 1650 | 030100 | 176.0 | 174.6 | 2.9 | 17.5 | 270 | 2.0 | -2.2 | 176.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 130 | 1810 | 040101 | 160.4 | 159.1 | 3.0 | 17.5 | 270 | 1.5 | -9.9 | 159.8 | 0 | 161.3 | 0 | 3.3 |
| NWR | 78 | 130 | 1810 | 050101 | 163.4 | 162.1 | 3.5 | 17.5 | 270 | 1.5 | -9.9 | 162.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 138 | 2150 | 010102 | 172.8 | 171.4 | 3.4 | 7.5 | 270 | 0.0 | -3.3 | 172.7 | 0 | 172.8 | 0 | 3.5 |
| NWR | 78 | 138 | 2150 | 020102 | 173.1 | 171.7 | 3.6 | 7.5 | 270 | 0.0 | -3.3 | 173.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 152 | 2030 | 030103 | 179.7 | 178.3 | 1.4 | 2.2 | 180 | 1.5 | -1.6 | 179.8 | 0 | 179.9 | 0 | 1.4 |
| NWR | 78 | 152 | 2030 | 060103 | 180.0 | 178.6 | 1.4 | 2.2 | 180 | 1.5 | -1.6 | 180.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 158 | 2235 | 010104 | 161.0 | 159.7 | 1.5 | 11.3 | 270 | 2.0 | -2.2 | 161.0 | 0 | 161.8 | 0 | 1.9 |
| NWR | 78 | 158 | 2235 | 020104 | 162.6 | 161.3 | 2.3 | 11.3 | 270 | 2.0 | -2.2 | 162.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 165 | 1840 | 030105 | 157.7 | 156.5 | 4.9 | 1.1 | 270 | 15.5 | -2.7 | 157.7 | 1 | 157.7 | 1 | 4.9 |
| NWR | 78 | 165 | 1840 | 040105 | 159.1 | 157.9 | 5.6 | 1.1 | 270 | 15.5 | -2.7 | 159.1 | 1 | 159.1 | 0 | 5.6 |
| NWR | 78 | 173 | 2205 | 050106 | 167.8 | 166.5 | 1.6 | 1.1 | 220 | 17.5 | .6 | 168.1 | 4 | 165.7 | 0 | 1.4 |
| NWR | 78 | 173 | 2205 | 060106 | 163.0 | 161.7 | 1.2 | 1.1 | 220 | 17.5 | .6 | 163.3 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 179 | 2000 | 010107 | 162.2 | 160.9 | 1.9 | 1.1 | 135 | 8.5 | 6.6 | 163.3 | 4 | 162.9 | 0 | 1.9 |
| NWR | 78 | 179 | 2000 | 020107 | 161.3 | 160.0 | 1.8 | 1.1 | 135 | 8.5 | 6.6 | 162.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 188 | 2130 | 030108 | 165.6 | 164.3 | 2.9 | 1.1 | 180 | 15.8 | -4.7 | 165.4 | 4 | 165.3 | 0 | 2.3 |
| NWR | 78 | 188 | 2130 | 040108 | 165.5 | 164.2 | 1.5 | 1.1 | 180 | 15.8 | -4.7 | 165.3 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 193 | 0325 | 050109 | 170.9 | 169.6 | .1 | .8 | 270 | 11.3 | 1.2 | 171.3 | 4 | 169.3 | 0 | 1.1 |
| NWR | 78 | 193 | 0325 | 060109 | 167.0 | 165.7 | 1.6 | .8 | 270 | 11.3 | 1.2 | 167.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 200 | 2300 | 010110 | 160.9 | 159.6 | 2.4 | 3.0 | 180 | 15.5 | -.4 | 161.1 | 3 | 165.5 | 0 | 2.4 |
| NWR | 78 | 200 | 2300 | 020110 | 169.7 | 168.4 | .9 | 3.0 | 180 | 15.5 | -.4 | 169.9 | 3 | -1.0 | 0 | -1.0 |
| NWR | 78 | 209 | 2130 | 030111 | 172.8 | 171.4 | 1.6 | 2.0 | 270 | 17.0 | 5.6 | 173.8 | 0 | 174.2 | 0 | 2.4 |
| NWR | 78 | 209 | 2130 | 040111 | 173.5 | 172.1 | 3.0 | 2.0 | 270 | 17.0 | 5.6 | 174.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 215 | 2040 | 060112 | 179.4 | 178.0 | 1.8 | 2.0 | 90 | 11.0 | 4.1 | 180.2 | 4 | 179.3 | 4 | 2.5 |
| NWR | 78 | 215 | 2040 | 050112 | 177.7 | 176.3 | 3.0 | 2.0 | 90 | 11.0 | 4.1 | 178.5 | 4 | -1.0 | 4 | -1.0 |
| NWR | 78 | 222 | 1915 | 020113 | 168.2 | 166.9 | 3.2 | 2.0 | 270 | 13.5 | 5.2 | 169.1 | 0 | 167.2 | 0 | 2.4 |
| NWR | 78 | 222 | 1915 | 010113 | 164.3 | 163.0 | 1.3 | 2.0 | 270 | 13.5 | 5.2 | 165.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 230 | 0000 | 030114 | 169.4 | 168.1 | 2.7 | 11.0 | 270 | 1.0 | -6.0 | 169.1 | 2 | 169.1 | 0 | 2.7 |
| NWR | 78 | 230 | 0000 | 040114 | 177.6 | 176.2 | 7.0 | 11.0 | 270 | 1.0 | -6.0 | 177.3 | 1 | 177.3 | 1 | 7.0 |
| NWR | 78 | 235 | 1830 | 060115 | 170.0 | 168.7 | 2.7 | 5.0 | 270 | 14.5 | -.7 | 170.2 | 0 | 169.7 | 0 | 3.7 |
| NWR | 78 | 235 | 1830 | 050115 | 169.0 | 167.7 | 4.5 | 5.0 | 270 | 14.5 | -.7 | 169.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 246 | 1900 | 010116 | 179.2 | 177.8 | 4.7 | 2.0 | 120 | 14.5 | -.2 | 179.4 | 4 | 178.0 | 4 | 3.7 |
| NWR | 78 | 246 | 1900 | 020116 | 176.3 | 174.9 | 2.4 | 2.0 | 120 | 14.5 | -.2 | 176.5 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 254 | 2230 | 030117 | 172.6 | 171.2 | 1.7 | 3.5 | 270 | .5 | -4.5 | 172.4 | 0 | 172.0 | 0 | 3.5 |
| NWR | 78 | 254 | 2230 | 040117 | 171.9 | 170.6 | 4.7 | 3.5 | 270 | .5 | -4.5 | 171.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 268 | 2040 | 050118 | 183.3 | 181.9 | 4.7 | 2.0 | 60 | 9.0 | -3.2 | 183.2 | 4 | 182.0 | 4 | 4.7 |
| NWR | 78 | 268 | 2040 | 060118 | 181.0 | 179.6 | 4.7 | 2.0 | 60 | 9.0 | -3.2 | 180.9 | 4 | -1.0 | 4 | -1.0 |
| NWR | 78 | 276 | 2130 | 040119 | 171.4 | 170.1 | 3.5 | 2.9 | 270 | 9.0 | -99.9 | 171.4 | 0 | 173.3 | 0 | 3.1 |
| NWR | 78 | 276 | 2130 | 030119 | 175.1 | 173.7 | 2.7 | 2.9 | 270 | 9.0 | -99.9 | 175.1 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 78 | 283 | 2300 | 050120 | 174.8 | 173.4 | 2.4 | 2.0 | 0 | 2.0 | -22.2 | 173.7 | 0 | 172.6 | 0 | 1.8 |
| NWR | 78 | 283 | 2300 | 060120 | 172.6 | 171.2 | .8 | 2.0 | 0 | 2.0 | -22.2 | 171.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 289 | 2110 | 010121 | 175.6 | 174.2 | 2.0 | 5.6 | 270 | 10.0 | -99.9 | 175.6 | 0 | 174.5 | 0 | 2.1 |
| NWR | 78 | 289 | 2110 | 020121 | 173.3 | 171.9 | 2.1 | 5.5 | 270 | 10.0 | -99.9 | 173.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 301 | 1735 | 040122 | 167.1 | 165.8 | .9 | 8.8 | 270 | 5.0 | -5.6 | 166.8 | 2 | 165.8 | 0 | .9 |
| NWR | 78 | 301 | 1735 | 030122 | 165.1 | 163.8 | 6.3 | 8.8 | 270 | 5.0 | -5.6 | 164.8 | 1 | -1.0 | 0 | -1.0 |
| NWR | 78 | 315 | 1930 | 010123 | 176.6 | 175.2 | 3.8 | 3.3 | 270 | 5.0 | -6.4 | 176.2 | 0 | 175.3 | 0 | 2.7 |
| NWR | 78 | 315 | 1930 | 020123 | 174.7 | 173.3 | .6 | 3.3 | 270 | 5.0 | -6.4 | 174.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 320 | 1930 | 030124 | 172.3 | 171.0 | 2.5 | 8.8 | 270 | -9.5 | -11.1 | 171.6 | 0 | 173.9 | 0 | 2.2 |
| NWR | 78 | 320 | 1930 | 040124 | 176.9 | 175.5 | 1.8 | 8.8 | 270 | -9.5 | -11.1 | 176.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 326 | 2045 | 060125 | 176.0 | 174.6 | 1.9 | 3.5 | 190 | -6.8 | -15.0 | 175.1 | 0 | 173.2 | 0 | 1.4 |
| NWR | 78 | 326 | 2045 | 050125 | 172.0 | 170.7 | .3 | 3.5 | 190 | -6.8 | -15.0 | 171.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 334 | 2040 | 010126 | 174.6 | 173.2 | 2.1 | 18.0 | 270 | -7.8 | -7.8 | 174.1 | 0 | 174.5 | 0 | 2.4 |
| NWR | 78 | 334 | 2040 | 020126 | 175.3 | 173.9 | 2.6 | 18.0 | 270 | -7.8 | -7.8 | 174.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 344 | 2000 | 050128 | 170.3 | 169.0 | 1.2 | 10.0 | 270 | MSG | MSG | 170.3 | 0 | 171.3 | 0 | 1.6 |
| NWR | 78 | 344 | 2000 | 060128 | 172.2 | 170.9 | 1.9 | 10.0 | 270 | MSG | MSG | 172.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 355 | 2320 | 010129 | 182.4 | 181.0 | 4.2 | 18.0 | 270 | -13.0 | -99.9 | 182.4 | 3 | 182.4 | 3 | 4.2 |
| NWR | 78 | 355 | 2320 | 020129 | 170.8 | 169.5 | 2.4 | 18.0 | 270 | -13.0 | -99.9 | 170.8 | 3 | 170.8 | 0 | 2.4 |
| NWR | 79 | 4 | 1545 | 030130 | 172.6 | 171.2 | 2.9 | 7.7 | 270 | -6.0 | -6.0 | 172.3 | 0 | 172.5 | 0 | 2.4 |
| NWR | 79 | 4 | 1545 | 040130 | 173.0 | 171.6 | 1.8 | 7.7 | 270 | -6.0 | -6.0 | 172.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 11 | 2300 | 010131 | 166.7 | 165.4 | .3 | 5.0 | 270 | -2.0 | MSG | 166.7 | 0 | 168.4 | 0 | 1.7 |
| NWR | 79 | 11 | 2300 | 020131 | 170.1 | 168.8 | 2.4 | 5.0 | 270 | -2.0 | MSG | 170.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 18 | 2310 | 030132 | 168.6 | 167.3 | 3.9 | 5.0 | 270 | -9.0 | MSG | 168.6 | 0 | 170.5 | 0 | 3.5 |
| NWR | 79 | 18 | 2310 | 040132 | 172.3 | 171.0 | 3.0 | 5.0 | 270 | -9.0 | MSG | 172.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 26 | 2200 | 030133 | 172.9 | 171.5 | .4 | 0.0 | CLM | -19.0 | -99.9 | 172.9 | 4 | 172.9 | 0 | .4 |
| NWR | 79 | 26 | 2200 | 040133 | 172.9 | 171.5 | .4 | 0.0 | CLM | -19.0 | -99.9 | 172.9 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 32 | 1750 | 050134 | 177.1 | 175.7 | 1.1 | 9.0 | 270 | -8.3 | -14.0 | 176.3 | 2 | 177.0 | 0 | 1.1 |
| NWR | 79 | 32 | 1750 | 060134 | 178.6 | 177.2 | U | 9.0 | 270 | -8.3 | -14.0 | 177.8 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 38 | 2330 | 010135 | 169.3 | 168.0 | U | 20.0 | 270 | -7.8 | -8.5 | 168.8 | 1 | 166.8 | 0 | .0 |
| NWR | 79 | 38 | 2330 | 020135 | 165.2 | 163.9 | .8 | 20.0 | 270 | -7.8 | -8.5 | 164.7 | 2 | -1.0 | 0 | -1.0 |
| NWR | 79 | 45 | 2045 | 030136 | 170.3 | 169.0 | 1.7 | 4.5 | 270 | 2.2 | -8.5 | 169.8 | 0 | 169.7 | 0 | 2.1 |
| NWR | 79 | 45 | 2045 | 040136 | 170.2 | 168.9 | 2.4 | 4.5 | 270 | 2.2 | -8.5 | 169.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 59 | 2045 | 040137 | 166.1 | 164.8 | 1.0 | 8.8 | 270 | -8.0 | MSG | 166.1 | 0 | 167.9 | 0 | .8 |
| NWR | 79 | 59 | 2045 | 030137 | 169.6 | 168.3 | .5 | 8.8 | 270 | -8.0 | MSG | 169.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 67 | 2200 | 040138 | 167.3 | 166.0 | 2.0 | 1.7 | 180 | -9.0 | MSG | 167.3 | 3 | 171.3 | 0 | 2.0 |
| NWR | 79 | 67 | 2200 | 030138 | 175.3 | 173.9 | 4.5 | 1.7 | 180 | -9.0 | MSG | 175.3 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 80 | 2330 | 050139 | 191.3 | 189.8 | 1.3 | 0.0 | CLM | -7.2 | -7.2 | 190.8 | 2 | 190.8 | 2 | 1.3 |
| NWR | 79 | 80 | 2330 | 060139 | 192.3 | 190.8 | 5.5 | 0.0 | CLM | -7.2 | -7.2 | 191.8 | 1 | 191.8 | 1 | 5.5 |
| NWR | 79 | 90 | 2120 | 030140 | 179.4 | 178.0 | 1.7 | 1.0 | 130 | 0.0 | -3.6 | 179.3 | 4 | 180.2 | 0 | 3.3 |
| NWR | 79 | 90 | 2120 | 040140 | 181.3 | 179.9 | 4.3 | 1.0 | 130 | 0.0 | -3.6 | 181.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 97 | 0100 | 050141 | 175.4 | 174.0 | 2.0 | 10.0 | 270 | -4.7 | -7.4 | 175.0 | 0 | 176.2 | 0 | 2.5 |
| NWR | 79 | 97 | 0100 | 060141 | 177.9 | 176.5 | 3.0 | 10.0 | 270 | -4.7 | -7.4 | 177.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 104 | 1930 | 030142 | 170.5 | 169.2 | 2.4 | 20.0 | 270 | -5.6 | -8.3 | 170.0 | 0 | 172.3 | 0 | 2.0 |
| NWR | 79 | 104 | 1930 | 040142 | 175.1 | 173.7 | 1.6 | 20.0 | 270 | -5.6 | -8.3 | 174.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 111 | 0145 | 060143 | 173.9 | 172.5 | 1.4 | 8.0 | 270 | -4.2 | -11.9 | 173.2 | 0 | 176.0 | 0 | 3.0 |
| NWR | 79 | 111 | 0145 | 050143 | 179.6 | 178.2 | 4.0 | 8.0 | 270 | -4.2 | -11.9 | 178.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 116 | 2200 | 030144 | 173.1 | 171.7 | 2.2 | 10.0 | 270 | -6.4 | -10.2 | 172.5 | 0 | 170.7 | 0 | 2.7 |
| NWR | 79 | 116 | 2200 | 040144 | 169.5 | 168.2 | 3.1 | 10.0 | 270 | -6.4 | -10.2 | 168.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 122 | 2030 | 050145 | 172.4 | 171.1 | 1.1 | 1.5 | 270 | .6 | -3.0 | 172.3 | 0 | 172.7 | 0 | 2.6 |
| NWR | 79 | 122 | 2030 | 060145 | 173.2 | 171.8 | 3.5 | 1.5 | 270 | .6 | -3.0 | 173.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 131 | 1800 | 040146 | 173.6 | 172.2 | 1.2 | 6.6 | 270 | -5.6 | -10.1 | 173.0 | 0 | 172.7 | 0 | 1.2 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 79 | 131 | 1800 | 030146 | 173.1 | 171.7 | 1.2 | 6.6 | 270 | -5.6 | -10.1 | 172.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 138 | 1530 | 060147 | 170.6 | 169.3 | 2.2 | 13.2 | 270 | 6.1 | -.3 | 170.8 | 0 | 171.7 | 0 | 2.7 |
| NWR | 79 | 138 | 1530 | 050147 | 172.5 | 171.2 | 3.1 | 13.2 | 270 | 6.1 | -.3 | 172.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 145 | 1100 | 030148 | 172.1 | 170.8 | 1.5 | 2.0 | 45 | 1.7 | -4.5 | 171.9 | 0 | 172.5 | 0 | 1.3 |
| NWR | 79 | 145 | 1100 | 040148 | 173.4 | 172.0 | 1.0 | 2.0 | 45 | 1.7 | -4.5 | 173.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 150 | 1830 | 050149 | 176.4 | 175.0 | .3 | 2.0 | 180 | -1.7 | -2.0 | 176.4 | 0 | 176.7 | 0 | 1.0 |
| NWR | 79 | 150 | 1830 | 060149 | 176.9 | 175.5 | 1.2 | 2.0 | 180 | -1.7 | -2.0 | 176.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 159 | 2115 | 030150 | 181.9 | 180.5 | 2.8 | 2.0 | 270 | -2.2 | -99.9 | 181.9 | 0 | 182.8 | 0 | 2.1 |
| NWR | 79 | 159 | 2115 | 040150 | 183.6 | 182.2 | .9 | 2.0 | 270 | -2.2 | -99.9 | 183.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 163 | 1500 | 060151 | 167.6 | 166.3 | 2.3 | 4.0 | 315 | 15.3 | 4.0 | 168.3 | 0 | 171.3 | 0 | 2.4 |
| NWR | 79 | 163 | 1500 | 050151 | 173.6 | 172.2 | 2.5 | 4.0 | 315 | 15.3 | 4.0 | 174.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 173 | 1600 | 030152 | 172.7 | 171.3 | 2.1 | 2.0 | 180 | 11.7 | -7.8 | 172.2 | 0 | 175.4 | 0 | 2.2 |
| NWR | 79 | 173 | 1600 | 040152 | 179.1 | 177.7 | 2.3 | 2.0 | 180 | 11.7 | -7.8 | 178.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 179 | 1300 | 050153 | 176.7 | 175.3 | .2 | 2.0 | 270 | 12.8 | -.7 | 176.9 | 0 | 176.1 | 0 | 1.9 |
| NWR | 79 | 179 | 1300 | 060153 | 175.1 | 173.7 | 2.7 | 2.0 | 270 | 12.8 | -.7 | 175.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 184 | 1700 | 040154 | 172.7 | 171.3 | .9 | 2.0 | 315 | 17.8 | -.2 | 172.9 | 2 | 172.9 | 0 | .9 |
| NWR | 79 | 184 | 1700 | 030154 | 166.8 | 165.5 | 4.9 | 2.0 | 315 | 17.8 | -.2 | 167.0 | 1 | 167.0 | 1 | 4.9 |
| NWR | 79 | 192 | 1630 | 060155 | 173.8 | 172.4 | 1.0 | 1.0 | 90 | 19.0 | -7.7 | 173.3 | 4 | 171.4 | 0 | 2.7 |
| NWR | 79 | 192 | 1630 | 050155 | 169.9 | 168.6 | 3.7 | 1.0 | 90 | 19.0 | -7.7 | 169.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 200 | 1700 | 030156 | 178.0 | 176.6 | .5 | 1.0 | 45 | 14.4 | 4.1 | 178.8 | 4 | 178.7 | 0 | 1.9 |
| NWR | 79 | 200 | 1700 | 040156 | 177.9 | 176.5 | 2.7 | 1.0 | 45 | 14.4 | 4.1 | 178.7 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 206 | 1530 | 050157 | 175.0 | 173.6 | 6.6 | 2.0 | 315 | 18.3 | -.6 | 175.2 | 1 | 178.5 | 0 | 6.6 |
| NWR | 79 | 206 | 1530 | 060157 | 181.6 | 180.2 | 3.7 | 2.0 | 315 | 18.3 | -.6 | 181.8 | 2 | -1.0 | 0 | -1.0 |
| NWR | 79 | 214 | 2130 | 030158 | 179.0 | 177.6 | 3.7 | 5.0 | 170 | 14.2 | .6 | 179.3 | 4 | 179.8 | 0 | 2.7 |
| NWR | 79 | 214 | 2130 | 040158 | 179.9 | 178.5 | .8 | 5.0 | 170 | 14.2 | .6 | 180.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 220 | 2213 | 060159 | 178.6 | 177.2 | 2.7 | 5.0 | 270 | 13.3 | 6.0 | 179.7 | 0 | 179.8 | 0 | 2.8 |
| NWR | 79 | 220 | 2213 | 050159 | 178.7 | 177.3 | 2.9 | 5.0 | 270 | 13.3 | 6.0 | 179.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 228 | 1830 | 040160 | 168.9 | 167.6 | 1.6 | 5.0 | 260 | 12.5 | 5.0 | 169.8 | 0 | 171.6 | 0 | 3.5 |
| NWR | 79 | 228 | 1830 | 030160 | 172.4 | 171.1 | 4.7 | 5.0 | 260 | 12.5 | 5.0 | 173.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 234 | 1910 | 050161 | 179.4 | 178.0 | 5.7 | 1.0 | 270 | 10.5 | -.9 | 179.5 | 1 | 183.2 | 0 | 5.7 |
| NWR | 79 | 234 | 1910 | 060161 | 186.8 | 185.3 | 4.0 | 1.0 | 270 | 10.5 | -.9 | 186.9 | 2 | -1.0 | 0 | -1.0 |
| NWR | 79 | 250 | 1730 | 050163 | 146.8 | 145.7 | U | 5.0 | 270 | 19.5 | -3.0 | 146.7 | 1 | 146.7 | 1 | .0 |
| NWR | 79 | 250 | 1730 | 060163 | 160.4 | 159.1 | U | 5.0 | 270 | 19.5 | -3.0 | 160.3 | 1 | 160.3 | 1 | .0 |
| NWR | 79 | 257 | 1340 | 030164 | 173.1 | 171.7 | .9 | 0.0 | CLM | 4.5 | -22.0 | 172.0 | 4 | 174.6 | 0 | 1.2 |
| NWR | 79 | 257 | 1340 | 040164 | 178.3 | 176.9 | 1.5 | 0.0 | CLM | 4.5 | -22.0 | 177.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 263 | 1827 | 050165 | 179.3 | 177.9 | 2.3 | 3.0 | 90 | 4.0 | -2.0 | 179.3 | 2 | 178.0 | 0 | 2.3 |
| NWR | 79 | 263 | 1827 | 060165 | 176.6 | 175.2 | 6.2 | 3.0 | 90 | 4.0 | -2.0 | 176.6 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 270 | 1630 | 040166 | 180.5 | 179.1 | 3.2 | 7.5 | 270 | 7.0 | -4.0 | 180.3 | 3 | 180.3 | 0 | 3.2 |
| NWR | 79 | 270 | 1630 | 030166 | 195.3 | 194.3 | 2.5 | 7.5 | 270 | 7.0 | -4.0 | 195.6 | 3 | 195.6 | 3 | 2.5 |
| NWR | 79 | 276 | 1700 | 060167 | 183.3 | 181.9 | 3.5 | 15.6 | 270 | -31.0 | -37.3 | 182.0 | 2 | 182.0 | 0 | 3.5 |
| NWR | 79 | 276 | 1700 | 050167 | 183.3 | 181.9 | 5.7 | 15.5 | 270 | -31.0 | -37.3 | 182.0 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 283 | 1930 | 030168 | 183.8 | 182.4 | 1.1 | 17.9 | 270 | 9.0 | -13.8 | 183.0 | 2 | 183.0 | 0 | 1.1 |
| NWR | 79 | 283 | 1930 | 040168 | 190.7 | 189.2 | 6.9 | 17.9 | 270 | 9.0 | -13.8 | 189.8 | 1 | 189.8 | 1 | 6.9 |
| NWR | 79 | 290 | 0100 | 050169 | 189.1 | 187.6 | 2.8 | 12.5 | 270 | 3.0 | -9.5 | 188.5 | 0 | 184.8 | 0 | 2.2 |
| NWR | 79 | 290 | 0100 | 060169 | 181.7 | 180.3 | 1.4 | 12.5 | 270 | 3.0 | -9.5 | 181.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 297 | 1740 | 040170 | 178.4 | 177.0 | .1 | 0.0 | CLM | 2.0 | -11.0 | 177.7 | 2 | 181.2 | 0 | .1 |
| NWR | 79 | 297 | 1740 | 030170 | 185.3 | 183.8 | 5.8 | 0.0 | CLM | 2.0 | -11.0 | 184.6 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 306 | 2301 | 050171 | 184.8 | 183.4 | .9 | 5.0 | 270 | -8.2 | MSG | 184.8 | 0 | 185.7 | 0 | .9 |
| NWR | 79 | 306 | 2301 | 060171 | 186.5 | 185.0 | .9 | 5.0 | 270 | -8.2 | MSG | 186.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 311 | 1930 | 030172 | 198.4 | 196.8 | U | 10.0 | 270 | MSG | MSG | 198.4 | 1 | 198.4 | 1 | .0 |
| NWR | 79 | 311 | 1930 | 040172 | 183.6 | 182.2 | 1.5 | 10.0 | 270 | MSG | MSG | 183.6 | 2 | 183.6 | 0 | 1.5 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 79 | 333 | 1530 | 040173 | 184.5 | 183.1 | 2.6 | 0.0 | CLM | -13.0 | -99.9 | 184.5 | 4 | 182.9 | 0 | 1.9 |
| NWR | 79 | 333 | 1530 | 050173 | 181.3 | 179.9 | .8 | 0.0 | CLM | -13.0 | -99.9 | 181.3 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 341 | 1400 | 050174 | 179.1 | 177.7 | 3.2 | 15.0 | 270 | -4.7 | -12.5 | 178.3 | 0 | 177.5 | 0 | 2.3 |
| NWR | 79 | 341 | 1400 | 060174 | 177.5 | 176.1 | .8 | 15.0 | 270 | -4.7 | -12.5 | 176.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 341 | 1400 | 740174 | 183.0 | 181.6 | .9 | 15.0 | 270 | -4.7 | -12.5 | 182.2 | 0 | 182.3 | 0 | 1.6 |
| NWR | 79 | 341 | 1400 | 750174 | 183.1 | 181.7 | 2.1 | 15.0 | 270 | -4.7 | -12.5 | 182.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 352 | 2305 | 030175 | 179.8 | 178.4 | .2 | 2.0 | 270 | -.8 | -20.0 | 178.8 | 0 | 178.9 | 0 | .9 |
| NWR | 79 | 352 | 2305 | 040175 | 180.0 | 178.6 | 1.2 | 2.0 | 270 | -.8 | -20.0 | 178.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 352 | 2305 | 710175 | 182.9 | 181.5 | 1.4 | 2.0 | 270 | -.8 | -20.0 | 181.8 | 0 | 181.1 | 0 | 1.3 |
| NWR | 79 | 352 | 2305 | 720175 | 181.5 | 180.1 | 1.2 | 2.0 | 270 | -.8 | -20.0 | 180.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 363 | 0120 | 050176 | 185.8 | 184.3 | 5.6 | 3.5 | 270 | -14.4 | -16.9 | 184.8 | 1 | 183.5 | 0 | 5.6 |
| NWR | 79 | 363 | 0120 | 060176 | 183.2 | 181.8 | .3 | 3.5 | 270 | -14.4 | -16.9 | 182.2 | 2 | -1.0 | 0 | -1.0 |
| NWR | 79 | 363 | 0120 | 740176 | 185.9 | 184.4 | 3.4 | 3.5 | 270 | -14.4 | -16.9 | 184.9 | 0 | 185.1 | 0 | 2.6 |
| NWR | 79 | 363 | 0120 | 750176 | 186.2 | 184.7 | 1.4 | 3.5 | 270 | -14.4 | -16.9 | 185.2 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 77 | 68 | 2019 | 050146 | 159.1 | 147.8 | 2.5 | 7.7 | 130 | 16.1 | -17.2 | 148.1 | 2 | 148.1 | 2 | 2.5 |
| MLO | 77 | 75 | 2045 | 060147 | 151.3 | 140.5 | 0 | 5.1 | 90 | 9.4 | -14.4 | 140.9 | 1 | 140.9 | 1 | .0 |
| MLO | 77 | 80 | 2035 | 030148 | 163.6 | 151.9 | .1 | 6.2 | 150 | -12.8 | -12.8 | 152.5 | 2 | 152.5 | 2 | .1 |
| MLO | 77 | 94 | 2004 | 050149 | 149.9 | 139.2 | 1.7 | 3.1 | 30 | 6.7 | .6 | 140.5 | 2 | 140.5 | 2 | 1.7 |
| MLO | 77 | 103 | 2022 | 060150 | 147.6 | 137.1 | 1.8 | 5.1 | 90 | 11.7 | -19.4 | 137.4 | 2 | 137.4 | 2 | 1.8 |
| MLO | 77 | 109 | 1946 | 030151 | 154.0 | 143.0 | 2.6 | 10.3 | 270 | 8.3 | -15.0 | 143.4 | 2 | 143.4 | 0 | 2.6 |
| MLO | 77 | 116 | 2000 | 050152 | 171.3 | 159.1 | 1.6 | 3.1 | 30 | 7.2 | 0.0 | 160.5 | 2 | 160.5 | 2 | 1.6 |
| MLO | 77 | 122 | 2040 | 060153 | 153.8 | 142.8 | 1.7 | 4.1 | 30 | 11.1 | -13.9 | 143.3 | 2 | 143.3 | 0 | 1.7 |
| MLO | 77 | 130 | 2036 | 030154 | 147.6 | 137.1 | 4.5 | 15.4 | 270 | 7.2 | -2.2 | 138.1 | 2 | 138.1 | 2 | 4.5 |
| MLO | 77 | 136 | 1959 | 050155 | 177.9 | 165.2 | 4.5 | 10.3 | 30 | 10.6 | -15.6 | 165.7 | 2 | 165.7 | 2 | 4.5 |
| MLO | 77 | 144 | 1954 | 060156 | 153.8 | 142.8 | .6 | 10.3 | 90 | 14.4 | -18.3 | 143.2 | 2 | 143.2 | 0 | .6 |
| MLO | 77 | 151 | 2058 | 030157 | 152.6 | 141.7 | 2.0 | 7.7 | 90 | 13.9 | -16.7 | 142.1 | 2 | 142.1 | 2 | 2.0 |
| MLO | 77 | 157 | 2120 | 050158 | 167.7 | 155.7 | 1.5 | 7.7 | 270 | 10.0 | -5.0 | 156.7 | 2 | 156.7 | 2 | 1.5 |
| MLO | 77 | 167 | 1930 | 050159 | 149.8 | 139.1 | 2.2 | 12.4 | 120 | 11.1 | -12.8 | 139.6 | 2 | 139.6 | 2 | 2.2 |
| MLO | 77 | 173 | 2029 | 030160 | 154.6 | 143.6 | 1.7 | 10.5 | 100 | 10.6 | -8.9 | 144.2 | 2 | 144.2 | 0 | 1.7 |
| MLO | 77 | 181 | 2040 | 050161 | 166.9 | 155.0 | .9 | 4.5 | 320 | 8.9 | 4.8 | 157.0 | 2 | 157.0 | 2 | .9 |
| MLO | 77 | 187 | 2125 | 060162 | 165.1 | 153.3 | 4.4 | 12.0 | 120 | 14.4 | 0.0 | 154.7 | 2 | 154.7 | 0 | 4.4 |
| MLO | 77 | 194 | 1959 | 030163 | 156.4 | 145.2 | 0 | 4.1 | 300 | 12.2 | -7.8 | 146.0 | 1 | 146.0 | 0 | .0 |
| MLO | 77 | 200 | 2240 | 050164 | 153.6 | 142.6 | 4.1 | 5.1 | 190 | 14.4 | 4.4 | 144.4 | 2 | 144.4 | 0 | 4.1 |
| MLO | 77 | 208 | 2300 | 060165 | 156.8 | 145.6 | .9 | 6.2 | 120 | 13.3 | -1.1 | 146.8 | 2 | 146.8 | 0 | .9 |
| MLO | 77 | 215 | 2312 | 030166 | 159.8 | 148.4 | 1.5 | 4.1 | 300 | 12.2 | 2.2 | 150.0 | 2 | 150.0 | 0 | 1.5 |
| MLO | 77 | 223 | 2104 | 050167 | 159.9 | 148.5 | 5.0 | 3.1 | 360 | 13.3 | -9.4 | 149.2 | 1 | 149.2 | 0 | 5.0 |
| MLO | 77 | 242 | 2027 | 060169 | 169.1 | 157.0 | .6 | 7.0 | 180 | 14.4 | 3.4 | 158.9 | 2 | 158.9 | 2 | .6 |
| MLO | 77 | 249 | 2008 | 030170 | 158.3 | 147.0 | 2.3 | 4.1 | 270 | 11.1 | 3.6 | 148.7 | 2 | 148.7 | 0 | 2.3 |
| MLO | 77 | 258 | 2326 | 050171 | 166.1 | 154.3 | 6.5 | 3.5 | 147 | 13.1 | 8.8 | 156.9 | 1 | 156.9 | 0 | 6.5 |
| MLO | 77 | 263 | 2258 | 060172 | 170.4 | 158.2 | 3.0 | 1.8 | 360 | 9.3 | 2.0 | 159.9 | 2 | 159.9 | 2 | 3.0 |
| MLO | 77 | 271 | 2045 | 030173 | 161.4 | 149.9 | 2.9 | 9.5 | 212 | 12.9 | -19.3 | 150.2 | 2 | 150.2 | 0 | 2.9 |
| MLO | 77 | 279 | 2336 | 050174 | 165.0 | 153.2 | 1.4 | 5.0 | 340 | 15.1 | -11.3 | 153.8 | 2 | 153.8 | 0 | 1.4 |
| MLO | 77 | 286 | 2329 | 060175 | 158.4 | 147.1 | 9.3 | 5.0 | 60 | 7.9 | 5.5 | 149.1 | 1 | 149.1 | 0 | 9.3 |
| MLO | 77 | 292 | 2328 | 030176 | 160.5 | 149.1 | 4.8 | 2.1 | 60 | 10.7 | -11.2 | 149.6 | 2 | 149.6 | 0 | 4.8 |
| MLO | 77 | 308 | 0549 | 050177 | 161.0 | 149.5 | 3.6 | 3.5 | 185 | 14.0 | 4.0 | 151.3 | 2 | 151.3 | 0 | 3.6 |
| MLO | 77 | 314 | 0444 | 060178 | 158.3 | 147.0 | 5.4 | 4.1 | 185 | 4.0 | -8.0 | 147.7 | 1 | 147.7 | 0 | 5.4 |
| MLO | 77 | 321 | 0733 | 030179 | 164.1 | 152.4 | 6.5 | 4.5 | 170 | 11.0 | -4.0 | 153.4 | 1 | 153.4 | 0 | 6.5 |
| MLO | 77 | 328 | 0540 | 050180 | 155.6 | 144.5 | 3.1 | 4.3 | 250 | 7.4 | -6.1 | 145.3 | 2 | 145.3 | 2 | 3.1 |
| MLO | 77 | 237 | 2145 | 460168 | 153.9 | 152.7 | 1.9 | 6.6 | 90 | 14.5 | -2.2 | 153.9 | 2 | 152.3 | 0 | 1.9 |
| MLO | 77 | 237 | 2145 | 470168 | 150.7 | 149.5 | 5.1 | 6.5 | 90 | 14.5 | -2.2 | 150.7 | 1 | -1.0 | 0 | -1.0 |
| MLO | 77 | 258 | 2334 | 440171 | 151.2 | 150.0 | 7.9 | 3.6 | 147 | 13.1 | 8.8 | 152.5 | 1 | 154.2 | 0 | 7.9 |
| MLO | 77 | 258 | 2334 | 450171 | 154.5 | 153.3 | 1.5 | 3.5 | 147 | 13.1 | 8.8 | 155.9 | 2 | -1.0 | 0 | -1.0 |
| MLO | 77 | 263 | 2304 | 420172 | 154.4 | 153.2 | 5.6 | 1.8 | 360 | 9.3 | 2.0 | 154.8 | 1 | 154.1 | 0 | 5.6 |
| MLO | 77 | 263 | 2304 | 430172 | 153.0 | 151.8 | 3.7 | 1.8 | 360 | 9.3 | 2.0 | 153.4 | 2 | -1.0 | 0 | -1.0 |
| MLO | 77 | 271 | 2049 | 460173 | 154.3 | 153.1 | 7.0 | 9.5 | 212 | 12.9 | -19.3 | 153.4 | 1 | 153.4 | 0 | 7.0 |
| MLO | 77 | 271 | 2049 | 470173 | 159.6 | 158.4 | 4.9 | 9.5 | 212 | 12.9 | -19.3 | 158.7 | 1 | 158.7 | 1 | 4.9 |
| MLO | 77 | 279 | 2342 | 440174 | 159.2 | 158.0 | 4.6 | 5.0 | 340 | 15.1 | -11.3 | 158.6 | 0 | 154.8 | 0 | 3.6 |
| MLO | 77 | 279 | 2342 | 450174 | 151.6 | 150.4 | 2.1 | 5.0 | 340 | 15.1 | -11.3 | 151.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 286 | 2334 | 420175 | 146.1 | 145.0 | 1.5 | 5.0 | 60 | 7.9 | 5.5 | 146.9 | 0 | 148.3 | 0 | 1.8 |
| MLO | 77 | 286 | 2334 | 430175 | 148.9 | 147.7 | 2.1 | 5.0 | 60 | 7.9 | 5.5 | 149.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 292 | 2333 | 460176 | 153.8 | 152.6 | 2.8 | 2.1 | 60 | 10.7 | -11.2 | 153.2 | 0 | 154.2 | 0 | 2.2 |
| MLO | 77 | 292 | 2333 | 470176 | 155.8 | 154.6 | 1.4 | 2.1 | 60 | 10.7 | -11.2 | 155.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 308 | 0555 | 420177 | 157.2 | 156.0 | 4.5 | 3.5 | 185 | 14.0 | 4.0 | 157.9 | 0 | 158.8 | 0 | 3.7 |
| MLO | 77 | 308 | 0555 | 430177 | 159.1 | 157.9 | 2.7 | 3.5 | 185 | 14.0 | 4.0 | 159.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 314 | 0451 | 440178 | 153.4 | 152.2 | 3.5 | 4.1 | 185 | 4.0 | -8.0 | 153.0 | 0 | 151.3 | 0 | 3.2 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 77 | 314 | 0451 | 450178 | 150.1 | 148.9 | 2.8 | 4.1 | 185 | 4.0 | -8.0 | 149.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 321 | 0740 | 460179 | 158.7 | 157.5 | .2 | 4.5 | 170 | 11.0 | -4.0 | 158.5 | 0 | 154.9 | 0 | 2.4 |
| MLO | 77 | 321 | 0740 | 470179 | 151.5 | 150.3 | 3.4 | 4.5 | 170 | 11.0 | -4.0 | 151.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 328 | 0543 | 420180 | 153.8 | 152.6 | 1.2 | 4.3 | 250 | 7.4 | -6.1 | 153.5 | 0 | 152.4 | 0 | 1.0 |
| MLO | 77 | 328 | 0543 | 430180 | 151.6 | 150.4 | .8 | 4.3 | 250 | 7.4 | -6.1 | 151.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 342 | 0650 | 420181 | 155.3 | 154.1 | 3.1 | 5.2 | 180 | 5.2 | 1.7 | 155.7 | 0 | 157.0 | 0 | 3.9 |
| MLO | 77 | 342 | 0650 | 430181 | 158.0 | 156.8 | 4.6 | 5.2 | 180 | 5.2 | 1.7 | 158.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 349 | 0620 | 440182 | 150.6 | 149.4 | 3.8 | 5.1 | 140 | 8.0 | -2.3 | 150.6 | 2 | 154.3 | 0 | 3.8 |
| MLO | 77 | 349 | 0620 | 450182 | 158.0 | 156.8 | 4.9 | 5.1 | 140 | 8.0 | -2.3 | 158.0 | 1 | -1.0 | 0 | -1.0 |
| MLO | 77 | 356 | 0421 | 460183 | 157.6 | 156.4 | 1.2 | 3.5 | 281 | 3.7 | -22.2 | 156.6 | 0 | 155.7 | 0 | 3.0 |
| MLO | 77 | 356 | 0421 | 470183 | 155.7 | 154.5 | 4.0 | 3.6 | 281 | 3.7 | -22.2 | 154.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 363 | 0555 | 420184 | 154.5 | 153.3 | 2.7 | 2.5 | 298 | 3.6 | 1.7 | 154.9 | 0 | 156.2 | 0 | 2.6 |
| MLO | 77 | 363 | 0555 | 430184 | 157.1 | 155.9 | 2.4 | 2.6 | 298 | 3.6 | 1.7 | 157.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 5 | 0700 | 440185 | 161.3 | 160.0 | 6.7 | 4.7 | 180 | 5.0 | -15.0 | 160.5 | 1 | 160.5 | 0 | 6.7 |
| MLO | 78 | 5 | 0700 | 450185 | 163.0 | 161.7 | 2.3 | 4.7 | 180 | 5.0 | -16.0 | 162.2 | 2 | 162.2 | 2 | 2.3 |
| MLO | 78 | 12 | 0543 | 460186 | 152.8 | 151.6 | 4.2 | 6.2 | 260 | 4.0 | -16.0 | 152.0 | 2 | 156.3 | 0 | 4.2 |
| MLO | 78 | 12 | 0543 | 470186 | 161.5 | 160.2 | 5.2 | 6.2 | 260 | 4.0 | -16.0 | 160.7 | 1 | -1.0 | 0 | -1.0 |
| MLO | 78 | 19 | 0510 | 420187 | 165.9 | 164.6 | 3.4 | 10.1 | 210 | 7.0 | -14.4 | 165.1 | 2 | 165.1 | 2 | 3.4 |
| MLO | 78 | 19 | 0510 | 430187 | 154.0 | 152.8 | 5.0 | 10.1 | 210 | 7.0 | -14.4 | 153.3 | 1 | 153.3 | 0 | 5.0 |
| MLO | 78 | 26 | 0423 | 440188 | 156.5 | 155.3 | 2.7 | 6.3 | 290 | 8.0 | 0.0 | 156.7 | 0 | 160.2 | 0 | 3.0 |
| MLO | 78 | 26 | 0423 | 450188 | 163.5 | 162.2 | 3.2 | 6.3 | 290 | 8.0 | 0.0 | 163.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 33 | 0641 | 460189 | 159.9 | 158.6 | 5.9 | 3.2 | 190 | 5.0 | -10.0 | 159.3 | 1 | 159.3 | 0 | 5.9 |
| MLO | 78 | 33 | 0641 | 470189 | 166.3 | 165.0 | 4.3 | 3.2 | 190 | 5.0 | -10.0 | 165.7 | 2 | 165.7 | 2 | 4.3 |
| MLO | 78 | 40 | 0410 | 420190 | 156.1 | 154.9 | .5 | 2.6 | 270 | 12.0 | -25.0 | 155.1 | 0 | 152.4 | 0 | .9 |
| MLO | 78 | 40 | 0410 | 430190 | 150.6 | 149.4 | 1.2 | 2.5 | 270 | 12.0 | -25.0 | 149.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 47 | 0555 | 440191 | 156.5 | 155.3 | 2.6 | 4.8 | 120 | 8.0 | -4.0 | 156.3 | 3 | 156.3 | 0 | 2.6 |
| MLO | 78 | 47 | 0555 | 450191 | 176.5 | 175.1 | 2.6 | 4.8 | 120 | 8.0 | -4.0 | 176.3 | 3 | 176.3 | 3 | 2.6 |
| MLO | 78 | 54 | 0410 | 460192 | 158.4 | 157.2 | 4.2 | 5.1 | 280 | 4.0 | -1.1 | 158.5 | 0 | 156.4 | 0 | 4.4 |
| MLO | 78 | 54 | 0410 | 470192 | 154.2 | 153.0 | 4.6 | 5.1 | 280 | 4.0 | -1.1 | 154.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 62 | 0450 | 420193 | 176.2 | 174.8 | 3.1 | 9.8 | 24 | 4.7 | -24.0 | 175.1 | 3 | 175.1 | 3 | 3.1 |
| MLO | 78 | 62 | 0450 | 430193 | 159.7 | 158.5 | 1.5 | 9.8 | 24 | 4.7 | -24.0 | 158.7 | 3 | 158.7 | 0 | 1.5 |
| MLO | 78 | 69 | 0440 | 440194 | 157.2 | 156.0 | 2.8 | 4.1 | 140 | 8.0 | -22.0 | 156.2 | 0 | 159.5 | 0 | 2.9 |
| MLO | 78 | 69 | 0440 | 450194 | 163.7 | 162.4 | 3.0 | 4.1 | 140 | 8.0 | -22.0 | 162.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 76 | 0440 | 460195 | 156.2 | 155.0 | 3.7 | 2.1 | 160 | 3.0 | -3.0 | 156.1 | 0 | 157.5 | 0 | 3.5 |
| MLO | 78 | 76 | 0440 | 470195 | 158.9 | 157.7 | 3.3 | 2.1 | 160 | 3.0 | -3.0 | 158.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 83 | 0440 | 420196 | 148.3 | 147.1 | 6.6 | 6.2 | 270 | 7.0 | -17.8 | 147.5 | 1 | 147.5 | 1 | 6.6 |
| MLO | 78 | 83 | 0440 | 430196 | 146.8 | 145.7 | 2.5 | 6.2 | 270 | 7.0 | -17.8 | 146.0 | 2 | 146.0 | 2 | 2.5 |
| MLO | 78 | 97 | 0330 | 420197 | 157.9 | 156.7 | 4.0 | 5.1 | 110 | 8.0 | -9.4 | 157.4 | 0 | 158.5 | 0 | 3.2 |
| MLO | 78 | 97 | 0330 | 430197 | 160.2 | 158.9 | 2.2 | 5.1 | 110 | 8.0 | -9.4 | 159.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 103 | 2351 | 440198 | 167.1 | 165.8 | 4.0 | 4.6 | 341 | 7.8 | -21.8 | 166.1 | 2 | 166.1 | 2 | 4.0 |
| MLO | 78 | 103 | 2351 | 450198 | 165.5 | 164.2 | 5.3 | 4.6 | 341 | 7.8 | -21.8 | 164.5 | 1 | 164.5 | 0 | 5.3 |
| MLO | 78 | 111 | 0010 | 460199 | 155.0 | 153.8 | .7 | 7.5 | 270 | 12.0 | -2.2 | 155.0 | 2 | 155.0 | 0 | .7 |
| MLO | 78 | 111 | 0010 | 470199 | 152.2 | 151.0 | 4.9 | 7.5 | 270 | 12.0 | -2.2 | 152.2 | 1 | 152.2 | 1 | 4.9 |
| MLO | 78 | 117 | 2144 | 420200 | 156.0 | 154.8 | 4.0 | 3.3 | 344 | 9.0 | -5.8 | 155.7 | 0 | 159.1 | 0 | 3.2 |
| MLO | 78 | 117 | 2144 | 430200 | 162.8 | 161.5 | 2.2 | 3.3 | 344 | 9.0 | -5.8 | 162.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 124 | 2118 | 440201 | 165.3 | 164.0 | 3.5 | 3.3 | 33 | 10.0 | -17.0 | 164.4 | 0 | 161.7 | 0 | 3.3 |
| MLO | 78 | 124 | 2118 | 450201 | 159.8 | 158.5 | 3.0 | 3.3 | 33 | 10.0 | -17.0 | 158.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 131 | 2148 | 460202 | 159.5 | 158.3 | 4.1 | 3.5 | 294 | 12.7 | -15.6 | 158.7 | 0 | 159.1 | 0 | 3.0 |
| MLO | 78 | 131 | 2148 | 470202 | 160.4 | 159.1 | 1.3 | 3.6 | 294 | 12.7 | -15.6 | 159.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 138 | 2142 | 420203 | 341.3 | 338.6 | 1.6 | 9.8 | 260 | 9.2 | -17.9 | 339.4 | 2 | 339.4 | 2 | 1.6 |
| MLO | 78 | 138 | 2142 | 430203 | 305.4 | 303.0 | 5.4 | 9.8 | 260 | 9.2 | -17.9 | 303.7 | 1 | 303.7 | 1 | 5.4 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 78 | 145 | 2134 | 440204 | 159.5 | 158.3 | .8 | 3.8 | 351 | 9.2 | -17.9 | 158.6 | 0 | 159.5 | 0 | 1.3 |
| MLO | 78 | 145 | 2134 | 450204 | 161.3 | 160.0 | 1.6 | 3.8 | 351 | 9.2 | -17.9 | 160.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 152 | 2228 | 460205 | 223.7 | 221.9 | 1.6 | 4.1 | 20 | 9.9 | -17.9 | 222.5 | 3 | 222.5 | 3 | 1.6 |
| MLO | 78 | 152 | 2228 | 470205 | 161.6 | 160.3 | 2.3 | 4.1 | 20 | 9.9 | -17.9 | 160.7 | 0 | 160.7 | 0 | 2.3 |
| MLO | 78 | 166 | 2324 | 420206 | 158.4 | 157.2 | 2.2 | 4.0 | 30 | 14.7 | -13.6 | 157.7 | 0 | 156.5 | 0 | 3.0 |
| MLO | 78 | 166 | 2324 | 430206 | 156.1 | 154.9 | 3.7 | 4.0 | 30 | 14.7 | -13.6 | 155.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 172 | 0234 | 440207 | 160.1 | 158.8 | 2.0 | 4.0 | 30 | 7.0 | 5.0 | 160.9 | 0 | 162.4 | 0 | 1.5 |
| MLO | 78 | 172 | 0234 | 450207 | 163.0 | 161.7 | .5 | 4.0 | 30 | 7.0 | 5.0 | 163.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 180 | 2137 | 460208 | 160.4 | 159.1 | 2.1 | 5.0 | 300 | 11.7 | 8.0 | 161.7 | 0 | 162.6 | 0 | 1.6 |
| MLO | 78 | 180 | 2137 | 470208 | 162.2 | 160.9 | 1.0 | 5.0 | 300 | 11.7 | 8.0 | 163.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 187 | 2132 | 420209 | 154.8 | 153.6 | 1.7 | 5.7 | 138 | 8.6 | -19.0 | 153.9 | 0 | 156.5 | 0 | 2.2 |
| MLO | 78 | 187 | 2132 | 430209 | 160.0 | 158.7 | 2.6 | 5.7 | 138 | 8.6 | -19.0 | 159.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 194 | 2139 | 440210 | 163.6 | 162.3 | 2.2 | 4.2 | 20 | 10.8 | -16.8 | 162.7 | 0 | 162.9 | 0 | 1.6 |
| MLO | 78 | 194 | 2139 | 450210 | 163.9 | 162.6 | .7 | 4.2 | 20 | 10.8 | -16.8 | 163.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 208 | 2245 | 420212 | 171.0 | 169.7 | 2.7 | 5.3 | 64 | 14.0 | -6.4 | 170.6 | 3 | 170.6 | 3 | 2.7 |
| MLO | 78 | 208 | 2245 | 430212 | 162.7 | 161.4 | 1.6 | 5.3 | 64 | 14.0 | -6.4 | 162.3 | 3 | 162.3 | 0 | 1.6 |
| MLO | 78 | 215 | 2145 | 440213 | 169.3 | 168.0 | 1.8 | 3.2 | 354 | 10.7 | -2.4 | 169.2 | 0 | 171.6 | 0 | 2.0 |
| MLO | 78 | 215 | 2145 | 450213 | 174.1 | 172.7 | 2.1 | 3.2 | 354 | 10.7 | -2.4 | 174.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 229 | 2337 | 470214 | 160.5 | 159.2 | 4.1 | 4.1 | 20 | 10.3 | -18.3 | 159.6 | 0 | 161.5 | 0 | 3.1 |
| MLO | 78 | 229 | 2337 | 460214 | 164.4 | 163.1 | 1.4 | 4.1 | 20 | 10.3 | -18.3 | 163.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 236 | 2233 | 430215 | 166.3 | 165.0 | 3.6 | 4.1 | 36 | 11.9 | -16.6 | 165.4 | 0 | 162.2 | 0 | 3.1 |
| MLO | 78 | 236 | 2233 | 430215 | 159.8 | 158.5 | 2.4 | 4.1 | 36 | 11.9 | -16.6 | 159.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 243 | 2323 | 440216 | 160.2 | 158.9 | .5 | 7.0 | 131 | 10.8 | -17.4 | 159.3 | 0 | 161.2 | 0 | 3.2 |
| MLO | 78 | 243 | 2323 | 450216 | 163.9 | 162.6 | 4.5 | 7.0 | 131 | 10.8 | -17.4 | 163.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 250 | 2240 | 460217 | 168.7 | 167.4 | 3.3 | 7.1 | 50 | 13.0 | -5.9 | 168.4 | 0 | 167.2 | 0 | 2.5 |
| MLO | 78 | 250 | 2240 | 470217 | 166.4 | 165.1 | 1.3 | 7.1 | 50 | 13.0 | -5.9 | 166.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 257 | 2137 | 420218 | 166.4 | 165.1 | .9 | 3.0 | 337 | 9.6 | -17.1 | 165.5 | 0 | 163.8 | 0 | 1.7 |
| MLO | 78 | 257 | 2137 | 430218 | 163.0 | 161.7 | 2.3 | 3.0 | 337 | 9.6 | -17.1 | 162.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 264 | 2134 | 440219 | 171.1 | 169.8 | 1.9 | 3.6 | 350 | 9.8 | -17.0 | 170.2 | 0 | 168.0 | 0 | 2.5 |
| MLO | 78 | 264 | 2134 | 450219 | 166.7 | 165.4 | 2.9 | 3.6 | 350 | 9.8 | -17.0 | 165.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 271 | 2124 | 460220 | 169.8 | 168.5 | 1.8 | 4.5 | 70 | 14.5 | -11.0 | 169.1 | 0 | 167.0 | 0 | 1.4 |
| MLO | 78 | 271 | 2124 | 470220 | 165.5 | 164.2 | .8 | 4.5 | 70 | 14.5 | -11.0 | 164.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 276 | 2303 | 420221 | 171.6 | 170.3 | 3.5 | 2.5 | 40 | 12.4 | -15.1 | 170.7 | 0 | 167.8 | 0 | 2.6 |
| MLO | 78 | 276 | 2303 | 430221 | 165.7 | 164.4 | 1.2 | 2.6 | 40 | 12.4 | -15.1 | 164.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 284 | 2314 | 440222 | 165.7 | 164.4 | 1.0 | 4.1 | 350 | 10.5 | -17.7 | 164.8 | 0 | 163.8 | 0 | 2.6 |
| MLO | 78 | 284 | 2314 | 450222 | 163.7 | 162.4 | 3.6 | 4.1 | 350 | 10.5 | -17.7 | 162.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 292 | 2334 | 460223 | 161.8 | 160.5 | 1.8 | 3.8 | 40 | 8.1 | -19.9 | 160.9 | 0 | 160.6 | 0 | 1.3 |
| MLO | 78 | 292 | 2334 | 470223 | 161.2 | 159.9 | .3 | 3.8 | 40 | 8.1 | -19.9 | 160.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 299 | 2336 | 430224 | 166.7 | 165.4 | .7 | 3.6 | 20 | 9.9 | -17.6 | 165.8 | 2 | 165.8 | 0 | .7 |
| MLO | 78 | 310 | 2016 | 440225 | 168.3 | 167.0 | 2.6 | 8.0 | 180 | 6.2 | -20.4 | 167.3 | 0 | 166.8 | 0 | 2.6 |
| MLO | 78 | 310 | 2016 | 450225 | 167.3 | 166.0 | 2.6 | 8.0 | 180 | 6.2 | -20.4 | 166.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 313 | 2140 | 460226 | 165.5 | 164.2 | 1.4 | 2.0 | 350 | 10.6 | -5.8 | 165.2 | 0 | 165.9 | 0 | 1.9 |
| MLO | 78 | 313 | 2140 | 470226 | 167.0 | 165.7 | 2.3 | 2.0 | 350 | 10.6 | -5.8 | 166.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 320 | 2335 | 420227 | 165.5 | 164.2 | .6 | 1.9 | 360 | 7.5 | -19.7 | 164.5 | 2 | 164.5 | 0 | .6 |
| MLO | 78 | 334 | 2230 | 440228 | 170.6 | 169.3 | 2.0 | 1.8 | 30 | 9.5 | -17.1 | 169.7 | 0 | 167.0 | 0 | 2.0 |
| MLO | 78 | 334 | 2230 | 450228 | 165.3 | 164.0 | 1.9 | 1.8 | 30 | 9.5 | -17.1 | 164.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 341 | 1319 | 470229 | 164.1 | 162.8 | 2.2 | 5.7 | 145 | 7.6 | -19.3 | 163.2 | 0 | 164.1 | 0 | 1.6 |
| MLO | 78 | 341 | 1319 | 460229 | 166.1 | 164.8 | .6 | 5.7 | 145 | 7.6 | -19.3 | 165.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 344 | 2334 | 420230 | 170.2 | 168.9 | 4.3 | 5.5 | 102 | 10.3 | -17.1 | 169.3 | 0 | 167.1 | 0 | 4.0 |
| MLO | 78 | 344 | 2334 | 430230 | 165.9 | 164.6 | 3.6 | 5.5 | 102 | 10.3 | -17.1 | 165.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 355 | 2114 | 440231 | 177.5 | 176.1 | 3.0 | 6.1 | 330 | 4.8 | -23.2 | 176.4 | 3 | 176.4 | 3 | 3.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 78 | 355 | 2114 | 450231 | 167.9 | 166.6 | 1.6 | 6.1 | 330 | 4.8 | -23.2 | 166.8 | 3 | 166.8 | 0 | 1.6 |
| MLO | 78 | 362 | 2130 | 460232 | 167.0 | 165.7 | 1.7 | 5.4 | 81 | 10.7 | -18.5 | 166.1 | 0 | 167.1 | 0 | 1.5 |
| MLO | 78 | 362 | 2130 | 470232 | 169.0 | 167.7 | 1.3 | 5.4 | 81 | 10.7 | -18.5 | 168.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 4 | 2128 | 420233 | 165.2 | 163.9 | 1.7 | 3.0 | 350 | 10.0 | -19.2 | 164.2 | 0 | 163.7 | 0 | 1.7 |
| MLO | 79 | 4 | 2128 | 430233 | 164.0 | 162.7 | 1.6 | 3.0 | 350 | 10.0 | -19.2 | 163.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 18 | 2327 | 440234 | 173.7 | 172.3 | 1.8 | 6.6 | 140 | 6.0 | -16.5 | 172.8 | 0 | 170.2 | 0 | 1.8 |
| MLO | 79 | 18 | 2327 | 450234 | 168.5 | 167.2 | 1.7 | 6.5 | 140 | 6.0 | -16.5 | 167.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 25 | 2214 | 460235 | 174.0 | 172.6 | 4.7 | 1.5 | 20 | 8.0 | -19.0 | 173.0 | 0 | 174.1 | 0 | 3.3 |
| MLO | 79 | 25 | 2214 | 470235 | 176.2 | 174.8 | .1 | 1.5 | 20 | 8.0 | -19.0 | 175.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 32 | 2219 | 420236 | 173.7 | 172.3 | 1.4 | 4.0 | 330 | 5.0 | -24.0 | 172.6 | 0 | 174.6 | 0 | 2.3 |
| MLO | 79 | 32 | 2219 | 430236 | 178.2 | 176.8 | 2.9 | 4.0 | 330 | 5.0 | -24.0 | 177.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 39 | 2033 | 440237 | 169.4 | 168.1 | .5 | 4.1 | 320 | 7.0 | -5.7 | 169.1 | 0 | 170.0 | 0 | .4 |
| MLO | 79 | 39 | 2033 | 450237 | 171.2 | 169.9 | .1 | 4.1 | 320 | 7.0 | -5.7 | 170.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 46 | 2132 | 460238 | 171.7 | 170.4 | 4.8 | 5.1 | 260 | 7.0 | -1.7 | 171.7 | 0 | 170.8 | 0 | 3.8 |
| MLO | 79 | 46 | 2132 | 470238 | 169.9 | 168.6 | 2.3 | 5.1 | 260 | 7.0 | -1.7 | 169.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 53 | 2337 | 420239 | 169.2 | 167.9 | .3 | 6.1 | 310 | 8.3 | 2.5 | 169.7 | 0 | 167.7 | 0 | 1.4 |
| MLO | 79 | 53 | 2337 | 430239 | 165.3 | 164.0 | 1.9 | 6.1 | 310 | 8.3 | 2.5 | 165.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 60 | 0020 | 450240 | 169.5 | 168.2 | 2.2 | 3.5 | 330 | 4.0 | 1.1 | 169.8 | 0 | 171.5 | 0 | 1.8 |
| MLO | 79 | 60 | 0020 | 440240 | 172.8 | 171.4 | 1.3 | 3.5 | 330 | 4.0 | 1.1 | 173.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 67 | 2121 | 430241 | 167.4 | 166.1 | 4.8 | 2.8 | 34 | 10.5 | -12.8 | 166.7 | 0 | 167.9 | 0 | 4.8 |
| MLO | 79 | 67 | 2121 | 420241 | 169.9 | 168.6 | 4.8 | 2.8 | 34 | 10.5 | -12.8 | 169.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 74 | 2100 | 460242 | 174.7 | 173.3 | 2.2 | 7.1 | 140 | 11.5 | -14.7 | 173.8 | 0 | 172.5 | 0 | 1.9 |
| MLO | 79 | 74 | 2100 | 470242 | 172.0 | 170.7 | 1.5 | 7.1 | 140 | 11.5 | -14.7 | 171.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 81 | 2147 | 440243 | 169.6 | 168.3 | 3.3 | 3.5 | 30 | 7.5 | -16.7 | 168.7 | 0 | 170.0 | 0 | 2.9 |
| MLO | 79 | 81 | 2147 | 450243 | 172.3 | 171.0 | 2.4 | 3.5 | 30 | 7.5 | -16.7 | 171.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 89 | 2136 | 460244 | 176.7 | 175.3 | 2.4 | 10.3 | 246 | 8.5 | -17.9 | 175.7 | 0 | 173.9 | 0 | 1.9 |
| MLO | 79 | 89 | 2136 | 470244 | 173.0 | 171.6 | 1.1 | 10.3 | 246 | 8.5 | -17.9 | 172.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 96 | 2026 | 430245 | 169.4 | 168.1 | 1.2 | 4.1 | 330 | 8.0 | 7.6 | 170.7 | 2 | 172.2 | 0 | 1.2 |
| MLO | 79 | 96 | 2026 | 420245 | 172.5 | 171.2 | 6.2 | 4.1 | 330 | 8.0 | 7.6 | 173.8 | 1 | -1.0 | 0 | -1.0 |
| MLO | 79 | 103 | 2331 | 440246 | 169.0 | 167.7 | 1.0 | 12.3 | 239 | 13.0 | -3.3 | 168.9 | 0 | 167.9 | 0 | .8 |
| MLO | 79 | 103 | 2331 | 450246 | 167.0 | 165.7 | .6 | 12.3 | 239 | 13.0 | -3.3 | 166.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 110 | 2338 | 470247 | 170.0 | 168.7 | 1.2 | 5.1 | 290 | 6.0 | -2.1 | 170.0 | 0 | 169.6 | 0 | 1.4 |
| MLO | 79 | 110 | 2338 | 460247 | 169.3 | 168.0 | 1.6 | 5.1 | 290 | 6.0 | -2.1 | 169.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 117 | 2206 | 430248 | 176.0 | 174.6 | 2.7 | 10.2 | 270 | 10.5 | -26.5 | 174.8 | 0 | 174.4 | 0 | 1.9 |
| MLO | 79 | 117 | 2216 | 420248 | 175.1 | 173.7 | .3 | 10.2 | 270 | 10.5 | -26.5 | 173.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 123 | 2126 | 440249 | 168.8 | 167.5 | .8 | 5.1 | 10 | 12.5 | -7.4 | 168.4 | 0 | 167.7 | 0 | .9 |
| MLO | 79 | 123 | 2126 | 450249 | 167.5 | 166.2 | .9 | 5.1 | 10 | 12.5 | -7.4 | 167.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 130 | 2039 | 460250 | 166.7 | 165.4 | 1.2 | 2.0 | 360 | 12.5 | -1.4 | 166.7 | 0 | 168.3 | 0 | .9 |
| MLO | 79 | 130 | 2039 | 470250 | 169.8 | 168.5 | .4 | 2.0 | 360 | 12.5 | -1.4 | 169.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 137 | 2117 | 430251 | 171.9 | 170.6 | 1.1 | 5.1 | 315 | 9.0 | 3.8 | 172.6 | 0 | 172.5 | 0 | 1.3 |
| MLO | 79 | 137 | 2117 | 420251 | 171.8 | 170.5 | 1.5 | 5.1 | 315 | 9.0 | 3.8 | 172.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 144 | 2204 | 440252 | 167.7 | 166.4 | 2.2 | 4.9 | 296 | 15.0 | -4.9 | 167.4 | 0 | 169.1 | 0 | 1.7 |
| MLO | 79 | 144 | 2204 | 450252 | 171.1 | 169.8 | .9 | 4.9 | 296 | 15.0 | -4.9 | 170.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 151 | 2053 | 460253 | 171.3 | 170.0 | 1.0 | 6.6 | 20 | 9.0 | MSG | 170.6 | 0 | 170.5 | 0 | .8 |
| MLO | 79 | 151 | 2053 | 470253 | 171.0 | 169.7 | .4 | 6.5 | 20 | 9.0 | MSG | 170.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 165 | 2327 | 430254 | 172.4 | 171.1 | 1.6 | 5.1 | 270 | 15.0 | MSG | 171.7 | 0 | 170.2 | 0 | 1.2 |
| MLO | 79 | 165 | 2327 | 420254 | 169.3 | 168.0 | .7 | 5.1 | 270 | 15.0 | MSG | 168.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 172 | 2245 | 450255 | 170.0 | 168.7 | 1.0 | 4.1 | 77 | 11.5 | -9.0 | 169.4 | 0 | 169.9 | 0 | 1.6 |
| MLO | 79 | 172 | 2245 | 440255 | 170.9 | 169.6 | 2.1 | 4.1 | 77 | 11.5 | -9.0 | 170.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 186 | 2142 | 430257 | 176.3 | 174.9 | .7 | 4.1 | 318 | 13.5 | -6.2 | 175.9 | 0 | 172.8 | 0 | 1.9 |
| MLO | 79 | 186 | 2142 | 420257 | 170.0 | 168.7 | 2.6 | 4.1 | 318 | 13.5 | -6.2 | 169.6 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 79 | 193 | 2300 | 450258 | 170.8 | 169.5 | 1.8 | 4.1 | 350 | 11.5 | 6.0 | 171.8 | 0 | 172.2 | 0 | 1.5 |
| MLO | 79 | 193 | 2300 | 440258 | 171.6 | 170.3 | 1.1 | 4.1 | 350 | 11.5 | 6.0 | 172.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 200 | 2339 | 470259 | 174.6 | 173.2 | 2.7 | 9.3 | 10 | 12.0 | -14.7 | 173.7 | 0 | 173.4 | 0 | 2.5 |
| MLO | 79 | 200 | 2339 | 460259 | 173.8 | 172.4 | 2.2 | 9.3 | 10 | 12.0 | -14.7 | 173.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 207 | 2300 | 420260 | 170.9 | 169.6 | 1.7 | 3.1 | 330 | 12.0 | -6.0 | 170.5 | 0 | 172.9 | 0 | 1.3 |
| MLO | 79 | 207 | 2300 | 430260 | 175.6 | 174.2 | .7 | 3.1 | 330 | 12.0 | -6.0 | 175.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 212 | 2010 | 450261 | 174.8 | 173.4 | 2.3 | 3.1 | 345 | 11.5 | -8.4 | 174.3 | 0 | 173.1 | 0 | 1.7 |
| MLO | 79 | 212 | 2010 | 440261 | 172.4 | 171.1 | .9 | 3.1 | 345 | 11.5 | -8.4 | 171.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 218 | 2235 | 460262 | 1740.8 | 1727.2 | 2.9 | 6.1 | 331 | 13.2 | -4.6 | 1738.3 | 2 | 1738.3 | 2 | 2.9 |
| MLO | 79 | 249 | 2057 | 420266 | 177.3 | 175.9 | 1.4 | 5.1 | 60 | 12.0 | -13.1 | 176.5 | 0 | 174.0 | 0 | 1.1 |
| MLO | 79 | 249 | 2057 | 430266 | 172.2 | 170.9 | .6 | 5.1 | 60 | 12.0 | -13.1 | 171.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 256 | 2144 | 450267 | 173.4 | 172.0 | 4.6 | 5.1 | 50 | 12.0 | -10.3 | 172.8 | 0 | 175.7 | 0 | 3.6 |
| MLO | 79 | 256 | 2144 | 440267 | 179.3 | 177.9 | 2.3 | 5.1 | 50 | 12.0 | -10.3 | 178.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 264 | 2132 | 470268 | 182.5 | 181.1 | 3.7 | 3.5 | 360 | 11.5 | -4.3 | 182.3 | 0 | 180.4 | 0 | 2.9 |
| MLO | 79 | 264 | 2132 | 460268 | 178.7 | 177.3 | 1.6 | 3.5 | 360 | 11.5 | -4.3 | 178.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 270 | 2130 | 430269 | 178.8 | 177.4 | 1.1 | 3.1 | 225 | 12.0 | -6.0 | 178.4 | 0 | 178.0 | 0 | 1.7 |
| MLO | 79 | 270 | 2130 | 440269 | 177.9 | 176.5 | 2.1 | 3.1 | 225 | 12.0 | -6.0 | 177.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 277 | 2059 | 440270 | 180.9 | 179.5 | 3.6 | 3.5 | 320 | 11.0 | 3.5 | 181.6 | 0 | 183.1 | 0 | 2.9 |
| MLO | 79 | 277 | 2059 | 450270 | 183.9 | 182.5 | 2.0 | 3.5 | 320 | 11.0 | 3.5 | 184.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 284 | 2100 | 470271 | 180.5 | 179.1 | .9 | 3.5 | 20 | 10.5 | 3.5 | 181.2 | 3 | 181.2 | 0 | .9 |
| MLO | 79 | 284 | 2100 | 460271 | 192.7 | 191.2 | 2.9 | 3.5 | 20 | 10.5 | 3.5 | 193.4 | 3 | 193.4 | 3 | 2.9 |
| MLO | 79 | 288 | 2118 | 430272 | 185.9 | 184.4 | .1 | 6.5 | 70 | 11.0 | .9 | 186.2 | 0 | 185.2 | 0 | 3.3 |
| MLO | 79 | 288 | 2118 | 420272 | 183.8 | 182.4 | 4.6 | 6.5 | 70 | 11.0 | .9 | 184.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 298 | 2134 | 430273 | 178.9 | 177.5 | 3.3 | 2.5 | 340 | 12.5 | -4.7 | 178.6 | 0 | 181.6 | 0 | 2.6 |
| MLO | 79 | 298 | 2134 | 420273 | 184.9 | 183.5 | 1.7 | 2.5 | 340 | 12.5 | -4.7 | 184.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 310 | 2135 | 450274 | 178.3 | 176.9 | 1.5 | 7.7 | 115 | 11.0 | -15.5 | 177.4 | 0 | 177.9 | 0 | 1.3 |
| MLO | 79 | 310 | 2135 | 440274 | 179.3 | 177.9 | 1.0 | 7.7 | 115 | 11.0 | -15.5 | 178.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 319 | 2030 | 470275 | 180.4 | 179.0 | 1.0 | 5.1 | 290 | 7.5 | 2.4 | 180.9 | 2 | 182.3 | 0 | 1.0 |
| MLO | 79 | 319 | 2030 | 460275 | 183.1 | 181.7 | 5.0 | 5.1 | 290 | 7.5 | 2.4 | 183.6 | 1 | -1.0 | 0 | -1.0 |
| MLO | 79 | 333 | 2039 | 430276 | 183.9 | 182.5 | 2.3 | 1.0 | 45 | 12.0 | -14.9 | 183.0 | 0 | 183.2 | 0 | 2.0 |
| MLO | 79 | 333 | 2039 | 420276 | 184.3 | 182.9 | 1.6 | 1.0 | 45 | 12.0 | -14.9 | 183.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 340 | 2108 | 440277 | 180.1 | 178.7 | 1.6 | 4.5 | 345 | 9.5 | -3.2 | 180.0 | 0 | 180.6 | 0 | 1.5 |
| MLO | 79 | 340 | 2108 | 450277 | 181.4 | 180.0 | 1.4 | 4.5 | 345 | 9.5 | -3.2 | 181.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 347 | 2132 | 470278 | 183.2 | 181.8 | 3.7 | 2.0 | 300 | 12.0 | -9.1 | 182.6 | 0 | 182.5 | 0 | 2.6 |
| MLO | 79 | 347 | 2132 | 460278 | 183.0 | 181.6 | .2 | 2.0 | 300 | 12.0 | -9.1 | 182.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 354 | 2127 | 430279 | 181.2 | 179.8 | 1.5 | 10.7 | 130 | 15.5 | -11.3 | 180.5 | 0 | 179.5 | 0 | 2.8 |
| MLO | 79 | 354 | 2127 | 420279 | 179.3 | 177.9 | 3.6 | 10.7 | 130 | 15.5 | -11.3 | 178.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 361 | 2149 | 460280 | 175.1 | 173.7 | 2.5 | 3.0 | 50 | 8.5 | -16.3 | 174.2 | 0 | 175.2 | 0 | 2.4 |
| MLO | 79 | 361 | 2149 | 470280 | 177.1 | 175.7 | 2.3 | 3.0 | 50 | 8.5 | -16.3 | 176.2 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 77 | 67 | 0340 | 050116 | 136.0 | 126.3 | .9 | 5.0 | 90 | 26.9 | 25.1 | 129.1 | 2 | 129.1 | 2 | .9 |
| SMO | 77 | 70 | 2030 | 010117 | 140.3 | 130.3 | 0 | 6.0 | 10 | 27.0* | 24.5* | 133.2 | 1 | 133.2 | 0 | .0 |
| SMO | 77 | 76 | 2030 | 040118 | 154.2 | 143.2 | 2.1 | 7.0 | 340 | 28.4 | 24.7 | 146.4 | 2 | 146.4 | 2 | 2.1 |
| SMO | 77 | 91 | 0020 | 050119 | 135.0 | 125.4 | 1.9 | 4.0 | 12 | 30.8 | 24.0 | 128.1 | 2 | 128.1 | 2 | 1.9 |
| SMO | 77 | 98 | 2030 | 010120 | 142.2 | 132.1 | 3.2 | 6.0 | 130 | 29.2 | 25.2 | 135.0 | 2 | 135.0 | 0 | 3.2 |
| SMO | 77 | 109 | 2020 | 040121 | 150.2 | 139.5 | 2.5 | 3.0 | 150 | 28.0 | 25.7 | 142.6 | 2 | 142.6 | 0 | 2.5 |
| SMO | 77 | 120 | 0130 | 050122 | 151.7 | 140.9 | 4.9 | 3.0 | 330 | 29.9 | 25.1 | 144.0 | 1 | 144.0 | 0 | 4.9 |
| SMO | 77 | 125 | 2035 | 010123 | 151.1 | 140.3 | 3.5 | 4.0 | 350 | 28.0 | 24.3 | 143.4 | 2 | 143.4 | 0 | 3.5 |
| SMO | 77 | 134 | 2130 | 040124 | 141.0 | 130.9 | 2.0 | 10.0 | 140 | 28.9 | 25.1 | 133.8 | 2 | 133.8 | 2 | 2.0 |
| SMO | 77 | 139 | 0315 | 050125 | 142.2 | 132.1 | 4.9 | 3.0 | 340 | 27.0* | 24.5* | 135.0 | 1 | 135.0 | 0 | 4.9 |
| SMO | 77 | 146 | 2100 | 010126 | 145.3 | 134.9 | 3.5 | 7.0 | 130 | 27.8 | 22.2 | 137.9 | 2 | 137.9 | 0 | 3.5 |
| SMO | 77 | 156 | 0400 | 040127 | 144.4 | 134.1 | 2.0 | 7.0 | 140 | 26.3 | 21.9 | 137.0 | 2 | 137.0 | 0 | 2.0 |
| SMO | 77 | 161 | 0100 | 050128 | 151.8 | 141.0 | .6 | 9.0 | 170 | 27.9 | 24.8 | 144.1 | 2 | 144.1 | 0 | .6 |
| SMO | 77 | 169 | 0200 | 010129 | 143.7 | 133.5 | 2.2 | 8.0 | 140 | 26.6 | 21.8 | 136.4 | 2 | 136.4 | 0 | 2.2 |
| SMO | 77 | 174 | 2025 | 040130 | 150.8 | 140.0 | 8.0 | 7.7 | 158 | 26.7 | 23.3 | 143.1 | 1 | 143.1 | 0 | 8.0 |
| SMO | 77 | 180 | 2330 | 050131 | 146.5 | 136.1 | 3.3 | 9.0 | 120 | 27.0* | 24.5* | 139.0 | 2 | 139.0 | 0 | 3.3 |
| SMO | 77 | 195 | 0205 | 010132 | 143.3 | 133.1 | 0 | 8.5 | 50 | 26.8 | 24.7 | 136.0 | 1 | 136.0 | 1 | .0 |
| SMO | 77 | 208 | 0300 | 040133 | 151.2 | 140.4 | .9 | 8.0 | 170 | 27.0* | 24.5* | 143.5 | 2 | 143.5 | 0 | .9 |
| SMO | 77 | 216 | 0255 | 050134 | 148.1 | 137.5 | 1.5 | 6.5 | 100 | 26.1 | 20.7 | 140.6 | 2 | 140.6 | 0 | 1.5 |
| SMO | 77 | 224 | 0030 | 040135 | 154.3 | 143.3 | 5.8 | 10.0 | 130 | 26.4 | 21.0 | 146.4 | 1 | 146.4 | 0 | 5.8 |
| SMO | 77 | 231 | 0010 | 010136 | 160.4 | 149.0 | 5.4 | 8.0 | 160 | 25.2 | 12.6 | 152.2 | 1 | 152.2 | 1 | 5.4 |
| SMO | 77 | 237 | 0150 | 050137 | 149.6 | 138.9 | .6 | 6.0 | 160 | 25.8 | 19.7 | 142.0 | 2 | 142.0 | 0 | .6 |
| SMO | 77 | 243 | 2025 | 040138 | 150.1 | 139.4 | 2.5 | 4.0 | 170 | 24.6 | 19.9 | 142.5 | 2 | 142.5 | 0 | 2.5 |
| SMO | 77 | 257 | 2345 | 010139 | 146.8 | 136.3 | 4.1 | 6.0 | 160 | 27.0* | 24.5* | 139.3 | 2 | 139.3 | 0 | 4.1 |
| SMO | 77 | 264 | 2025 | 050140 | 141.8 | 131.7 | 2.6 | 5.0 | 150 | 26.4 | 19.8 | 134.6 | 2 | 134.6 | 2 | 2.6 |
| SMO | 77 | 271 | 2030 | 040141 | 159.6 | 148.2 | 1.4 | 8.0 | 140 | 27.0* | 24.5* | 151.5 | 2 | 151.5 | 2 | 1.4 |
| SMO | 77 | 280 | 0230 | 010142 | 147.3 | 136.8 | 5.0 | 10.0 | 130 | 27.0 | 19.8 | 139.8 | 1 | 139.8 | 0 | 5.0 |
| SMO | 77 | 289 | 0135 | 050143 | 149.2 | 138.6 | 2.9 | 8.0 | 150 | 25.8 | 20.6 | 141.6 | 2 | 141.6 | 0 | 2.9 |
| SMO | 77 | 293 | 0055 | 040144 | 166.5 | 154.6 | 2.6 | 4.0 | 120 | 28.0 | 20.2 | 158.0 | 2 | 158.0 | 2 | 2.6 |
| SMO | 77 | 302 | 2335 | 010145 | 146.9 | 136.4 | 2.2 | 10.0 | 130 | 25.5 | 20.6 | 139.4 | 2 | 139.4 | 2 | 2.2 |
| SMO | 77 | 307 | 2045 | 050146 | 139.3 | 129.4 | .1 | 3.5 | 150 | 26.5 | 21.2 | 132.2 | 2 | 132.2 | 2 | .1 |
| SMO | 77 | 314 | 0220 | 040147 | 171.3 | 159.1 | 3.0 | 4.5 | 150 | 27.3 | 19.8 | 162.6 | 2 | 162.6 | 2 | 3.0 |
| SMO | 77 | 321 | 0215 | 010148 | 144.8 | 134.5 | 2.1 | 9.0 | 150 | 27.6 | 23.3 | 137.4 | 2 | 137.4 | 2 | 2.1 |
| SMO | 77 | 328 | 2100 | 050149 | 146.4 | 136.0 | 1.2 | 7.5 | 135 | 26.0 | 24.4 | 138.9 | 2 | 138.9 | 2 | 1.2 |
| SMO | 77 | 224 | 0020 | 510135 | 141.4 | 140.3 | 2.1 | 10.0 | 130 | 26.4 | 21.0 | 143.4 | 0 | 142.3 | 0 | 3.3 |
| SMO | 77 | 224 | 0020 | 520135 | 139.2 | 138.1 | 4.2 | 10.0 | 130 | 26.4 | 21.0 | 141.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 231 | 0010 | 530136 | 143.5 | 142.4 | 1.6 | 8.0 | 160 | 25.2 | 12.6 | 145.5 | 0 | 146.2 | 0 | 1.6 |
| SMO | 77 | 231 | 0010 | 540136 | 144.8 | 143.7 | 1.6 | 8.0 | 160 | 25.2 | 12.6 | 146.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 237 | 0150 | 550137 | 141.0 | 139.9 | 3.5 | 6.0 | 160 | 25.8 | 19.7 | 143.0 | 0 | 144.1 | 0 | 2.9 |
| SMO | 77 | 237 | 0150 | 560137 | 143.3 | 142.2 | 2.1 | 6.0 | 160 | 25.8 | 19.7 | 145.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 243 | 2025 | 510138 | 138.0 | 136.9 | 5.2 | 4.0 | 170 | 24.6 | 19.9 | 139.9 | 1 | 139.4 | 0 | 5.2 |
| SMO | 77 | 243 | 2025 | 520138 | 136.9 | 135.8 | 2.3 | 4.0 | 170 | 24.6 | 19.9 | 138.8 | 2 | -1.0 | 0 | -1.0 |
| SMO | 77 | 257 | 2345 | 530139 | 137.5 | 136.4 | 1.9 | 6.0 | 160 | 27.0* | 24.5* | 139.4 | 3 | 143.5 | 0 | 1.9 |
| SMO | 77 | 257 | 2345 | 540139 | 145.5 | 144.4 | 2.0 | 6.0 | 160 | 27.0* | 24.5* | 147.5 | 3 | -1.0 | 0 | -1.0 |
| SMO | 77 | 264 | 2025 | 510140 | 142.7 | 141.6 | 1.9 | 5.0 | 150 | 26.4 | 19.8 | 144.7 | 0 | 143.3 | 0 | 2.5 |
| SMO | 77 | 264 | 2025 | 520140 | 139.9 | 138.8 | 2.9 | 5.0 | 150 | 26.4 | 19.8 | 141.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 271 | 2030 | 550141 | 141.7 | 140.6 | 2.2 | 8.0 | 140 | 27.0* | 24.5* | 143.7 | 0 | 145.2 | 0 | 1.8 |
| SMO | 77 | 271 | 2030 | 560141 | 144.7 | 143.6 | 1.4 | 8.0 | 140 | 27.0* | 24.5* | 146.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 280 | 0215 | 530142 | 152.4 | 151.2 | 1.8 | 10.0 | 130 | 27.0 | 19.8 | 154.5 | 2 | 154.5 | 2 | 1.8 |
| SMO | 77 | 280 | 0215 | 540142 | 137.5 | 136.4 | 6.0 | 10.0 | 130 | 27.0 | 19.8 | 139.4 | 1 | 139.4 | 0 | 6.0 |
| SMO | 77 | 289 | 0135 | 510143 | 144.2 | 143.1 | 2.8 | 8.0 | 150 | 25.8 | 20.6 | 146.2 | 0 | 144.3 | 0 | 3.7 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 77 | 289 | 0135 | 520143 | 140.4 | 139.3 | 4.4 | 8.0 | 150 | 25.8 | 20.6 | 142.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 293 | 0045 | 550144 | 143.8 | 142.7 | 4.5 | 4.0 | 115 | 28.0 | 20.2 | 145.8 | 2 | 146.0 | 0 | 4.5 |
| SMO | 77 | 293 | 0045 | 560144 | 144.2 | 143.1 | 6.5 | 4.0 | 115 | 28.0 | 20.2 | 146.2 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 302 | 2335 | 530145 | 134.6 | 133.5 | 3.3 | 10.0 | 130 | 25.5 | 20.6 | 136.5 | 3 | 136.5 | 3 | 3.3 |
| SMO | 77 | 302 | 2335 | 540145 | 146.0 | 144.9 | 3.8 | 10.0 | 130 | 25.5 | 20.6 | 148.0 | 3 | 148.0 | 0 | 3.8 |
| SMO | 77 | 307 | 2045 | 510146 | 142.5 | 141.4 | 3.7 | 3.5 | 150 | 26.5 | 21.2 | 144.5 | 0 | 141.9 | 0 | 3.2 |
| SMO | 77 | 307 | 2045 | 520146 | 137.3 | 136.2 | 2.7 | 3.5 | 150 | 26.5 | 21.2 | 139.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 314 | 0220 | 550147 | 138.6 | 137.5 | 6.5 | 4.5 | 150 | 27.3 | 19.8 | 140.5 | 1 | 140.9 | 0 | 6.5 |
| SMO | 77 | 314 | 0220 | 560147 | 139.3 | 138.2 | 2.4 | 4.5 | 150 | 27.3 | 19.8 | 141.2 | 2 | -1.0 | 0 | -1.0 |
| SMO | 77 | 321 | 0210 | 530148 | 146.0 | 144.9 | 5.4 | 9.0 | 150 | 27.6 | 23.3 | 148.0 | 1 | 145.3 | 0 | 5.4 |
| SMO | 77 | 321 | 0210 | 540148 | 140.5 | 139.4 | 5.3 | 9.0 | 150 | 27.6 | 23.3 | 142.5 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 328 | 2100 | 510149 | 147.6 | 146.4 | 4.8 | 7.5 | 135 | 26.0 | 24.4 | 149.7 | 0 | 147.7 | 0 | 4.4 |
| SMO | 77 | 328 | 2100 | 520149 | 143.7 | 142.6 | 3.9 | 7.5 | 135 | 26.0 | 24.4 | 145.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 337 | 2045 | 550150 | 141.0 | 139.9 | 5.4 | 4.0 | 150 | 29.8 | 25.8 | 143.0 | 1 | 142.7 | 0 | 5.4 |
| SMO | 77 | 337 | 2045 | 560150 | 140.5 | 139.4 | 5.7 | 4.0 | 150 | 29.8 | 25.8 | 142.5 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 341 | 2355 | 530151 | 136.7 | 135.6 | 6.8 | 7.5 | 140 | 29.2 | 24.9 | 138.6 | 1 | 138.6 | 1 | 6.8 |
| SMO | 77 | 341 | 2355 | 540151 | 140.2 | 139.1 | 2.6 | 7.5 | 140 | 29.2 | 24.9 | 142.2 | 2 | 142.2 | 0 | 2.6 |
| SMO | 77 | 349 | 0250 | 510152 | 139.5 | 138.4 | 3.9 | 8.5 | 140 | 28.4 | 25.4 | 141.5 | 0 | 141.4 | 0 | 3.9 |
| SMO | 77 | 349 | 0250 | 520152 | 139.3 | 138.2 | 3.8 | 8.5 | 140 | 28.4 | 25.4 | 141.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 364 | 2035 | 550153 | 145.6 | 144.5 | .7 | 5.1 | 52 | 29.0 | 27.7 | 147.6 | 2 | 146.6 | 0 | .7 |
| SMO | 77 | 364 | 2035 | 560153 | 143.5 | 142.4 | 5.2 | 5.1 | 52 | 29.0 | 27.7 | 145.5 | 1 | -1.0 | 0 | -1.0 |
| SMO | 78 | 5 | 0245 | 530154 | 142.3 | 141.2 | .7 | 4.5 | 60 | 27.5 | 26.2 | 144.3 | 0 | 144.5 | 0 | 1.8 |
| SMO | 78 | 5 | 0245 | 540154 | 142.7 | 141.6 | 2.5 | 4.5 | 60 | 27.5 | 26.2 | 144.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 15 | 0230 | 510155 | 149.3 | 148.1 | 1.7 | 6.0 | 130 | 27.7 | 24.7 | 151.4 | 0 | 152.6 | 0 | 2.3 |
| SMO | 78 | 15 | 0230 | 520155 | 151.6 | 150.4 | 2.7 | 6.0 | 130 | 27.7 | 24.7 | 153.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 21 | 0250 | 550156 | 152.2 | 151.0 | 3.9 | 5.0 | 100 | 28.0 | 23.9 | 154.3 | 3 | 154.3 | 3 | 3.9 |
| SMO | 78 | 21 | 0250 | 560156 | 142.9 | 141.8 | 3.2 | 5.0 | 100 | 28.0 | 23.9 | 144.9 | 3 | 144.9 | 0 | 3.2 |
| SMO | 78 | 33 | 2230 | 510157 | 145.9 | 144.8 | 3.2 | 3.0 | 40 | 27.0* | 24.5* | 147.9 | 0 | 148.4 | 0 | 3.0 |
| SMO | 78 | 33 | 2230 | 520157 | 146.9 | 145.8 | 2.8 | 3.0 | 40 | 27.0* | 24.5* | 149.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 42 | 2305 | 530158 | 142.2 | 141.1 | 2.2 | 2.8 | 130 | 27.5 | 26.2 | 144.2 | 0 | 147.4 | 0 | 2.1 |
| SMO | 78 | 42 | 2305 | 540158 | 148.6 | 147.4 | 2.0 | 2.8 | 130 | 27.5 | 26.2 | 150.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 61 | 2145 | 550159 | 143.3 | 142.2 | 4.0 | 5.0 | 120 | 28.0 | 23.9 | 145.3 | 0 | 144.3 | 0 | 3.2 |
| SMO | 78 | 61 | 2145 | 560159 | 141.4 | 140.3 | 2.0 | 5.0 | 120 | 28.0 | 23.9 | 143.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 68 | 0305 | 510160 | 145.8 | 144.7 | 4.3 | 9.0 | 140 | 28.5 | 25.1 | 147.8 | 0 | 149.7 | 0 | 3.5 |
| SMO | 78 | 68 | 0305 | 520160 | 149.4 | 148.2 | 2.5 | 9.0 | 140 | 28.5 | 25.1 | 151.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 81 | 0100 | 530161 | 180.5 | 179.1 | 0 | 9.0 | 20 | 28.0 | 26.0 | 183.0 | 1 | 183.0 | 1 | .0 |
| SMO | 78 | 81 | 0100 | 540161 | 160.3 | 159.0 | 6.0 | 9.0 | 20 | 28.0 | 26.0 | 162.5 | 1 | 162.5 | 1 | 6.0 |
| SMO | 78 | 87 | 2025 | 550162 | 157.6 | 156.4 | 2.9 | 7.5 | 340 | 26.7 | 24.7 | 159.8 | 0 | 156.9 | 0 | 2.2 |
| SMO | 78 | 87 | 2025 | 560162 | 151.8 | 150.6 | 1.0 | 7.5 | 340 | 26.7 | 24.7 | 153.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 99 | 0100 | 510163 | 147.5 | 146.3 | 4.6 | 6.0 | 130 | 27.8 | 26.5 | 149.6 | 0 | 150.7 | 0 | 3.3 |
| SMO | 78 | 99 | 0100 | 520163 | 149.8 | 148.6 | .8 | 6.0 | 130 | 27.8 | 26.5 | 151.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 108 | 0440 | 530164 | 157.7 | 156.5 | 2.2 | 3.0 | 315 | 28.0 | 25.3 | 159.9 | 0 | 157.0 | 0 | 1.8 |
| SMO | 78 | 108 | 0440 | 540164 | 152.0 | 150.8 | 1.3 | 3.0 | 315 | 28.0 | 25.3 | 154.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 121 | 0255 | 560165 | 149.1 | 147.9 | 4.5 | 4.5 | 150 | 26.8 | 23.5 | 151.2 | 0 | 150.8 | 0 | 3.9 |
| SMO | 78 | 121 | 0255 | 550165 | 148.3 | 147.1 | 3.3 | 4.5 | 150 | 26.8 | 23.5 | 150.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 126 | 2355 | 520166 | 155.3 | 154.1 | 3.3 | 6.0 | 160 | 28.1 | 26.0 | 157.5 | 2 | 154.9 | 0 | 3.3 |
| SMO | 78 | 126 | 2355 | 510166 | 150.3 | 149.1 | 0.1 | 6.0 | 160 | 28.1 | 26.0 | 152.4 | 1 | -1.0 | 0 | -1.0 |
| SMO | 78 | 133 | 2250 | 540167 | 149.1 | 147.9 | 1.6 | 9.0 | 330 | 26.2 | 24.4 | 151.2 | 2 | 151.2 | 0 | 1.6 |
| SMO | 78 | 137 | 2100 | 550168 | 149.2 | 148.0 | 2.4 | 7.5 | 120 | 27.4 | 24.4 | 151.3 | 0 | 151.3 | 0 | 2.4 |
| SMO | 78 | 137 | 2100 | 560168 | 149.2 | 148.0 | 2.3 | 7.5 | 120 | 27.4 | 24.4 | 151.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 148 | 0355 | 510169 | 148.8 | 147.6 | 1.6 | 6.0 | 80 | 26.3 | 23.1 | 150.9 | 0 | 151.2 | 0 | 2.5 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 78 | 148 | 0355 | 520169 | 149.4 | 148.2 | 3.2 | 6.0 | 80 | 26.3 | 23.1 | 151.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 159 | 2025 | 530170 | 149.3 | 148.1 | 1.7 | 5.0 | 130 | 27.3 | 24.4 | 151.4 | 0 | 151.8 | 0 | 1.5 |
| SMO | 78 | 159 | 2025 | 540170 | 150.1 | 148.9 | 1.2 | 5.0 | 130 | 27.3 | 24.4 | 152.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 168 | 0025 | 520171 | 147.1 | 145.9 | .5 | 8.0 | 140 | 26.1 | 21.7 | 149.2 | 0 | 151.0 | 0 | .7 |
| SMO | 78 | 168 | 0025 | 510171 | 150.7 | 149.5 | .8 | 8.0 | 140 | 26.1 | 21.7 | 152.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 176 | 0240 | 560172 | 150.5 | 149.3 | 1.4 | 7.0 | 30 | 27.6 | 24.6 | 152.6 | 0 | 153.2 | 0 | 1.2 |
| SMO | 78 | 176 | 0240 | 550172 | 151.7 | 150.5 | 1.0 | 7.0 | 30 | 27.6 | 24.6 | 153.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 189 | 0055 | 510173 | 149.3 | 148.1 | .9 | 2.5 | 30 | 28.0 | 23.0 | 151.4 | 0 | 151.7 | 0 | 1.4 |
| SMO | 78 | 189 | 0055 | 520173 | 150.0 | 148.8 | 1.8 | 2.5 | 30 | 28.0 | 23.0 | 152.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 196 | 2230 | 530174 | 148.2 | 147.0 | .8 | 6.7 | 160 | 27.0 | 22.1 | 150.3 | 0 | 149.6 | 0 | 1.0 |
| SMO | 78 | 196 | 2230 | 540174 | 146.9 | 145.8 | 1.1 | 6.7 | 160 | 27.0 | 22.1 | 149.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 202 | 0340 | 550175 | 152.9 | 151.7 | 1.7 | 8.0 | 150 | 26.4 | 23.3 | 155.0 | 0 | 153.5 | 0 | 1.8 |
| SMO | 78 | 202 | 0340 | 560175 | 149.9 | 148.7 | 1.9 | 8.0 | 150 | 26.4 | 23.3 | 152.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 208 | 2005 | 510176 | 151.2 | 150.0 | .3 | 7.0 | 140 | 27.0 | 24.3 | 153.3 | 0 | 153.4 | 0 | .6 |
| SMO | 78 | 208 | 2005 | 520176 | 151.3 | 150.1 | .8 | 7.0 | 140 | 27.0 | 24.3 | 153.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 217 | 0310 | 530177 | 153.2 | 152.0 | 4.2 | 8.5 | 150 | 27.0 | 21.3 | 155.3 | 0 | 156.1 | 0 | 4.0 |
| SMO | 78 | 217 | 0310 | 540177 | 154.6 | 153.4 | 3.8 | 8.5 | 150 | 27.0 | 21.3 | 156.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 225 | 0145 | 560178 | 156.3 | 155.1 | 1.1 | 3.0 | 30 | 26.0 | 23.2 | 158.5 | 0 | 158.1 | 0 | 1.2 |
| SMO | 78 | 225 | 0145 | 550178 | 155.6 | 154.4 | 1.3 | 3.0 | 30 | 26.0 | 23.2 | 157.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 229 | 0100 | 520179 | 151.7 | 150.5 | .8 | 8.0 | 150 | 27.6 | 24.9 | 153.8 | 0 | 153.1 | 0 | 3.0 |
| SMO | 78 | 229 | 0100 | 510179 | 150.3 | 149.1 | 4.1 | 8.0 | 150 | 27.6 | 24.9 | 152.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 238 | 0000 | 530180 | 147.4 | 146.2 | 1.3 | 7.0 | 90 | 28.5 | 24.8 | 149.5 | 0 | 151.5 | 0 | 2.5 |
| SMO | 78 | 238 | 0000 | 540180 | 151.4 | 150.2 | 3.3 | 7.0 | 90 | 28.5 | 24.8 | 153.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 244 | 2320 | 550181 | 154.1 | 152.9 | 3.5 | 7.5 | 150 | 25.2 | 24.3 | 156.3 | 0 | 154.8 | 0 | 3.5 |
| SMO | 78 | 244 | 2320 | 550181 | 151.3 | 150.1 | 3.4 | 7.5 | 150 | 25.2 | 24.3 | 153.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 253 | 0400 | 530182 | 149.8 | 148.6 | 1.7 | 7.0 | 160 | 24.4 | 19.4 | 151.9 | 0 | 152.1 | 0 | 1.4 |
| SMO | 78 | 253 | 0400 | 540182 | 150.3 | 149.1 | 1.1 | 7.0 | 160 | 24.4 | 19.4 | 152.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 260 | 0405 | 510183 | 153.3 | 152.1 | 3.5 | 2.5 | 160 | 26.0 | 22.9 | 155.4 | 2 | 157.6 | 0 | 3.5 |
| SMO | 78 | 260 | 0405 | 520183 | 157.5 | 156.3 | 5.3 | 2.5 | 160 | 26.0 | 22.9 | 159.7 | 1 | -1.0 | 0 | -1.0 |
| SMO | 78 | 266 | 0025 | 550184 | 153.3 | 152.1 | 3.7 | 9.0 | 130 | 28.3 | 24.5 | 155.4 | 0 | 157.5 | 0 | 3.6 |
| SMO | 78 | 266 | 0025 | 560184 | 157.4 | 156.2 | 3.4 | 9.0 | 130 | 28.3 | 24.5 | 159.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 272 | 0245 | 530185 | 150.7 | 149.5 | 1.6 | 6.0 | 160 | 26.3 | 22.4 | 152.8 | 0 | 153.7 | 0 | 2.2 |
| SMO | 78 | 272 | 0245 | 540185 | 152.5 | 151.3 | 2.6 | 6.0 | 160 | 26.3 | 22.4 | 154.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 280 | 0355 | 550186 | 157.2 | 156.0 | 1.7 | 3.0 | 100 | 26.8 | 24.6 | 159.4 | 0 | 159.4 | 0 | 2.6 |
| SMO | 78 | 280 | 0355 | 560186 | 157.2 | 156.0 | 3.2 | 3.0 | 100 | 26.8 | 24.6 | 159.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 294 | 0545 | 510187 | 151.2 | 150.0 | 1.5 | 8.0 | 150 | 26.5 | 23.7 | 153.3 | 0 | 153.8 | 0 | 2.6 |
| SMO | 78 | 294 | 0545 | 520187 | 152.2 | 151.0 | 3.4 | 8.0 | 150 | 26.5 | 23.7 | 154.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 311 | 2245 | 530188 | 159.1 | 157.9 | 3.9 | 8.0 | 150 | 29.0 | 24.8 | 161.3 | 0 | 160.9 | 0 | 2.8 |
| SMO | 78 | 311 | 2245 | 540188 | 158.3 | 157.1 | .4 | 8.0 | 150 | 29.0 | 24.8 | 160.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 322 | 0320 | 520189 | 156.8 | 155.6 | 2.3 | 8.0 | 120 | 25.5 | 24.1 | 159.0 | 0 | 157.9 | 0 | 2.8 |
| SMO | 78 | 322 | 0320 | 510189 | 154.6 | 153.4 | 3.2 | 8.0 | 120 | 25.5 | 24.1 | 156.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 328 | 2355 | 560190 | 156.9 | 155.7 | .9 | 5.0 | 60 | 29.0 | 25.0 | 159.1 | 0 | 160.9 | 0 | 1.7 |
| SMO | 78 | 328 | 2355 | 550190 | 160.4 | 159.1 | 2.2 | 5.0 | 60 | 29.0 | 25.0 | 162.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 337 | 2355 | 530191 | 156.8 | 155.6 | 6.8 | 5.0 | 360 | 29.0 | 28.0 | 159.0 | 1 | 158.9 | 0 | 6.8 |
| SMO | 78 | 337 | 0138 | 540191 | 156.7 | 155.5 | 1.0 | 5.0 | 360 | 29.0 | 28.0 | 158.9 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 343 | 0430 | 510192 | 155.9 | 154.7 | 1.4 | 7.0 | 160 | 25.9 | 24.7 | 158.1 | 0 | 157.6 | 0 | 1.3 |
| SMO | 78 | 343 | 0430 | 520192 | 155.0 | 153.8 | 1.1 | 7.0 | 160 | 25.9 | 24.7 | 157.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 350 | 0355 | 550193 | 152.7 | 151.5 | 1.9 | 5.0 | 160 | 27.0 | 23.7 | 154.8 | 0 | 155.7 | 0 | 2.6 |
| SMO | 78 | 350 | 0355 | 560193 | 154.5 | 153.3 | 3.1 | 5.0 | 160 | 27.0 | 23.7 | 156.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 360 | 2315 | 530194 | 160.1 | 158.8 | .9 | 9.0 | 80 | 27.0* | 24.5* | 162.3 | 0 | 163.2 | 0 | 2.4 |
| SMO | 78 | 360 | 2315 | 540194 | 161.8 | 160.5 | 3.2 | 9.0 | 80 | 27.0* | 24.5* | 164.1 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 78 | 364 | 0030 | 510195 | 156.9 | 155.7 | .3 | 6.0 | 330 | 30.0 | 26.7 | 159.1 | 0 | 158.4 | 0 | .5 |
| SMO | 78 | 364 | 0030 | 520195 | 155.5 | 154.3 | .6 | 6.0 | 330 | 30.0 | 26.7 | 157.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 4 | 0225 | 550196 | 160.2 | 158.9 | 4.1 | 7.0 | 340 | 27.3 | 24.4 | 162.3 | 0 | 163.4 | 0 | 3.6 |
| SMO | 79 | 4 | 0255 | 560196 | 162.5 | 161.2 | 3.0 | 7.0 | 340 | 27.3 | 24.4 | 164.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 13 | 0350 | 530197 | 157.2 | 156.0 | .5 | 10.0 | 290 | 26.8 | 24.3 | 159.1 | 0 | 162.2 | 0 | 2.4 |
| SMO | 79 | 13 | 0350 | 540197 | 163.2 | 161.9 | 3.4 | 10.0 | 290 | 26.8 | 24.3 | 165.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 21 | 0340 | 510198 | 157.2 | 156.0 | 4.5 | 3.0 | 160 | 28.0 | 23.9 | 158.8 | 0 | 159.2 | 0 | 4.0 |
| SMO | 79 | 21 | 0340 | 520198 | 157.9 | 156.7 | 3.4 | 3.0 | 160 | 28.0 | 23.9 | 159.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 27 | 0307 | 550199 | 156.7 | 155.5 | 1.7 | 6.8 | 110 | 27.7 | 24.5 | 158.5 | 2 | 158.5 | 0 | 1.7 |
| SMO | 79 | 27 | 0307 | 560199 | 165.9 | 164.6 | 6.9 | 6.8 | 110 | 27.7 | 24.5 | 167.8 | 1 | 167.8 | 1 | 6.9 |
| SMO | 79 | 35 | 0355 | 530200 | 168.5 | 167.2 | 2.1 | 4.0 | 120 | 27.3 | 24.4 | 170.6 | 0 | 169.3 | 0 | 2.2 |
| SMO | 79 | 35 | 0355 | 540200 | 166.0 | 164.7 | 2.3 | 4.0 | 120 | 27.3 | 24.4 | 168.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 44 | 2345 | 510201 | 160.7 | 159.4 | 1.5 | 2.7 | 130 | 29.0 | 24.5 | 162.4 | 0 | 163.6 | 0 | 2.0 |
| SMO | 79 | 44 | 2345 | 520201 | 163.0 | 161.7 | 2.4 | 2.7 | 130 | 29.0 | 24.5 | 164.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 51 | 0203 | 550202 | 161.6 | 160.3 | .8 | 7.2 | 340 | 29.0 | 24.8 | 163.7 | 0 | 164.0 | 0 | 2.1 |
| SMO | 79 | 51 | 0203 | 560202 | 162.3 | 161.0 | 2.8 | 7.2 | 340 | 29.0 | 24.8 | 164.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 59 | 2239 | 510203 | 165.0 | 163.7 | 1.6 | 3.2 | 150 | 28.9 | 24.6 | 167.0 | 0 | 165.1 | 0 | 1.7 |
| SMO | 79 | 59 | 2239 | 520203 | 161.2 | 159.9 | 1.7 | 3.2 | 150 | 28.9 | 24.6 | 163.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 66 | 2104 | 530204 | 159.1 | 157.9 | 1.4 | 3.5 | 75 | 30.2 | 24.6 | 160.9 | 0 | 159.0 | 0 | 1.3 |
| SMO | 79 | 66 | 2104 | 540204 | 155.4 | 154.2 | 1.1 | 3.5 | 75 | 30.2 | 24.6 | 157.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 72 | 2300 | 550205 | 155.5 | 154.3 | 8.0 | 4.5 | 120 | 28.2 | 24.3 | 157.3 | 1 | 158.6 | 0 | 8.0 |
| SMO | 79 | 72 | 2300 | 560205 | 158.1 | 156.9 | .8 | 4.5 | 120 | 28.2 | 24.3 | 159.9 | 2 | -1.0 | 0 | -1.0 |
| SMO | 79 | 83 | 2339 | 520206 | 163.1 | 161.8 | 1.4 | 6.2 | 325 | 29.3 | 24.8 | 165.4 | 0 | 166.5 | 0 | 1.6 |
| SMO | 79 | 83 | 2339 | 510206 | 165.1 | 163.8 | 1.8 | 6.2 | 325 | 29.3 | 24.8 | 167.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 92 | 0305 | 530207 | 163.2 | 161.9 | 2.7 | 5.0 | 140 | 28.5 | 25.8 | 165.3 | 0 | 162.9 | 0 | 2.2 |
| SMO | 79 | 92 | 0305 | 540207 | 158.6 | 157.4 | 1.4 | 5.0 | 140 | 28.5 | 25.8 | 160.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 98 | 0405 | 550208 | 165.0 | 163.7 | 2.3 | 4.0 | 150 | 27.4 | 24.1 | 167.3 | 0 | 166.6 | 0 | 1.7 |
| SMO | 79 | 98 | 0405 | 560208 | 163.7 | 162.4 | .8 | 4.0 | 150 | 27.4 | 24.1 | 165.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 109 | 0050 | 510209 | 160.2 | 158.9 | 3.2 | 6.0 | 330 | 30.3 | 25.9 | 162.2 | 0 | 163.6 | 0 | 2.3 |
| SMO | 79 | 109 | 0050 | 520209 | 163.1 | 161.8 | .3 | 6.5 | 330 | 30.3 | 25.9 | 165.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 114 | 2350 | 540210 | 152.6 | 151.4 | 5.8 | 2.0 | 160 | 27.8 | 24.0 | 154.6 | 1 | 154.6 | 1 | 5.8 |
| SMO | 79 | 114 | 2350 | 530210 | 160.6 | 159.3 | 1.3 | 2.0 | 160 | 27.8 | 24.0 | 162.7 | 2 | 162.7 | 0 | 1.3 |
| SMO | 79 | 122 | 0245 | 550211 | 159.3 | 158.1 | .3 | 10.0 | 160 | 26.5 | 23.5 | 161.2 | 0 | 160.8 | 0 | 1.2 |
| SMO | 79 | 122 | 0245 | 560211 | 158.6 | 157.4 | 1.7 | 10.0 | 160 | 26.5 | 23.5 | 160.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 129 | 0235 | 520212 | 163.4 | 162.1 | 1.3 | 8.0 | 130 | 27.5 | 25.2 | 165.6 | 0 | 164.3 | 0 | 1.0 |
| SMO | 79 | 129 | 0235 | 510212 | 160.8 | 159.5 | .7 | 8.0 | 130 | 27.5 | 25.2 | 163.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 135 | 2250 | 540213 | 157.4 | 156.2 | 1.0 | 8.0 | 140 | 27.0 | 24.4 | 160.0 | 0 | 162.1 | 0 | .9 |
| SMO | 79 | 135 | 2250 | 530213 | 161.5 | 160.2 | .7 | 8.0 | 140 | 27.0 | 24.4 | 164.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 143 | 0410 | 550214 | 161.8 | 160.5 | .5 | 2.0 | 60 | 27.7 | 24.0 | 165.0 | 0 | 165.4 | 0 | .9 |
| SMO | 79 | 143 | 0410 | 560214 | 162.7 | 161.4 | 1.1 | 2.0 | 60 | 27.7 | 24.0 | 165.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 150 | 0245 | 530215 | 159.4 | 158.2 | .8 | 4.4 | 146 | 30.0 | 21.1 | 162.6 | 0 | 163.7 | 0 | 1.0 |
| SMO | 79 | 150 | 0245 | 540215 | 161.6 | 160.3 | 1.2 | 4.4 | 146 | 30.0 | 21.1 | 164.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 157 | 0248 | 510216 | 161.2 | 159.9 | 1.1 | 1.5 | 81 | 29.7 | 23.3 | 163.8 | 0 | 162.9 | 0 | 1.2 |
| SMO | 79 | 157 | 0248 | 520216 | 159.3 | 158.1 | 1.3 | 1.5 | 81 | 29.7 | 23.3 | 161.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 163 | 0142 | 550217 | 161.9 | 160.6 | 2.8 | 5.0 | 150 | 25.3 | 22.6 | 164.5 | 2 | 167.3 | 0 | 2.8 |
| SMO | 79 | 163 | 0142 | 560217 | 167.4 | 166.1 | 11.7 | 5.0 | 150 | 25.3 | 22.6 | 170.1 | 1 | -1.0 | 0 | -1.0 |
| SMO | 79 | 171 | 0057 | 540218 | 158.0 | 156.8 | 1.6 | 2.7 | 330 | 30.8 | 25.0 | 160.5 | 0 | 161.3 | 0 | 1.5 |
| SMO | 79 | 171 | 0057 | 530218 | 159.5 | 158.3 | 1.4 | 2.7 | 330 | 30.8 | 25.0 | 162.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 178 | 0338 | 520219 | 161.4 | 160.1 | 1.0 | 8.0 | 100 | 29.0 | 23.5 | 164.1 | 0 | 163.6 | 0 | .8 |
| SMO | 79 | 178 | 0338 | 510219 | 160.4 | 159.1 | .6 | 8.0 | 100 | 29.0 | 23.5 | 163.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 185 | 0045 | 550220 | 165.6 | 164.3 | .3 | 2.7 | 170 | 26.0 | 24.5 | 168.5 | 0 | 166.4 | 0 | .7 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 79 | 185 | 0045 | 560220 | 161.6 | 160.3 | .9 | 2.7 | 170 | 26.0 | 24.5 | 164.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 192 | 0118 | 540221 | 160.7 | 159.4 | 1.8 | 5.0 | 150 | 21.6 | 21.6 | 163.4 | 0 | 163.8 | 0 | 1.4 |
| SMO | 79 | 192 | 0118 | 530221 | 161.6 | 160.3 | .9 | 5.0 | 150 | 21.6 | 21.6 | 164.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 199 | 0045 | 520222 | 165.3 | 164.0 | .7 | 7.5 | 30 | 28.3 | 25.2 | 168.1 | 0 | 166.4 | 0 | 1.0 |
| SMO | 79 | 199 | 0045 | 510222 | 161.9 | 160.6 | 1.2 | 7.5 | 30 | 28.3 | 25.2 | 164.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 209 | 2100 | 550223 | 161.9 | 160.6 | 1.6 | 10.4 | 145 | 25.5 | 16.5 | 164.9 | 0 | 165.6 | 0 | 1.4 |
| SMO | 79 | 209 | 2100 | 560223 | 163.3 | 162.0 | 1.1 | 10.4 | 145 | 25.5 | 16.5 | 166.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 213 | 0200 | 540224 | 161.5 | 160.2 | 2.0 | 10.4 | 140 | 26.4 | 16.2 | 164.2 | 0 | 162.0 | 0 | 1.6 |
| SMO | 79 | 213 | 0200 | 530224 | 157.2 | 156.0 | 1.1 | 10.4 | 140 | 26.4 | 16.2 | 159.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 221 | 2130 | 520225 | 167.9 | 166.6 | .7 | 3.6 | 340 | 29.0 | 26.4 | 170.5 | 0 | 170.9 | 0 | .5 |
| SMO | 79 | 221 | 2130 | 510225 | 168.6 | 167.3 | .1 | 3.6 | 340 | 29.0 | 26.4 | 171.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 227 | 0300 | 560226 | 164.1 | 162.8 | 4.0 | 2.7 | 110 | 27.0 | 19.8 | 166.5 | 0 | 164.5 | 0 | 4.4 |
| SMO | 79 | 227 | 0300 | 550226 | 160.3 | 159.0 | 4.8 | 2.7 | 110 | 27.0 | 19.8 | 162.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 234 | 2120 | 510227 | 165.8 | 164.5 | 3.7 | 3.2 | 140 | 28.0 | 25.3 | 168.1 | 2 | 168.1 | 0 | 3.7 |
| SMO | 79 | 242 | 0107 | 540228 | 162.0 | 160.7 | .6 | 6.3 | 135 | 27.0 | 24.3 | 164.4 | 2 | 167.2 | 0 | .6 |
| SMO | 79 | 242 | 0107 | 530228 | 167.4 | 166.1 | 6.2 | 6.3 | 135 | 27.0 | 24.3 | 169.9 | 1 | -1.0 | 0 | -1.0 |
| SMO | 79 | 248 | 0301 | 550229 | 154.3 | 153.1 | 3.0 | 3.6 | 130 | 26.8 | 25.1 | 156.3 | 0 | 159.2 | 0 | 3.8 |
| SMO | 79 | 248 | 0301 | 560229 | 160.0 | 158.7 | 4.4 | 3.6 | 130 | 26.8 | 25.1 | 162.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 255 | 0000 | 520230 | 160.0 | 158.7 | 1.6 | 2.7 | 170 | 24.0 | 24.0 | 162.3 | 0 | 162.7 | 0 | 3.0 |
| SMO | 79 | 255 | 0000 | 510230 | 160.7 | 159.4 | 3.9 | 2.7 | 170 | 24.0 | 24.0 | 163.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 261 | 0054 | 540231 | 165.2 | 163.9 | 1.9 | 4.1 | 130 | 28.0 | 25.0 | 167.8 | 3 | 167.8 | 0 | 1.9 |
| SMO | 79 | 261 | 0054 | 530231 | 177.0 | 175.6 | 2.5 | 4.1 | 130 | 28.0 | 25.0 | 179.8 | 3 | 179.8 | 3 | 2.5 |
| SMO | 79 | 269 | 0146 | 550232 | 167.3 | 166.0 | 1.2 | 5.0 | 50 | 28.2 | 26.3 | 169.8 | 0 | 169.9 | 0 | 1.2 |
| SMO | 79 | 269 | 0146 | 560232 | 167.5 | 166.2 | 1.2 | 5.0 | 50 | 28.2 | 26.3 | 170.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 279 | 0200 | 510233 | 170.5 | 169.2 | 1.6 | 5.4 | 140 | 28.0 | 27.0 | 173.4 | 0 | 171.7 | 0 | 2.6 |
| SMO | 79 | 279 | 0200 | 520233 | 167.2 | 165.9 | 3.3 | 5.4 | 140 | 28.0 | 27.0 | 170.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 290 | 1322 | 560235 | 166.3 | 165.0 | 1.3 | 8.1 | 140 | 27.0 | 21.6 | 168.4 | 0 | 169.3 | 0 | 1.5 |
| SMO | 79 | 290 | 1322 | 550235 | 168.2 | 166.9 | 1.6 | 8.1 | 140 | 27.0 | 21.6 | 170.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 297 | 0252 | 520236 | 168.1 | 166.8 | .9 | 2.3 | 340 | 29.2 | 26.3 | 170.4 | 0 | 170.9 | 0 | .8 |
| SMO | 79 | 297 | 0252 | 510236 | 169.0 | 167.7 | .7 | 2.3 | 340 | 29.2 | 26.3 | 171.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 304 | 0319 | 540237 | 189.8 | 188.3 | .6 | 3.6 | 0 | 25.8 | 25.3 | 192.2 | 3 | 192.2 | 3 | .6 |
| SMO | 79 | 304 | 0319 | 530237 | 180.4 | 179.0 | 1.0 | 3.6 | 0 | 25.8 | 25.3 | 182.7 | 3 | 182.7 | 3 | 1.0 |
| SMO | 79 | 311 | 0214 | 560238 | 163.8 | 162.5 | 2.5 | 1.8 | 150 | 28.0 | 26.7 | 165.8 | 0 | 165.9 | 0 | 2.0 |
| SMO | 79 | 311 | 0214 | 550238 | 164.1 | 162.8 | 1.4 | 1.8 | 150 | 28.0 | 26.7 | 166.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 319 | 0212 | 520239 | 168.1 | 166.8 | 1.5 | 7.2 | 160 | 27.0 | 21.7 | 170.0 | 0 | 169.3 | 0 | 1.2 |
| SMO | 79 | 319 | 0212 | 510239 | 166.6 | 165.3 | .8 | 7.2 | 160 | 27.0 | 21.7 | 168.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 325 | 0243 | 540240 | 168.1 | 166.8 | 1.2 | 2.3 | 70 | 29.0 | 22.6 | 170.3 | 0 | 171.5 | 0 | 1.8 |
| SMO | 79 | 325 | 0243 | 530240 | 170.3 | 169.0 | 2.3 | 2.3 | 70 | 29.0 | 22.6 | 172.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 339 | 0221 | 550241 | 166.2 | 164.9 | .6 | 6.3 | 150 | 27.0 | 25.0 | 168.3 | 0 | 169.9 | 0 | .9 |
| SMO | 79 | 339 | 0221 | 560241 | 169.5 | 168.2 | 1.2 | 6.3 | 150 | 27.0 | 25.0 | 171.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 346 | 0048 | 510242 | 169.2 | 167.9 | 2.2 | 10.4 | 300 | 26.0 | 24.5 | 171.3 | 0 | 171.5 | 0 | 3.0 |
| SMO | 79 | 346 | 0048 | 520242 | 169.5 | 168.2 | 3.6 | 10.4 | 300 | 26.0 | 24.5 | 171.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 353 | 0250 | 530243 | 163.8 | 162.5 | .5 | 14.0 | 155 | 27.2 | 23.6 | 165.6 | 0 | 167.5 | 0 | .6 |
| SMO | 79 | 353 | 0250 | 540243 | 167.7 | 166.4 | .7 | 14.0 | 155 | 27.2 | 23.6 | 169.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 361 | 2102 | 550244 | 168.0 | 166.7 | .5 | 4.5 | 155 | 27.8 | 25.7 | 169.9 | 0 | 168.7 | 0 | 1.5 |
| SMO | 79 | 361 | 2102 | 560244 | 165.5 | 164.2 | 2.1 | 4.5 | 155 | 27.8 | 25.7 | 167.4 | 0 | -1.0 | 0 | -1.0 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPO | 77 | 26 | 0320 | 010013 | 141.4 | 140.3 | 3.1 | 2.5 | 30 | -26.0 | -99.9 | 140.3 | 0 | 141.4 | 0 | 3.3 |
| SPO | 77 | 26 | 0320 | 020013 | 143.6 | 142.5 | 3.4 | 2.5 | 30 | -26.0 | -99.9 | 142.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 77 | 35 | 0230 | 030014 | 137.4 | 136.3 | 3.1 | 5.5 | 65 | -37.3 | -99.9 | 136.3 | 2 | 138.1 | 0 | 3.1 |
| SPO | 77 | 35 | 0230 | 040014 | 141.0 | 139.9 | 10.8 | 5.5 | 65 | -37.3 | -99.9 | 139.9 | 1 | -1.0 | 0 | -1.0 |
| SPO | 77 | 38 | 0445 | 050015 | 132.4 | 131.4 | 1.6 | 3.2 | 90 | -34.0 | -99.9 | 131.4 | 0 | 130.1 | 0 | 1.5 |
| SPO | 77 | 38 | 0445 | 060015 | 129.8 | 128.8 | 1.4 | 3.2 | 90 | -34.0 | -99.9 | 128.8 | 0 | -1.0 | 0 | -1.0 |
| SPO | 77 | 41 | 0300 | 070016 | 99.4 | 98.6 | U | 4.0 | 120 | -41.6 | -99.9 | 98.6 | 1 | 98.6 | 1 | .0 |
| SPO | 77 | 41 | 0300 | 080016 | 130.3 | 129.3 | U | 4.0 | 120 | -41.6 | -99.9 | 129.3 | 1 | 129.3 | 0 | .0 |
| SPO | 77 | 72 | 2230 | 090017 | 73.4 | 72.8 | U | 3.5 | 30 | -46.0 | -99.9 | 72.8 | 1 | 72.8 | 1 | .0 |
| SPO | 77 | 72 | 2230 | 100017 | 1857.6 | 1843.1 | U | 3.5 | 30 | -46.0 | -99.9 | 1843.1 | 1 | 1843.1 | 1 | .0 |
| SPO | 77 | 105 | 0355 | 110018 | 79.2 | 78.6 | U | 3.4 | 40 | -59.0 | -99.9 | 78.6 | 1 | 78.6 | 1 | .0 |
| SPO | 77 | 105 | 0355 | 120018 | 157.0 | 155.8 | U | 3.4 | 40 | -59.0 | -99.9 | 155.8 | 1 | 155.8 | 0 | .0 |
| SPO | 77 | 134 | 0230 | 130019 | 420.7 | 417.4 | U | 8.0 | 25 | -52.2 | -99.9 | 417.4 | 1 | 417.4 | 1 | .0 |
| SPO | 77 | 134 | 0230 | 140019 | 406.8 | 403.6 | U | 8.0 | 25 | -52.2 | -99.9 | 403.6 | 1 | 403.6 | 1 | .0 |
| SPO | 77 | 195 | 0410 | 170021 | 124.2 | 123.2 | U | 9.0 | 345 | -45.1 | -99.9 | 123.2 | 1 | 123.2 | 1 | .0 |
| SPO | 77 | 195 | 0410 | 270021 | 2806.9 | 2784.9 | U | 9.0 | 345 | -45.1 | -99.9 | 2784.9 | 1 | 2784.9 | 1 | .0 |
| SPO | 77 | 229 | 2150 | 280022 | 663.3 | 658.1 | U | 4.0 | 10 | -59.1 | -99.9 | 658.1 | 1 | 658.1 | 1 | .0 |
| SPO | 77 | 229 | 2150 | 290022 | 1724.3 | 1710.8 | U | 4.0 | 10 | -59.1 | -99.9 | 1710.8 | 1 | 1710.8 | 1 | .0 |
| SPO | 77 | 257 | 1140 | 300023 | 171.2 | 169.9 | U | 3.5 | 25 | -60.1 | -99.9 | 169.9 | 1 | 169.9 | 1 | .0 |
| SPO | 77 | 257 | 1140 | 310023 | 389.2 | 386.2 | U | 3.5 | 25 | -60.1 | -99.9 | 386.2 | 1 | 386.2 | 1 | .0 |
| SPO | 77 | 287 | 2350 | 320024 | 1594.0 | 1581.5 | U | 6.2 | 360 | -53.8 | -99.9 | 1581.5 | 1 | 1581.5 | 1 | .0 |
| SPO | 77 | 287 | 2350 | 330024 | 135.8 | 134.7 | U | 6.2 | 360 | -53.8 | -99.9 | 134.7 | 1 | 134.7 | 0 | .0 |
| SPO | 77 | 316 | 1155 | 340025 | 433.5 | 430.1 | U | 2.7 | 325 | -33.2 | -99.9 | 430.1 | 1 | 430.1 | 1 | .0 |
| SPO | 77 | 316 | 1155 | 350025 | 168.9 | 167.6 | U | 2.7 | 325 | -33.2 | -99.9 | 167.6 | 1 | 167.6 | 1 | .0 |
| SPO | 77 | 336 | 0750 | 010026 | 153.6 | 152.4 | 3.7 | 3.8 | 4 | -31.8 | -99.9 | 152.4 | 3 | 157.3 | 0 | 3.7 |
| SPO | 77 | 336 | 0750 | 020026 | 163.5 | 162.2 | 1.6 | 3.8 | 4 | -31.8 | -99.9 | 162.2 | 3 | -1.0 | 0 | -1.0 |
| SPO | 77 | 353 | 0345 | 030027 | 186.1 | 184.6 | 2.3 | 2.7 | 99 | -29.3 | -99.9 | 184.6 | 3 | 184.6 | 3 | 2.3 |
| SPO | 77 | 353 | 0345 | 040027 | 165.1 | 163.8 | 2.3 | 2.7 | 99 | -29.3 | -99.9 | 163.8 | 3 | 163.8 | 0 | 2.3 |
| SPO | 78 | 1 | 0425 | 050028 | 280.6 | 278.4 | 15.8 | 4.4 | 320 | -21.5 | -99.9 | 278.4 | 1 | 278.4 | 1 | 15.8 |
| SPO | 78 | 1 | 0425 | 060028 | 252.6 | 250.6 | 5.7 | 4.4 | 320 | -21.5 | -99.9 | 250.6 | 1 | 250.6 | 1 | 5.7 |
| SPO | 78 | 15 | 0855 | 070029 | 146.3 | 145.2 | 3.1 | 1.2 | 75 | -27.6 | -99.9 | 145.2 | 2 | 153.5 | 0 | 3.1 |
| SPO | 78 | 15 | 0855 | 080029 | 163.2 | 161.9 | 5.3 | 1.2 | 75 | -27.6 | -99.9 | 161.9 | 1 | -1.0 | 0 | -1.0 |
| SPO | 78 | 31 | 0200 | 240030 | 153.4 | 152.2 | 1.2 | 3.2 | 102 | -36.0 | -99.9 | 152.2 | 2 | 156.3 | 0 | 1.2 |
| SPO | 78 | 31 | 0200 | 250030 | 161.6 | 160.3 | 9.6 | 3.2 | 102 | -36.0 | -99.9 | 160.3 | 1 | -1.0 | 0 | -1.0 |
| SPO | 78 | 45 | 2355 | 370031 | 479.8 | 476.0 | U | 4.3 | 70 | -36.7 | -99.9 | 476.0 | 1 | 476.0 | 1 | .0 |
| SPO | 78 | 60 | 0212 | 270032 | 1651.9 | 1639.0 | U | 2.5 | 78 | -57.8 | -99.9 | 1639.0 | 1 | 1639.0 | 1 | .0 |
| SPO | 78 | 60 | 0212 | 280032 | 197.1 | 195.6 | 3.1 | 2.5 | 78 | -57.8 | -99.9 | 195.6 | 2 | 195.6 | 2 | 3.1 |
| SPO | 78 | 91 | 0230 | 290033 | 221.3 | 219.6 | 5.5 | 8.1 | 16 | -47.1 | -99.9 | 219.6 | 1 | 219.6 | 1 | 5.5 |
| SPO | 78 | 91 | 0230 | 300033 | 145.3 | 144.2 | 1.8 | 8.1 | 16 | -47.1 | -99.9 | 144.2 | 2 | 144.2 | 0 | 1.8 |
| SPO | 78 | 121 | 0105 | 310034 | 67.7 | 67.2 | .4 | 4.7 | 88 | -63.6 | -99.9 | 67.2 | 3 | 67.2 | 3 | .4 |
| SPO | 78 | 121 | 0105 | 320034 | 86.9 | 86.2 | .3 | 4.7 | 88 | -63.6 | -99.9 | 86.2 | 3 | 86.2 | 3 | .3 |
| SPO | 78 | 152 | 0918 | 330035 | 140.2 | 139.1 | 3.9 | 7.8 | 14 | -39.2 | -99.9 | 139.1 | 2 | 147.8 | 0 | 3.9 |
| SPO | 78 | 152 | 0918 | 340035 | 157.7 | 156.5 | 8.6 | 7.8 | 14 | -39.2 | -99.9 | 156.5 | 1 | -1.0 | 0 | -1.0 |
| SPO | 78 | 182 | 1012 | 350036 | 169.4 | 168.1 | 1.2 | 3.6 | 84 | -61.4 | -99.9 | 168.1 | 3 | 168.1 | 0 | 1.2 |
| SPO | 78 | 182 | 1012 | 090036 | 98.6 | 97.8 | 1.2 | 3.5 | 84 | -61.4 | -99.9 | 97.8 | 3 | 97.8 | 3 | 1.2 |
| SPO | 78 | 213 | 0140 | 100037 | 160.3 | 159.0 | .6 | 3.4 | 57 | -61.7 | -99.9 | 159.0 | 0 | 162.5 | 0 | 1.7 |
| SPO | 78 | 213 | 0140 | 110037 | 167.2 | 165.9 | 2.3 | 3.4 | 57 | -61.7 | -99.9 | 165.9 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 244 | 0910 | 120038 | 346.9 | 344.2 | 6.7 | 7.1 | 11 | -49.8 | -99.9 | 344.2 | 1 | 344.2 | 1 | 6.7 |
| SPO | 78 | 244 | 0910 | 130038 | 143.8 | 142.7 | 3.0 | 7.1 | 11 | -49.8 | -99.9 | 142.7 | 2 | 142.7 | 0 | 3.0 |
| SPO | 78 | 274 | 0450 | 150039 | 22.3 | 22.1 | 1.7 | 5.9 | 13 | -58.0 | -99.9 | 22.1 | 3 | 22.1 | 3 | 1.7 |
| SPO | 78 | 274 | 0450 | 140039 | 157.6 | 156.4 | 2.4 | 5.9 | 13 | -58.0 | -99.9 | 156.4 | 3 | 156.4 | 0 | 2.4 |

F11 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP CEG C AIR | TEMP CEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPO | 78 | 305 | 0834 | 160040 | 111.6 | 110.7 | 2.5 | 3.7 | 101 | -44.8 | -99.9 | 110.7 | 3 | 110.7 | 3 | 2.5 |
| SPO | 78 | 305 | 0834 | 170040 | 146.7 | 145.6 | 1.2 | 3.7 | 101 | -44.8 | -99.9 | 145.6 | 3 | 145.6 | 0 | 1.2 |
| SPO | 78 | 320 | 0400 | 680041 | 171.3 | 170.0 | 3.4 | 3.1 | 69 | -35.2 | -99.9 | 170.0 | 0 | 171.9 | 0 | 2.5 |
| SPO | 78 | 320 | 0400 | 690041 | 175.2 | 173.8 | 1.1 | 3.1 | 69 | -35.2 | -99.9 | 173.8 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 336 | 2234 | 250042 | 161.7 | 160.4 | .7 | 3.9 | 14 | -29.9 | -99.9 | 160.4 | 0 | 160.5 | 0 | 2.2 |
| SPO | 78 | 336 | 2234 | 240042 | 161.8 | 160.5 | 3.0 | 3.9 | 14 | -29.9 | -99.9 | 160.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 343 | 0140 | 010043 | 167.1 | 165.8 | 2.4 | 3.8 | 49 | -26.8 | -99.9 | 165.8 | 3 | 165.8 | 0 | 2.4 |
| SPO | 78 | 343 | 0140 | 020043 | 184.0 | 182.6 | 2.2 | 3.8 | 49 | -26.8 | -99.9 | 182.6 | 3 | 182.6 | 3 | 2.2 |
| SPO | 78 | 351 | 0210 | 060044 | 156.2 | 155.0 | .6 | 2.2 | 83 | -26.5 | -99.9 | 155.0 | 3 | 166.8 | 0 | .6 |
| SPO | 78 | 351 | 0210 | 070044 | 180.0 | 178.6 | 2.2 | 2.2 | 83 | -26.5 | -99.9 | 178.6 | 3 | -1.0 | 0 | -1.0 |
| SPO | 78 | 357 | 0045 | 030045 | 263.6 | 261.5 | .5 | 2.3 | 15 | -28.6 | -99.9 | 261.5 | 3 | 261.5 | 3 | .5 |
| SPO | 78 | 357 | 0045 | 040045 | 158.3 | 157.1 | 4.0 | 2.3 | 15 | -28.6 | -99.9 | 157.1 | 3 | 157.1 | 0 | 4.0 |
| SPO | 78 | 363 | 0110 | 080046 | 161.6 | 160.3 | 3.4 | 6.3 | 6 | -16.6 | -99.9 | 160.3 | 0 | 161.3 | 0 | 2.8 |
| SPO | 78 | 363 | 0110 | 050046 | 163.5 | 162.2 | 2.0 | 6.3 | 6 | -16.6 | -99.9 | 162.2 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 2 | 2240 | 340047 | 157.7 | 156.5 | 1.4 | 6.0 | 67 | -20.9 | -99.9 | 156.5 | 3 | 160.8 | 0 | 1.4 |
| SPO | 79 | 2 | 2240 | 350047 | 166.4 | 165.1 | 2.7 | 6.0 | 67 | -20.9 | -99.9 | 165.1 | 3 | -1.0 | 0 | -1.0 |
| SPO | 79 | 8 | 2300 | 330048 | 153.6 | 152.4 | 3.7 | 7.2 | 15 | -22.2 | -99.9 | 152.4 | 3 | 152.4 | 0 | 3.7 |
| SPO | 79 | 8 | 2300 | 370048 | 242.0 | 240.1 | 4.7 | 7.2 | 15 | -22.2 | -99.9 | 240.1 | 3 | 240.1 | 3 | 4.7 |
| SPO | 79 | 13 | 0145 | 290049 | 157.4 | 156.2 | .8 | 4.0 | 74 | -26.0 | -99.9 | 156.2 | 0 | 156.4 | 0 | 2.5 |
| SPO | 79 | 13 | 0145 | 300049 | 157.9 | 156.7 | 3.4 | 4.0 | 74 | -26.0 | -99.9 | 156.7 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 18 | 0155 | 260050 | 251.9 | 249.9 | 2.2 | 3.4 | 109 | -29.8 | -99.9 | 249.9 | 2 | 249.9 | 2 | 2.2 |
| SPO | 79 | 23 | 0125 | 270051 | 167.0 | 165.7 | 2.7 | 4.0 | 8 | -26.7 | -99.9 | 165.7 | 0 | 162.9 | 0 | 2.5 |
| SPO | 79 | 23 | 0125 | 280051 | 161.4 | 160.1 | 2.3 | 4.0 | 8 | -26.7 | -99.9 | 160.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 27 | 0030 | 090052 | 151.3 | 150.1 | .8 | 4.2 | 85 | -30.3 | -99.9 | 150.1 | 0 | 152.1 | 0 | .9 |
| SPO | 79 | 27 | 0030 | 100052 | 155.2 | 154.0 | 1.0 | 4.2 | 85 | -30.3 | -99.9 | 154.0 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 34 | 0025 | 110053 | 182.6 | 181.2 | 1.5 | 5.8 | 40 | -33.3 | -99.9 | 181.2 | 0 | 178.7 | 0 | 1.2 |
| SPO | 79 | 34 | 0025 | 120053 | 177.6 | 176.2 | .7 | 5.8 | 40 | -33.3 | -99.9 | 176.2 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 37 | 2325 | 130054 | 151.4 | 150.2 | 2.5 | 4.2 | 51 | -39.1 | -99.9 | 150.2 | 0 | 152.1 | 0 | 2.7 |
| SPO | 79 | 37 | 2325 | 140054 | 155.3 | 154.1 | 2.9 | 4.2 | 51 | -39.1 | -99.9 | 154.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 284 | 0040 | 020055 | 222.2 | 220.5 | 1.4 | 6.7 | 11 | -53.0 | -99.9 | 220.5 | 3 | 220.5 | 3 | 1.4 |
| SPO | 79 | 284 | 0040 | 010055 | 212.4 | 210.7 | 3.4 | 6.7 | 11 | -53.0 | -99.9 | 210.7 | 3 | 210.7 | 3 | 3.4 |
| SPO | 79 | 291 | 0430 | 060056 | 197.8 | 196.3 | 2.5 | 5.2 | 64 | -54.2 | -99.9 | 196.3 | 3 | 196.3 | 3 | 2.5 |
| SPO | 79 | 291 | 0430 | 070056 | 281.8 | 279.6 | 1.3 | 5.2 | 64 | -54.2 | -99.9 | 279.6 | 3 | 279.6 | 3 | 1.3 |
| SPO | 79 | 297 | 2320 | 250057 | 221.9 | 220.2 | .6 | 4.7 | 55 | -47.8 | -99.9 | 220.2 | 3 | 220.2 | 3 | .6 |
| SPO | 79 | 297 | 2320 | 240057 | 262.1 | 260.0 | 1.6 | 4.7 | 55 | -47.8 | -99.9 | 260.0 | 3 | 260.0 | 3 | 1.6 |
| SPO | 79 | 305 | 0330 | 690058 | 224.6 | 222.8 | U | 7.1 | 342 | -43.2 | -99.9 | 222.8 | 1 | 222.8 | 1 | .0 |
| SPO | 79 | 305 | 0330 | 680058 | 205.2 | 203.6 | 2.0 | 7.1 | 342 | -43.2 | -99.9 | 203.6 | 2 | 203.6 | 2 | 2.0 |
| SPO | 79 | 312 | 0457 | 040059 | 170.4 | 169.1 | 1.0 | 4.4 | 330 | -41.3 | -99.9 | 169.1 | 3 | 169.1 | 0 | 1.0 |
| SPO | 79 | 312 | 0457 | 050059 | 215.7 | 214.0 | 1.5 | 4.4 | 330 | -41.3 | -99.9 | 214.0 | 3 | 214.0 | 3 | 1.5 |
| SPO | 79 | 319 | 2340 | 330060 | 167.8 | 166.5 | .1 | 7.1 | 30 | -40.8 | -99.9 | 166.5 | 2 | 166.5 | 0 | .1 |
| SPO | 79 | 319 | 2340 | 340061 | 167.8 | 166.5 | 2.3 | 7.1 | 30 | -40.8 | -99.9 | 166.5 | 2 | 166.5 | 0 | 2.3 |
| SPO | 79 | 319 | 2340 | 380061 | 260.0 | 258.0 | 7.6 | 7.1 | 30 | -40.8 | -99.9 | 258.0 | 1 | 258.0 | 1 | 7.6 |
| SPO | 79 | 325 | 2300 | 370062 | 230.9 | 229.1 | 1.7 | 5.3 | 67 | -30.9 | -99.9 | 229.1 | 3 | 229.1 | 3 | 1.7 |
| SPO | 79 | 325 | 2300 | 130062 | 170.0 | 168.7 | 3.9 | 5.3 | 67 | -30.9 | -99.9 | 168.7 | 3 | 168.7 | 0 | 3.9 |
| SPO | 79 | 333 | 2310 | 520063 | 188.0 | 186.5 | 1.7 | 3.8 | 117 | 26.2 | -99.9 | 186.5 | 3 | 186.5 | 0 | 1.7 |
| SPO | 79 | 333 | 2310 | 400063 | 272.3 | 270.2 | 1.8 | 3.8 | 117 | 27.4 | -99.9 | 270.2 | 3 | 270.2 | 3 | 1.8 |
| SPO | 79 | 340 | 2320 | 350064 | 178.9 | 177.5 | 2.3 | 3.8 | 30 | -31.1 | -99.9 | 177.5 | 2 | 177.5 | 0 | 2.3 |
| SPO | 79 | 346 | 2300 | 110065 | 251.4 | 249.4 | 1.9 | 4.2 | 90 | -27.0 | -99.9 | 249.4 | 3 | 249.4 | 3 | 1.9 |
| SPO | 79 | 346 | 2300 | 140065 | 174.5 | 173.1 | 2.3 | 4.2 | 90 | -27.0 | -99.9 | 173.1 | 3 | 173.1 | 0 | 2.3 |
| SPO | 79 | 354 | 2255 | 120066 | 257.2 | 255.2 | 1.2 | 2.5 | 67 | -24.0 | -99.9 | 255.2 | 3 | 255.2 | 3 | 1.2 |
| SPO | 79 | 354 | 2255 | 290066 | 211.0 | 209.3 | 2.5 | 2.5 | 67 | -24.0 | -99.9 | 209.3 | 3 | 209.3 | 3 | 2.5 |
| SPO | 79 | 360 | 2305 | 080067 | 170.3 | 169.0 | 1.6 | 4.9 | 5 | -26.0 | -99.9 | 169.0 | 3 | 169.0 | 0 | 1.6 |
| SPO | 79 | 360 | 2305 | 280067 | 210.6 | 209.0 | 1.5 | 4.9 | 5 | -26.0 | -99.9 | 209.0 | 3 | 209.0 | 3 | 1.5 |

# Appendix C: $CCl_2F_2$ Data for Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole, 7 March 1977 to 31 December 1979

Description of Data Sets:

1. Data analyzed on chromatograph; calibrations performed using reference gas 3072 (December 1977), 253.4 pptv.

2. Data corrected for use of unelectropolished sample flasks (correction factor = 0.900), for $CCl_2F_2$ reference gas calibration drift [see Eq. (3) of Sec. 2.3], and for flask air sample contamination during 1977 and 1978 at Barrow where pure $CCl_2F_2$ was used to calibrate a nephelometer.

3. $CCl_2F_2$ mole fractions in dry air. Flags F3 (column 14) associated with data set 3 are the following.

   0: Optimum pair-sample data--s.d. $\leq$6.0 pptv and concentration difference $\leq$9.8 pptv.

   1: Exceeded s.d. of 6.0 pptv.

   2: Single sample, or pair member of sample already flagged.

   3: Concentration difference for samples of pair exceeded 9.8 pptv.

   4: Meteorological criteria not satisfied. Applied only to Niwot Ridge data. Acceptable wind speeds and directions are $>1.5$ m $s^{-1}$ and 180° through 45°, respectively.

   5: Previously unflagged data, subjectively determined to be outlying.

   6: Sample not representative of global background conditions due to local pollution and/or sample contamination. Applicable only to Niwot Ridge data.

   Data set 3 is intended for use by researchers who desire to apply their own data selection criteria for improvement of data quality and identification of background measurement conditions.

4. Select data set-$CCl_2F_2$ mole fractions in dry air. Flags F4 (column 16) associated with data set 4 are the following.

   0: Optimum pair-sample data, with pair values averaged. Also, $CCl_2F_2$ mole fractions (with pair values averaged), flagged 1 to 4 in data set 3, that lie within ±3 r.s.d. of the regression line fitted to the optimum pair-sample data.

   1-6: As flags 1 to 6 of data set 3.

   Data flagged 0 in data set 4 presumably represent atmospheric background measurement conditions at the various stations. They are intended for use by researchers who accept as satisfactory the data selection procedures outlined in this report.

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 77 | 122 | 2236 | 020122 | 550.5 | 493.1 | 5.6 | 6.4 | 54 | -11.2 | -16.5 | 493.9 | 2 | 493.9 | 2 | 5.6 |
| BRW | 77 | 144 | 2000 | 050124 | 2630.0 | 2356.8 | 12.7 | 6.5 | 65 | -4.4 | -9.1 | 2364.1 | 1 | 2364.1 | 1 | 12.7 |
| BRW | 77 | 153 | 0030 | 020125 | 311.2 | 278.9 | 1.3 | 2.4 | 178 | 3.9 | -3.2 | 280.3 | 2 | 280.3 | 0 | 1.3 |
| BRW | 77 | 167 | 2350 | 020127 | 367.0 | 329.0 | 0 | 9.1 | 107 | 3.8 | .2 | 331.1 | 1 | 331.1 | 1 | .0 |
| BRW | 77 | 215 | 0153 | 050128 | 3172.0 | 2846.9 | 10.0 | 6.1 | 275 | 10.0 | 6.1 | 2864.3 | 1 | 2864.3 | 1 | 10.0 |
| BRW | 77 | 220 | 2351 | 030129 | 426.4 | 382.7 | 1.1 | 11.2 | 85 | 4.0 | 3.3 | 381.0 | 2 | 381.0 | 2 | 1.1 |
| BRW | 77 | 229 | 0200 | 020130 | 377.4 | 338.8 | 14.1 | 4.0 | 110 | 15.5 | 11.9 | 334.4 | 1 | 334.4 | 1 | 14.1 |
| BRW | 77 | 247 | 0045 | 050131 | 1008.0 | 905.3 | 10.6 | 3.9 | 260 | 8.5 | 7.9 | 868.6 | 1 | 868.6 | 1 | 10.6 |
| BRW | 77 | 254 | 0011 | 020132 | 504.5 | 453.2 | 14.7 | 8.5 | 76 | 2.2 | -1.1 | 429.1 | 1 | 429.1 | 1 | 14.7 |
| BRW | 77 | 260 | 2025 | 030133 | 434.4 | 390.2 | 2.8 | 5.4 | 90 | .2 | -1.1 | 367.1 | 2 | 367.1 | 2 | 2.8 |
| BRW | 77 | 271 | 2205 | 050134 | 555.8 | 499.4 | 3.7 | 8.7 | 15 | -2.2 | -4.4 | 464.4 | 2 | 464.4 | 2 | 3.7 |
| BRW | 77 | 281 | 0005 | 020135 | 365.4 | 328.4 | 3.0 | 5.3 | 135 | -.6 | -3.1 | 303.1 | 2 | 303.1 | 2 | 3.0 |
| BRW | 77 | 284 | 2353 | 030136 | 527.4 | 474.0 | 41.3 | 16.0 | 80 | -3.3 | -6.8 | 436.0 | 1 | 436.0 | 1 | 41.3 |
| BRW | 77 | 293 | 2302 | 050137 | 683.6 | 614.6 | 34.5 | 12.0 | 70 | -7.2 | -8.3 | 561.7 | 1 | 561.7 | 1 | 34.5 |
| BRW | 77 | 306 | 0055 | 020138 | 463.2 | 416.5 | 1.9 | 5.5 | 30 | -21.3 | -21.7 | 377.4 | 2 | 377.4 | 2 | 1.9 |
| BRW | 77 | 313 | 2238 | 030139 | 641.1 | 576.6 | 7.9 | 6.5 | 10 | -26.1 | -26.4 | 520.7 | 1 | 520.7 | 1 | 7.9 |
| BRW | 77 | 330 | 2200 | 020141 | 1167.0 | 1050.0 | 23.3 | 3.3 | 217 | -22.5 | -26.7 | 943.3 | 1 | 943.3 | 1 | 23.3 |
| BRW | 77 | 215 | 0153 | 180128 | 267.6 | 266.9 | 1.5 | 6.1 | 275 | 10.0 | 6.1 | 268.5 | 3 | 268.5 | 3 | 1.5 |
| BRW | 77 | 215 | 0153 | 190128 | 289.4 | 288.6 | 2.7 | 6.1 | 275 | 10.0 | 6.1 | 290.4 | 3 | 290.4 | 0 | 2.7 |
| BRW | 77 | 220 | 2351 | 200129 | 330.2 | 329.3 | 24.8 | 11.2 | 85 | 4.0 | 3.3 | 327.8 | 1 | 327.8 | 1 | 24.8 |
| BRW | 77 | 220 | 2351 | 210129 | 350.8 | 349.9 | 3.6 | 11.2 | 85 | 4.0 | 3.3 | 348.3 | 2 | 348.3 | 2 | 3.6 |
| BRW | 77 | 229 | 0200 | 220130 | 283.9 | 283.2 | 5.4 | 4.0 | 110 | 15.5 | 11.9 | 279.5 | 3 | 286.6 | 0 | 5.4 |
| BRW | 77 | 229 | 0200 | 230130 | 298.4 | 297.7 | 4.0 | 4.0 | 110 | 15.5 | 11.9 | 293.8 | 3 | -1.0 | 0 | -1.0 |
| BRW | 77 | 247 | 0045 | 180131 | 283.1 | 282.5 | 1.5 | 3.9 | 260 | 8.5 | 7.9 | 271.0 | 3 | 271.0 | 3 | 1.5 |
| BRW | 77 | 247 | 0045 | 190131 | 302.6 | 302.0 | 2.2 | 3.9 | 260 | 8.5 | 7.9 | 289.7 | 3 | 289.7 | 0 | 2.2 |
| BRW | 77 | 254 | 0011 | 200132 | 289.6 | 289.0 | 6.9 | 8.5 | 76 | 2.2 | -1.1 | 273.7 | 1 | 273.7 | 0 | 6.9 |
| BRW | 77 | 254 | 0011 | 210132 | 280.1 | 279.6 | 1.2 | 8.5 | 76 | 2.2 | -1.1 | 264.7 | 2 | 264.7 | 2 | 1.2 |
| BRW | 77 | 260 | 2025 | 220133 | 282.9 | 282.4 | 1.3 | 5.4 | 90 | .2 | -1.1 | 265.7 | 3 | 265.7 | 3 | 1.3 |
| BRW | 77 | 260 | 2025 | 230133 | 304.8 | 304.2 | 3.3 | 5.4 | 90 | .2 | -1.1 | 286.2 | 3 | 286.2 | 0 | 3.3 |
| BRW | 77 | 271 | 2205 | 180134 | 294.3 | 293.8 | 3.2 | 8.7 | 15 | -2.2 | -4.4 | 273.2 | 3 | 281.7 | 0 | 3.2 |
| BRW | 77 | 271 | 2205 | 190134 | 312.5 | 312.0 | 1.6 | 8.7 | 15 | -2.2 | -4.4 | 290.1 | 3 | -1.0 | 0 | -1.0 |
| BRW | 77 | 281 | 0005 | 200135 | 304.4 | 304.0 | 1.8 | 5.3 | 135 | -.6 | -3.1 | 280.5 | 3 | 280.5 | 0 | 1.8 |
| BRW | 77 | 281 | 0005 | 210135 | 286.0 | 285.6 | 3.6 | 5.3 | 135 | -.6 | -3.1 | 263.6 | 3 | 263.6 | 3 | 3.6 |
| BRW | 77 | 284 | 2353 | 220136 | 292.6 | 292.2 | 3.3 | 16.0 | 80 | -3.3 | -6.8 | 268.8 | 2 | 268.8 | 2 | 3.3 |
| BRW | 77 | 284 | 2353 | 230136 | 317.6 | 317.2 | 7.8 | 16.0 | 80 | -3.3 | -6.8 | 291.7 | 1 | 291.7 | 0 | 7.8 |
| BRW | 77 | 293 | 2302 | 180137 | 308.1 | 307.8 | 4.0 | 12.0 | 70 | -7.2 | -8.3 | 281.3 | 3 | 281.3 | 0 | 4.0 |
| BRW | 77 | 293 | 2302 | 190137 | 333.9 | 333.5 | 2.8 | 12.0 | 70 | -7.2 | -8.3 | 304.9 | 3 | 304.9 | 3 | 2.8 |
| BRW | 77 | 306 | 0055 | 200138 | 310.6 | 310.3 | 2.7 | 5.5 | 30 | -21.3 | -21.7 | 281.2 | 3 | 287.3 | 0 | 2.7 |
| BRW | 77 | 306 | 0055 | 210138 | 324.1 | 323.8 | 2.9 | 5.5 | 30 | -21.3 | -21.7 | 293.4 | 3 | -1.0 | 0 | -1.0 |
| BRW | 77 | 313 | 2238 | 220139 | 299.0 | 298.8 | 2.0 | 6.5 | 10 | -26.1 | -26.4 | 269.8 | 3 | 269.8 | 3 | 2.0 |
| BRW | 77 | 313 | 2238 | 230139 | 315.8 | 315.6 | .4 | 6.5 | 10 | -26.1 | -26.4 | 285.0 | 3 | 285.0 | 0 | .4 |
| BRW | 77 | 318 | 2100 | 180140 | 317.7 | 317.5 | 3.5 | 8.0 | 62 | -23.0 | -25.6 | 286.2 | 0 | 288.8 | 0 | 2.5 |
| BRW | 77 | 318 | 2100 | 190140 | 323.4 | 323.2 | .8 | 8.0 | 62 | -23.0 | -25.6 | 291.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 330 | 2200 | 200141 | 366.1 | 366.0 | 3.0 | 3.3 | 217 | -22.5 | -26.7 | 328.8 | 3 | 328.8 | 3 | 3.0 |
| BRW | 77 | 330 | 2200 | 210141 | 391.1 | 391.0 | 3.6 | 3.3 | 217 | -22.5 | -26.7 | 351.2 | 3 | 351.2 | 3 | 3.6 |
| BRW | 77 | 345 | 0142 | 220142 | 323.9 | 323.9 | 1.1 | 9.5 | 320 | -30.0 | -31.7 | 290.2 | 0 | 295.0 | 0 | 3.1 |
| BRW | 77 | 345 | 0142 | 230142 | 334.6 | 334.6 | 4.2 | 9.6 | 320 | -30.0 | -31.7 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 351 | 0130 | 180143 | 344.0 | 344.0 | 3.4 | 4.5 | 125 | -34.4 | -38.1 | 308.0 | 5 | 308.9 | 5 | 2.5 |
| BRW | 77 | 351 | 0130 | 190143 | 345.9 | 345.9 | .9 | 4.5 | 125 | -34.4 | -38.1 | 309.7 | 5 | -1.0 | 5 | -1.0 |
| BRW | 77 | 363 | 0036 | 200144 | 323.2 | 323.3 | 8.0 | 10.2 | 115 | -16.5 | -18.9 | 289.7 | 1 | 291.7 | 0 | 8.0 |
| BRW | 77 | 363 | 0036 | 210144 | 327.5 | 327.6 | 2.0 | 10.2 | 115 | -16.5 | -18.9 | 293.6 | 2 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 78 | 6 | 0142 | 220145 | 315.1 | 315.3 | 2.7 | 6.4 | 99 | -21.3 | -25.6 | 282.5 | 3 | 291.0 | 0 | 2.7 |
| BRW | 78 | 6 | 0142 | 230145 | 334.1 | 334.3 | 4.8 | 6.4 | 99 | -21.3 | -25.6 | 299.5 | 3 | -1.0 | 0 | -1.0 |
| BRW | 78 | 13 | 0110 | 200146 | 317.7 | 317.9 | 1.8 | 9.1 | 72 | -15.3 | -15.3 | 285.4 | 0 | 284.0 | 0 | 1.6 |
| BRW | 78 | 13 | 0110 | 210146 | 314.8 | 315.0 | 1.3 | 9.1 | 72 | -15.3 | -15.3 | 282.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 18 | 2340 | 180147 | 4948.0 | 4951.9 | 37.0 | 2.7 | 60 | -21.0 | -23.3 | 4443.7 | 1 | 4443.7 | 1 | 37.0 |
| BRW | 78 | 18 | 2340 | 190147 | 4958.0 | 4962.0 | 19.0 | 2.7 | 60 | -21.0 | -23.3 | 4452.6 | 1 | 4452.6 | 1 | 19.0 |
| BRW | 78 | 28 | 0150 | 200148 | 353.1 | 353.5 | 5.1 | 4.2 | 75 | -29.1 | -30.6 | 317.6 | 3 | 317.6 | 3 | 5.1 |
| BRW | 78 | 28 | 0150 | 210148 | 466.9 | 467.4 | 3.6 | 4.2 | 75 | -29.1 | -30.6 | 419.9 | 3 | 419.9 | 3 | 3.6 |
| BRW | 78 | 33 | 0100 | 220149 | 311.4 | 311.7 | 5.7 | 7.0 | 72 | -27.0 | -30.6 | 280.4 | 3 | 280.4 | 0 | 5.7 |
| BRW | 78 | 33 | 0100 | 230149 | 353.1 | 353.5 | .6 | 7.0 | 72 | -27.0 | -30.6 | 318.0 | 3 | 318.0 | 3 | .6 |
| BRW | 78 | 40 | 2158 | 180150 | 336.3 | 336.7 | .1 | 4.5 | 79 | -39.3 | -43.1 | 303.3 | 5 | 306.9 | 5 | 1.3 |
| BRW | 78 | 40 | 2158 | 190150 | 344.3 | 344.7 | 1.8 | 4.6 | 79 | -39.3 | -43.1 | 310.5 | 5 | -1.0 | 5 | -1.0 |
| BRW | 78 | 45 | 2059 | 220151 | 316.1 | 316.5 | 2.0 | 8.3 | 60 | -21.0 | -26.7 | 285.6 | 0 | 289.2 | 0 | 1.5 |
| BRW | 78 | 45 | 2059 | 230151 | 323.9 | 324.3 | .5 | 8.3 | 60 | -21.0 | -26.7 | 292.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 54 | 2350 | 180152 | 348.6 | 349.1 | 5.8 | 4.2 | 57 | -21.7 | -27.2 | 315.9 | 5 | 318.0 | 5 | 4.4 |
| BRW | 78 | 54 | 2350 | 190152 | 353.3 | 353.9 | 2.3 | 4.2 | 57 | -21.7 | -27.2 | 320.2 | 5 | -1.0 | 5 | -1.0 |
| BRW | 78 | 64 | 0302 | 200153 | 931.4 | 933.1 | 2.1 | 8.9 | 35 | -24.4 | -29.4 | 846.9 | 5 | 846.5 | 5 | 2.0 |
| BRW | 78 | 64 | 0302 | 210153 | 930.5 | 932.2 | 1.8 | 8.9 | 35 | -24.4 | -29.4 | 846.1 | 5 | -1.0 | 5 | -1.0 |
| BRW | 78 | 67 | 2223 | 180154 | 321.7 | 322.3 | 2.6 | 12.3 | 59 | -21.3 | -23.9 | 293.0 | 0 | 297.4 | 0 | 2.1 |
| BRW | 78 | 67 | 2223 | 190154 | 331.5 | 332.1 | 1.4 | 12.3 | 59 | -21.3 | -23.9 | 301.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 78 | 0211 | 180155 | 331.0 | 331.7 | 1.9 | 4.5 | 10 | -19.3 | -21.7 | 302.8 | 3 | 302.8 | 0 | 1.9 |
| BRW | 78 | 78 | 0211 | 190155 | 375.9 | 376.7 | 2.2 | 4.5 | 10 | -19.3 | -21.7 | 343.9 | 3 | 343.9 | 3 | 2.2 |
| BRW | 78 | 86 | 2037 | 220156 | 301.1 | 301.8 | 8.4 | 6.4 | 30 | -22.0 | -25.0 | 276.3 | 1 | 276.3 | 1 | 8.4 |
| BRW | 78 | 86 | 2037 | 230156 | 309.3 | 310.0 | 6.2 | 6.4 | 30 | -22.0 | -25.0 | 283.9 | 1 | 283.9 | 0 | 6.2 |
| BRW | 78 | 93 | 2034 | 200157 | 303.8 | 304.5 | 2.7 | 6.6 | 80 | -25.6 | -29.4 | 279.6 | 0 | 275.7 | 0 | 2.3 |
| BRW | 78 | 93 | 2034 | 210157 | 295.3 | 296.0 | 1.8 | 6.5 | 80 | -25.6 | -29.4 | 271.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 101 | 2139 | 220158 | 283.5 | 284.2 | 3.2 | 4.9 | 85 | -20.7 | -26.1 | 261.9 | 3 | 261.9 | 3 | 3.2 |
| BRW | 78 | 101 | 2139 | 230158 | 294.6 | 295.4 | 1.5 | 4.9 | 85 | -20.7 | -26.1 | 272.2 | 3 | 272.2 | 3 | 1.5 |
| BRW | 78 | 108 | 2339 | 180159 | 296.9 | 297.7 | 9.5 | 7.3 | 144 | -11.0 | -12.8 | 275.7 | 1 | 275.7 | 1 | 9.5 |
| BRW | 78 | 108 | 2339 | 190159 | 305.0 | 305.8 | 8.1 | 7.3 | 144 | -11.0 | -12.8 | 283.2 | 1 | 283.2 | 0 | 8.1 |
| BRW | 78 | 115 | 0044 | 200160 | 313.6 | 314.5 | 2.8 | 11.6 | 98 | -11.5 | -14.4 | 292.1 | 3 | 292.1 | 0 | 2.8 |
| BRW | 78 | 115 | 0044 | 210160 | 294.7 | 295.5 | 1.7 | 11.6 | 98 | -11.5 | -14.4 | 274.5 | 3 | 274.5 | 3 | 1.7 |
| BRW | 78 | 122 | 2353 | 220161 | 295.7 | 296.6 | 3.8 | 9.0 | 87 | -12.0 | -13.3 | 276.4 | 3 | 276.4 | 3 | 3.8 |
| BRW | 78 | 122 | 2353 | 230161 | 306.5 | 307.4 | 3.4 | 9.0 | 87 | -12.0 | -13.3 | 286.5 | 3 | 286.5 | 0 | 3.4 |
| BRW | 78 | 128 | 1939 | 180162 | 299.4 | 300.3 | .6 | 8.8 | 100 | -11.4 | -16.7 | 280.6 | 3 | 280.6 | 3 | .6 |
| BRW | 78 | 128 | 1939 | 190162 | 323.6 | 324.6 | 4.4 | 8.8 | 100 | -11.4 | -16.7 | 303.3 | 3 | 303.3 | 0 | 4.4 |
| BRW | 78 | 135 | 2340 | 200163 | 303.7 | 304.7 | 3.1 | 7.8 | 79 | -12.4 | -15.0 | 285.7 | 3 | 285.7 | 0 | 3.1 |
| BRW | 78 | 135 | 2340 | 210163 | 291.4 | 292.4 | 4.9 | 7.8 | 79 | -12.4 | -15.0 | 274.2 | 3 | 274.2 | 3 | 4.9 |
| BRW | 78 | 142 | 2250 | 220164 | 307.9 | 309.0 | 16.2 | 4.2 | 68 | -3.3 | -5.6 | 291.3 | 1 | 292.8 | 0 | 16.2 |
| BRW | 78 | 142 | 2250 | 230164 | 311.0 | 312.1 | 9.5 | 4.2 | 68 | -3.3 | -5.6 | 294.3 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 150 | 2350 | 200165 | 303.0 | 304.1 | 2.4 | 6.4 | 145 | -1.9 | -1.9 | 288.3 | 3 | 288.3 | 0 | 2.4 |
| BRW | 78 | 150 | 2350 | 210165 | 289.0 | 290.0 | .7 | 6.4 | 145 | -1.9 | -1.9 | 275.0 | 3 | 275.0 | 3 | .7 |
| BRW | 78 | 160 | 2039 | 220166 | 296.7 | 297.8 | 3.7 | 4.0 | 110 | 3.7 | -1.7 | 283.8 | 3 | 290.6 | 0 | 3.7 |
| BRW | 78 | 160 | 2039 | 230166 | 311.0 | 312.2 | 2.1 | 4.0 | 110 | 3.7 | -1.7 | 297.5 | 3 | -1.0 | 0 | -1.0 |
| BRW | 78 | 164 | 2325 | 200167 | 305.2 | 306.4 | 4.0 | 4.1 | 54 | .6 | -2.2 | 292.5 | 3 | 292.5 | 0 | 4.0 |
| BRW | 78 | 164 | 2325 | 210167 | 292.5 | 293.6 | 1.0 | 4.1 | 54 | .6 | -2.2 | 280.3 | 3 | 280.3 | 3 | 1.0 |
| BRW | 78 | 173 | 2017 | 230168 | 308.2 | 309.5 | 3.3 | 10.3 | 80 | -.8 | -5.8 | 296.4 | 3 | 296.4 | 0 | 3.3 |
| BRW | 78 | 173 | 2017 | 220168 | 287.7 | 288.9 | 1.4 | 10.3 | 80 | -.8 | -5.8 | 276.7 | 3 | 276.7 | 3 | 1.4 |
| BRW | 78 | 179 | 1935 | 200169 | 309.4 | 310.7 | 2.8 | 3.5 | 95 | 2.7 | -.6 | 299.0 | 2 | 291.9 | 0 | 2.8 |
| BRW | 78 | 179 | 1935 | 210169 | 294.7 | 295.9 | 6.8 | 3.5 | 95 | 2.7 | -.6 | 284.8 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 187 | 0115 | 220170 | 286.8 | 288.1 | 1.7 | 5.4 | 65 | 3.0 | 3.0 | 278.8 | 3 | 278.8 | 3 | 1.7 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 78 | 187 | 0115 | 230170 | 307.7 | 309.1 | 3.6 | 5.4 | 65 | 3.0 | 3.0 | 299.1 | 3 | 299.1 | 0 | 3.6 |
| BRW | 78 | 193 | 1925 | 200171 | 302.4 | 303.8 | 6.8 | 6.7 | 105 | 2.5 | .3 | 294.5 | 1 | 294.5 | 0 | 6.8 |
| BRW | 78 | 193 | 1925 | 210171 | 290.1 | 291.4 | .9 | 6.7 | 105 | 2.5 | .3 | 282.5 | 2 | 282.5 | 2 | .9 |
| BRW | 78 | 199 | 0140 | 220172 | 287.5 | 288.8 | 2.0 | 9.4 | 110 | 1.4 | 1.4 | 281.0 | 0 | 284.5 | 0 | 1.6 |
| BRW | 78 | 199 | 0140 | 230172 | 294.7 | 296.1 | 1.2 | 9.4 | 110 | 1.4 | 1.4 | 288.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 212 | 1959 | 210173 | 292.9 | 294.3 | 4.2 | 5.8 | 170 | 15.4 | 13.3 | 290.6 | 0 | 291.6 | 0 | 3.2 |
| BRW | 78 | 212 | 1959 | 200173 | 295.1 | 296.6 | 1.7 | 5.8 | 170 | 15.4 | 13.3 | 292.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 221 | 2250 | 220174 | 287.2 | 288.7 | .7 | 6.7 | 90 | .4 | -1.9 | 283.3 | 3 | 283.3 | 3 | .7 |
| BRW | 78 | 221 | 2250 | 230174 | 304.1 | 305.7 | 4.6 | 6.7 | 90 | .4 | -1.9 | 300.0 | 3 | 300.0 | 0 | 4.6 |
| BRW | 78 | 228 | 1935 | 630175 | 337.3 | 339.1 | 6.4 | 8.5 | 115 | -.7 | -1.4 | 333.9 | 1 | 333.9 | 1 | 6.4 |
| BRW | 78 | 238 | 0130 | 220176 | 281.9 | 283.4 | 6.0 | 4.0 | 75 | 2.3 | 1.1 | 280.6 | 3 | 280.6 | 3 | 6.0 |
| BRW | 78 | 238 | 0130 | 230176 | 304.4 | 306.1 | .4 | 4.0 | 75 | 2.3 | 1.1 | 303.0 | 3 | 303.0 | 0 | .4 |
| BRW | 78 | 242 | 1945 | 200177 | 304.1 | 305.8 | 6.4 | 5.8 | 115 | 7.1 | 6.7 | 304.2 | 1 | 295.4 | 0 | 6.4 |
| BRW | 78 | 242 | 1945 | 210177 | 286.5 | 288.1 | 8.0 | 5.8 | 115 | 7.1 | 6.7 | 286.6 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 248 | 2330 | 630178 | 299.4 | 301.1 | 1.0 | 3.5 | 115 | 7.5 | 7.5 | 300.4 | 2 | 300.4 | 0 | 1.0 |
| BRW | 78 | 256 | 2030 | 230179 | 304.0 | 305.8 | 5.7 | 9.3 | 80 | 2.2 | 1.7 | 305.0 | 2 | 305.0 | 0 | 5.7 |
| BRW | 78 | 261 | 2003 | 200180 | 303.2 | 305.0 | 4.2 | 5.8 | 100 | -1.6 | -4.4 | 304.0 | 2 | 298.0 | 0 | 4.2 |
| BRW | 78 | 261 | 2003 | 210180 | 291.1 | 292.8 | 7.8 | 5.8 | 100 | -1.6 | -4.4 | 291.9 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 268 | 1910 | 590181 | 297.0 | 298.8 | 1.1 | 6.7 | 110 | .4 | .4 | 299.2 | 0 | 297.0 | 0 | 1.2 |
| BRW | 78 | 268 | 1910 | 600181 | 292.8 | 294.6 | 1.2 | 6.7 | 110 | .4 | .4 | 294.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 277 | 2005 | 220182 | 296.7 | 298.6 | 1.8 | 6.3 | 100 | -6.2 | -9.4 | 298.9 | 3 | 298.9 | 0 | 1.8 |
| BRW | 78 | 277 | 2005 | 230182 | 327.6 | 329.7 | 1.0 | 6.3 | 100 | -6.2 | -9.4 | 330.0 | 3 | 330.0 | 3 | 1.0 |
| BRW | 78 | 286 | 2340 | 210183 | 294.4 | 296.3 | .3 | 6.7 | 265 | -3.3 | -5.6 | 297.5 | 0 | 301.7 | 0 | 1.2 |
| BRW | 78 | 286 | 2340 | 200183 | 302.7 | 304.7 | 1.6 | 6.7 | 265 | -3.3 | -5.6 | 305.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 290 | 2030 | 600184 | 298.3 | 300.3 | 1.5 | 4.9 | 70 | -18.9 | -18.9 | 300.7 | 0 | 304.5 | 0 | 1.4 |
| BRW | 78 | 290 | 2030 | 590184 | 305.8 | 307.8 | 1.2 | 4.9 | 70 | -18.9 | -18.9 | 308.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 297 | 0055 | 230185 | 343.4 | 345.7 | 1.2 | 6.7 | 85 | -21.1 | -23.9 | 346.1 | 3 | 346.1 | 3 | 1.2 |
| BRW | 78 | 297 | 0055 | 220185 | 306.6 | 308.7 | .5 | 6.7 | 85 | -21.1 | -23.9 | 309.0 | 3 | 309.0 | 0 | .5 |
| BRW | 78 | 304 | 2020 | 210186 | 305.7 | 307.8 | .9 | 4.5 | 40 | -23.4 | -26.0 | 308.1 | 0 | 312.4 | 0 | 1.0 |
| BRW | 78 | 304 | 2020 | 200186 | 314.3 | 316.5 | 1.0 | 4.5 | 40 | -23.4 | -26.0 | 316.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 316 | 1622 | 590187 | 299.6 | 301.7 | 1.0 | 3.1 | 135 | -7.0 | -9.4 | 302.6 | 0 | 303.0 | 0 | 2.6 |
| BRW | 78 | 316 | 1622 | 600187 | 300.2 | 302.3 | 3.5 | 3.1 | 135 | -7.0 | -9.4 | 303.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 320 | 0125 | 630188 | 308.1 | 310.3 | .3 | 5.4 | 150 | -24.2 | -26.8 | 310.6 | 0 | 311.3 | 0 | .4 |
| BRW | 78 | 320 | 0125 | 220188 | 309.6 | 311.8 | .4 | 5.4 | 150 | -24.2 | -26.8 | 312.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 329 | 2325 | 200189 | 314.8 | 317.1 | .5 | 8.9 | 73 | -23.4 | -23.4 | 317.5 | 0 | 314.3 | 0 | .5 |
| BRW | 78 | 329 | 2325 | 210189 | 308.6 | 310.9 | .4 | 8.9 | 73 | -23.4 | -23.4 | 311.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 341 | 2245 | 590190 | 297.3 | 299.6 | .1 | 6.7 | 30 | -21.0 | -23.6 | 299.9 | 2 | 299.9 | 0 | .1 |
| BRW | 78 | 346 | 2150 | 200191 | 310.6 | 313.0 | 2.9 | 4.5 | 115 | -27.8 | -31.2 | 313.2 | 0 | 309.8 | 0 | 2.2 |
| BRW | 78 | 346 | 2150 | 210191 | 303.9 | 306.3 | 1.0 | 4.5 | 115 | -27.8 | -31.2 | 306.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 354 | 0205 | 590192 | 312.6 | 315.1 | 4.2 | 4.9 | 75 | -34.5 | -37.8 | 315.2 | 3 | 315.2 | 3 | 4.2 |
| BRW | 78 | 354 | 0205 | 600192 | 322.8 | 325.4 | 1.8 | 4.9 | 75 | -34.5 | -37.8 | 325.5 | 3 | 325.5 | 3 | 1.8 |
| BRW | 78 | 361 | 2005 | 220193 | 299.9 | 302.3 | .2 | 4.5 | 105 | -36.6 | -41.0 | 302.4 | 0 | 302.3 | 0 | .6 |
| BRW | 78 | 361 | 2005 | 630193 | 299.6 | 302.0 | .8 | 4.5 | 105 | -36.6 | -41.0 | 302.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 3 | 0335 | 200194 | 308.7 | 311.2 | 2.6 | 4.9 | 127 | -11.4 | -13.2 | 311.9 | 0 | 308.4 | 0 | 1.9 |
| BRW | 79 | 3 | 0335 | 210194 | 301.7 | 304.2 | .3 | 4.9 | 127 | -11.4 | -13.2 | 304.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 8 | 2110 | 600195 | 289.9 | 292.3 | .5 | 5.8 | 105 | -18.9 | -21.7 | 292.7 | 0 | 291.2 | 0 | 1.3 |
| BRW | 79 | 8 | 2110 | 590195 | 287.0 | 289.4 | 1.7 | 5.8 | 105 | -18.9 | -21.7 | 289.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 15 | 2305 | 220196 | 298.6 | 301.1 | 1.4 | 5.8 | 60 | -20.7 | -23.6 | 301.4 | 2 | 300.0 | 0 | 1.4 |
| BRW | 79 | 15 | 2305 | 630196 | 295.8 | 298.3 | 6.8 | 5.8 | 60 | -20.7 | -23.6 | 298.6 | 1 | -1.0 | 0 | -1.0 |
| BRW | 79 | 18 | 2040 | 200197 | 312.1 | 314.8 | 1.1 | 10.3 | 70 | -17.2 | -19.8 | 315.2 | 0 | 311.4 | 0 | 2.4 |
| BRW | 79 | 18 | 2040 | 210197 | 304.5 | 307.1 | 3.2 | 10.3 | 70 | -17.2 | -19.8 | 307.5 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 79 | 33 | 2110 | 590198 | 293.5 | 296.1 | 2.7 | 3.6 | 300 | -33.1 | -37.7 | 296.2 | 0 | 299.2 | 0 | 1.9 |
| BRW | 79 | 33 | 2110 | 600198 | 299.3 | 302.0 | .4 | 3.6 | 300 | -33.1 | -37.7 | 302.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 39 | 1935 | 220199 | 321.1 | 324.0 | 1.4 | 3.1 | 20 | -25.2 | -28.6 | 324.2 | 3 | 324.2 | 3 | 1.4 |
| BRW | 79 | 39 | 1935 | 630199 | 301.8 | 304.5 | 3.7 | 3.1 | 20 | -25.2 | -28.6 | 304.7 | 3 | 304.7 | 0 | 3.7 |
| BRW | 79 | 43 | 2035 | 200200 | 314.9 | 317.8 | 2.7 | 7.6 | 90 | -34.9 | -38.6 | 317.9 | 0 | 317.1 | 0 | 2.8 |
| BRW | 79 | 43 | 2035 | 210200 | 313.4 | 316.3 | 2.8 | 7.6 | 90 | -34.9 | -38.6 | 316.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 49 | 2250 | 590201 | 297.4 | 300.1 | 1.2 | 3.6 | 110 | -28.3 | -32.7 | 300.3 | 0 | 299.1 | 0 | 1.1 |
| BRW | 79 | 49 | 2250 | 600201 | 295.0 | 297.7 | .9 | 3.6 | 110 | -28.3 | -32.7 | 297.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 57 | 2205 | 630202 | 302.0 | 304.8 | .6 | 5.4 | 90 | -27.6 | -32.1 | 305.0 | 0 | 307.3 | 0 | 1.3 |
| BRW | 79 | 57 | 2205 | 220202 | 306.6 | 309.5 | 1.8 | 5.4 | 90 | -27.6 | -32.1 | 309.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 64 | 2030 | 200203 | 310.1 | 313.1 | 2.3 | 11.6 | 65 | -29.8 | -34.8 | 313.2 | 0 | 314.3 | 0 | 1.8 |
| BRW | 79 | 64 | 2030 | 210203 | 312.3 | 315.3 | 1.2 | 11.6 | 65 | -29.8 | -34.8 | 315.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 71 | 1955 | 600204 | 296.7 | 299.6 | 3.6 | 5.4 | 70 | -30.3 | -35.1 | 299.7 | 0 | 302.1 | 0 | 2.6 |
| BRW | 79 | 71 | 1955 | 590204 | 301.5 | 304.4 | .5 | 5.4 | 70 | -30.3 | -35.1 | 304.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 78 | 2325 | 220205 | 320.5 | 323.7 | 0 | 2.2 | 20 | -31.5 | -37.3 | 323.8 | 1 | 323.8 | 1 | .0 |
| BRW | 79 | 78 | 2325 | 630205 | 322.5 | 325.7 | .8 | 2.2 | 20 | -31.5 | -37.3 | 325.8 | 2 | 325.8 | 2 | .8 |
| BRW | 79 | 86 | 2005 | 200206 | 307.4 | 310.5 | 1.0 | 8.2 | 105 | -14.6 | -17.2 | 311.0 | 0 | 307.5 | 0 | 1.6 |
| BRW | 79 | 86 | 2005 | 210206 | 300.5 | 303.5 | 2.0 | 8.2 | 105 | -14.6 | -17.2 | 304.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 94 | 0215 | 630207 | 301.9 | 305.0 | .8 | 10.3 | 80 | -23.0 | -26.5 | 305.2 | 0 | 305.4 | 0 | 1.7 |
| BRW | 79 | 94 | 0215 | 220207 | 302.3 | 305.4 | 2.2 | 10.3 | 80 | -23.0 | -26.5 | 305.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 102 | 0130 | 590208 | 300.6 | 303.7 | 1.0 | 7.1 | 98 | -24.2 | -30.0 | 303.9 | 0 | 303.3 | 0 | 1.7 |
| BRW | 79 | 102 | 0130 | 600208 | 299.4 | 302.5 | 2.2 | 7.1 | 98 | -24.2 | -30.0 | 302.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 108 | 2155 | 210209 | 299.9 | 303.0 | 1.0 | 6.4 | 70 | -22.7 | -26.5 | 303.3 | 0 | 305.7 | 0 | 1.0 |
| BRW | 79 | 108 | 2151 | 200209 | 304.7 | 307.9 | 1.0 | 6.4 | 70 | -22.7 | -26.5 | 308.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 114 | 0220 | 630210 | 302.7 | 305.9 | 1.2 | 8.9 | 110 | -4.2 | -6.7 | 307.0 | 0 | 306.5 | 0 | 1.4 |
| BRW | 79 | 114 | 0220 | 220210 | 301.7 | 304.9 | 1.5 | 8.9 | 110 | -4.2 | -6.7 | 306.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 121 | 2055 | 600211 | 299.3 | 302.5 | 1.5 | 4.0 | 115 | -4.5 | -7.7 | 303.6 | 2 | 303.6 | 0 | 1.5 |
| BRW | 79 | 127 | 2055 | 200212 | 300.4 | 303.7 | 1.1 | 7.6 | 100 | -2.3 | -5.8 | 304.9 | 0 | 304.9 | 0 | 1.2 |
| BRW | 79 | 127 | 2055 | 210212 | 300.4 | 303.7 | 1.2 | 7.6 | 100 | -2.3 | -5.8 | 304.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 135 | 1955 | 630213 | 398.6 | 403.0 | 2.0 | 4.0 | 70 | -9.5 | -12.3 | 404.0 | 5 | 400.3 | 5 | 3.0 |
| BRW | 79 | 135 | 1955 | 220213 | 391.3 | 395.6 | 3.7 | 4.0 | 70 | -9.5 | -12.3 | 396.6 | 5 | -1.0 | 5 | -1.0 |
| BRW | 79 | 141 | 1855 | 590214 | 302.4 | 305.8 | 1.1 | 4.9 | 40 | -9.6 | -11.1 | 306.6 | 0 | 304.8 | 0 | 1.0 |
| BRW | 79 | 141 | 1855 | 600214 | 298.9 | 302.2 | .9 | 4.9 | 40 | -9.6 | -11.1 | 303.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 151 | 2325 | 210215 | 310.1 | 313.6 | .6 | 4.5 | 220 | 4.8 | -.2 | 315.5 | 3 | 315.5 | 0 | .6 |
| BRW | 79 | 151 | 2325 | 200215 | 326.6 | 330.3 | 1.0 | 4.5 | 220 | 4.8 | -.2 | 332.3 | 3 | 332.3 | 3 | 1.0 |
| BRW | 79 | 155 | 1925 | 220216 | 303.6 | 307.1 | 2.5 | 5.8 | 75 | .7 | -2.1 | 308.7 | 0 | 306.7 | 0 | 1.8 |
| BRW | 79 | 155 | 1925 | 630216 | 299.7 | 303.1 | .4 | 5.8 | 75 | .7 | -2.1 | 304.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 166 | 0001 | 600217 | 299.4 | 302.9 | .2 | 4.0 | 340 | -.8 | -2.6 | 304.4 | 0 | 304.3 | 0 | .2 |
| BRW | 79 | 166 | 0001 | 590217 | 299.1 | 302.6 | .1 | 4.0 | 340 | -.8 | -2.6 | 304.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 169 | 2042 | 200218 | 314.9 | 318.6 | 1.7 | 8.9 | 115 | 1.3 | -.5 | 320.5 | 0 | 316.4 | 0 | 2.4 |
| BRW | 79 | 169 | 2042 | 210218 | 306.9 | 310.5 | 3.0 | 8.9 | 115 | 1.3 | -.5 | 312.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 176 | 1940 | 220219 | 302.9 | 306.5 | 2.2 | 6.7 | 30 | -1.0 | -3.3 | 308.0 | 0 | 308.0 | 0 | 2.6 |
| BRW | 79 | 176 | 1940 | 630219 | 303.0 | 306.6 | 2.9 | 6.7 | 30 | -1.0 | -3.3 | 308.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 183 | 2047 | 600220 | 298.6 | 302.2 | 1.7 | 2.7 | 105 | 7.2 | 4.9 | 304.8 | 0 | 307.2 | 0 | 1.5 |
| BRW | 79 | 183 | 2047 | 590220 | 303.2 | 306.9 | 1.2 | 2.7 | 105 | 7.2 | 4.9 | 309.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 195 | 0215 | 200221 | 304.8 | 308.6 | 2.1 | 6.7 | 270 | 11.2 | 7.3 | 311.7 | 0 | 309.8 | 0 | 1.8 |
| BRW | 79 | 195 | 0215 | 210221 | 301.1 | 304.8 | 1.4 | 6.7 | 270 | 11.2 | 7.3 | 307.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 200 | 1920 | 600222 | 305.3 | 309.1 | 1.6 | 3.6 | 130 | 11.2 | 8.4 | 312.5 | 0 | 312.4 | 0 | 1.6 |
| BRW | 79 | 200 | 1920 | 590222 | 305.2 | 309.0 | 1.6 | 3.6 | 130 | 11.2 | 8.4 | 312.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 204 | 2108 | 630223 | 302.4 | 306.2 | 2.1 | 5.0 | 115 | 4.0 | 3.0 | 308.5 | 0 | 309.5 | 0 | 1.6 |
| BRW | 79 | 204 | 2108 | 220223 | 304.3 | 308.1 | .7 | 5.0 | 115 | 4.0 | 3.0 | 310.4 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 79 | 211 | 0441 | 210224 | 305.4 | 309.3 | 1.8 | 4.9 | 105 | 4.9 | 4.7 | 311.9 | 0 | 313.1 | 0 | 1.7 |
| BRW | 79 | 211 | 0441 | 200224 | 307.7 | 311.6 | 1.5 | 4.9 | 105 | 4.9 | 4.7 | 314.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 218 | 1950 | 590225 | 305.0 | 308.9 | 1.0 | 10.7 | 90 | 1.8 | 1.2 | 311.0 | 0 | 308.8 | 0 | 1.0 |
| BRW | 79 | 218 | 1950 | 600225 | 300.8 | 304.7 | .9 | 10.7 | 90 | 1.8 | 1.2 | 306.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 225 | 1855 | 200226 | 303.6 | 307.5 | 1.5 | 8.9 | 105 | 7.4 | 5.3 | 310.3 | 0 | 309.7 | 0 | 1.1 |
| BRW | 79 | 225 | 1855 | 210226 | 302.4 | 306.3 | .4 | 8.9 | 105 | 7.4 | 5.3 | 309.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 232 | 2059 | 200227 | 360.9 | 365.6 | .7 | 4.0 | 135 | 12.4 | 11.2 | 370.5 | 3 | 370.5 | 3 | .7 |
| BRW | 79 | 232 | 2059 | 210227 | 334.9 | 339.3 | 2.3 | 4.0 | 135 | 12.4 | 11.2 | 343.8 | 3 | 343.8 | 3 | 2.3 |
| BRW | 79 | 249 | 1855 | 600229 | 309.5 | 313.7 | 16.4 | 9.8 | 145 | 4.2 | 2.7 | 316.0 | 1 | 314.9 | 0 | 16.4 |
| BRW | 79 | 249 | 1855 | 590229 | 307.3 | 311.4 | 3.7 | 9.8 | 145 | 4.2 | 2.7 | 313.7 | 2 | -1.0 | 0 | -1.0 |
| BRW | 79 | 253 | 1900 | 220230 | 311.0 | 315.2 | 3.2 | 4.9 | 140 | .8 | -.5 | 317.1 | 0 | 317.6 | 0 | 2.6 |
| BRW | 79 | 253 | 1900 | 630230 | 312.0 | 316.2 | 1.8 | 4.9 | 140 | .8 | -.5 | 318.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 262 | 1840 | 210231 | 310.7 | 315.0 | 1.7 | 5.4 | 85 | -.4 | -4.1 | 316.4 | 0 | 320.1 | 0 | 2.2 |
| BRW | 79 | 262 | 1840 | 200231 | 318.0 | 322.4 | 2.6 | 5.4 | 85 | -.4 | -4.1 | 323.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 268 | 2015 | 590232 | 308.0 | 312.3 | 1.2 | 8.0 | 115 | 1.8 | -.2 | 314.1 | 2 | 314.7 | 0 | 1.2 |
| BRW | 79 | 268 | 2015 | 600232 | 309.0 | 313.3 | 6.8 | 8.0 | 115 | 1.8 | -.2 | 315.2 | 1 | -1.0 | 0 | -1.0 |
| BRW | 79 | 274 | 1845 | 220233 | 308.5 | 312.8 | 3.2 | 8.1 | 85 | -.6 | -2.2 | 314.4 | 0 | 314.4 | 0 | 2.4 |
| BRW | 79 | 274 | 1845 | 630233 | 308.5 | 312.8 | 1.3 | 8.1 | 85 | -.6 | -2.2 | 314.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 281 | 2105 | 590234 | 312.7 | 317.1 | .2 | 7.5 | 80 | -4.5 | -5.7 | 318.4 | 0 | 316.9 | 0 | .4 |
| BRW | 79 | 281 | 2105 | 600234 | 309.7 | 314.1 | .6 | 7.5 | 80 | -4.5 | -5.7 | 315.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 289 | 2016 | 630235 | 307.0 | 311.4 | 1.2 | 4.5 | 100 | -11.0 | -14.0 | 312.1 | 0 | 313.4 | 0 | 1.4 |
| BRW | 79 | 289 | 2016 | 220235 | 309.6 | 314.0 | 1.5 | 4.5 | 100 | -11.0 | -14.0 | 314.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 295 | 2140 | 210236 | 305.1 | 309.5 | 1.3 | 11.6 | 70 | -8.8 | -9.7 | 310.4 | 0 | 311.5 | 0 | 1.3 |
| BRW | 79 | 295 | 2140 | 200236 | 307.2 | 311.6 | 1.3 | 11.6 | 70 | -8.8 | -9.7 | 312.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 302 | 0130 | 220237 | 303.5 | 307.9 | 1.3 | 4.5 | 65 | -18.2 | -19.5 | 308.4 | 0 | 310.3 | 0 | .9 |
| BRW | 79 | 302 | 0130 | 630237 | 307.3 | 311.8 | .3 | 4.5 | 65 | -18.2 | -19.5 | 312.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 309 | 2030 | 210238 | 304.2 | 308.7 | 5.0 | 6.7 | 90 | -11.0 | -16.0 | 309.3 | 0 | 312.8 | 0 | 3.5 |
| BRW | 79 | 309 | 2030 | 200238 | 311.1 | 315.7 | .3 | 6.7 | 90 | -11.0 | -16.0 | 316.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 319 | 0030 | 600239 | 303.2 | 307.7 | 3.1 | 4.9 | 70 | -12.7 | -18.0 | 308.2 | 0 | 310.7 | 0 | 2.8 |
| BRW | 79 | 319 | 0030 | 590239 | 308.0 | 312.6 | 2.4 | 4.9 | 70 | -12.7 | -18.0 | 313.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 326 | 2150 | 630240 | 313.4 | 318.1 | 4.1 | 9.1 | 30 | -23.6 | -27.5 | 318.4 | 2 | 318.4 | 0 | 4.1 |
| BRW | 79 | 338 | 2130 | 590241 | 314.7 | 319.5 | 3.6 | 6.9 | 98 | -23.6 | -27.5 | 319.8 | 0 | 318.2 | 0 | 2.7 |
| BRW | 79 | 338 | 2130 | 600241 | 311.6 | 316.4 | 1.2 | 6.9 | 98 | -23.6 | -27.5 | 316.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 348 | 2300 | 630242 | 314.0 | 318.9 | 1.8 | 12.4 | 230 | -10.7 | -12.3 | 319.7 | 2 | 319.7 | 0 | 1.8 |
| BRW | 79 | 352 | 2030 | 210243 | 318.0 | 323.0 | 2.3 | 4.5 | 60 | -20.0 | -24.4 | 323.3 | 0 | 323.1 | 0 | 2.2 |
| BRW | 79 | 352 | 2030 | 200243 | 317.6 | 322.6 | 2.1 | 4.5 | 60 | -20.0 | -24.4 | 322.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 358 | 2200 | 590244 | 320.4 | 325.5 | 2.0 | 7.7 | 68 | -31.0 | -37.3 | 325.6 | 0 | 322.2 | 0 | 1.5 |
| BRW | 79 | 358 | 2200 | 600244 | 313.8 | 318.8 | .8 | 7.7 | 68 | -31.0 | -37.3 | 318.9 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 77 | 125 | 1900 | 030058 | 345.3 | 343.7 | 8.3 | 1.8 | 180 | 3.8 | -3.2 | 346.2 | 1 | 346.2 | 1 | 8.3 |
| NWR | 77 | 125 | 1900 | 040058 | 317.9 | 316.4 | 1.4 | 1.8 | 180 | 3.8 | -3.2 | 318.7 | 2 | 318.7 | 2 | 1.4 |
| NWR | 77 | 132 | 1740 | 050059 | 263.5 | 262.3 | 3.5 | .7 | 203 | 7.0 | -11.5 | 263.3 | 3 | 263.3 | 0 | 3.5 |
| NWR | 77 | 132 | 1740 | 060059 | 339.9 | 338.4 | 1.0 | .7 | 203 | 7.0 | -11.5 | 339.7 | 3 | 339.7 | 3 | 1.0 |
| NWR | 77 | 139 | 1740 | 010060 | 267.0 | 265.8 | 3.3 | 0.0 | CLM | -1.0 | -12.5 | 266.8 | 3 | 266.8 | 0 | 3.3 |
| NWR | 77 | 139 | 1740 | 020060 | 334.2 | 332.7 | 3.6 | 0.0 | CLM | -1.0 | -12.5 | 333.9 | 3 | 333.9 | 3 | 3.6 |
| NWR | 77 | 146 | 2050 | 040061 | 290.5 | 289.3 | 2.9 | 0.0 | CLM | 3.3 | -3.8 | 291.3 | 3 | 291.3 | 7 | 2.9 |
| NWR | 77 | 146 | 2050 | 030061 | 312.7 | 311.4 | .6 | 0.0 | CLM | 3.3 | -3.8 | 313.5 | 3 | 313.5 | 3 | .6 |
| NWR | 77 | 151 | 2100 | 050062 | 266.1 | 265.0 | 2.7 | 2.2 | 135 | 14.1 | -4.0 | 266.8 | 3 | 266.8 | 0 | 2.7 |
| NWR | 77 | 151 | 2100 | 060062 | 367.7 | 366.2 | 2.1 | 2.2 | 135 | 14.1 | -4.0 | 368.7 | 3 | 368.7 | 3 | 2.1 |
| NWR | 77 | 159 | 2045 | 010063 | 805.7 | 802.5 | .8 | 0.0 | CLM | 11.8 | 3.3 | 811.9 | 3 | 811.9 | 3 | .8 |
| NWR | 77 | 159 | 2045 | 020063 | 323.5 | 322.2 | .2 | 0.0 | CLM | 11.8 | 3.3 | 326.0 | 3 | 326.0 | 3 | .2 |
| NWR | 77 | 166 | 2150 | 030064 | 303.8 | 302.6 | 4.7 | 2.2 | 225 | 17.6 | -11.0 | 303.9 | 3 | 284.7 | 7 | 4.7 |
| NWR | 77 | 166 | 2150 | 040064 | 265.5 | 264.5 | 1.8 | 2.2 | 225 | 17.6 | -11.0 | 265.6 | 3 | -1.0 | 7 | -1.0 |
| NWR | 77 | 172 | 1800 | 050065 | 270.2 | 269.2 | 3.8 | 4.5 | 270 | 14.0 | -7.2 | 270.7 | 2 | 270.7 | 0 | 3.8 |
| NWR | 77 | 172 | 1800 | 060065 | 1120.0 | 1115.9 | 69.0 | 4.5 | 270 | 14.0 | -7.2 | 1121.9 | 1 | 1121.9 | 1 | 69.0 |
| NWR | 77 | 179 | 1845 | 010066 | 9999.9 | 9964.4 | U | 2.2 | 135 | 17.5 | 7.0 | ****** | 1 | ****** | 1 | .0 |
| NWR | 77 | 179 | 1845 | 020066 | 7359.0 | 7332.9 | U | 2.2 | 135 | 17.5 | 7.0 | 7444.3 | 1 | 7444.3 | 1 | .0 |
| NWR | 77 | 194 | 1830 | 030067 | 271.9 | 271.0 | 2.5 | 8.9 | 270 | 11.5 | 3.7 | 274.3 | 0 | 273.8 | 0 | 2.7 |
| NWR | 77 | 194 | 1830 | 040067 | 270.9 | 270.0 | 2.8 | 8.9 | 270 | 11.5 | 3.7 | 273.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 200 | 1840 | 050068 | 281.0 | 280.1 | U | 0.0 | CLM | 16.0 | 4.2 | 283.6 | 1 | 283.6 | 7 | .0 |
| NWR | 77 | 200 | 1840 | 060068 | 254.2 | 253.4 | U | 0.0 | CLM | 16.0 | 4.2 | 256.6 | 1 | 256.6 | 1 | .0 |
| NWR | 77 | 208 | 2125 | 010069 | 8562.0 | 8536.9 | U | 11.2 | 90 | 16.2 | 1.8 | 8626.8 | 1 | 8626.8 | 1 | .0 |
| NWR | 77 | 208 | 2125 | 020069 | 327.8 | 326.8 | 4.4 | 11.2 | 90 | 16.2 | 1.8 | 330.3 | 2 | 330.3 | 2 | 4.4 |
| NWR | 77 | 214 | 2030 | 030070 | 284.8 | 284.0 | 1.7 | 6.7 | 270 | 19.0 | -4.2 | 285.9 | 0 | 282.3 | 0 | 2.6 |
| NWR | 77 | 214 | 2030 | 040070 | 277.5 | 276.7 | 3.3 | 6.7 | 270 | 19.0 | -4.2 | 278.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 222 | 1800 | 050071 | 270.4 | 269.7 | 5.0 | 2.2 | 270 | 15.0 | .5 | 272.3 | 3 | 272.3 | 0 | 5.0 |
| NWR | 77 | 222 | 1800 | 060071 | 484.7 | 483.4 | 2.8 | 2.2 | 270 | 15.0 | .5 | 488.1 | 3 | 488.1 | 3 | 2.8 |
| NWR | 77 | 229 | 1700 | 010072 | 368.9 | 368.0 | 16.5 | 1.3 | 180 | 12.0 | 7.1 | 373.6 | 1 | 373.6 | 1 | 16.5 |
| NWR | 77 | 237 | 1830 | 030073 | 312.6 | 311.9 | 5.7 | 4.5 | 293 | 11.0 | 6.0 | 316.3 | 3 | 316.3 | 3 | 5.7 |
| NWR | 77 | 237 | 1830 | 040073 | 277.3 | 276.7 | 5.1 | 4.5 | 293 | 11.0 | 6.0 | 280.6 | 3 | 280.6 | 0 | 5.1 |
| NWR | 77 | 244 | 2120 | 050074 | 270.5 | 269.9 | 1.8 | 0.0 | CLM | 14.5 | -4.5 | 271.7 | 2 | 271.7 | 0 | 1.8 |
| NWR | 77 | 258 | 2000 | 040075 | 283.8 | 283.3 | 7.2 | 2.2 | 270 | -4.0 | -8.5 | 284.7 | 1 | 292.7 | 7 | 7.2 |
| NWR | 77 | 258 | 2000 | 030075 | 299.9 | 299.3 | 1.2 | 2.2 | 270 | -4.0 | -8.5 | 300.8 | 2 | -1.0 | 7 | -1.0 |
| NWR | 77 | 265 | 2245 | 010076 | 308.5 | 308.0 | 2.6 | 1.3 | 270 | 13.5 | -14.8 | 308.9 | 3 | 308.9 | 7 | 2.6 |
| NWR | 77 | 265 | 2245 | 020076 | 375.2 | 374.6 | 1.1 | 1.3 | 270 | 13.5 | -14.8 | 375.7 | 3 | 375.7 | 3 | 1.1 |
| NWR | 77 | 272 | 2020 | 030077 | 304.4 | 303.9 | 5.3 | 2.2 | 270 | MSG | MSG | 306.4 | 3 | 292.0 | 7 | 5.3 |
| NWR | 77 | 272 | 2020 | 040077 | 275.9 | 275.5 | 3.2 | 2.2 | 270 | MSG | MSG | 277.7 | 3 | -1.0 | 7 | -1.0 |
| NWR | 77 | 281 | 2300 | 010078 | 305.6 | 305.2 | 5.7 | 6.7 | 270 | -2.0 | -9.8 | 306.5 | 3 | 306.5 | 7 | 5.7 |
| NWR | 77 | 281 | 2300 | 020078 | 332.3 | 331.8 | 2.6 | 6.7 | 270 | -2.0 | -9.8 | 333.3 | 3 | 333.3 | 3 | 2.6 |
| NWR | 77 | 286 | 2140 | 030079 | 340.0 | 339.6 | 1.9 | 4.5 | 270 | 6.0 | -10.5 | 341.0 | 3 | 341.0 | 3 | 1.9 |
| NWR | 77 | 286 | 2140 | 040079 | 299.2 | 297.8 | 2.3 | 4.5 | 270 | 6.0 | -10.5 | 299.1 | 3 | 299.1 | 7 | 2.3 |
| NWR | 77 | 296 | 2215 | 010080 | 308.2 | 307.9 | 2.1 | 2.2 | 270 | 2.5 | -5.8 | 309.7 | 3 | 309.7 | 7 | 2.1 |
| NWR | 77 | 296 | 2215 | 020080 | 356.0 | 355.6 | 1.2 | 2.2 | 270 | 2.5 | -5.8 | 357.8 | 3 | 357.8 | 3 | 1.2 |
| NWR | 77 | 300 | 2110 | 030081 | 311.1 | 310.8 | 3.0 | 2.2 | 180 | 6.5 | -8.5 | 312.3 | 3 | 303.4 | 7 | 3.0 |
| NWR | 77 | 300 | 2110 | 040081 | 293.3 | 293.0 | 1.9 | 2.2 | 180 | 6.5 | -8.5 | 294.5 | 3 | -1.0 | 7 | -1.0 |
| NWR | 77 | 307 | 2315 | 010082 | 292.1 | 291.9 | 3.3 | 2.2 | 225 | 3.5 | -12.2 | 292.9 | 2 | 292.9 | 7 | 3.3 |
| NWR | 77 | 307 | 2315 | 020082 | 321.2 | 320.9 | 6.9 | 2.2 | 225 | 3.5 | -12.2 | 322.1 | 1 | 322.1 | 1 | 6.9 |
| NWR | 77 | 315 | 2020 | 030083 | 306.9 | 306.7 | 5.7 | 4.5 | 270 | 3.0 | -16.2 | 307.5 | 3 | 292.4 | 7 | 5.7 |
| NWR | 77 | 315 | 2020 | 040083 | 276.7 | 276.5 | 2.2 | 4.5 | 270 | 3.0 | -16.2 | 277.3 | 3 | -1.0 | 7 | -1.0 |
| NWR | 77 | 325 | 2200 | 010084 | 288.1 | 288.0 | 3.3 | 4.5 | 270 | -7.0 | MSG | 290.3 | 3 | 299.0 | 7 | 3.3 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 77 | 325 | 2200 | 020084 | 305.4 | 305.3 | 2.1 | 4.5 | 270 | -7.0 | MSG | 307.7 | 3 | -1.0 | 7 | -1.0 |
| NWR | 77 | 333 | 2100 | 030085 | 314.0 | 313.9 | 2.1 | 4.5 | 270 | -9.4 | MSG | 316.4 | 3 | 316.4 | 3 | 2.1 |
| NWR | 77 | 333 | 2100 | 040085 | 294.1 | 294.0 | 1.9 | 4.5 | 270 | -9.4 | MSG | 296.4 | 3 | 296.4 | 7 | 1.9 |
| NWR | 77 | 341 | 2030 | 010086 | 398.7 | 398.7 | 11.1 | 2.2 | 270 | -6.5 | -8.8 | 400.6 | 1 | 400.6 | 1 | 11.1 |
| NWR | 77 | 341 | 2030 | 020086 | 367.5 | 367.5 | 16.4 | 2.2 | 270 | -6.5 | -8.8 | 369.2 | 1 | 369.2 | 1 | 16.4 |
| NWR | 77 | 351 | 0000 | 030087 | 290.8 | 290.8 | 1.6 | 11.2 | 270 | -13.0 | -99.9 | 293.2 | 0 | 293.7 | 0 | 4.2 |
| NWR | 77 | 351 | 0000 | 050087 | 291.8 | 291.8 | 5.7 | 11.2 | 270 | -13.0 | -99.9 | 294.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 365 | 0040 | 060088 | 307.6 | 307.7 | .6 | 11.2 | 270 | -5.0 | MSG | 310.2 | 2 | 310.2 | 7 | .6 |
| NWR | 78 | 7 | 2130 | 010089 | 301.1 | 301.3 | 6.6 | 8.9 | 270 | MSG | MSG | 303.7 | 1 | 303.7 | 7 | 6.6 |
| NWR | 78 | 7 | 2130 | 020089 | 332.4 | 332.6 | 2.9 | 8.9 | 270 | MSG | MSG | 335.2 | 2 | 335.2 | 2 | 2.9 |
| NWR | 78 | 11 | 2150 | 030090 | 299.7 | 299.9 | 4.3 | 8.9 | 270 | -8.6 | -9.5 | 301.3 | 2 | 287.3 | 0 | 4.3 |
| NWR | 78 | 11 | 2150 | 040090 | 272.0 | 272.2 | 8.1 | 8.9 | 270 | -8.6 | -9.5 | 273.4 | 1 | -1.0 | 0 | -1.0 |
| NWR | 78 | 17 | 2020 | 050091 | 283.2 | 283.4 | 7.1 | 4.5 | 270 | -8.5 | -10.8 | 284.6 | 1 | 284.6 | 0 | 7.1 |
| NWR | 78 | 17 | 2020 | 060091 | 326.8 | 327.1 | 5.2 | 4.5 | 270 | -8.5 | -10.8 | 328.4 | 2 | 328.4 | 2 | 5.2 |
| NWR | 78 | 28 | 2200 | 010092 | 307.9 | 308.2 | 1.9 | 17.9 | 270 | -7.0 | -13.1 | 309.3 | 3 | 309.3 | 7 | 1.9 |
| NWR | 78 | 28 | 2200 | 020092 | 362.3 | 362.7 | 5.7 | 17.9 | 270 | -7.0 | -13.1 | 363.9 | 3 | 363.9 | 3 | 5.7 |
| NWR | 78 | 35 | 0030 | 030093 | 320.8 | 321.2 | 5.0 | 17.9 | 270 | -7.2 | -8.3 | 322.8 | 3 | 322.8 | 3 | 5.0 |
| NWR | 78 | 35 | 0030 | 040093 | 279.9 | 280.2 | 3.5 | 17.9 | 270 | -7.2 | -8.3 | 281.6 | 3 | 281.6 | 0 | 3.5 |
| NWR | 78 | 50 | 0000 | 010094 | 286.2 | 286.6 | 1.0 | 6.7 | 270 | MSG | MSG | 288.9 | 3 | 288.9 | 0 | 1.0 |
| NWR | 78 | 50 | 0000 | 020094 | 330.8 | 331.3 | 1.5 | 6.7 | 270 | MSG | MSG | 333.9 | 3 | 333.9 | 3 | 1.5 |
| NWR | 78 | 54 | 2109 | 030095 | 286.9 | 287.3 | 4.5 | 15.6 | 270 | -6.5 | -15.0 | 288.2 | 3 | 282.4 | 0 | 4.5 |
| NWR | 78 | 54 | 2109 | 040095 | 275.4 | 275.8 | 3.1 | 15.6 | 270 | -6.5 | -15.0 | 276.6 | 3 | -1.0 | 0 | -1.0 |
| NWR | 78 | 63 | 2045 | 050096 | 263.2 | 263.7 | 8.1 | 17.9 | 270 | -5.0 | -7.0 | 265.1 | 1 | 265.1 | 1 | 8.1 |
| NWR | 78 | 63 | 2045 | 060096 | 384.5 | 385.2 | 20.4 | 17.9 | 270 | -5.0 | -7.0 | 387.3 | 1 | 387.3 | 1 | 20.4 |
| NWR | 78 | 67 | 2150 | 010097 | 294.8 | 295.3 | .9 | 7.8 | 270 | -4.0 | -11.2 | 296.5 | 0 | 294.7 | 0 | .7 |
| NWR | 78 | 67 | 2150 | 020097 | 291.2 | 291.7 | .2 | 7.8 | 270 | -4.0 | -11.2 | 292.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 86 | 1930 | 030098 | 327.1 | 327.8 | 5.6 | 0.0 | CLM | 2.0 | -11.2 | 329.1 | 3 | 329.1 | 3 | 5.6 |
| NWR | 78 | 86 | 1930 | 040098 | 287.2 | 287.8 | 2.7 | 0.0 | CLM | 2.0 | -11.2 | 289.0 | 3 | 289.0 | 0 | 2.7 |
| NWR | 78 | 103 | 2330 | 020099 | 330.8 | 331.7 | 6.9 | 1.1 | 180 | -2.5 | -6.1 | 333.6 | 1 | 333.6 | 1 | 6.9 |
| NWR | 78 | 103 | 2330 | 060099 | 468.5 | 469.7 | 7.9 | 1.1 | 180 | -2.5 | -6.1 | 472.5 | 1 | 472.5 | 1 | 7.9 |
| NWR | 78 | 123 | 1650 | 010100 | 318.9 | 319.9 | 6.8 | 17.5 | 270 | 2.0 | -2.2 | 322.4 | 1 | 322.4 | 7 | 6.8 |
| NWR | 78 | 123 | 1650 | 030100 | 363.1 | 364.2 | 11.5 | 17.5 | 270 | 2.0 | -2.2 | 367.1 | 1 | 367.1 | 1 | 11.5 |
| NWR | 78 | 130 | 1810 | 040101 | 302.9 | 303.9 | 8.3 | 17.5 | 270 | 1.5 | -9.9 | 305.2 | 1 | 305.2 | 7 | 8.3 |
| NWR | 78 | 130 | 1810 | 050101 | 335.2 | 336.3 | 13.5 | 17.5 | 270 | 1.5 | -9.9 | 337.7 | 1 | 337.7 | 1 | 13.5 |
| NWR | 78 | 138 | 2150 | 010102 | 336.5 | 337.6 | 7.9 | 7.5 | 270 | 0.0 | -3.3 | 340.1 | 1 | 340.1 | 1 | 7.9 |
| NWR | 78 | 138 | 2150 | 020102 | 317.2 | 318.3 | 2.9 | 7.5 | 270 | 0.0 | -3.3 | 320.6 | 2 | 320.6 | 7 | 2.9 |
| NWR | 78 | 152 | 2030 | 030103 | 348.1 | 349.4 | 3.2 | 2.2 | 180 | 1.5 | -1.6 | 352.2 | 3 | 352.2 | 3 | 3.2 |
| NWR | 78 | 152 | 2030 | 060103 | 373.6 | 375.0 | 2.5 | 2.2 | 180 | 1.5 | -1.6 | 378.0 | 3 | 378.0 | 3 | 2.5 |
| NWR | 78 | 158 | 2235 | 010104 | 310.8 | 312.0 | 2.8 | 11.3 | 270 | 2.0 | -2.2 | 314.4 | 2 | 318.0 | 7 | 2.8 |
| NWR | 78 | 158 | 2235 | 020104 | 317.8 | 319.0 | 6.2 | 11.3 | 270 | 2.0 | -2.2 | 321.5 | 1 | -1.0 | 7 | -1.0 |
| NWR | 78 | 165 | 1840 | 030105 | 349.6 | 351.0 | 8.8 | 1.1 | 270 | 15.5 | -2.7 | 353.6 | 1 | 353.6 | 1 | 8.8 |
| NWR | 78 | 165 | 1840 | 040105 | 290.7 | 291.8 | 2.7 | 1.1 | 270 | 15.5 | -2.7 | 294.1 | 2 | 294.1 | 0 | 2.7 |
| NWR | 78 | 173 | 2205 | 050106 | 390.2 | 391.8 | 2.1 | 1.1 | 220 | 17.5 | .6 | 395.6 | 2 | 395.6 | 2 | 2.1 |
| NWR | 78 | 173 | 2205 | 060106 | 319.7 | 321.0 | 9.5 | 1.1 | 220 | 17.5 | .6 | 324.1 | 1 | 324.1 | 7 | 9.5 |
| NWR | 78 | 179 | 2000 | 010107 | 306.2 | 307.5 | 3.1 | 1.1 | 135 | 8.5 | 6.6 | 312.0 | 3 | 312.0 | 7 | 3.1 |
| NWR | 78 | 179 | 2000 | 020107 | 330.2 | 331.6 | 1.7 | 1.1 | 135 | 8.5 | 6.6 | 336.5 | 3 | 336.5 | 3 | 1.7 |
| NWR | 78 | 188 | 2130 | 030108 | 318.8 | 320.2 | 4.9 | 1.1 | 180 | 15.8 | -4.7 | 322.3 | 3 | 307.5 | 7 | 4.9 |
| NWR | 78 | 188 | 2130 | 040108 | 289.6 | 290.9 | .8 | 1.1 | 180 | 15.8 | -4.7 | 292.8 | 3 | -1.0 | 7 | -1.0 |
| NWR | 78 | 193 | 0325 | 050109 | 337.4 | 336.9 | .1 | .8 | 270 | 11.3 | 1.2 | 342.3 | 3 | 342.3 | 3 | .1 |
| NWR | 78 | 193 | 0325 | 060109 | 313.4 | 314.8 | 5.7 | .8 | 270 | 11.3 | 1.2 | 318.0 | 3 | 318.0 | 7 | 5.7 |
| NWR | 78 | 200 | 2300 | 010110 | 317.4 | 318.9 | 1.5 | 3.0 | 180 | 15.5 | -.4 | 321.7 | 0 | 317.8 | 7 | 1.1 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 78 | 200 | 2300 | 020110 | 309.6 | 311.0 | .3 | 3.0 | 180 | 15.5 | -.4 | 313.8 | 0 | -1.0 | 7 | -1.0 |
| NWR | 78 | 209 | 2130 | 030111 | 315.8 | 317.3 | 2.7 | 2.0 | 270 | 17.0 | 5.6 | 321.7 | 0 | 319.3 | 7 | 4.3 |
| NWR | 78 | 209 | 2130 | 040111 | 311.1 | 312.6 | 5.5 | 2.0 | 270 | 17.0 | 5.6 | 316.9 | 0 | -1.0 | 7 | -1.0 |
| NWR | 78 | 215 | 2040 | 060112 | 1298.5 | 1305.0 | 13.0 | 2.0 | 90 | 11.0 | 4.1 | 1321.2 | 1 | 1321.2 | 1 | 13.0 |
| NWR | 78 | 215 | 2040 | 050112 | 1302.0 | 1308.5 | 7.0 | 2.0 | 90 | 11.0 | 4.1 | 1324.7 | 1 | 1324.7 | 1 | 7.0 |
| NWR | 78 | 222 | 1915 | 020113 | 321.3 | 323.0 | 3.4 | 2.0 | 270 | 13.5 | 5.2 | 327.3 | 3 | 327.3 | 3 | 3.4 |
| NWR | 78 | 222 | 1915 | 010113 | 311.3 | 312.9 | 1.1 | 2.0 | 270 | 13.5 | 5.2 | 317.1 | 3 | 317.1 | 7 | 1.1 |
| NWR | 78 | 230 | 0000 | 030114 | 344.7 | 346.5 | 1.6 | 11.0 | 270 | 1.0 | -6.0 | 348.6 | 3 | 348.6 | 3 | 1.6 |
| NWR | 78 | 230 | 0000 | 040114 | 289.9 | 291.4 | 1.5 | 11.0 | 270 | 1.0 | -6.0 | 293.2 | 3 | 293.2 | 0 | 1.5 |
| NWR | 78 | 235 | 1830 | 060115 | 329.7 | 331.5 | 2.3 | 5.0 | 270 | 14.5 | -.7 | 334.4 | 3 | 334.4 | 3 | 2.3 |
| NWR | 78 | 235 | 1830 | 050115 | 319.5 | 321.2 | 2.0 | 5.0 | 270 | 14.5 | -.7 | 324.1 | 3 | 324.1 | 7 | 2.0 |
| NWR | 78 | 246 | 1900 | 010116 | 358.7 | 360.7 | 3.9 | 2.0 | 120 | 14.5 | -.2 | 364.0 | 2 | 364.0 | 2 | 3.9 |
| NWR | 78 | 246 | 1900 | 020116 | 370.4 | 372.5 | 8.0 | 2.0 | 120 | 14.5 | -.2 | 375.9 | 1 | 375.9 | 1 | 8.0 |
| NWR | 78 | 254 | 2230 | 030117 | 332.5 | 334.4 | 3.7 | 3.5 | 270 | .5 | -4.5 | 336.7 | 3 | 336.7 | 3 | 3.7 |
| NWR | 78 | 254 | 2230 | 040117 | 291.0 | 292.7 | 4.3 | 3.5 | 270 | .5 | -4.5 | 294.6 | 3 | 294.6 | 0 | 4.3 |
| NWR | 78 | 268 | 2040 | 050118 | 330.9 | 332.9 | .4 | 2.0 | 60 | 9.0 | -3.2 | 335.4 | 3 | 335.4 | 3 | .4 |
| NWR | 78 | 268 | 2040 | 060118 | 348.9 | 351.0 | 4.7 | 2.0 | 60 | 9.0 | -3.2 | 353.6 | 3 | 353.6 | 3 | 4.7 |
| NWR | 78 | 276 | 2130 | 040119 | 291.2 | 293.0 | 4.1 | 2.9 | 270 | 9.0 | -99.9 | 295.4 | 2 | 295.4 | 0 | 4.1 |
| NWR | 78 | 276 | 2130 | 030119 | 340.8 | 342.9 | 6.5 | 2.9 | 270 | 9.0 | -99.9 | 345.7 | 1 | 345.7 | 1 | 6.5 |
| NWR | 78 | 283 | 2300 | 050120 | 305.7 | 307.7 | 1.9 | 2.0 | 0 | 2.0 | -22.2 | 308.2 | 0 | 312.4 | 7 | 2.0 |
| NWR | 78 | 283 | 2300 | 060120 | 314.0 | 316.0 | 2.1 | 2.0 | 0 | 2.0 | -22.2 | 316.6 | 0 | -1.0 | 7 | -1.0 |
| NWR | 78 | 289 | 2110 | 010121 | 437.2 | 440.1 | 3.1 | 5.5 | 270 | 10.0 | -99.9 | 443.6 | 3 | 443.6 | 3 | 3.1 |
| NWR | 78 | 289 | 2110 | 020121 | 334.0 | 336.2 | 2.6 | 5.6 | 270 | 10.0 | -99.9 | 338.9 | 3 | 338.9 | 3 | 2.6 |
| NWR | 78 | 301 | 1735 | 040122 | 303.3 | 305.4 | 7.8 | 8.8 | 270 | 5.0 | -5.6 | 307.2 | 1 | 313.1 | 7 | 7.8 |
| NWR | 78 | 301 | 1735 | 030122 | 314.8 | 316.9 | .9 | 8.8 | 270 | 5.0 | -5.6 | 318.9 | 2 | -1.0 | 7 | -1.0 |
| NWR | 78 | 315 | 1930 | 010123 | 322.6 | 324.9 | 5.3 | 3.3 | 270 | 5.0 | -6.4 | 326.8 | 0 | 328.9 | 7 | 4.2 |
| NWR | 78 | 315 | 1930 | 020123 | 326.8 | 329.1 | 2.8 | 3.3 | 270 | 5.0 | -6.4 | 331.0 | 0 | -1.0 | 7 | -1.0 |
| NWR | 78 | 320 | 1930 | 030124 | 296.4 | 298.5 | 1.6 | 8.3 | 270 | -9.5 | -11.1 | 299.7 | 0 | 296.1 | 0 | 1.5 |
| NWR | 78 | 320 | 1930 | 040124 | 289.1 | 291.2 | 1.4 | 8.8 | 270 | -9.5 | -11.1 | 292.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 326 | 2045 | 060125 | 302.2 | 304.4 | 6.5 | 3.5 | 190 | -6.8 | -15.0 | 305.3 | 1 | 302.5 | 0 | 6.5 |
| NWR | 78 | 326 | 2045 | 050125 | 296.7 | 298.9 | 1.9 | 3.5 | 190 | -6.8 | -15.0 | 299.8 | 2 | -1.0 | 0 | -1.0 |
| NWR | 78 | 334 | 2040 | 010126 | 315.9 | 318.3 | 1.6 | 18.0 | 270 | -7.8 | -7.8 | 319.9 | 0 | 315.5 | 7 | 1.3 |
| NWR | 78 | 334 | 2040 | 020126 | 307.1 | 309.4 | .8 | 18.0 | 270 | -7.8 | -7.8 | 311.0 | 0 | -1.0 | 7 | -1.0 |
| NWR | 78 | 344 | 2000 | 050128 | 305.7 | 308.1 | 1.6 | 10.0 | 270 | MSG | MSG | 310.5 | 3 | 316.5 | 7 | 1.6 |
| NWR | 78 | 344 | 2000 | 060128 | 317.4 | 319.9 | 1.7 | 10.0 | 270 | MSG | MSG | 322.4 | 3 | -1.0 | 7 | -1.0 |
| NWR | 78 | 355 | 2320 | 010129 | 347.2 | 350.0 | 1.4 | 18.0 | 270 | -13.0 | -99.9 | 352.8 | 3 | 352.8 | 3 | 1.4 |
| NWR | 78 | 355 | 2320 | 020129 | 329.6 | 332.2 | 1.8 | 18.0 | 270 | -13.0 | -99.9 | 334.9 | 3 | 334.9 | 3 | 1.8 |
| NWR | 79 | 4 | 1545 | 030130 | 299.1 | 301.6 | 3.4 | 7.7 | 270 | -6.0 | -6.0 | 303.4 | 0 | 299.1 | 0 | 3.4 |
| NWR | 79 | 4 | 1545 | 040130 | 290.7 | 293.1 | 3.3 | 7.7 | 270 | -6.0 | -6.0 | 294.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 11 | 2300 | 010131 | 301.8 | 304.3 | 3.5 | 5.0 | 270 | -2.0 | MSG | 306.8 | 3 | 301.7 | 0 | 3.5 |
| NWR | 79 | 11 | 2300 | 020131 | 291.9 | 294.4 | 2.8 | 5.0 | 270 | -2.0 | MSG | 296.7 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 18 | 2310 | 030132 | 294.7 | 297.2 | 4.0 | 5.0 | 270 | -9.0 | MSG | 299.6 | 0 | 296.4 | 0 | 3.9 |
| NWR | 79 | 18 | 2310 | 040132 | 288.3 | 290.8 | 3.7 | 5.0 | 270 | -9.0 | MSG | 293.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 26 | 2200 | 030133 | 297.4 | 300.0 | .3 | 0.0 | CLM | -19.0 | -99.9 | 302.4 | 4 | 299.5 | 0 | .5 |
| NWR | 79 | 26 | 2200 | 040133 | 291.7 | 294.3 | .6 | 0.0 | CLM | -19.0 | -99.9 | 296.6 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 32 | 1750 | 050134 | 302.6 | 305.3 | 11.1 | 9.0 | 270 | -8.3 | -14.0 | 306.3 | 1 | 309.6 | 0 | 11.1 |
| NWR | 79 | 32 | 1750 | 060134 | 309.1 | 311.8 | U | 9.0 | 270 | -8.3 | -14.0 | 312.8 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 38 | 2330 | 010135 | 300.2 | 302.9 | U | 20.0 | 270 | -7.8 | -8.5 | 304.4 | 1 | 303.5 | 0 | .0 |
| NWR | 79 | 38 | 2330 | 020135 | 298.4 | 301.1 | 9.8 | 20.0 | 270 | -7.8 | -8.5 | 302.6 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 45 | 2045 | 030136 | 311.6 | 314.5 | 7.5 | 4.5 | 270 | 2.2 | -8.5 | 316.0 | 1 | 314.1 | 0 | 7.5 |
| NWR | 79 | 45 | 2045 | 040136 | 307.8 | 310.6 | 4.1 | 4.5 | 270 | 2.2 | -8.5 | 312.1 | 2 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 79 | 59 | 2045 | 040137 | 297.0 | 299.8 | 1.4 | 8.8 | 270 | -8.0 | MSG | 302.2 | 0 | 304.0 | 0 | 2.0 |
| NWR | 79 | 59 | 2045 | 030137 | 300.5 | 303.3 | 2.5 | 8.8 | 270 | -8.0 | MSG | 305.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 67 | 2200 | 040138 | 300.9 | 303.8 | .6 | 1.7 | 180 | -9.0 | MSG | 306.2 | 3 | 313.5 | 0 | .6 |
| NWR | 79 | 67 | 2200 | 030138 | 315.2 | 318.2 | 2.9 | 1.7 | 180 | -9.0 | MSG | 320.8 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 80 | 2330 | 050139 | 342.0 | 345.4 | 2.0 | 0.0 | CLM | -7.2 | -7.2 | 347.3 | 4 | 348.9 | 4 | 2.3 |
| NWR | 79 | 80 | 2330 | 060139 | 345.3 | 348.7 | 2.5 | 0.0 | CLM | -7.2 | -7.2 | 350.6 | 4 | -1.0 | 4 | -1.0 |
| NWR | 79 | 90 | 2120 | 030140 | 322.6 | 325.9 | 2.2 | 1.0 | 130 | 0.0 | -3.6 | 328.2 | 3 | 322.6 | 7 | 2.2 |
| NWR | 79 | 90 | 2120 | 040140 | 311.6 | 314.8 | .3 | 1.0 | 130 | 0.0 | -3.6 | 317.0 | 3 | -1.0 | 7 | -1.0 |
| NWR | 79 | 97 | 0100 | 050141 | 330.7 | 334.1 | 3.0 | 10.0 | 270 | -4.7 | -7.4 | 335.9 | 0 | 333.5 | 7 | 2.1 |
| NWR | 79 | 97 | 0100 | 060141 | 326.0 | 329.3 | .4 | 10.0 | 270 | -4.7 | -7.4 | 331.1 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 104 | 1930 | 030142 | 312.0 | 315.2 | 3.1 | 20.0 | 270 | -5.6 | -8.3 | 316.8 | 3 | 309.1 | 0 | 3.1 |
| NWR | 79 | 104 | 1930 | 040142 | 296.8 | 299.9 | 4.9 | 20.0 | 270 | -5.6 | -8.3 | 301.4 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 111 | 0145 | 060143 | 324.4 | 327.8 | .5 | 8.0 | 270 | -4.2 | -11.9 | 329.1 | 3 | 329.1 | 7 | .5 |
| NWR | 79 | 111 | 0145 | 050143 | 345.6 | 349.2 | 1.7 | 8.0 | 270 | -4.2 | -11.9 | 350.6 | 3 | 350.6 | 3 | 1.7 |
| NWR | 79 | 116 | 2200 | 030144 | 322.9 | 326.3 | 2.6 | 10.0 | 270 | -6.4 | -10.2 | 327.7 | 3 | 315.6 | 0 | 2.6 |
| NWR | 79 | 116 | 2200 | 040144 | 298.9 | 302.1 | 1.8 | 10.0 | 270 | -6.4 | -10.2 | 303.4 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 122 | 2030 | 050145 | 305.7 | 309.0 | 1.1 | 1.5 | 270 | .6 | -3.0 | 311.3 | 0 | 312.8 | 0 | 3.1 |
| NWR | 79 | 122 | 2030 | 060145 | 308.6 | 311.9 | 4.2 | 1.5 | 270 | .6 | -3.0 | 314.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 131 | 1800 | 040146 | 296.1 | 299.4 | 2.4 | 6.6 | 270 | -5.6 | -10.1 | 300.7 | 3 | 308.5 | 0 | 2.4 |
| NWR | 79 | 131 | 1800 | 030146 | 311.6 | 315.0 | 1.3 | 6.6 | 270 | -5.6 | -10.1 | 316.4 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 138 | 1530 | 060147 | 311.4 | 314.9 | 1.9 | 13.2 | 270 | 6.1 | -.3 | 317.7 | 2 | 317.7 | 7 | 1.9 |
| NWR | 79 | 138 | 1530 | 050147 | 333.2 | 336.9 | 9.4 | 13.2 | 270 | 6.1 | -.3 | 340.0 | 1 | 340.0 | 1 | 9.4 |
| NWR | 79 | 145 | 1100 | 030148 | 305.6 | 309.0 | 1.2 | 2.0 | 45 | 1.7 | -4.5 | 311.1 | 0 | 309.0 | 0 | 2.4 |
| NWR | 79 | 145 | 1100 | 040148 | 301.4 | 304.8 | 3.1 | 2.0 | 45 | 1.7 | -4.5 | 306.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 150 | 1830 | 050149 | 309.9 | 313.4 | 1.3 | 2.0 | 180 | -1.7 | -2.0 | 315.9 | 0 | 319.8 | 7 | 1.1 |
| NWR | 79 | 150 | 1830 | 060149 | 317.4 | 321.0 | .8 | 2.0 | 180 | -1.7 | -2.0 | 323.6 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 159 | 2115 | 030150 | 338.8 | 342.7 | .9 | 2.0 | 270 | -2.2 | -99.9 | 345.5 | 0 | 343.2 | 7 | .7 |
| NWR | 79 | 159 | 2115 | 040150 | 334.3 | 338.2 | .4 | 2.0 | 270 | -2.2 | -99.9 | 340.9 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 163 | 1500 | 060151 | 309.2 | 312.8 | 1.7 | 4.0 | 315 | 15.3 | 4.0 | 316.7 | 0 | 317.4 | 0 | 2.0 |
| NWR | 79 | 163 | 1500 | 050151 | 310.6 | 314.2 | 2.2 | 4.0 | 315 | 15.3 | 4.0 | 318.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 173 | 1600 | 030152 | 303.2 | 306.8 | 18.9 | 2.0 | 180 | 11.7 | -7.8 | 308.4 | 1 | 309.8 | 0 | 18.9 |
| NWR | 79 | 173 | 1600 | 040152 | 305.9 | 309.5 | 2.4 | 2.0 | 180 | 11.7 | -7.8 | 311.1 | 2 | -1.0 | 0 | -1.0 |
| NWR | 79 | 179 | 1300 | 050153 | 306.8 | 310.5 | 4.9 | 2.0 | 270 | 12.8 | -.7 | 313.2 | 0 | 313.0 | 0 | 4.1 |
| NWR | 79 | 179 | 1300 | 060153 | 306.4 | 310.1 | 3.0 | 2.0 | 270 | 12.8 | -.7 | 312.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 184 | 1700 | 040154 | 298.5 | 302.1 | 1.9 | 2.0 | 315 | 17.8 | -.2 | 304.9 | 3 | 309.9 | 0 | 1.9 |
| NWR | 79 | 184 | 1700 | 030154 | 308.4 | 312.1 | 3.6 | 2.0 | 315 | 17.8 | -.2 | 315.0 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 192 | 1630 | 060155 | 302.4 | 306.1 | 3.5 | 1.0 | 90 | 19.0 | -7.7 | 307.7 | 4 | 308.3 | 0 | 2.7 |
| NWR | 79 | 192 | 1630 | 050155 | 303.6 | 307.3 | 1.6 | 1.0 | 90 | 19.0 | -7.7 | 308.9 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 200 | 1700 | 030156 | 323.2 | 327.2 | 2.7 | 1.0 | 45 | 14.4 | 4.1 | 331.3 | 3 | 323.0 | 7 | 2.7 |
| NWR | 79 | 200 | 1700 | 040156 | 307.1 | 310.9 | 2.4 | 1.0 | 45 | 14.4 | 4.1 | 314.8 | 3 | -1.0 | 7 | -1.0 |
| NWR | 79 | 206 | 1530 | 050157 | 305.2 | 309.0 | 5.7 | 2.0 | 315 | 18.3 | -.6 | 311.8 | 0 | 315.0 | 0 | 4.3 |
| NWR | 79 | 206 | 1530 | 060157 | 311.6 | 315.5 | 2.3 | 2.0 | 315 | 18.3 | -.6 | 318.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 214 | 2130 | 030158 | 323.6 | 327.7 | 3.9 | 5.0 | 170 | 14.2 | .6 | 330.9 | 4 | 328.6 | 7 | 3.7 |
| NWR | 79 | 214 | 2130 | 040158 | 319.1 | 323.2 | 3.4 | 5.0 | 170 | 14.2 | .6 | 326.3 | 4 | -1.0 | 7 | -1.0 |
| NWR | 79 | 220 | 2213 | 060159 | 312.7 | 316.7 | .7 | 5.0 | 270 | 13.3 | 6.0 | 321.2 | 0 | 319.0 | 7 | .8 |
| NWR | 79 | 220 | 2213 | 050159 | 308.3 | 312.3 | .8 | 5.0 | 270 | 13.3 | 6.0 | 316.7 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 228 | 1830 | 040160 | 297.3 | 301.2 | 3.0 | 5.0 | 260 | 12.5 | 5.0 | 305.2 | 0 | 309.1 | 0 | 2.4 |
| NWR | 79 | 228 | 1830 | 030160 | 305.0 | 309.0 | 1.5 | 5.0 | 260 | 12.5 | 5.0 | 313.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 234 | 1910 | 050161 | 301.5 | 305.3 | 5.8 | 1.0 | 270 | 10.5 | -.9 | 308.1 | 4 | 309.3 | 0 | 4.6 |
| NWR | 79 | 234 | 1910 | 060161 | 303.8 | 307.8 | 2.8 | 1.0 | 270 | 10.5 | -.9 | 310.5 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 250 | 1730 | 050163 | 314.1 | 318.3 | 2.7 | 5.0 | 270 | 19.5 | -3.0 | 320.7 | 0 | 321.7 | 7 | 4.3 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 79 | 250 | 1730 | 060163 | 316.0 | 320.3 | 5.4 | 5.0 | 270 | 19.5 | -3.0 | 322.6 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 257 | 1340 | 030164 | 335.1 | 339.7 | 3.1 | 0.0 | CLM | 4.5 | -22.0 | 340.3 | 3 | 330.5 | 7 | 3.1 |
| NWR | 79 | 257 | 1340 | 040164 | 315.8 | 320.1 | 5.9 | 0.0 | CLM | 4.5 | -22.0 | 320.7 | 3 | -1.0 | 7 | -1.0 |
| NWR | 79 | 263 | 1827 | 050165 | 324.0 | 328.5 | .1 | 3.0 | 90 | 4.0 | -2.0 | 331.1 | 4 | 335.5 | 7 | 3.6 |
| NWR | 79 | 263 | 1827 | 060165 | 332.6 | 337.2 | 5.1 | 3.0 | 90 | 4.0 | -2.0 | 339.9 | 4 | -1.0 | 7 | -1.0 |
| NWR | 79 | 270 | 1630 | 040166 | 298.5 | 302.7 | 6.0 | 7.5 | 270 | 7.0 | -4.0 | 304.7 | 3 | 316.2 | 0 | 6.0 |
| NWR | 79 | 270 | 1630 | 030166 | 321.0 | 325.5 | 2.3 | 7.5 | 270 | 7.0 | -4.0 | 327.7 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 276 | 1700 | 060167 | 313.5 | 317.9 | 9.3 | 15.6 | 270 | -23.6 | -27.5 | 318.3 | 1 | 314.4 | 0 | 9.3 |
| NWR | 79 | 276 | 1700 | 050167 | 305.9 | 310.2 | 11.9 | 15.6 | 270 | -23.6 | -27.5 | 310.6 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 283 | 1930 | 030168 | 314.7 | 319.2 | 3.6 | 17.9 | 270 | 9.0 | -13.8 | 320.2 | 0 | 317.3 | 0 | 2.6 |
| NWR | 79 | 283 | 1930 | 040168 | 308.9 | 313.3 | .8 | 17.9 | 270 | 9.0 | -13.8 | 314.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 290 | 0100 | 050169 | 311.3 | 315.8 | .8 | 12.5 | 270 | 3.0 | -9.5 | 317.2 | 0 | 313.9 | 0 | 1.7 |
| NWR | 79 | 290 | 0100 | 060169 | 304.8 | 309.2 | 2.3 | 12.5 | 270 | 3.0 | -9.5 | 310.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 297 | 1740 | 040170 | 300.8 | 305.2 | .8 | 0.0 | CLM | 2.0 | -11.0 | 306.4 | 4 | 308.2 | 0 | 4.3 |
| NWR | 79 | 297 | 1740 | 030170 | 304.4 | 308.8 | 6.0 | 0.0 | CLM | 2.0 | -11.0 | 310.1 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 306 | 2301 | 050171 | 306.5 | 311.0 | 1.5 | 5.0 | 270 | -8.2 | MSG | 313.5 | 0 | 315.6 | 0 | 1.8 |
| NWR | 79 | 306 | 2301 | 060171 | 310.7 | 315.3 | 2.0 | 5.0 | 270 | -8.2 | MSG | 317.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 311 | 1930 | 030172 | 327.3 | 332.2 | 3.8 | 10.0 | 270 | MSG | MSG | 334.8 | 3 | 323.6 | 7 | 3.8 |
| NWR | 79 | 311 | 1930 | 040172 | 305.4 | 309.9 | .3 | 10.0 | 270 | MSG | MSG | 312.4 | 3 | -1.0 | 7 | -1.0 |
| NWR | 79 | 333 | 1530 | 040173 | 313.5 | 318.3 | 2.7 | 0.0 | CLM | -13.0 | -99.9 | 320.8 | 2 | 316.0 | 0 | 2.7 |
| NWR | 79 | 333 | 1530 | 050173 | 304.0 | 308.6 | 6.3 | 0.0 | CLM | -13.0 | -99.9 | 311.1 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 341 | 1400 | 050174 | 340.1 | 345.4 | .9 | 15.0 | 270 | -4.7 | -12.5 | 346.6 | 3 | 346.6 | 7 | .9 |
| NWR | 79 | 341 | 1400 | 060174 | 359.6 | 365.2 | 3.9 | 15.0 | 270 | -4.7 | -12.5 | 366.5 | 3 | 366.5 | 3 | 3.9 |
| NWR | 79 | 341 | 1400 | 740174 | 338.5 | 343.7 | 3.4 | 15.0 | 270 | -4.7 | -12.5 | 345.0 | 0 | 342.6 | 7 | 2.4 |
| NWR | 79 | 341 | 1400 | 750174 | 333.9 | 339.1 | .4 | 15.0 | 270 | -4.7 | -12.5 | 340.3 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 352 | 2305 | 030175 | 316.7 | 321.7 | 2.7 | 2.0 | 270 | -.8 | -20.0 | 322.3 | 3 | 316.8 | 0 | 2.7 |
| NWR | 79 | 352 | 2305 | 040175 | 305.9 | 310.7 | 2.5 | 2.0 | 270 | -.8 | -20.0 | 311.3 | 3 | -1.0 | 0 | -1.0 |
| NWR | 79 | 352 | 2305 | 710175 | 306.7 | 311.5 | 2.1 | 2.0 | 270 | -.8 | -20.0 | 312.1 | 0 | 310.5 | 0 | 1.5 |
| NWR | 79 | 352 | 2305 | 720175 | 303.4 | 308.2 | .3 | 2.0 | 270 | -.8 | -20.0 | 308.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 363 | 0120 | 050176 | 321.7 | 326.8 | 5.7 | 3.5 | 270 | -14.4 | -16.9 | 327.7 | 0 | 324.7 | 7 | 4.1 |
| NWR | 79 | 363 | 0120 | 060176 | 315.9 | 320.9 | 1.3 | 3.5 | 270 | -14.4 | -16.9 | 321.8 | 0 | -1.0 | 7 | -1.0 |
| NWR | 79 | 363 | 0120 | 740176 | 311.9 | 316.9 | .2 | 3.5 | 270 | -14.4 | -16.9 | 317.7 | 0 | 317.0 | 0 | .7 |
| NWR | 79 | 363 | 0120 | 750176 | 310.6 | 315.5 | .9 | 3.5 | 270 | -14.4 | -16.9 | 316.4 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 77 | 122 | 2040 | 060153 | 280.7 | 251.4 | 9.4 | 4.1 | 30 | 11.1 | -13.9 | 252.2 | 1 | 252.2 | 1 | 9.4 |
| MLO | 77 | 130 | 2036 | 030154 | 257.6 | 230.8 | 6.2 | 15.4 | 270 | 7.2 | -2.2 | 232.6 | 1 | 232.6 | 1 | 6.2 |
| MLO | 77 | 136 | 1959 | 050155 | 357.9 | 320.7 | 2.4 | 10.3 | 30 | 10.6 | -15.6 | 321.6 | 2 | 321.6 | 2 | 2.4 |
| MLO | 77 | 144 | 1954 | 060156 | 292.6 | 262.2 | 3.3 | 10.3 | 90 | 14.4 | -18.3 | 262.8 | 2 | 262.8 | 0 | 3.3 |
| MLO | 77 | 151 | 2058 | 030157 | 261.5 | 234.4 | 2.4 | 7.7 | 90 | 13.9 | -16.7 | 235.0 | 2 | 235.0 | 2 | 2.4 |
| MLO | 77 | 157 | 2120 | 050158 | 310.2 | 278.1 | 7.4 | 7.7 | 270 | 10.0 | -5.0 | 279.8 | 1 | 279.8 | 0 | 7.4 |
| MLO | 77 | 167 | 1930 | 060159 | 343.0 | 307.5 | 4.7 | 12.4 | 120 | 11.1 | -12.8 | 308.6 | 2 | 308.6 | 2 | 4.7 |
| MLO | 77 | 173 | 2029 | 030160 | 266.7 | 239.1 | 6.6 | 10.5 | 100 | 10.6 | -8.9 | 240.3 | 1 | 240.3 | 1 | 6.6 |
| MLO | 77 | 181 | 2040 | 050161 | 298.9 | 268.1 | 17.4 | 4.5 | 320 | 8.9 | 4.8 | 271.5 | 1 | 271.5 | 0 | 17.4 |
| MLO | 77 | 187 | 2125 | 060162 | 316.5 | 283.9 | 4.5 | 12.0 | 120 | 14.4 | 0.0 | 286.5 | 2 | 286.5 | 2 | 4.5 |
| MLO | 77 | 194 | 1959 | 030163 | 275.2 | 246.9 | 2.8 | 4.1 | 300 | 12.2 | -7.8 | 248.1 | 2 | 248.1 | 2 | 2.8 |
| MLO | 77 | 200 | 2240 | 050164 | 307.4 | 275.8 | 7.0 | 5.1 | 190 | 14.4 | 4.4 | 279.2 | 1 | 279.2 | 0 | 7.0 |
| MLO | 77 | 208 | 2300 | 060165 | 283.2 | 254.1 | 3.3 | 6.2 | 120 | 13.3 | -1.1 | 256.3 | 2 | 256.3 | 2 | 3.3 |
| MLO | 77 | 215 | 2312 | 030166 | 976.9 | 876.8 | 13.8 | 4.1 | 300 | 12.2 | 2.2 | 886.1 | 1 | 886.1 | 1 | 13.8 |
| MLO | 77 | 223 | 2104 | 050167 | 309.9 | 278.2 | 6.5 | 3.1 | 360 | 13.3 | -9.4 | 279.4 | 1 | 279.4 | 0 | 6.5 |
| MLO | 77 | 242 | 2027 | 060169 | 293.0 | 263.1 | 1.8 | 7.0 | 180 | 14.4 | 3.4 | 266.2 | 2 | 266.2 | 0 | 1.8 |
| MLO | 77 | 249 | 2008 | 030170 | 272.8 | 245.0 | 1.5 | 4.1 | 270 | 11.1 | 3.5 | 247.9 | 2 | 247.9 | 2 | 1.5 |
| MLO | 77 | 258 | 2326 | 050171 | 328.5 | 295.1 | 4.4 | 3.6 | 147 | 13.1 | 8.8 | 300.1 | 2 | 300.1 | 2 | 4.4 |
| MLO | 77 | 263 | 2258 | 060172 | 316.7 | 284.5 | 3.9 | 1.8 | 360 | 9.3 | 2.0 | 287.5 | 2 | 287.5 | 0 | 3.9 |
| MLO | 77 | 271 | 2045 | 030173 | 272.2 | 244.6 | 1.8 | 9.6 | 212 | 12.9 | -19.3 | 245.1 | 2 | 245.1 | 2 | 1.8 |
| MLO | 77 | 279 | 2336 | 050174 | 335.3 | 301.3 | 3.2 | 5.0 | 340 | 15.1 | -11.3 | 302.5 | 2 | 302.5 | 2 | 3.2 |
| MLO | 77 | 286 | 2329 | 060175 | 300.2 | 269.8 | 2.7 | 5.0 | 60 | 7.9 | 5.5 | 273.5 | 2 | 273.5 | 0 | 2.7 |
| MLO | 77 | 292 | 2328 | 030176 | 828.7 | 745.0 | U | 2.1 | 50 | 10.7 | -11.2 | 747.9 | 1 | 747.9 | 1 | .0 |
| MLO | 77 | 308 | 0549 | 050177 | 349.0 | 313.8 | 4.5 | 3.5 | 185 | 14.0 | 4.0 | 317.6 | 2 | 317.6 | 2 | 4.5 |
| MLO | 77 | 314 | 0444 | 060178 | 308.6 | 277.6 | 7.4 | 4.1 | 185 | 4.0 | -8.0 | 278.9 | 1 | 278.9 | 0 | 7.4 |
| MLO | 77 | 321 | 0733 | 030179 | 280.9 | 252.7 | 3.2 | 4.5 | 170 | 11.0 | -4.0 | 254.4 | 2 | 254.4 | 2 | 3.2 |
| MLO | 77 | 328 | 0540 | 050180 | 332.9 | 299.4 | 3.9 | 4.3 | 250 | 7.4 | -6.1 | 301.1 | 2 | 301.1 | 2 | 3.9 |
| MLO | 77 | 237 | 2145 | 460168 | 314.5 | 313.8 | 5.3 | 6.5 | 90 | 14.5 | -2.2 | 316.2 | 3 | 316.2 | 3 | 5.3 |
| MLO | 77 | 237 | 2145 | 470168 | 295.9 | 295.2 | 1.2 | 6.5 | 90 | 14.5 | -2.2 | 297.5 | 3 | 297.5 | 3 | 1.2 |
| MLO | 77 | 258 | 2334 | 440171 | 266.2 | 265.7 | 6.7 | 3.6 | 147 | 13.1 | 8.8 | 270.2 | 1 | 268.9 | 0 | 6.7 |
| MLO | 77 | 258 | 2334 | 450171 | 263.6 | 263.1 | 7.0 | 3.5 | 147 | 13.1 | 8.8 | 267.5 | 1 | -1.0 | 0 | -1.0 |
| MLO | 77 | 263 | 2304 | 420172 | 289.2 | 288.7 | 4.1 | 1.8 | 360 | 9.3 | 2.0 | 291.7 | 3 | 291.7 | 3 | 4.1 |
| MLO | 77 | 263 | 2304 | 430172 | 264.4 | 263.9 | 1.1 | 1.8 | 360 | 9.3 | 2.0 | 266.7 | 3 | 266.7 | 0 | 1.1 |
| MLO | 77 | 271 | 2049 | 460173 | 274.0 | 273.6 | .5 | 9.6 | 212 | 12.9 | -19.3 | 274.1 | 3 | 274.1 | 0 | .5 |
| MLO | 77 | 271 | 2049 | 470173 | 264.1 | 263.7 | .6 | 9.6 | 212 | 12.9 | -19.3 | 264.2 | 3 | 264.2 | 3 | .6 |
| MLO | 77 | 279 | 2342 | 440174 | 290.4 | 290.0 | 10.6 | 5.0 | 340 | 15.1 | -11.3 | 291.1 | 1 | 291.1 | 1 | 10.6 |
| MLO | 77 | 279 | 2342 | 450174 | 283.6 | 283.2 | 7.3 | 5.0 | 340 | 15.1 | -11.3 | 284.3 | 1 | 284.3 | 0 | 7.3 |
| MLO | 77 | 286 | 2334 | 420175 | 277.5 | 277.1 | 6.6 | 5.0 | 60 | 7.9 | 5.5 | 280.9 | 1 | 280.9 | 0 | 6.6 |
| MLO | 77 | 286 | 2334 | 430175 | 322.1 | 321.7 | 3.1 | 5.0 | 60 | 7.9 | 5.5 | 326.0 | 2 | 326.0 | 2 | 3.1 |
| MLO | 77 | 292 | 2333 | 460176 | 275.5 | 275.2 | 5.0 | 2.1 | 60 | 10.7 | -11.2 | 276.3 | 0 | 276.0 | 0 | 3.6 |
| MLO | 77 | 292 | 2333 | 470176 | 275.0 | 274.7 | .6 | 2.1 | 60 | 10.7 | -11.2 | 275.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 308 | 0555 | 420177 | 281.3 | 281.1 | 1.0 | 3.5 | 185 | 14.0 | 4.0 | 284.5 | 0 | 285.0 | 0 | 4.0 |
| MLO | 77 | 308 | 0555 | 430177 | 282.3 | 282.1 | 5.5 | 3.5 | 185 | 14.0 | 4.0 | 285.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 314 | 0451 | 440178 | 273.9 | 273.7 | 3.5 | 4.1 | 185 | 4.0 | -8.0 | 275.1 | 0 | 274.8 | 0 | 3.0 |
| MLO | 77 | 314 | 0451 | 450178 | 273.3 | 273.1 | 2.4 | 4.1 | 185 | 4.0 | -8.0 | 274.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 321 | 0740 | 460179 | 288.3 | 288.1 | 4.6 | 4.5 | 170 | 11.0 | -4.0 | 290.1 | 2 | 282.5 | 0 | 4.6 |
| MLO | 77 | 321 | 0740 | 470179 | 273.2 | 273.1 | 6.5 | 4.5 | 170 | 11.0 | -4.0 | 274.9 | 1 | -1.0 | 0 | -1.0 |
| MLO | 77 | 328 | 0543 | 420180 | 271.0 | 270.9 | 3.7 | 4.3 | 250 | 7.4 | -6.1 | 272.5 | 0 | 270.2 | 0 | 2.7 |
| MLO | 77 | 328 | 0543 | 430180 | 266.5 | 266.4 | .6 | 4.3 | 250 | 7.4 | -6.1 | 267.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 342 | 0650 | 420181 | 286.6 | 286.6 | U | 5.2 | 180 | 5.2 | 1.7 | 289.5 | 1 | 290.6 | 0 | .0 |
| MLO | 77 | 342 | 0650 | 430181 | 288.7 | 288.7 | 4.8 | 5.2 | 180 | 5.2 | 1.7 | 291.6 | 2 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 77 | 349 | 0620 | 440182 | 287.9 | 287.9 | 2.2 | 5.1 | 140 | 8.0 | -2.3 | 290.1 | 0 | 290.2 | 0 | 1.8 |
| MLO | 77 | 349 | 0620 | 450182 | 288.1 | 288.1 | 1.4 | 5.1 | 140 | 8.0 | -2.3 | 290.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 356 | 0421 | 460183 | 292.9 | 293.0 | 6.5 | 3.6 | 281 | 3.7 | -22.2 | 293.5 | 1 | 293.5 | 1 | 6.5 |
| MLO | 77 | 356 | 0421 | 470183 | 275.8 | 275.9 | 3.0 | 3.6 | 281 | 3.7 | -22.2 | 276.3 | 2 | 276.3 | 0 | 3.0 |
| MLO | 77 | 363 | 0555 | 420184 | 279.9 | 280.0 | 2.7 | 2.6 | 298 | 3.6 | 1.7 | 282.9 | 0 | 280.4 | 0 | 2.1 |
| MLO | 77 | 363 | 0555 | 430184 | 275.0 | 275.1 | 1.1 | 2.6 | 298 | 3.6 | 1.7 | 277.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 5 | 0700 | 440185 | 287.5 | 287.6 | 10.8 | 4.7 | 180 | 5.0 | -16.0 | 288.4 | 1 | 288.4 | 0 | 10.8 |
| MLO | 78 | 5 | 0700 | 450185 | 297.5 | 297.7 | 5.8 | 4.7 | 180 | 5.0 | -16.0 | 298.5 | 2 | 298.5 | 2 | 5.8 |
| MLO | 78 | 12 | 0543 | 460186 | 276.1 | 276.3 | 1.4 | 6.2 | 260 | 4.0 | -16.0 | 277.0 | 3 | 277.0 | 0 | 1.4 |
| MLO | 78 | 12 | 0543 | 470186 | 302.9 | 303.1 | 4.0 | 6.2 | 260 | 4.0 | -16.0 | 303.9 | 3 | 303.9 | 3 | 4.0 |
| MLO | 78 | 19 | 0510 | 420187 | 300.6 | 300.8 | 11.5 | 10.1 | 210 | 7.0 | -14.4 | 301.8 | 1 | 301.8 | 1 | 11.5 |
| MLO | 78 | 19 | 0510 | 430187 | 285.3 | 285.5 | 6.1 | 10.1 | 210 | 7.0 | -14.4 | 286.4 | 1 | 286.4 | 0 | 6.1 |
| MLO | 78 | 26 | 0423 | 440188 | 278.3 | 278.6 | 6.0 | 6.3 | 290 | 8.0 | 0.0 | 281.1 | 0 | 281.2 | 0 | 4.3 |
| MLO | 78 | 26 | 0423 | 450188 | 278.5 | 278.8 | 1.1 | 6.3 | 290 | 8.0 | 0.0 | 281.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 33 | 0641 | 460189 | 280.0 | 280.3 | 7.6 | 3.2 | 190 | 5.0 | -10.0 | 281.5 | 1 | 281.5 | 0 | 7.6 |
| MLO | 78 | 33 | 0641 | 470189 | 321.2 | 321.6 | .8 | 3.2 | 190 | 5.0 | -10.0 | 322.9 | 2 | 322.9 | 2 | .8 |
| MLO | 78 | 40 | 0410 | 420190 | 278.2 | 278.6 | 1.5 | 2.6 | 270 | 12.0 | -25.0 | 278.9 | 0 | 280.0 | 0 | 3.7 |
| MLO | 78 | 40 | 0410 | 430190 | 280.4 | 280.8 | 5.0 | 2.6 | 270 | 12.0 | -25.0 | 281.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 47 | 0555 | 440191 | 281.5 | 281.9 | 2.7 | 4.8 | 120 | 8.0 | -4.0 | 283.8 | 0 | 282.0 | 0 | 1.9 |
| MLO | 78 | 47 | 0555 | 450191 | 277.9 | 278.3 | .3 | 4.8 | 120 | 8.0 | -4.0 | 280.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 54 | 0410 | 460192 | 278.0 | 278.4 | .4 | 5.1 | 280 | 4.0 | -1.1 | 280.8 | 0 | 283.2 | 0 | 2.2 |
| MLO | 78 | 54 | 0410 | 470192 | 282.8 | 283.2 | 3.1 | 5.1 | 280 | 4.0 | -1.1 | 285.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 62 | 0450 | 420193 | 277.9 | 278.4 | 1.6 | 9.8 | 24 | 4.7 | -24.0 | 278.8 | 0 | 277.8 | 0 | 2.2 |
| MLO | 78 | 62 | 0450 | 430193 | 276.0 | 276.5 | 2.7 | 9.8 | 24 | 4.7 | -24.0 | 276.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 69 | 0440 | 440194 | 296.1 | 296.7 | 6.0 | 4.1 | 140 | 8.0 | -22.0 | 297.2 | 0 | 297.7 | 0 | 4.4 |
| MLO | 78 | 69 | 0440 | 450194 | 297.1 | 297.7 | 1.6 | 4.1 | 140 | 8.0 | -22.0 | 298.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 76 | 0440 | 460195 | 275.4 | 276.0 | 3.0 | 2.1 | 160 | 3.0 | -3.0 | 278.0 | 2 | 281.4 | 0 | 3.0 |
| MLO | 78 | 76 | 0440 | 470195 | 282.3 | 282.9 | 6.8 | 2.1 | 160 | 3.0 | -3.0 | 284.9 | 1 | -1.0 | 0 | -1.0 |
| MLO | 78 | 83 | 0440 | 420196 | 312.1 | 312.8 | 9.2 | 6.2 | 270 | 7.0 | -17.8 | 313.5 | 1 | 313.5 | 1 | 9.2 |
| MLO | 78 | 83 | 0440 | 430196 | 304.0 | 304.7 | 5.6 | 6.2 | 270 | 7.0 | -17.8 | 305.4 | 2 | 305.4 | 2 | 5.6 |
| MLO | 78 | 97 | 0330 | 420197 | 299.1 | 299.8 | 4.2 | 5.1 | 110 | 8.0 | -9.4 | 301.2 | 3 | 301.2 | 3 | 4.2 |
| MLO | 78 | 97 | 0330 | 430197 | 289.3 | 290.0 | 4.8 | 5.1 | 110 | 8.0 | -9.4 | 291.3 | 3 | 291.3 | 0 | 4.8 |
| MLO | 78 | 103 | 2351 | 440198 | 332.0 | 332.9 | 6.7 | 4.6 | 341 | 7.8 | -21.8 | 333.4 | 1 | 333.4 | 1 | 6.7 |
| MLO | 78 | 103 | 2351 | 450198 | 297.6 | 298.4 | 8.2 | 4.6 | 341 | 7.8 | -21.8 | 298.9 | 1 | 298.9 | 1 | 8.2 |
| MLO | 78 | 111 | 0010 | 460199 | 295.3 | 296.1 | 7.3 | 7.5 | 270 | 12.0 | -2.2 | 298.4 | 1 | 293.7 | 0 | 7.3 |
| MLO | 78 | 111 | 0010 | 470199 | 285.9 | 286.7 | 5.3 | 7.5 | 270 | 12.0 | -2.2 | 288.9 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 117 | 2144 | 420200 | 312.7 | 313.6 | 16.5 | 3.3 | 344 | 9.0 | -5.8 | 315.5 | 1 | 315.5 | 1 | 16.5 |
| MLO | 78 | 117 | 2144 | 430200 | 287.3 | 288.1 | 2.4 | 3.3 | 344 | 9.0 | -5.8 | 289.8 | 2 | 289.8 | 0 | 2.4 |
| MLO | 78 | 124 | 2118 | 440201 | 317.8 | 318.8 | 8.6 | 3.3 | 33 | 10.0 | -17.0 | 319.6 | 1 | 319.6 | 1 | 8.6 |
| MLO | 78 | 124 | 2118 | 450201 | 294.1 | 295.0 | 8.9 | 3.3 | 33 | 10.0 | -17.0 | 295.7 | 1 | 295.7 | 0 | 8.9 |
| MLO | 78 | 131 | 2148 | 460202 | 293.6 | 294.5 | 6.7 | 3.6 | 294 | 12.7 | -15.6 | 295.4 | 1 | 290.2 | 0 | 6.7 |
| MLO | 78 | 131 | 2148 | 470202 | 283.3 | 284.2 | 3.1 | 3.6 | 294 | 12.7 | -15.6 | 285.0 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 138 | 2142 | 420203 | 281.1 | 282.0 | 2.3 | 9.8 | 260 | 9.2 | -17.9 | 282.7 | 3 | 282.7 | 0 | 2.3 |
| MLO | 78 | 138 | 2142 | 430203 | 348.2 | 349.4 | 5.4 | 9.8 | 260 | 9.2 | -17.9 | 350.2 | 3 | 350.2 | 3 | 5.4 |
| MLO | 78 | 145 | 2134 | 440204 | 289.4 | 290.4 | 6.2 | 3.8 | 351 | 9.2 | -17.9 | 291.1 | 1 | 294.0 | 0 | 6.2 |
| MLO | 78 | 145 | 2134 | 450204 | 295.2 | 296.2 | 13.5 | 3.8 | 351 | 9.2 | -17.9 | 296.9 | 1 | -1.0 | 0 | -1.0 |
| MLO | 78 | 152 | 2228 | 460205 | 362.4 | 363.7 | 6.2 | 4.1 | 20 | 9.9 | -17.9 | 364.6 | 1 | 364.6 | 1 | 6.2 |
| MLO | 78 | 152 | 2228 | 470205 | 318.9 | 320.1 | 6.1 | 4.1 | 20 | 9.9 | -17.9 | 320.8 | 1 | 320.8 | 1 | 6.1 |
| MLO | 78 | 166 | 2324 | 420206 | 294.8 | 296.0 | 5.0 | 4.0 | 30 | 14.7 | -13.6 | 296.9 | 0 | 292.5 | 0 | 5.1 |
| MLO | 78 | 166 | 2324 | 430206 | 286.1 | 287.2 | 5.1 | 4.0 | 30 | 14.7 | -13.6 | 288.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 172 | 0234 | 440207 | 300.0 | 301.2 | 2.9 | 4.0 | 30 | 7.0 | 5.0 | 305.1 | 0 | 303.5 | 0 | 3.1 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 78 | 172 | 0234 | 450207 | 296.8 | 298.0 | 3.2 | 4.0 | 30 | 7.0 | 5.0 | 301.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 180 | 2137 | 460208 | 292.9 | 294.1 | 1.7 | 5.0 | 300 | 11.7 | 8.0 | 298.8 | 0 | 295.8 | 0 | 2.4 |
| MLO | 78 | 180 | 2137 | 470208 | 286.9 | 288.1 | 2.9 | 5.0 | 300 | 11.7 | 8.0 | 292.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 187 | 2132 | 420209 | 291.3 | 292.6 | 5.3 | 5.7 | 138 | 8.6 | -19.0 | 293.2 | 0 | 288.6 | 0 | 4.0 |
| MLO | 78 | 187 | 2132 | 430209 | 282.2 | 283.4 | 2.1 | 5.7 | 138 | 8.6 | -19.0 | 284.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 194 | 2139 | 440210 | 289.0 | 290.3 | 5.3 | 4.2 | 20 | 10.8 | -16.8 | 291.0 | 0 | 289.8 | 0 | 3.8 |
| MLO | 78 | 194 | 2139 | 450210 | 286.6 | 287.9 | .4 | 4.2 | 20 | 10.8 | -16.8 | 288.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 208 | 2245 | 420212 | 310.1 | 311.6 | 2.6 | 5.3 | 64 | 14.0 | -6.4 | 313.4 | 3 | 313.4 | 3 | 2.6 |
| MLO | 78 | 208 | 2245 | 430212 | 300.2 | 301.7 | 1.6 | 5.3 | 64 | 14.0 | -6.4 | 303.4 | 3 | 303.4 | 0 | 1.6 |
| MLO | 78 | 215 | 2145 | 440213 | 291.0 | 292.5 | 2.2 | 3.2 | 354 | 10.7 | -2.4 | 294.7 | 0 | 296.2 | 0 | 1.9 |
| MLO | 78 | 215 | 2145 | 450213 | 294.1 | 295.6 | 1.5 | 3.2 | 354 | 10.7 | -2.4 | 297.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 229 | 2337 | 470214 | 290.2 | 291.7 | 5.2 | 4.1 | 20 | 10.3 | -18.3 | 292.4 | 0 | 295.1 | 0 | 3.8 |
| MLO | 78 | 229 | 2337 | 460214 | 295.6 | 297.2 | 1.1 | 4.1 | 20 | 10.3 | -18.3 | 297.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 236 | 2233 | 430215 | 287.3 | 288.9 | 2.5 | 4.1 | 36 | 11.9 | -16.6 | 289.6 | 0 | 289.8 | 0 | 2.0 |
| MLO | 78 | 236 | 2233 | 430215 | 287.6 | 289.2 | 1.4 | 4.1 | 36 | 11.9 | -16.6 | 289.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 243 | 2323 | 440216 | 291.4 | 293.0 | 2.4 | 7.0 | 131 | 10.8 | -17.4 | 293.7 | 0 | 295.5 | 0 | 2.3 |
| MLO | 78 | 243 | 2323 | 450216 | 295.0 | 296.6 | 2.1 | 7.0 | 131 | 10.8 | -17.4 | 297.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 250 | 2240 | 460217 | 302.5 | 304.2 | 2.5 | 7.1 | 50 | 13.0 | -5.9 | 306.0 | 3 | 306.0 | 3 | 2.6 |
| MLO | 78 | 250 | 2240 | 470217 | 288.7 | 290.4 | 2.0 | 7.1 | 50 | 13.0 | -5.9 | 292.1 | 3 | 292.1 | 0 | 2.0 |
| MLO | 78 | 257 | 2137 | 420218 | 288.8 | 290.5 | 1.3 | 3.0 | 337 | 9.6 | -17.1 | 291.2 | 0 | 290.3 | 0 | .9 |
| MLO | 78 | 257 | 2137 | 430218 | 287.0 | 288.7 | .1 | 3.0 | 337 | 9.6 | -17.1 | 289.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 264 | 2134 | 440219 | 292.2 | 294.0 | 2.0 | 3.6 | 350 | 9.8 | -17.0 | 294.7 | 2 | 296.3 | 0 | 2.0 |
| MLO | 78 | 264 | 2134 | 450219 | 295.4 | 297.2 | 7.8 | 3.6 | 350 | 9.8 | -17.0 | 297.9 | 1 | -1.0 | 0 | -1.0 |
| MLO | 78 | 271 | 2124 | 460220 | 300.1 | 302.0 | 2.3 | 4.5 | 70 | 14.5 | -11.0 | 303.2 | 3 | 294.9 | 0 | 2.3 |
| MLO | 78 | 271 | 2124 | 470220 | 283.8 | 285.6 | 1.6 | 4.5 | 70 | 14.5 | -11.0 | 286.7 | 3 | -1.0 | 0 | -1.0 |
| MLO | 78 | 276 | 2303 | 420221 | 294.4 | 296.3 | .1 | 2.6 | 40 | 12.4 | -15.1 | 297.1 | 0 | 294.9 | 0 | 1.0 |
| MLO | 78 | 276 | 2303 | 430221 | 290.0 | 291.8 | 1.4 | 2.6 | 40 | 12.4 | -15.1 | 292.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 284 | 2314 | 440222 | 286.6 | 288.5 | 3.1 | 4.1 | 350 | 10.5 | -17.7 | 289.1 | 0 | 289.3 | 0 | 2.4 |
| MLO | 78 | 284 | 2314 | 450222 | 287.0 | 288.9 | 1.5 | 4.1 | 350 | 10.5 | -17.7 | 289.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 292 | 2334 | 460223 | 288.8 | 290.7 | 1.3 | 3.8 | 40 | 8.1 | -19.9 | 291.3 | 0 | 288.6 | 0 | 1.1 |
| MLO | 78 | 292 | 2334 | 470223 | 283.5 | 285.4 | .9 | 3.8 | 40 | 8.1 | -19.9 | 285.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 299 | 2336 | 430224 | 294.3 | 296.3 | 2.9 | 3.5 | 20 | 9.9 | -17.6 | 297.0 | 2 | 297.0 | 0 | 2.9 |
| MLO | 78 | 310 | 2016 | 440225 | 295.5 | 297.6 | 8.7 | 8.0 | 180 | 6.2 | -20.4 | 298.1 | 1 | 295.5 | 0 | 8.7 |
| MLO | 78 | 310 | 2016 | 450225 | 290.3 | 292.3 | 2.6 | 8.0 | 180 | 6.2 | -20.4 | 292.9 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 313 | 2140 | 460226 | 290.7 | 292.8 | 1.2 | 2.0 | 350 | 10.6 | -5.8 | 294.5 | 0 | 295.0 | 0 | 3.4 |
| MLO | 78 | 313 | 2140 | 470226 | 291.8 | 293.9 | 4.7 | 2.0 | 350 | 10.6 | -5.8 | 295.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 320 | 2335 | 420227 | 295.8 | 297.9 | 1.5 | 1.9 | 360 | 7.5 | -19.7 | 298.5 | 2 | 298.5 | 0 | 1.5 |
| MLO | 78 | 334 | 2230 | 440228 | 305.5 | 307.8 | 7.8 | 1.8 | 30 | 9.5 | -17.1 | 308.6 | 1 | 304.6 | 0 | 7.8 |
| MLO | 78 | 334 | 2230 | 450228 | 297.7 | 299.9 | 3.3 | 1.8 | 30 | 9.5 | -17.1 | 300.7 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 341 | 1319 | 470229 | 295.1 | 297.4 | 3.9 | 5.7 | 145 | 7.6 | -19.3 | 298.0 | 3 | 298.0 | 0 | 3.9 |
| MLO | 78 | 341 | 1319 | 460229 | 308.3 | 310.7 | 1.4 | 5.7 | 145 | 7.6 | -19.3 | 311.3 | 3 | 311.3 | 3 | 1.4 |
| MLO | 78 | 344 | 2334 | 420230 | 314.1 | 316.5 | 1.5 | 5.5 | 102 | 10.3 | -17.1 | 317.3 | 3 | 317.3 | 3 | 1.5 |
| MLO | 78 | 344 | 2334 | 430230 | 304.3 | 306.7 | 1.0 | 5.5 | 102 | 10.3 | -17.1 | 307.4 | 3 | 307.4 | 0 | 1.0 |
| MLO | 78 | 355 | 2114 | 440231 | 301.7 | 304.1 | 5.2 | 6.1 | 330 | 4.8 | -23.2 | 304.6 | 2 | 304.6 | 0 | 5.2 |
| MLO | 78 | 355 | 2114 | 450231 | 283.7 | 286.0 | 6.2 | 6.1 | 330 | 4.8 | -23.2 | 286.4 | 1 | 286.4 | 1 | 6.2 |
| MLO | 78 | 362 | 2130 | 460232 | 302.0 | 304.5 | 1.0 | 5.4 | 81 | 10.7 | -18.5 | 305.1 | 0 | 301.0 | 0 | .8 |
| MLO | 78 | 362 | 2130 | 470232 | 293.6 | 296.2 | .5 | 5.4 | 81 | 10.7 | -18.5 | 296.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 4 | 2128 | 420233 | 303.5 | 306.0 | 2.3 | 3.0 | 350 | 10.0 | -19.2 | 306.7 | 0 | 304.4 | 0 | 3.0 |
| MLO | 79 | 4 | 2128 | 430233 | 299.1 | 301.6 | 3.5 | 3.0 | 350 | 10.0 | -19.2 | 302.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 18 | 2327 | 440234 | 308.4 | 311.0 | 2.2 | 6.5 | 140 | 6.0 | -16.5 | 311.8 | 0 | 307.6 | 0 | 1.8 |
| MLO | 79 | 18 | 2327 | 450234 | 300.0 | 302.6 | 1.2 | 6.5 | 140 | 6.0 | -16.5 | 303.4 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 79 | 25 | 2214 | 460235 | 318.3 | 321.1 | 4.5 | 1.5 | 20 | 8.0 | -19.0 | 321.8 | 3 | 321.8 | 3 | 4.5 |
| MLO | 79 | 25 | 2214 | 470235 | 300.5 | 303.1 | 4.2 | 1.5 | 20 | 8.0 | -19.0 | 303.8 | 3 | 303.8 | 0 | 4.2 |
| MLO | 79 | 32 | 2219 | 420236 | 294.2 | 296.8 | 3.9 | 4.0 | 330 | 5.0 | -24.0 | 297.2 | 0 | 299.9 | 0 | 4.3 |
| MLO | 79 | 32 | 2219 | 430236 | 299.5 | 302.2 | 4.5 | 4.0 | 330 | 5.0 | -24.0 | 302.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 39 | 2033 | 440237 | 443.8 | 447.8 | 0 | 4.1 | 320 | 7.0 | -5.7 | 450.5 | 1 | 450.5 | 1 | .0 |
| MLO | 79 | 39 | 2033 | 450237 | 315.7 | 318.5 | 5.8 | 4.1 | 320 | 7.0 | -5.7 | 320.4 | 2 | 320.4 | 2 | 5.8 |
| MLO | 79 | 46 | 2132 | 460238 | 307.1 | 309.9 | 1.5 | 5.1 | 260 | 7.0 | -1.7 | 312.4 | 3 | 306.5 | 0 | 1.5 |
| MLO | 79 | 46 | 2132 | 470238 | 295.6 | 298.3 | .8 | 5.1 | 260 | 7.0 | -1.7 | 300.7 | 3 | -1.0 | 0 | -1.0 |
| MLO | 79 | 53 | 2337 | 420239 | 289.2 | 291.9 | 1.6 | 6.1 | 310 | 8.3 | 2.5 | 295.1 | 0 | 296.3 | 0 | 2.8 |
| MLO | 79 | 53 | 2337 | 430239 | 291.7 | 294.4 | 3.5 | 6.1 | 310 | 8.3 | 2.5 | 297.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 60 | 0020 | 450240 | 293.6 | 296.4 | .9 | 3.5 | 330 | 4.0 | 1.1 | 299.3 | 2 | 298.8 | 0 | .9 |
| MLO | 79 | 60 | 0020 | 440240 | 292.7 | 295.5 | 10.8 | 3.5 | 330 | 4.0 | 1.1 | 298.4 | 1 | -1.0 | 0 | -1.0 |
| MLO | 79 | 67 | 2121 | 430241 | 297.2 | 300.1 | 6.3 | 2.8 | 34 | 10.5 | -12.8 | 301.1 | 1 | 304.6 | 0 | 6.3 |
| MLO | 79 | 67 | 2121 | 420241 | 304.1 | 307.0 | 1.6 | 2.8 | 34 | 10.5 | -12.8 | 308.1 | 2 | -1.0 | 0 | -1.0 |
| MLO | 79 | 74 | 2100 | 460242 | 319.9 | 323.0 | .9 | 7.1 | 140 | 11.5 | -14.7 | 324.0 | 3 | 324.0 | 3 | .9 |
| MLO | 79 | 74 | 2100 | 470242 | 305.4 | 308.4 | .5 | 7.1 | 140 | 11.5 | -14.7 | 309.3 | 3 | 309.3 | 0 | .5 |
| MLO | 79 | 81 | 2147 | 440243 | 296.3 | 299.2 | 1.8 | 3.5 | 30 | 7.5 | -16.7 | 300.0 | 0 | 299.3 | 0 | 1.8 |
| MLO | 79 | 81 | 2147 | 450243 | 295.0 | 297.9 | 1.8 | 3.5 | 30 | 7.5 | -16.7 | 298.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 89 | 2136 | 460244 | 296.6 | 299.6 | .1 | 10.3 | 246 | 8.5 | -17.9 | 300.3 | 0 | 298.7 | 0 | .4 |
| MLO | 79 | 89 | 2136 | 470244 | 293.4 | 296.4 | .6 | 10.3 | 246 | 8.5 | -17.9 | 297.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 96 | 2026 | 430245 | 286.6 | 289.5 | 1.0 | 4.1 | 330 | 8.0 | 7.6 | 294.0 | 0 | 297.6 | 0 | 2.4 |
| MLO | 79 | 96 | 2026 | 420245 | 293.6 | 296.6 | 3.2 | 4.1 | 330 | 8.0 | 7.6 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 103 | 2331 | 440246 | 293.7 | 296.8 | 1.9 | 12.3 | 239 | 13.0 | -3.3 | 298.9 | 0 | 299.9 | 0 | 1.4 |
| MLO | 79 | 103 | 2331 | 450246 | 295.8 | 298.9 | .5 | 12.3 | 239 | 13.0 | -3.3 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 110 | 2338 | 470247 | 288.9 | 291.9 | .4 | 5.1 | 290 | 6.0 | -2.1 | 294.2 | 0 | 297.0 | 0 | 2.3 |
| MLO | 79 | 110 | 2338 | 460247 | 294.4 | 297.5 | 3.2 | 5.1 | 290 | 6.0 | -2.1 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 117 | 2206 | 430248 | 291.6 | 294.7 | 1.3 | 10.2 | 270 | 10.5 | -26.5 | 295.1 | 0 | 299.6 | 0 | 1.8 |
| MLO | 79 | 117 | 2216 | 420248 | 300.5 | 303.7 | 2.2 | 10.2 | 270 | 10.5 | -26.5 | 304.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 123 | 2126 | 440249 | 295.9 | 299.1 | 4.6 | 5.1 | 10 | 12.5 | -7.4 | 300.7 | 0 | 300.3 | 0 | 3.4 |
| MLO | 79 | 123 | 2126 | 450249 | 295.2 | 298.4 | 1.2 | 5.1 | 10 | 12.5 | -7.4 | 299.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 130 | 2039 | 460250 | 300.4 | 303.7 | .7 | 2.0 | 360 | 12.5 | -1.4 | 306.2 | 0 | 304.8 | 0 | 1.2 |
| MLO | 79 | 130 | 2039 | 470250 | 297.7 | 301.0 | 1.6 | 2.0 | 360 | 12.5 | -1.4 | 303.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 137 | 2117 | 430251 | 289.1 | 292.3 | 2.5 | 5.1 | 315 | 9.0 | 3.8 | 295.8 | 3 | 301.2 | 0 | 2.5 |
| MLO | 79 | 137 | 2117 | 420251 | 299.6 | 302.9 | 2.0 | 5.1 | 315 | 9.0 | 3.8 | 306.5 | 3 | -1.0 | 0 | -1.0 |
| MLO | 79 | 144 | 2204 | 440252 | 303.1 | 306.5 | .8 | 4.9 | 296 | 15.0 | -4.9 | 308.4 | 0 | 309.9 | 0 | 1.0 |
| MLO | 79 | 144 | 2204 | 450252 | 306.0 | 309.4 | 1.2 | 4.9 | 296 | 15.0 | -4.9 | 311.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 151 | 2053 | 460253 | 310.5 | 314.0 | 1.0 | 6.5 | 20 | 9.0 | MSG | 315.3 | 3 | 304.9 | 0 | 1.0 |
| MLO | 79 | 151 | 2053 | 470253 | 290.1 | 293.4 | 2.6 | 6.5 | 20 | 9.0 | MSG | 294.6 | 3 | -1.0 | 0 | -1.0 |
| MLO | 79 | 165 | 2327 | 430254 | 292.8 | 296.2 | .0 | 5.1 | 270 | 15.0 | MSG | 297.4 | 0 | 298.1 | 0 | .6 |
| MLO | 79 | 165 | 2327 | 420254 | 294.2 | 297.6 | .6 | 5.1 | 270 | 15.0 | MSG | 298.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 172 | 2245 | 450255 | 315.4 | 319.1 | 3.9 | 4.1 | 77 | 11.5 | -9.0 | 320.6 | 2 | 320.6 | 2 | 3.9 |
| MLO | 79 | 172 | 2245 | 440255 | 317.2 | 321.0 | 0 | 4.1 | 77 | 11.5 | -9.0 | 322.4 | 1 | 322.4 | 1 | .0 |
| MLO | 79 | 186 | 2142 | 430257 | 297.7 | 301.3 | 1.0 | 4.1 | 318 | 13.5 | -6.2 | 303.0 | 0 | 303.8 | 0 | 1.5 |
| MLO | 79 | 186 | 2142 | 420257 | 299.2 | 302.8 | 1.8 | 4.1 | 318 | 13.5 | -6.2 | 304.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 193 | 2300 | 450258 | 302.7 | 306.4 | 1.4 | 4.1 | 350 | 11.5 | 6.0 | 310.7 | 0 | 308.5 | 0 | 1.8 |
| MLO | 79 | 193 | 2300 | 440258 | 298.5 | 302.2 | 2.1 | 4.1 | 350 | 11.5 | 6.0 | 306.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 200 | 2339 | 470259 | 300.6 | 304.3 | 1.4 | 9.3 | 10 | 12.0 | -14.7 | 305.2 | 0 | 310.0 | 0 | 1.2 |
| MLO | 79 | 200 | 2339 | 460259 | 309.9 | 313.8 | 1.0 | 9.3 | 10 | 12.0 | -14.7 | 314.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 207 | 2300 | 420260 | 299.5 | 303.3 | 2.2 | 3.1 | 330 | 12.0 | -6.0 | 305.0 | 0 | 308.1 | 0 | 2.2 |
| MLO | 79 | 207 | 2300 | 430260 | 305.6 | 309.5 | 2.1 | 3.1 | 330 | 12.0 | -6.0 | 311.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 212 | 2010 | 450261 | 312.3 | 316.3 | 1.1 | 3.1 | 345 | 11.5 | -8.4 | 317.8 | 0 | 315.9 | 0 | 1.4 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 79 | 212 | 2010 | 440261 | 308.6 | 312.5 | 1.6 | 3.1 | 345 | 11.5 | -8.4 | 314.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 218 | 2235 | 460262 | 3000.6 | 3039.1 | 1.7 | 6.1 | 331 | 13.2 | -4.6 | 3058.7 | 2 | 3058.7 | 2 | 1.7 |
| MLO | 79 | 242 | 2120 | 470265 | 313.4 | 317.6 | 9.0 | 15.3 | 120 | 11.0 | -6.8 | 319.3 | 1 | 319.3 | 0 | 9.0 |
| MLO | 79 | 249 | 2057 | 420266 | 316.2 | 320.5 | 3.3 | 5.1 | 60 | 12.0 | -13.1 | 321.5 | 0 | 319.5 | 0 | 3.6 |
| MLO | 79 | 249 | 2057 | 430266 | 312.2 | 316.4 | 3.8 | 5.1 | 60 | 12.0 | -13.1 | 317.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 256 | 2144 | 450267 | 321.3 | 325.7 | 2.4 | 5.1 | 50 | 12.0 | -10.3 | 327.0 | 3 | 327.0 | 3 | 2.4 |
| MLO | 79 | 256 | 2144 | 440267 | 308.9 | 313.1 | 1.1 | 5.1 | 50 | 12.0 | -10.3 | 314.4 | 3 | 314.4 | 0 | 1.1 |
| MLO | 79 | 264 | 2132 | 470268 | 307.6 | 311.9 | 1.9 | 3.5 | 360 | 11.5 | -4.3 | 313.9 | 3 | 313.9 | 0 | 1.9 |
| MLO | 79 | 264 | 2132 | 460268 | 330.5 | 335.1 | 3.9 | 3.5 | 360 | 11.5 | -4.3 | 337.3 | 3 | 337.3 | 3 | 3.9 |
| MLO | 79 | 270 | 2130 | 430269 | 302.9 | 307.1 | 2.4 | 3.1 | 225 | 12.0 | -6.0 | 308.9 | 0 | 309.0 | 0 | 1.7 |
| MLO | 79 | 270 | 2130 | 440269 | 303.0 | 307.2 | .2 | 3.1 | 225 | 12.0 | -6.0 | 309.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 277 | 2059 | 440270 | 329.0 | 333.6 | 2.8 | 3.5 | 320 | 11.0 | 3.5 | 337.5 | 0 | 333.8 | 0 | 2.3 |
| MLO | 79 | 277 | 2059 | 450270 | 321.7 | 326.2 | 1.7 | 3.5 | 320 | 11.0 | 3.5 | 330.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 284 | 2100 | 470271 | 350.6 | 355.6 | .6 | 3.5 | 20 | 10.5 | 3.5 | 359.7 | 3 | 359.7 | 3 | .6 |
| MLO | 79 | 284 | 2100 | 460271 | 442.7 | 449.0 | 3.3 | 3.5 | 20 | 10.5 | 3.5 | 454.2 | 3 | 454.2 | 3 | 3.3 |
| MLO | 79 | 288 | 2118 | 430272 | 349.2 | 354.2 | 3.5 | 6.5 | 70 | 11.0 | .9 | 357.6 | 3 | 357.6 | 3 | 3.5 |
| MLO | 79 | 288 | 2118 | 420272 | 396.1 | 401.8 | .8 | 6.6 | 70 | 11.0 | .9 | 405.7 | 3 | 405.7 | 3 | .8 |
| MLO | 79 | 298 | 2134 | 430273 | 332.2 | 337.0 | .2 | 2.5 | 340 | 12.5 | -4.7 | 339.2 | 5 | 341.8 | 5 | 1.1 |
| MLO | 79 | 298 | 2134 | 420273 | 337.3 | 342.2 | 1.6 | 2.5 | 340 | 12.5 | -4.7 | 344.4 | 5 | -1.0 | 5 | -1.0 |
| MLO | 79 | 310 | 2135 | 450274 | 310.5 | 315.1 | .6 | 7.7 | 115 | 11.0 | -15.5 | 316.0 | 0 | 314.3 | 0 | 2.1 |
| MLO | 79 | 310 | 2135 | 440274 | 307.3 | 311.8 | 2.9 | 7.7 | 115 | 11.0 | -15.5 | 312.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 319 | 2030 | 470275 | 305.3 | 309.9 | 1.3 | 5.1 | 290 | 7.5 | 2.4 | 313.2 | 3 | 319.4 | 0 | 1.3 |
| MLO | 79 | 319 | 2030 | 460275 | 317.3 | 322.1 | 1.4 | 5.1 | 290 | 7.5 | 2.4 | 325.5 | 3 | -1.0 | 0 | -1.0 |
| MLO | 79 | 333 | 2039 | 430276 | 392.6 | 398.6 | 3.6 | 1.0 | 45 | 12.0 | -14.9 | 399.8 | 5 | 396.2 | 5 | 3.4 |
| MLO | 79 | 333 | 2039 | 420276 | 385.6 | 391.5 | 3.1 | 1.0 | 45 | 12.0 | -14.9 | 392.6 | 5 | -1.0 | 5 | -1.0 |
| MLO | 79 | 340 | 2108 | 440277 | 310.1 | 314.9 | .4 | 4.5 | 345 | 9.5 | -3.2 | 317.1 | 0 | 315.9 | 0 | .6 |
| MLO | 79 | 340 | 2108 | 450277 | 307.6 | 312.3 | .7 | 4.5 | 345 | 9.5 | -3.2 | 314.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 347 | 2132 | 470278 | 307.5 | 312.3 | 4.3 | 2.0 | 300 | 12.0 | -9.1 | 313.7 | 3 | 313.7 | 0 | 4.3 |
| MLO | 79 | 347 | 2132 | 460278 | 331.4 | 336.6 | 3.1 | 2.0 | 300 | 12.0 | -9.1 | 338.1 | 3 | 338.1 | 3 | 3.1 |
| MLO | 79 | 354 | 2127 | 430279 | 384.4 | 390.4 | 2.8 | 10.7 | 130 | 15.5 | -11.3 | 392.0 | 3 | 392.0 | 3 | 2.8 |
| MLO | 79 | 354 | 2127 | 420279 | 348.5 | 354.0 | 1.3 | 10.7 | 130 | 15.5 | -11.3 | 355.4 | 3 | 355.4 | 3 | 1.3 |
| MLO | 79 | 361 | 2149 | 460280 | 347.5 | 353.0 | 1.0 | 3.0 | 50 | 8.5 | -16.3 | 353.9 | 3 | 353.9 | 3 | 1.0 |
| MLO | 79 | 361 | 2149 | 470280 | 315.0 | 320.0 | 1.6 | 3.0 | 50 | 8.5 | -16.3 | 320.8 | 3 | 320.8 | 0 | 1.6 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F1 | 4 PPTV | F2 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 77 | 120 | 0130 | 050122 | 279.6 | 250.4 | 4.2 | 3.0 | 330 | 29.9 | 25.1 | 255.9 | 2 | 255.9 | 2 | 4.2 |
| SMO | 77 | 125 | 2035 | 010123 | 292.5 | 262.0 | 5.8 | 4.0 | 350 | 28.0 | 24.3 | 267.8 | 2 | 267.8 | 2 | 5.8 |
| SMO | 77 | 134 | 2130 | 040124 | 249.8 | 223.8 | 5.7 | 10.0 | 140 | 28.9 | 25.1 | 228.7 | 2 | 228.7 | 2 | 5.7 |
| SMO | 77 | 139 | 0315 | 050125 | 265.6 | 238.0 | 7.4 | 3.0 | 340 | 27.0* | 24.5* | 243.2 | 1 | 243.2 | 0 | 7.4 |
| SMO | 77 | 146 | 2100 | 010126 | 299.0 | 268.0 | 7.7 | 7.0 | 130 | 27.8 | 22.2 | 273.8 | 1 | 273.8 | 1 | 7.7 |
| SMO | 77 | 156 | 0400 | 040127 | 247.0 | 221.4 | 1.0 | 7.0 | 140 | 26.3 | 21.9 | 226.3 | 2 | 226.3 | 2 | 1.0 |
| SMO | 77 | 161 | 0100 | 050128 | 275.2 | 246.7 | 3.3 | 9.0 | 170 | 27.9 | 24.8 | 252.1 | 2 | 252.1 | 0 | 3.3 |
| SMO | 77 | 169 | 0200 | 010129 | 281.6 | 252.5 | 1.3 | 8.0 | 140 | 26.6 | 21.8 | 258.0 | 2 | 258.0 | 0 | 1.3 |
| SMO | 77 | 174 | 2025 | 040130 | 260.5 | 233.6 | 6.1 | 7.7 | 158 | 26.7 | 23.3 | 238.7 | 1 | 238.7 | 1 | 6.1 |
| SMO | 77 | 180 | 2330 | 050131 | 271.2 | 243.2 | 5.2 | 9.0 | 120 | 27.0* | 24.5* | 248.6 | 2 | 248.6 | 0 | 5.2 |
| SMO | 77 | 195 | 0205 | 010132 | 254.5 | 228.3 | 7.1 | 8.5 | 50 | 26.8 | 24.7 | 233.3 | 1 | 233.3 | 1 | 7.1 |
| SMO | 77 | 208 | 0300 | 040133 | 252.1 | 226.2 | 1.1 | 8.0 | 170 | 27.0* | 24.5* | 231.2 | 2 | 231.2 | 2 | 1.1 |
| SMO | 77 | 216 | 0255 | 050134 | 261.6 | 234.8 | 2.7 | 6.5 | 100 | 26.1 | 20.7 | 240.0 | 2 | 240.0 | 2 | 2.7 |
| SMO | 77 | 224 | 0030 | 040135 | 258.6 | 232.1 | 2.5 | 10.0 | 130 | 26.4 | 21.0 | 237.2 | 2 | 237.2 | 2 | 2.5 |
| SMO | 77 | 231 | 0010 | 010136 | 340.3 | 305.5 | 10.0 | 8.0 | 160 | 25.2 | 12.6 | 312.2 | 1 | 312.2 | 1 | 10.0 |
| SMO | 77 | 237 | 0150 | 050137 | 272.3 | 244.5 | 1.0 | 6.0 | 160 | 25.8 | 19.7 | 249.9 | 2 | 249.9 | 0 | 1.0 |
| SMO | 77 | 243 | 2025 | 040138 | 257.4 | 231.2 | 3.4 | 4.0 | 170 | 24.6 | 19.9 | 236.2 | 2 | 236.2 | 2 | 3.4 |
| SMO | 77 | 257 | 2345 | 010139 | 299.6 | 269.1 | .6 | 6.0 | 160 | 27.0* | 24.5* | 275.0 | 2 | 275.0 | 2 | .6 |
| SMO | 77 | 264 | 2025 | 050140 | 263.2 | 236.5 | 4.5 | 5.0 | 150 | 26.4 | 19.8 | 241.7 | 2 | 241.7 | 2 | 4.5 |
| SMO | 77 | 271 | 2030 | 040141 | 266.3 | 239.3 | 4.2 | 8.0 | 140 | 27.0* | 24.5* | 244.6 | 2 | 244.6 | 2 | 4.2 |
| SMO | 77 | 280 | 0230 | 010142 | 297.6 | 267.5 | 3.5 | 10.0 | 130 | 27.0 | 19.8 | 273.3 | 2 | 273.3 | 2 | 3.5 |
| SMO | 77 | 289 | 0135 | 050143 | 286.8 | 257.8 | 4.1 | 8.0 | 150 | 25.8 | 20.6 | 263.5 | 2 | 263.5 | 0 | 4.1 |
| SMO | 77 | 293 | 0055 | 040144 | 277.8 | 249.7 | 2.6 | 4.0 | 120 | 28.0 | 20.2 | 255.2 | 2 | 255.2 | 0 | 2.6 |
| SMO | 77 | 302 | 2335 | 010145 | 311.1 | 279.7 | 4.1 | 10.0 | 130 | 25.5 | 20.6 | 285.9 | 2 | 285.9 | 2 | 4.1 |
| SMO | 77 | 307 | 2045 | 050146 | 278.9 | 250.8 | 1.7 | 3.5 | 150 | 26.5 | 21.2 | 256.3 | 2 | 256.3 | 0 | 1.7 |
| SMO | 77 | 314 | 0220 | 040147 | 276.2 | 248.4 | 2.9 | 4.5 | 150 | 27.3 | 19.8 | 253.9 | 2 | 253.9 | 0 | 2.9 |
| SMO | 77 | 321 | 0215 | 010148 | 297.2 | 267.3 | 3.4 | 9.0 | 150 | 27.6 | 23.3 | 273.2 | 2 | 273.2 | 2 | 3.4 |
| SMO | 77 | 328 | 2100 | 050149 | 290.6 | 261.4 | 1.2 | 7.5 | 135 | 26.0 | 24.4 | 267.2 | 2 | 267.2 | 2 | 1.2 |
| SMO | 77 | 224 | 0020 | 510135 | 247.0 | 246.4 | 3.1 | 10.0 | 130 | 26.4 | 21.0 | 251.8 | 3 | 251.8 | 0 | 3.1 |
| SMO | 77 | 224 | 0020 | 520135 | 258.7 | 258.0 | 4.0 | 10.0 | 130 | 26.4 | 21.0 | 263.7 | 3 | 263.7 | 3 | 4.0 |
| SMO | 77 | 231 | 0010 | 530136 | 250.4 | 249.8 | 4.4 | 8.0 | 160 | 25.2 | 12.6 | 255.3 | 0 | 253.8 | 0 | 5.0 |
| SMO | 77 | 231 | 0010 | 540136 | 247.4 | 246.8 | 5.6 | 8.0 | 160 | 25.2 | 12.6 | 252.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 237 | 0150 | 550137 | 247.6 | 247.0 | 5.5 | 6.0 | 160 | 25.8 | 19.7 | 252.5 | 2 | 254.6 | 0 | 5.5 |
| SMO | 77 | 237 | 0150 | 560137 | 251.8 | 251.2 | 7.2 | 6.0 | 160 | 25.8 | 19.7 | 256.7 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 243 | 2025 | 510138 | 244.0 | 243.5 | 3.8 | 4.0 | 170 | 24.6 | 19.9 | 248.8 | 0 | 252.1 | 0 | 2.7 |
| SMO | 77 | 243 | 2025 | 520138 | 250.4 | 249.9 | .5 | 4.0 | 170 | 24.6 | 19.9 | 255.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 257 | 2345 | 530139 | 245.5 | 245.0 | 3.2 | 6.0 | 160 | 27.0* | 24.5* | 250.4 | 0 | 250.9 | 0 | 3.1 |
| SMO | 77 | 257 | 2345 | 540139 | 246.5 | 246.0 | 2.9 | 6.0 | 160 | 27.0* | 24.5* | 251.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 264 | 2025 | 510140 | 251.1 | 250.7 | 2.0 | 5.0 | 150 | 26.4 | 19.8 | 256.2 | 0 | 253.7 | 0 | 1.9 |
| SMO | 77 | 264 | 2025 | 520140 | 246.2 | 245.8 | 1.7 | 5.0 | 150 | 26.4 | 19.8 | 251.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 271 | 2030 | 550141 | 243.8 | 243.4 | 2.8 | 8.0 | 140 | 27.0* | 24.5* | 248.8 | 0 | 251.7 | 0 | 2.9 |
| SMO | 77 | 271 | 2030 | 560141 | 249.5 | 249.1 | 2.9 | 8.0 | 140 | 27.0* | 24.5* | 254.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 280 | 0215 | 530142 | 268.3 | 267.9 | 2.5 | 10.0 | 130 | 27.0 | 19.8 | 273.8 | 3 | 273.8 | 3 | 2.5 |
| SMO | 77 | 280 | 0215 | 540142 | 243.9 | 243.6 | 2.4 | 10.0 | 130 | 27.0 | 19.8 | 248.9 | 3 | 248.9 | 0 | 2.4 |
| SMO | 77 | 289 | 0135 | 510143 | 247.9 | 247.6 | 4.4 | 8.0 | 150 | 25.8 | 20.6 | 253.0 | 2 | 256.6 | 0 | 4.4 |
| SMO | 77 | 289 | 0135 | 520143 | 254.8 | 254.5 | 6.3 | 8.0 | 150 | 25.8 | 20.6 | 260.1 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 293 | 0045 | 550144 | 249.3 | 249.0 | 5.7 | 4.0 | 115 | 28.0 | 20.2 | 254.5 | 0 | 255.6 | 0 | 4.3 |
| SMO | 77 | 293 | 0045 | 560144 | 251.4 | 251.1 | 2.2 | 4.0 | 115 | 28.0 | 20.2 | 256.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 302 | 2335 | 530145 | 264.2 | 264.0 | 6.9 | 10.0 | 130 | 25.5 | 20.6 | 269.8 | 1 | 269.8 | 1 | 6.9 |
| SMO | 77 | 302 | 2335 | 540145 | 248.3 | 248.1 | 3.0 | 10.0 | 130 | 25.5 | 20.6 | 253.5 | 2 | 253.5 | 0 | 3.0 |
| SMO | 77 | 307 | 2045 | 510146 | 256.7 | 256.5 | 1.5 | 3.5 | 150 | 26.5 | 21.2 | 262.1 | 0 | 261.0 | 0 | 1.1 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 77 | 307 | 2045 | 520146 | 254.5 | 254.3 | .3 | 3.5 | 150 | 26.5 | 21.2 | 259.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 314 | 0220 | 550147 | 247.9 | 247.7 | 1.8 | 4.5 | 150 | 27.3 | 19.8 | 253.2 | 0 | 251.9 | 0 | 2.5 |
| SMO | 77 | 314 | 0220 | 560147 | 245.4 | 245.2 | 3.1 | 4.5 | 150 | 27.3 | 19.8 | 250.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 321 | 0210 | 530148 | 250.0 | 249.9 | 3.3 | 9.0 | 150 | 27.6 | 23.3 | 255.4 | 0 | 253.4 | 0 | 2.4 |
| SMO | 77 | 321 | 0210 | 540148 | 246.1 | 246.0 | 1.0 | 9.0 | 150 | 27.6 | 23.3 | 251.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 328 | 2100 | 510149 | 248.6 | 248.5 | 1.2 | 7.5 | 135 | 26.0 | 24.4 | 254.0 | 0 | 253.7 | 0 | 1.5 |
| SMO | 77 | 328 | 2100 | 520149 | 248.0 | 247.9 | 1.8 | 7.5 | 135 | 26.0 | 24.4 | 253.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 337 | 2045 | 550150 | 254.4 | 254.4 | 5.5 | 4.0 | 150 | 29.8 | 25.8 | 259.9 | 0 | 257.3 | 0 | 4.4 |
| SMO | 77 | 337 | 2045 | 560150 | 249.2 | 249.2 | 2.9 | 4.0 | 150 | 29.8 | 25.8 | 254.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 341 | 2355 | 530151 | 256.7 | 256.7 | 3.7 | 7.5 | 140 | 29.2 | 24.9 | 262.3 | 0 | 265.7 | 0 | 4.8 |
| SMO | 77 | 341 | 2355 | 540151 | 263.4 | 263.4 | 5.7 | 7.5 | 140 | 29.2 | 24.9 | 269.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 349 | 0250 | 510152 | 259.6 | 259.6 | 6.9 | 8.5 | 140 | 28.4 | 25.4 | 265.3 | 1 | 263.5 | 0 | 6.9 |
| SMO | 77 | 349 | 0250 | 520152 | 256.0 | 256.0 | 3.1 | 8.5 | 140 | 28.4 | 25.4 | 261.6 | 2 | -1.0 | 0 | -1.0 |
| SMO | 77 | 364 | 2035 | 550153 | 257.7 | 257.8 | 5.4 | 5.1 | 52 | 29.0 | 27.7 | 263.5 | 0 | 263.5 | 0 | 4.6 |
| SMO | 77 | 364 | 2035 | 560153 | 257.8 | 257.9 | 3.7 | 5.1 | 52 | 29.0 | 27.7 | 263.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 5 | 0245 | 530154 | 259.7 | 259.8 | 7.4 | 4.5 | 60 | 27.5 | 26.2 | 265.5 | 1 | 263.2 | 0 | 7.4 |
| SMO | 78 | 5 | 0245 | 540154 | 255.1 | 255.2 | 5.1 | 4.5 | 60 | 27.5 | 26.2 | 260.8 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 15 | 0230 | 510155 | 255.5 | 255.7 | 2.2 | 6.0 | 130 | 27.7 | 24.7 | 261.3 | 0 | 262.9 | 0 | 1.9 |
| SMO | 78 | 15 | 0230 | 520155 | 258.7 | 258.9 | 1.6 | 6.0 | 130 | 27.7 | 24.7 | 264.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 21 | 0250 | 550156 | 263.8 | 264.0 | 8.7 | 5.0 | 100 | 28.0 | 23.9 | 269.8 | 1 | 269.8 | 1 | 8.7 |
| SMO | 78 | 21 | 0250 | 560156 | 267.3 | 267.5 | 5.5 | 5.0 | 100 | 28.0 | 23.9 | 273.4 | 2 | 273.4 | 2 | 5.5 |
| SMO | 78 | 33 | 2230 | 510157 | 264.7 | 265.0 | 9.8 | 3.0 | 40 | 27.0* | 24.5* | 270.8 | 1 | 270.8 | 1 | 9.8 |
| SMO | 78 | 33 | 2230 | 520157 | 262.0 | 262.3 | 4.9 | 3.0 | 40 | 27.0* | 24.5* | 268.1 | 2 | 268.1 | 0 | 4.9 |
| SMO | 78 | 42 | 2305 | 530158 | 264.9 | 265.2 | 7.6 | 2.8 | 130 | 27.5 | 26.2 | 271.1 | 1 | 271.1 | 1 | 7.6 |
| SMO | 78 | 42 | 2305 | 540158 | 260.7 | 261.0 | 3.7 | 2.8 | 130 | 27.5 | 26.2 | 266.8 | 2 | 266.8 | 0 | 3.7 |
| SMO | 78 | 61 | 2145 | 550159 | 264.2 | 264.7 | 8.8 | 5.0 | 120 | 28.0 | 23.9 | 270.5 | 1 | 265.4 | 0 | 8.8 |
| SMO | 78 | 61 | 2145 | 560159 | 254.3 | 254.7 | 4.7 | 5.0 | 120 | 28.0 | 23.9 | 260.3 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 68 | 0305 | 510160 | 259.4 | 259.9 | 6.8 | 9.0 | 140 | 28.5 | 25.1 | 265.6 | 1 | 268.0 | 0 | 6.8 |
| SMO | 78 | 68 | 0305 | 520160 | 264.0 | 264.5 | 6.5 | 9.0 | 140 | 28.5 | 25.1 | 270.3 | 1 | -1.0 | 0 | -1.0 |
| SMO | 78 | 81 | 0100 | 530161 | 301.7 | 302.3 | U | 9.0 | 20 | 28.0 | 26.0 | 309.0 | 1 | 309.0 | 1 | .0 |
| SMO | 78 | 81 | 0100 | 540161 | 285.0 | 285.6 | 9.4 | 9.0 | 20 | 28.0 | 26.0 | 291.9 | 1 | 291.9 | 1 | 9.4 |
| SMO | 78 | 87 | 2025 | 550162 | 301.0 | 301.7 | 4.1 | 7.5 | 340 | 26.7 | 24.7 | 308.3 | 5 | 308.8 | 5 | 4.0 |
| SMO | 78 | 87 | 2025 | 560162 | 301.9 | 302.6 | 3.9 | 7.5 | 340 | 26.7 | 24.7 | 309.2 | 5 | -1.0 | 5 | -1.0 |
| SMO | 78 | 99 | 0100 | 510163 | 295.9 | 296.6 | 6.3 | 6.0 | 130 | 27.8 | 26.5 | 303.2 | 1 | 303.2 | 1 | 6.3 |
| SMO | 78 | 99 | 0100 | 520163 | 268.8 | 269.5 | .9 | 6.0 | 130 | 27.8 | 26.5 | 275.4 | 2 | 275.4 | 2 | .9 |
| SMO | 78 | 108 | 0440 | 530164 | 296.5 | 297.3 | 23.3 | 3.0 | 315 | 28.0 | 25.3 | 303.8 | 1 | 303.8 | 1 | 23.3 |
| SMO | 78 | 108 | 0440 | 540164 | 269.8 | 270.5 | 3.2 | 3.0 | 315 | 28.0 | 25.3 | 276.5 | 2 | 276.5 | 2 | 3.2 |
| SMO | 78 | 121 | 0255 | 560165 | 275.5 | 276.3 | 6.2 | 4.5 | 150 | 26.8 | 23.5 | 282.4 | 1 | 282.4 | 1 | 6.2 |
| SMO | 78 | 121 | 0255 | 550165 | 270.3 | 271.1 | 6.0 | 4.5 | 150 | 26.8 | 23.5 | 277.1 | 2 | 277.1 | 2 | 6.0 |
| SMO | 78 | 126 | 2355 | 520166 | 302.1 | 303.0 | 9.6 | 6.0 | 160 | 28.1 | 26.0 | 309.7 | 1 | 309.7 | 1 | 9.6 |
| SMO | 78 | 126 | 2355 | 510166 | 274.2 | 275.0 | 3.4 | 6.0 | 160 | 28.1 | 26.0 | 281.1 | 2 | 281.1 | 2 | 3.4 |
| SMO | 78 | 133 | 2250 | 540167 | 269.2 | 270.1 | 4.9 | 9.0 | 330 | 26.2 | 24.4 | 276.0 | 2 | 276.0 | 2 | 4.9 |
| SMO | 78 | 137 | 2100 | 550168 | 267.3 | 268.2 | 4.9 | 7.5 | 120 | 27.4 | 24.4 | 274.1 | 0 | 270.9 | 0 | 4.0 |
| SMO | 78 | 137 | 2100 | 560168 | 261.0 | 261.9 | 2.7 | 7.5 | 120 | 27.4 | 24.4 | 267.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 148 | 0355 | 510169 | 283.0 | 284.0 | 4.0 | 6.0 | 80 | 26.3 | 23.1 | 290.3 | 2 | 290.3 | 2 | 4.0 |
| SMO | 78 | 148 | 0355 | 520169 | 269.4 | 270.4 | 7.8 | 6.0 | 80 | 26.3 | 23.1 | 276.3 | 1 | 276.3 | 1 | 7.8 |
| SMO | 78 | 159 | 2025 | 530170 | 266.6 | 267.6 | 6.8 | 5.0 | 130 | 27.3 | 24.4 | 273.5 | 1 | 271.7 | 0 | 6.8 |
| SMO | 78 | 159 | 2025 | 540170 | 263.1 | 264.1 | 3.2 | 5.0 | 130 | 27.3 | 24.4 | 269.9 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 168 | 0025 | 520171 | 266.9 | 268.0 | 5.6 | 8.0 | 140 | 26.1 | 21.7 | 273.9 | 0 | 274.4 | 0 | 5.5 |
| SMO | 78 | 168 | 0025 | 510171 | 267.9 | 269.0 | 5.3 | 8.0 | 140 | 26.1 | 21.7 | 274.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 176 | 0240 | 560172 | 261.0 | 262.1 | 3.0 | 7.0 | 30 | 27.6 | 24.6 | 267.8 | 0 | 268.0 | 0 | 2.4 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 78 | 176 | 0240 | 550172 | 261.3 | 262.4 | 1.5 | 7.0 | 30 | 27.6 | 24.6 | 268.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 189 | 0055 | 510173 | 261.5 | 262.7 | 1.1 | 2.5 | 30 | 28.0 | 23.0 | 268.4 | 2 | 272.1 | 0 | 1.1 |
| SMO | 78 | 189 | 0055 | 520173 | 268.7 | 269.9 | 6.7 | 2.5 | 30 | 28.0 | 23.0 | 275.8 | 1 | -1.0 | 0 | -1.0 |
| SMO | 78 | 196 | 2230 | 530174 | 264.6 | 265.8 | 3.8 | 6.7 | 160 | 27.0 | 22.1 | 271.7 | 0 | 268.9 | 0 | 3.3 |
| SMO | 78 | 196 | 2230 | 540174 | 259.3 | 260.5 | 2.7 | 6.7 | 160 | 27.0 | 22.1 | 266.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 202 | 0340 | 550175 | 260.6 | 261.8 | 3.5 | 8.0 | 150 | 26.4 | 23.3 | 267.6 | 0 | 266.9 | 0 | 3.0 |
| SMO | 78 | 202 | 0340 | 560175 | 259.3 | 260.5 | 2.4 | 8.0 | 150 | 26.4 | 23.3 | 266.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 208 | 2005 | 510176 | 262.5 | 263.8 | 3.3 | 7.0 | 140 | 27.0 | 24.3 | 269.6 | 0 | 269.9 | 0 | 2.4 |
| SMO | 78 | 208 | 2005 | 520176 | 263.2 | 264.5 | .9 | 7.0 | 140 | 27.0 | 24.3 | 270.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 217 | 0310 | 530177 | 265.1 | 266.4 | 1.4 | 8.5 | 150 | 27.0 | 21.3 | 272.3 | 0 | 270.7 | 0 | 1.4 |
| SMO | 78 | 217 | 0310 | 540177 | 262.0 | 263.3 | 1.4 | 8.5 | 150 | 27.0 | 21.3 | 269.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 225 | 0145 | 560178 | 271.0 | 272.4 | 2.1 | 3.0 | 30 | 26.0 | 23.2 | 278.4 | 0 | 275.6 | 0 | 1.9 |
| SMO | 78 | 225 | 0145 | 550178 | 265.5 | 266.9 | 1.7 | 3.0 | 30 | 26.0 | 23.2 | 272.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 229 | 0100 | 520179 | 258.6 | 260.0 | 5.6 | 8.0 | 150 | 27.6 | 24.9 | 265.7 | 0 | 266.4 | 0 | 4.1 |
| SMO | 78 | 229 | 0100 | 510179 | 259.9 | 261.3 | 1.3 | 8.0 | 150 | 27.6 | 24.9 | 267.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 238 | 0000 | 530180 | 264.0 | 265.4 | 1.2 | 7.0 | 90 | 28.5 | 24.8 | 271.3 | 0 | 267.4 | 0 | 3.6 |
| SMO | 78 | 238 | 0000 | 540180 | 256.4 | 257.8 | 5.0 | 7.0 | 90 | 28.5 | 24.8 | 263.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 244 | 2320 | 560181 | 262.5 | 264.0 | 1.4 | 7.5 | 150 | 25.2 | 24.3 | 269.8 | 0 | 270.2 | 0 | 1.4 |
| SMO | 78 | 244 | 2320 | 550181 | 263.3 | 264.8 | 1.4 | 7.5 | 150 | 25.2 | 24.3 | 270.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 253 | 0400 | 530182 | 270.3 | 271.9 | 1.0 | 7.0 | 160 | 24.4 | 19.4 | 277.8 | 3 | 272.3 | 0 | 1.0 |
| SMO | 78 | 253 | 0400 | 540182 | 259.6 | 261.1 | 1.3 | 7.0 | 160 | 24.4 | 19.4 | 266.8 | 3 | -1.0 | 0 | -1.0 |
| SMO | 78 | 260 | 0405 | 510183 | 264.5 | 266.1 | 1.5 | 2.5 | 160 | 26.0 | 22.9 | 271.9 | 0 | 275.2 | 0 | 3.2 |
| SMO | 78 | 260 | 0405 | 520183 | 270.9 | 272.5 | 4.3 | 2.5 | 160 | 26.0 | 22.9 | 278.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 266 | 0025 | 550184 | 261.6 | 263.2 | 1.0 | 9.0 | 130 | 28.3 | 24.5 | 269.0 | 3 | 274.0 | 0 | 1.0 |
| SMO | 78 | 266 | 0025 | 560184 | 271.4 | 273.1 | 2.9 | 9.0 | 130 | 28.3 | 24.5 | 279.1 | 3 | -1.0 | 0 | -1.0 |
| SMO | 78 | 272 | 0245 | 530185 | 272.0 | 273.7 | 2.7 | 6.0 | 160 | 26.3 | 22.4 | 279.7 | 0 | 274.9 | 0 | 2.1 |
| SMO | 78 | 272 | 0245 | 540185 | 262.6 | 264.2 | 1.1 | 6.0 | 160 | 26.3 | 22.4 | 270.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 280 | 0355 | 550186 | 267.7 | 269.4 | 2.8 | 3.0 | 100 | 26.8 | 24.6 | 275.3 | 0 | 275.0 | 0 | 2.5 |
| SMO | 78 | 280 | 0355 | 560186 | 267.0 | 268.7 | 2.2 | 3.0 | 100 | 26.8 | 24.6 | 274.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 294 | 0545 | 510187 | 266.3 | 268.1 | 1.7 | 8.0 | 150 | 26.5 | 23.7 | 274.0 | 0 | 274.0 | 0 | 2.8 |
| SMO | 78 | 294 | 0545 | 520187 | 266.3 | 268.1 | 3.5 | 8.0 | 150 | 26.5 | 23.7 | 274.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 311 | 2245 | 530188 | 275.0 | 276.9 | 1.4 | 8.0 | 150 | 29.0 | 24.8 | 283.0 | 0 | 278.8 | 0 | 2.9 |
| SMO | 78 | 311 | 2245 | 540188 | 266.7 | 268.6 | 3.8 | 8.0 | 150 | 29.0 | 24.8 | 274.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 322 | 0320 | 520189 | 268.6 | 270.6 | 2.3 | 8.0 | 120 | 25.5 | 24.1 | 276.5 | 0 | 276.2 | 0 | 1.9 |
| SMO | 78 | 322 | 0320 | 510189 | 268.0 | 270.0 | 1.4 | 8.0 | 120 | 25.5 | 24.1 | 275.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 328 | 2355 | 560190 | 271.1 | 273.1 | 3.4 | 5.0 | 60 | 29.0 | 25.0 | 279.1 | 0 | 281.2 | 0 | 2.8 |
| SMO | 78 | 328 | 2355 | 550190 | 275.1 | 277.1 | 2.0 | 5.0 | 60 | 29.0 | 25.0 | 283.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 337 | 2355 | 530191 | 255.5 | 257.4 | 7.4 | 5.0 | 360 | 29.0 | 28.0 | 263.1 | 1 | 263.1 | 1 | 7.4 |
| SMO | 78 | 337 | 0138 | 540191 | 273.2 | 275.3 | 1.3 | 5.0 | 360 | 29.0 | 28.0 | 281.3 | 2 | 281.3 | 0 | 1.3 |
| SMO | 78 | 343 | 0430 | 510192 | 265.7 | 267.8 | 1.6 | 7.0 | 160 | 25.9 | 24.7 | 273.6 | 0 | 276.9 | 0 | 3.2 |
| SMO | 78 | 343 | 0430 | 520192 | 272.1 | 274.2 | 4.3 | 7.0 | 160 | 25.9 | 24.7 | 280.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 350 | 0355 | 550193 | 266.6 | 268.7 | .7 | 5.0 | 160 | 27.0 | 23.7 | 274.6 | 0 | 273.6 | 0 | 1.6 |
| SMO | 78 | 350 | 0355 | 560193 | 264.7 | 266.8 | 2.2 | 5.0 | 160 | 27.0 | 23.7 | 272.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 360 | 2315 | 530194 | 277.6 | 279.8 | 4.4 | 9.0 | 80 | 27.0* | 24.5* | 286.0 | 0 | 282.1 | 0 | 3.5 |
| SMO | 78 | 360 | 2315 | 540194 | 270.0 | 272.2 | 2.3 | 9.0 | 80 | 27.0* | 24.5* | 278.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 364 | 0030 | 510195 | 273.7 | 275.9 | .7 | 6.0 | 330 | 30.0 | 26.7 | 282.0 | 0 | 281.5 | 0 | 1.1 |
| SMO | 78 | 364 | 0030 | 520195 | 272.8 | 275.0 | 1.4 | 6.0 | 330 | 30.0 | 26.7 | 281.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 4 | 0225 | 550196 | 275.4 | 277.7 | 1.5 | 7.0 | 340 | 27.3 | 24.4 | 283.5 | 0 | 284.0 | 0 | 2.5 |
| SMO | 79 | 4 | 0255 | 560196 | 276.4 | 278.7 | 3.2 | 7.0 | 340 | 27.3 | 24.4 | 284.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 13 | 0350 | 530197 | 278.0 | 280.4 | 2.6 | 10.0 | 290 | 26.8 | 24.3 | 286.1 | 0 | 285.7 | 0 | 2.4 |
| SMO | 79 | 13 | 0350 | 540197 | 277.4 | 279.7 | 2.1 | 10.0 | 290 | 26.8 | 24.3 | 285.4 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 79 | 21 | 0340 | 510198 | 276.5 | 278.9 | 7.2 | 3.0 | 160 | 28.0 | 23.9 | 284.0 | 1 | 284.6 | 0 | 7.2 |
| SMO | 79 | 21 | 0340 | 520198 | 277.6 | 280.0 | 6.1 | 3.0 | 160 | 28.0 | 23.9 | 285.2 | 1 | -1.0 | 0 | -1.0 |
| SMO | 79 | 27 | 0307 | 550199 | 279.1 | 281.5 | 4.5 | 6.8 | 110 | 27.7 | 24.5 | 287.0 | 2 | 287.0 | 0 | 4.5 |
| SMO | 79 | 27 | 0307 | 560199 | 286.8 | 289.3 | 8.8 | 6.8 | 110 | 27.7 | 24.5 | 294.9 | 1 | 294.9 | 1 | 8.8 |
| SMO | 79 | 35 | 0355 | 530200 | 280.3 | 282.8 | 2.3 | 4.0 | 120 | 27.3 | 24.4 | 288.5 | 0 | 286.5 | 0 | 2.4 |
| SMO | 79 | 35 | 0355 | 540200 | 276.4 | 278.9 | 2.4 | 4.0 | 120 | 27.3 | 24.4 | 284.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 44 | 2345 | 510201 | 273.2 | 275.7 | 2.0 | 2.7 | 130 | 29.0 | 24.5 | 280.8 | 0 | 282.0 | 0 | 2.9 |
| SMO | 79 | 44 | 2345 | 520201 | 275.6 | 278.1 | 3.5 | 2.7 | 130 | 29.0 | 24.5 | 283.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 51 | 0203 | 550202 | 274.8 | 277.3 | 2.4 | 7.2 | 340 | 29.0 | 24.8 | 283.1 | 0 | 285.3 | 0 | 3.9 |
| SMO | 79 | 51 | 0203 | 560202 | 279.0 | 281.6 | 4.9 | 7.2 | 340 | 29.0 | 24.8 | 287.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 59 | 2239 | 510203 | 276.2 | 278.8 | 1.2 | 3.2 | 150 | 28.9 | 24.6 | 284.4 | 0 | 284.7 | 0 | 1.2 |
| SMO | 79 | 59 | 2239 | 520203 | 276.9 | 279.5 | 1.2 | 3.2 | 150 | 28.9 | 24.6 | 285.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 66 | 2104 | 530204 | 274.7 | 277.3 | 2.3 | 3.6 | 75 | 30.2 | 24.6 | 282.7 | 3 | 282.7 | 0 | 2.3 |
| SMO | 79 | 66 | 2104 | 540204 | 257.8 | 260.3 | 2.5 | 3.6 | 75 | 30.2 | 24.6 | 265.3 | 3 | 265.3 | 3 | 2.5 |
| SMO | 79 | 72 | 2300 | 550205 | 274.0 | 276.7 | 1.9 | 4.5 | 120 | 28.2 | 24.3 | 282.1 | 0 | 283.3 | 0 | 3.1 |
| SMO | 79 | 72 | 2300 | 560205 | 276.4 | 279.1 | 4.0 | 4.5 | 120 | 28.2 | 24.3 | 284.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 83 | 2339 | 520206 | 276.7 | 279.5 | 3.3 | 6.2 | 325 | 29.3 | 24.8 | 285.7 | 0 | 285.6 | 0 | 3.5 |
| SMO | 79 | 83 | 2339 | 510206 | 276.5 | 279.3 | 3.6 | 6.2 | 325 | 29.3 | 24.8 | 285.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 92 | 0305 | 530207 | 273.0 | 275.8 | 2.2 | 5.0 | 140 | 28.5 | 25.8 | 281.4 | 0 | 281.1 | 0 | 2.2 |
| SMO | 79 | 92 | 0305 | 540207 | 272.3 | 275.1 | 2.1 | 5.0 | 140 | 28.5 | 25.8 | 280.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 98 | 0405 | 550208 | 280.1 | 283.0 | 1.7 | 4.0 | 150 | 27.4 | 24.1 | 289.1 | 0 | 289.1 | 0 | 1.4 |
| SMO | 79 | 98 | 0405 | 560208 | 280.1 | 283.0 | 1.0 | 4.0 | 150 | 27.4 | 24.1 | 289.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 109 | 0050 | 510209 | 277.9 | 280.8 | 2.6 | 6.0 | 330 | 30.3 | 25.9 | 286.5 | 0 | 287.6 | 0 | 3.9 |
| SMO | 79 | 109 | 0050 | 520209 | 280.0 | 282.9 | 4.9 | 6.5 | 330 | 30.3 | 25.9 | 288.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 114 | 2350 | 540210 | 273.3 | 276.2 | 3.2 | 2.0 | 160 | 27.8 | 24.0 | 282.0 | 0 | 283.6 | 0 | 2.7 |
| SMO | 79 | 114 | 2350 | 530210 | 276.3 | 279.2 | 2.1 | 2.0 | 160 | 27.8 | 24.0 | 285.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 122 | 0245 | 550211 | 272.1 | 275.0 | 1.4 | 10.0 | 160 | 26.5 | 23.5 | 280.5 | 0 | 281.5 | 0 | 2.0 |
| SMO | 79 | 122 | 0245 | 560211 | 274.0 | 277.0 | 2.5 | 10.0 | 160 | 26.5 | 23.5 | 282.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 129 | 0235 | 520212 | 276.3 | 279.3 | 2.0 | 8.0 | 130 | 27.5 | 25.2 | 285.3 | 0 | 283.7 | 0 | 1.5 |
| SMO | 79 | 129 | 0235 | 510212 | 273.1 | 276.1 | .7 | 8.0 | 130 | 27.5 | 25.2 | 282.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 135 | 2250 | 540213 | 272.1 | 275.1 | 2.4 | 8.0 | 140 | 27.0 | 24.4 | 281.8 | 0 | 284.2 | 0 | 2.2 |
| SMO | 79 | 135 | 2250 | 530213 | 276.6 | 279.7 | 1.9 | 8.0 | 140 | 27.0 | 24.4 | 286.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 143 | 0410 | 550214 | 275.3 | 278.4 | .8 | 2.0 | 60 | 27.7 | 24.0 | 286.1 | 0 | 285.9 | 0 | .6 |
| SMO | 79 | 143 | 0410 | 560214 | 274.8 | 277.9 | .3 | 2.0 | 60 | 27.7 | 24.0 | 285.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 150 | 0245 | 530215 | 274.4 | 277.5 | 3.7 | 4.4 | 146 | 30.0 | 21.1 | 285.3 | 0 | 285.8 | 0 | 3.4 |
| SMO | 79 | 150 | 0245 | 540215 | 275.3 | 278.4 | 3.1 | 4.4 | 146 | 30.0 | 21.1 | 286.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 157 | 0248 | 510216 | 278.7 | 281.9 | 2.4 | 1.5 | 81 | 29.7 | 23.3 | 288.8 | 0 | 286.8 | 0 | 2.0 |
| SMO | 79 | 157 | 0248 | 520216 | 274.9 | 278.1 | 1.5 | 1.5 | 81 | 29.7 | 23.3 | 284.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 163 | 0142 | 550217 | 269.0 | 272.1 | 2.4 | 5.0 | 150 | 25.3 | 22.6 | 278.7 | 0 | 280.2 | 0 | 4.3 |
| SMO | 79 | 163 | 0142 | 560217 | 271.9 | 275.1 | 5.6 | 5.0 | 150 | 25.3 | 22.6 | 281.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 171 | 0057 | 540218 | 277.9 | 281.2 | 1.1 | 2.7 | 330 | 30.8 | 25.0 | 288.0 | 0 | 288.1 | 0 | 1.1 |
| SMO | 79 | 171 | 0057 | 530218 | 278.2 | 281.5 | 1.0 | 2.7 | 330 | 30.8 | 25.0 | 288.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 178 | 0338 | 520219 | 275.8 | 279.1 | 2.4 | 8.0 | 100 | 29.0 | 23.5 | 286.0 | 0 | 284.7 | 0 | 2.0 |
| SMO | 79 | 178 | 0338 | 510219 | 273.2 | 276.5 | 1.5 | 8.0 | 100 | 29.0 | 23.5 | 283.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 185 | 0045 | 550220 | 282.3 | 285.7 | 4.1 | 2.7 | 170 | 26.0 | 24.5 | 293.0 | 0 | 288.8 | 0 | 3.1 |
| SMO | 79 | 185 | 0045 | 560220 | 274.2 | 277.5 | 1.6 | 2.7 | 170 | 26.0 | 24.5 | 284.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 192 | 0118 | 540221 | 273.0 | 276.4 | .8 | 5.0 | 150 | 21.6 | 21.6 | 283.2 | 0 | 282.0 | 0 | 2.1 |
| SMO | 79 | 192 | 0118 | 530221 | 270.7 | 274.0 | 2.9 | 5.0 | 150 | 21.6 | 21.6 | 280.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 199 | 0045 | 520222 | 279.2 | 282.7 | .9 | 7.5 | 30 | 28.3 | 25.2 | 289.8 | 0 | 288.2 | 0 | 1.2 |
| SMO | 79 | 199 | 0045 | 510222 | 276.1 | 279.5 | 1.4 | 7.5 | 30 | 28.3 | 25.2 | 286.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 209 | 2100 | 550223 | 284.5 | 288.1 | 2.2 | 10.4 | 145 | 25.5 | 16.5 | 295.7 | 0 | 293.3 | 0 | 3.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 79 | 209 | 2100 | 560223 | 279.8 | 283.3 | 3.7 | 10.4 | 145 | 25.5 | 16.5 | 290.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 213 | 0200 | 540224 | 276.0 | 279.5 | 3.1 | 10.4 | 140 | 26.4 | 16.2 | 286.5 | 0 | 288.5 | 0 | 3.0 |
| SMO | 79 | 213 | 0200 | 530224 | 279.9 | 283.5 | 2.9 | 10.4 | 140 | 26.4 | 16.2 | 290.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 221 | 2130 | 520225 | 283.4 | 287.1 | 1.7 | 3.6 | 340 | 29.0 | 26.4 | 293.8 | 0 | 293.0 | 0 | 1.4 |
| SMO | 79 | 221 | 2130 | 510225 | 281.8 | 285.4 | 1.0 | 3.6 | 340 | 29.0 | 26.4 | 292.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 227 | 0300 | 560226 | 277.4 | 281.0 | 4.6 | 2.7 | 110 | 27.0 | 19.8 | 287.3 | 0 | 287.4 | 0 | 3.3 |
| SMO | 79 | 227 | 0300 | 550226 | 277.7 | 281.3 | .2 | 2.7 | 110 | 27.0 | 19.8 | 287.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 234 | 2120 | 510227 | 276.0 | 279.6 | 1.8 | 3.2 | 140 | 28.0 | 25.3 | 285.8 | 2 | 285.8 | 0 | 1.8 |
| SMO | 79 | 242 | 0107 | 540228 | 284.9 | 288.7 | 7.1 | 6.3 | 135 | 27.0 | 24.3 | 295.3 | 1 | 295.3 | 0 | 7.1 |
| SMO | 79 | 242 | 0107 | 530228 | 291.3 | 295.2 | 4.9 | 6.3 | 135 | 27.0 | 24.3 | 302.0 | 2 | 302.0 | 2 | 4.9 |
| SMO | 79 | 248 | 0301 | 550229 | 289.8 | 293.7 | 16.1 | 3.5 | 130 | 26.8 | 25.1 | 299.8 | 1 | 299.8 | 1 | 16.1 |
| SMO | 79 | 248 | 0301 | 560229 | 282.4 | 286.2 | 5.7 | 3.6 | 130 | 26.8 | 25.1 | 292.2 | 2 | 292.2 | 0 | 5.7 |
| SMO | 79 | 255 | 0000 | 520230 | 278.7 | 282.5 | 2.3 | 2.7 | 170 | 24.0 | 24.0 | 288.9 | 0 | 289.8 | 0 | 2.2 |
| SMO | 79 | 255 | 0000 | 510230 | 280.5 | 284.3 | 2.0 | 2.7 | 170 | 24.0 | 24.0 | 290.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 261 | 0054 | 540231 | 281.8 | 285.7 | 1.9 | 4.1 | 130 | 28.0 | 25.0 | 292.5 | 0 | 296.7 | 0 | 2.9 |
| SMO | 79 | 261 | 0054 | 530231 | 289.9 | 293.9 | 3.6 | 4.1 | 130 | 28.0 | 25.0 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 269 | 0146 | 550232 | 278.9 | 282.8 | 1.4 | 5.0 | 50 | 28.2 | 26.3 | 289.3 | 0 | 290.1 | 0 | 1.5 |
| SMO | 79 | 269 | 0146 | 560232 | 280.4 | 284.3 | 1.6 | 5.0 | 50 | 28.2 | 26.3 | 290.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 279 | 0200 | 510233 | 274.6 | 278.5 | .9 | 5.4 | 140 | 28.0 | 27.0 | 285.4 | 0 | 285.4 | 0 | 3.1 |
| SMO | 79 | 279 | 0200 | 520233 | 274.6 | 278.5 | 4.3 | 5.4 | 140 | 28.0 | 27.0 | 285.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 283 | 0259 | 540234 | 283.3 | 287.3 | 1.2 | 5.4 | 140 | 27.0 | 22.8 | 295.1 | 0 | 294.9 | 0 | 2.3 |
| SMO | 79 | 283 | 0259 | 530234 | 282.8 | 286.8 | 3.0 | 5.4 | 140 | 27.0 | 22.8 | 294.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 290 | 1322 | 560235 | 280.5 | 284.5 | 3.8 | 8.1 | 140 | 27.0 | 21.6 | 290.4 | 0 | 291.7 | 0 | 2.9 |
| SMO | 79 | 290 | 1322 | 550235 | 283.1 | 287.2 | 1.5 | 8.1 | 140 | 27.0 | 21.6 | 293.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 297 | 0252 | 520236 | 286.2 | 290.4 | 1.3 | 2.3 | 340 | 29.2 | 26.3 | 296.6 | 0 | 295.5 | 0 | 1.4 |
| SMO | 79 | 297 | 0252 | 510236 | 283.9 | 288.0 | 1.4 | 2.3 | 340 | 29.2 | 26.3 | 294.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 304 | 0319 | 540237 | 285.4 | 289.6 | 2.6 | 3.6 | 0 | 25.8 | 25.3 | 295.5 | 0 | 294.5 | 0 | 2.1 |
| SMO | 79 | 304 | 0319 | 530237 | 283.4 | 287.6 | 1.5 | 3.6 | 0 | 25.8 | 25.3 | 293.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 311 | 0214 | 560238 | 275.5 | 279.6 | .5 | 1.8 | 150 | 28.0 | 26.7 | 285.2 | 0 | 285.3 | 0 | 2.2 |
| SMO | 79 | 311 | 0214 | 550238 | 275.6 | 279.7 | 3.1 | 1.8 | 150 | 28.0 | 26.7 | 285.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 319 | 0212 | 520239 | 276.6 | 280.7 | .7 | 7.2 | 160 | 27.0 | 21.7 | 286.2 | 0 | 287.5 | 0 | 1.8 |
| SMO | 79 | 319 | 0212 | 510239 | 279.0 | 283.2 | 2.5 | 7.2 | 160 | 27.0 | 21.7 | 288.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 325 | 0243 | 540240 | 283.3 | 287.6 | 1.2 | 2.3 | 70 | 29.0 | 22.6 | 293.7 | 0 | 295.6 | 0 | 2.0 |
| SMO | 79 | 325 | 0243 | 530240 | 286.9 | 291.2 | 2.5 | 2.3 | 70 | 29.0 | 22.6 | 297.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 339 | 0221 | 550241 | 280.4 | 284.7 | .8 | 6.3 | 150 | 27.0 | 25.0 | 290.5 | 0 | 291.7 | 0 | .9 |
| SMO | 79 | 339 | 0221 | 560241 | 282.7 | 287.1 | 1.0 | 6.3 | 150 | 27.0 | 25.0 | 292.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 346 | 0048 | 510242 | 284.4 | 288.8 | .6 | 10.4 | 300 | 26.0 | 24.5 | 294.8 | 0 | 295.7 | 0 | 3.8 |
| SMO | 79 | 346 | 0048 | 520242 | 286.3 | 290.8 | 5.3 | 10.4 | 300 | 26.0 | 24.5 | 296.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 353 | 0250 | 530243 | 278.4 | 282.8 | 1.3 | 14.0 | 155 | 27.2 | 23.6 | 288.1 | 0 | 289.6 | 0 | 1.3 |
| SMO | 79 | 353 | 0250 | 540243 | 281.3 | 285.7 | 1.3 | 14.0 | 155 | 27.2 | 23.6 | 291.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 361 | 2102 | 550244 | 281.9 | 286.4 | .9 | 4.5 | 155 | 27.8 | 25.7 | 291.9 | 0 | 291.0 | 0 | 1.4 |
| SMO | 79 | 361 | 2102 | 560244 | 280.1 | 284.5 | 1.8 | 4.5 | 155 | 27.8 | 25.7 | 290.1 | 0 | -1.0 | 0 | -1.0 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPO | 77 | 38 | 0445 | 050015 | 232.6 | 231.1 | U | 3.2 | 90 | -34.0 | -99.9 | 231.1 | 1 | 231.1 | 1 | .0 |
| SPO | 77 | 38 | 0445 | 060015 | 256.3 | 254.6 | U | 3.2 | 90 | -34.0 | -99.9 | 254.6 | 1 | 254.6 | 1 | .0 |
| SPO | 77 | 41 | 0300 | 070016 | 242.5 | 241.0 | U | 4.0 | 120 | -41.6 | -99.9 | 241.0 | 1 | 241.0 | 1 | .0 |
| SPO | 77 | 41 | 0300 | 080016 | 244.6 | 243.0 | U | 4.0 | 120 | -41.6 | -99.9 | 243.0 | 1 | 243.0 | 1 | .0 |
| SPO | 77 | 72 | 2230 | 090017 | 229.4 | 228.1 | U | 3.5 | 30 | -46.0 | -99.9 | 228.1 | 1 | 228.1 | 1 | .0 |
| SPO | 77 | 72 | 2230 | 100017 | 576.3 | 572.9 | U | 3.5 | 30 | -46.0 | -99.9 | 572.9 | 1 | 572.9 | 1 | .0 |
| SPO | 77 | 105 | 0355 | 110018 | 234.9 | 233.7 | U | 3.4 | 40 | -59.0 | -99.9 | 233.7 | 1 | 233.7 | 1 | .0 |
| SPO | 77 | 105 | 0355 | 120018 | 332.8 | 331.1 | U | 3.4 | 40 | -59.0 | -99.9 | 331.1 | 1 | 331.1 | 1 | .0 |
| SPO | 77 | 134 | 0230 | 130019 | 276.6 | 275.4 | U | 8.0 | 25 | -52.2 | -99.9 | 275.4 | 1 | 275.4 | 1 | .0 |
| SPO | 77 | 134 | 0230 | 140019 | 256.0 | 254.8 | U | 8.0 | 25 | -52.2 | -99.9 | 254.8 | 1 | 254.8 | 1 | .0 |
| SPO | 77 | 165 | 2340 | 150020 | 242.1 | 241.2 | U | 3.4 | 20 | -64.3 | -99.9 | 241.2 | 1 | 239.6 | 0 | .0 |
| SPO | 77 | 165 | 2340 | 160020 | 239.0 | 238.1 | U | 3.4 | 20 | -64.3 | -99.9 | 238.1 | 1 | -1.0 | 0 | -1.0 |
| SPO | 77 | 195 | 0410 | 170021 | 240.2 | 239.4 | U | 9.0 | 345 | -45.1 | -99.9 | 239.4 | 1 | 239.4 | 0 | .0 |
| SPO | 77 | 195 | 0410 | 270021 | 5119.0 | 5102.6 | U | 9.0 | 345 | -45.1 | -99.9 | 5102.6 | 1 | 5102.6 | 1 | .0 |
| SPO | 77 | 229 | 2150 | 280022 | 2164.0 | 2158.6 | U | 4.0 | 10 | -59.1 | -99.9 | 2158.6 | 1 | 2158.6 | 1 | .0 |
| SPO | 77 | 229 | 2150 | 290022 | 2166.0 | 2160.6 | U | 4.0 | 10 | -59.1 | -99.9 | 2160.6 | 1 | 2160.6 | 1 | .0 |
| SPO | 77 | 257 | 1140 | 300023 | 255.8 | 255.3 | U | 3.5 | 25 | -60.1 | -99.9 | 255.3 | 1 | 255.3 | 0 | .0 |
| SPO | 77 | 257 | 1140 | 310023 | 628.9 | 627.7 | U | 3.5 | 25 | -60.1 | -99.9 | 627.7 | 1 | 627.7 | 1 | .0 |
| SPO | 77 | 287 | 2350 | 320024 | 1670.0 | 1667.9 | U | 6.2 | 360 | -53.8 | -99.9 | 1667.9 | 1 | 1667.9 | 1 | .0 |
| SPO | 77 | 287 | 2350 | 330024 | 245.9 | 245.6 | U | 6.2 | 360 | -53.8 | -99.9 | 245.6 | 1 | 245.6 | 0 | .0 |
| SPO | 77 | 316 | 1155 | 340025 | 878.0 | 877.4 | U | 2.7 | 325 | -33.2 | -99.9 | 877.4 | 1 | 877.4 | 1 | .0 |
| SPO | 77 | 316 | 1155 | 350025 | 333.7 | 333.5 | U | 2.7 | 325 | -33.2 | -99.9 | 333.5 | 1 | 333.5 | 1 | .0 |
| SPO | 77 | 336 | 0750 | 010026 | 263.3 | 263.2 | .2 | 3.8 | 4 | -31.8 | -99.9 | 263.2 | 0 | 261.2 | 0 | 1.6 |
| SPO | 77 | 336 | 0750 | 020026 | 259.2 | 259.1 | 2.2 | 3.8 | 4 | -31.8 | -99.9 | 259.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 77 | 353 | 0345 | 030027 | 274.6 | 274.6 | .9 | 2.7 | 99 | -29.3 | -99.9 | 274.6 | 2 | 274.6 | 2 | .9 |
| SPO | 77 | 353 | 0345 | 040027 | 294.9 | 294.9 | 11.5 | 2.7 | 99 | -29.3 | -99.9 | 294.9 | 1 | 294.9 | 1 | 11.5 |
| SPO | 78 | 1 | 0425 | 050028 | 330.6 | 330.7 | 22.3 | 4.4 | 320 | -21.5 | -99.9 | 330.7 | 1 | 330.7 | 1 | 22.3 |
| SPO | 78 | 1 | 0425 | 060028 | 252.9 | 253.0 | 3.4 | 4.4 | 320 | -21.5 | -99.9 | 253.0 | 2 | 253.0 | 0 | 3.4 |
| SPO | 78 | 15 | 0855 | 070029 | 247.3 | 247.5 | 4.9 | 1.2 | 75 | -27.6 | -99.9 | 247.5 | 2 | 247.5 | 0 | 4.9 |
| SPO | 78 | 15 | 0855 | 080029 | 286.3 | 286.5 | 45.8 | 1.2 | 75 | -27.6 | -99.9 | 286.5 | 1 | 286.5 | 1 | 45.8 |
| SPO | 78 | 31 | 0200 | 240030 | 259.5 | 259.8 | 10.5 | 3.2 | 102 | -36.0 | -99.9 | 259.8 | 1 | 259.8 | 0 | 10.5 |
| SPO | 78 | 31 | 0200 | 250030 | 276.8 | 277.1 | 29.4 | 3.2 | 102 | -36.0 | -99.9 | 277.1 | 1 | 277.1 | 1 | 29.4 |
| SPO | 78 | 45 | 2355 | 370031 | 720.4 | 721.4 | U | 4.3 | 70 | -36.7 | -99.9 | 721.4 | 1 | 721.4 | 1 | .0 |
| SPO | 78 | 60 | 0212 | 270032 | 1211.4 | 1213.5 | U | 2.5 | 78 | -57.8 | -99.9 | 1213.5 | 1 | 1213.5 | 1 | .0 |
| SPO | 78 | 60 | 0212 | 280032 | 349.2 | 349.8 | 1.0 | 2.5 | 78 | -57.8 | -99.9 | 349.8 | 2 | 349.8 | 2 | 1.0 |
| SPO | 78 | 91 | 0230 | 290033 | 393.2 | 394.1 | 1.1 | 8.1 | 16 | -47.1 | -99.9 | 394.1 | 3 | 394.1 | 3 | 1.1 |
| SPO | 78 | 91 | 0230 | 300033 | 251.1 | 251.7 | .4 | 8.1 | 16 | -47.1 | -99.9 | 251.7 | 3 | 251.7 | 0 | .4 |
| SPO | 78 | 121 | 0105 | 310034 | 272.7 | 273.5 | 1.0 | 4.7 | 88 | -63.6 | -99.9 | 273.5 | 3 | 273.5 | 3 | 1.0 |
| SPO | 78 | 121 | 0105 | 320034 | 328.0 | 329.0 | 1.4 | 4.7 | 88 | -63.6 | -99.9 | 329.0 | 3 | 329.0 | 3 | 1.4 |
| SPO | 78 | 152 | 0918 | 330035 | 257.7 | 258.6 | .6 | 7.8 | 14 | -39.2 | -99.9 | 258.6 | 3 | 264.3 | 0 | .6 |
| SPO | 78 | 152 | 0918 | 340035 | 269.0 | 270.0 | .3 | 7.8 | 14 | -39.2 | -99.9 | 270.0 | 3 | -1.0 | 0 | -1.0 |
| SPO | 78 | 182 | 1012 | 350036 | 369.0 | 370.6 | .5 | 3.6 | 84 | -61.4 | -99.9 | 370.6 | 3 | 370.6 | 3 | .5 |
| SPO | 78 | 182 | 1012 | 090036 | 257.3 | 258.4 | .7 | 3.6 | 84 | -61.4 | -99.9 | 258.4 | 3 | 258.4 | 0 | .7 |
| SPO | 78 | 213 | 0140 | 100037 | 282.6 | 284.0 | 7.0 | 3.4 | 57 | -61.7 | -99.9 | 284.0 | 1 | 284.0 | 1 | 7.0 |
| SPO | 78 | 244 | 0910 | 120038 | 685.8 | 689.7 | 2.4 | 7.1 | 11 | -49.8 | -99.9 | 689.7 | 3 | 689.7 | 3 | 2.4 |
| SPO | 78 | 244 | 0910 | 130038 | 274.9 | 276.4 | 1.0 | 7.1 | 11 | -49.8 | -99.9 | 276.4 | 3 | 276.4 | 0 | 1.0 |
| SPO | 78 | 274 | 0450 | 150039 | 256.6 | 258.2 | 1.7 | 5.9 | 13 | -58.0 | -99.9 | 258.2 | 0 | 263.0 | 0 | 1.5 |
| SPO | 78 | 274 | 0450 | 140039 | 266.2 | 267.9 | 1.2 | 5.9 | 13 | -58.0 | -99.9 | 267.9 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 305 | 0834 | 160040 | 263.2 | 265.0 | .1 | 3.7 | 101 | -44.8 | -99.9 | 265.0 | 0 | 264.9 | 0 | .5 |
| SPO | 78 | 305 | 0834 | 170040 | 262.9 | 264.7 | .7 | 3.7 | 101 | -44.8 | -99.9 | 264.7 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 320 | 0400 | 680041 | 292.6 | 294.7 | .6 | 3.1 | 69 | -35.2 | -99.9 | 294.7 | 3 | 294.7 | 3 | .6 |

F12 DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPTV | 2 PPTV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPTV | F3 | 4 PPTV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPO | 78 | 320 | 0400 | 690041 | 305.4 | 307.6 | .2 | 3.1 | 69 | -35.2 | -99.9 | 307.6 | 3 | 307.6 | 3 | .2 |
| SPO | 78 | 336 | 2234 | 250042 | 268.3 | 270.8 | 2.6 | 3.9 | 14 | -29.9 | -99.9 | 270.8 | 0 | 269.8 | 0 | 2.1 |
| SPO | 78 | 336 | 2234 | 240042 | 266.8 | 268.8 | 1.4 | 3.9 | 14 | -29.9 | -99.9 | 268.8 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 343 | 0140 | 010043 | 283.8 | 286.0 | 1.8 | 3.8 | 49 | -26.8 | -99.9 | 286.0 | 3 | 286.0 | 3 | 1.8 |
| SPO | 78 | 343 | 0140 | 020043 | 306.6 | 309.0 | 1.6 | 3.6 | 49 | -26.6 | -99.9 | 309.0 | 3 | 309.0 | 3 | 1.6 |
| SPO | 78 | 351 | 0210 | 060044 | 284.1 | 286.3 | 1.9 | 2.2 | 83 | -26.5 | -99.9 | 286.3 | 3 | 286.3 | 3 | 1.9 |
| SPO | 78 | 351 | 0210 | 070044 | 314.1 | 316.6 | .6 | 2.2 | 83 | -26.5 | -99.9 | 316.6 | 3 | 316.6 | 3 | .6 |
| SPO | 78 | 357 | 0045 | 030045 | 285.8 | 288.1 | 1.9 | 2.3 | 15 | -28.6 | -99.9 | 288.1 | 3 | 288.1 | 3 | 1.9 |
| SPO | 78 | 357 | 0045 | 040045 | 272.3 | 274.5 | 4.0 | 2.3 | 15 | -28.6 | -99.9 | 274.5 | 3 | 274.5 | 0 | 4.0 |
| SPO | 78 | 363 | 0110 | 080046 | 271.2 | 273.4 | 1.3 | 6.3 | 6 | -16.6 | -99.9 | 273.4 | 0 | 272.8 | 0 | .9 |
| SPO | 78 | 363 | 0110 | 050046 | 269.9 | 272.1 | .1 | 6.3 | 6 | -16.6 | -99.9 | 272.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 2 | 2240 | 340047 | 266.6 | 268.8 | .9 | 6.0 | 67 | -20.9 | -99.9 | 268.8 | 0 | 271.0 | 0 | .6 |
| SPO | 79 | 2 | 2240 | 350047 | 271.0 | 273.2 | .1 | 6.0 | 67 | -20.9 | -99.9 | 273.2 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 8 | 2300 | 330048 | 267.3 | 269.5 | .2 | 7.2 | 15 | -22.2 | -99.9 | 269.5 | 3 | 269.5 | 0 | .2 |
| SPO | 79 | 8 | 2300 | 370048 | 310.0 | 312.6 | 2.1 | 7.2 | 15 | -22.2 | -99.9 | 312.6 | 3 | 312.6 | 3 | 2.1 |
| SPO | 79 | 13 | 0145 | 290049 | 267.5 | 269.8 | 2.9 | 4.0 | 74 | -26.0 | -99.9 | 269.8 | 0 | 269.4 | 0 | 2.8 |
| SPO | 79 | 13 | 0145 | 300049 | 266.8 | 269.1 | 2.7 | 4.0 | 74 | -26.0 | -99.9 | 269.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 18 | 0155 | 260050 | 282.2 | 284.6 | 1.3 | 3.4 | 109 | -29.8 | -99.9 | 284.6 | 2 | 284.6 | 2 | 1.3 |
| SPO | 79 | 23 | 0125 | 270051 | 267.0 | 269.3 | 1.2 | 4.0 | 8 | -26.7 | -99.9 | 269.3 | 0 | 268.8 | 0 | 2.2 |
| SPO | 79 | 23 | 0125 | 280051 | 265.9 | 268.2 | 2.8 | 4.0 | 8 | -26.7 | -99.9 | 268.2 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 27 | 0030 | 090052 | 265.1 | 267.4 | .8 | 4.2 | 85 | -30.3 | -99.9 | 267.4 | 0 | 270.0 | 0 | .9 |
| SPO | 79 | 27 | 0030 | 100052 | 270.2 | 272.6 | 1.0 | 4.2 | 85 | -30.3 | -99.9 | 272.6 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 34 | 0025 | 110053 | 312.8 | 315.6 | 3.1 | 5.8 | 40 | -33.3 | -99.9 | 315.6 | 3 | 315.6 | 3 | 3.1 |
| SPO | 79 | 34 | 0025 | 120053 | 353.6 | 356.8 | 3.1 | 5.8 | 40 | -33.3 | -99.9 | 356.8 | 3 | 356.8 | 3 | 3.1 |
| SPO | 79 | 37 | 2325 | 130054 | 265.2 | 267.6 | .6 | 4.2 | 51 | -39.1 | -99.9 | 267.6 | 0 | 267.1 | 0 | .6 |
| SPO | 79 | 37 | 2325 | 140054 | 264.2 | 266.6 | .5 | 4.2 | 51 | -39.1 | -99.9 | 266.6 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 284 | 0040 | 020055 | 319.9 | 324.5 | .8 | 6.7 | 11 | -53.0 | -99.9 | 324.5 | 3 | 324.5 | 3 | .8 |
| SPO | 79 | 284 | 0040 | 010055 | 310.1 | 314.5 | 5.8 | 6.7 | 11 | -53.0 | -99.9 | 314.5 | 3 | 314.5 | 3 | 5.8 |
| SPO | 79 | 291 | 0430 | 060056 | 302.3 | 306.7 | 2.2 | 5.2 | 64 | -54.2 | -99.9 | 306.7 | 2 | 306.7 | 2 | 2.2 |
| SPO | 79 | 291 | 0430 | 070056 | 368.9 | 374.2 | U | 5.2 | 64 | -54.2 | -99.9 | 374.2 | 1 | 374.2 | 1 | .0 |
| SPO | 79 | 297 | 2320 | 250057 | 323.5 | 328.2 | 1.2 | 4.7 | 55 | -47.8 | -99.9 | 328.2 | 3 | 328.2 | 3 | 1.2 |
| SPO | 79 | 297 | 2320 | 240057 | 344.7 | 349.7 | 3.3 | 4.7 | 55 | -47.8 | -99.9 | 349.7 | 3 | 349.7 | 3 | 3.3 |
| SPO | 79 | 305 | 0330 | 690058 | 318.0 | 322.7 | 2.8 | 7.1 | 342 | -43.2 | -99.9 | 322.7 | 3 | 322.7 | 3 | 2.8 |
| SPO | 79 | 305 | 0330 | 680058 | 302.7 | 307.1 | .6 | 7.1 | 342 | -43.2 | -99.9 | 307.1 | 3 | 307.1 | 3 | .6 |
| SPO | 79 | 312 | 0457 | 040059 | 2030.0 | 2060.1 | 9.7 | 4.4 | 330 | -41.3 | -99.9 | 2060.1 | 1 | 2060.1 | 1 | 9.7 |
| SPO | 79 | 312 | 0457 | 050059 | 9999.9 | 9999.9 | 52.7 | 4.4 | 330 | -41.3 | 0.0 | 9999.9 | 1 | 9999.9 | 1 | 52.7 |
| SPO | 79 | 319 | 2340 | 330060 | 281.1 | 285.3 | 1.5 | 7.1 | 30 | -40.8 | -99.9 | 285.3 | 2 | 285.3 | 0 | 1.5 |
| SPO | 79 | 319 | 2340 | 340061 | 274.3 | 278.4 | 10.6 | 7.1 | 30 | -40.8 | -99.9 | 278.4 | 1 | 278.4 | 0 | 10.6 |
| SPO | 79 | 319 | 2340 | 380061 | 330.9 | 335.9 | .2 | 7.1 | 30 | -40.8 | -99.9 | 335.9 | 2 | 335.9 | 2 | .2 |
| SPO | 79 | 325 | 2300 | 370062 | 305.9 | 310.5 | 1.5 | 5.3 | 67 | -30.9 | -99.9 | 310.5 | 3 | 310.5 | 3 | 1.5 |
| SPO | 79 | 325 | 2300 | 130062 | 330.0 | 335.0 | 1.6 | 5.3 | 67 | -30.9 | -99.9 | 335.0 | 3 | 335.0 | 3 | 1.6 |
| SPO | 79 | 333 | 2310 | 620063 | 296.4 | 300.9 | 2.6 | 3.8 | 117 | 27.3 | -99.9 | 300.9 | 0 | 299.5 | 0 | 1.8 |
| SPO | 79 | 333 | 2310 | 400063 | 293.6 | 298.1 | .2 | 3.8 | 117 | 26.1 | -99.9 | 298.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 340 | 2320 | 350064 | 286.8 | 291.2 | 1.5 | 3.8 | 30 | -31.1 | -99.9 | 291.2 | 2 | 291.2 | 0 | 1.5 |
| SPO | 79 | 346 | 2300 | 110065 | 864.0 | 877.4 | U | 4.2 | 90 | -27.0 | -99.9 | 877.4 | 1 | 877.4 | 1 | .0 |
| SPO | 79 | 346 | 2300 | 140065 | 312.4 | 317.3 | 1.7 | 4.2 | 90 | -27.0 | -99.9 | 317.3 | 2 | 317.3 | 2 | 1.7 |
| SPO | 79 | 354 | 2255 | 120066 | 286.3 | 290.8 | .9 | 2.5 | 67 | -24.0 | -99.9 | 290.8 | 0 | 287.8 | 0 | .9 |
| SPO | 79 | 354 | 2255 | 290066 | 280.3 | 284.7 | .8 | 2.5 | 67 | -24.0 | -99.9 | 284.7 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 360 | 2305 | 080067 | 281.9 | 286.4 | 2.3 | 4.9 | 5 | -26.0 | -99.9 | 286.4 | 3 | 286.4 | 0 | 2.3 |
| SPO | 79 | 360 | 2305 | 280067 | 300.9 | 305.7 | 2.3 | 4.9 | 5 | -26.0 | -99.9 | 305.7 | 3 | 305.7 | 3 | 2.3 |

# Appendix D: $N_2O$ Data for Barrow, Niwot Ridge, Mauna Loa, Samoa, and South Pole, 7 March 1977 to 31 December 1979

Description of Data Sets:

1. Data analyzed on chromatograph; calibrations performed using reference gas 3072 (December 1977), 331.40 ppbv.

2. Data corrected for use of unelectropolished sample flasks (correction factor = 0.965), for $N_2O$ chromatograph trace baseline error [see Eq. (2) of Sec. 2.2] and for change from R. A. Rasmussen to NOAA/GMCC $N_2O$ calibration scale (correction factor = 0.898).

3. $N_2O$ mole fractions in dry air. Flags F3 (Column 14) associated with data set 3 are the following.

   0: Optimum pair-sample data--s.d. $\leq$3.8 ppbv and concentration difference $\leq$6.2 ppbv.

   1: Exceeded s.d. of 3.8 ppbv.

   2: Single sample, or pair member of sample already flagged.

   3: Concentration difference for samples of pair exceeded 6.2 ppbv.

   4: Meteorological criteria not satisfied. Applied only to Niwot Ridge data. Acceptable wind speeds and directions are >1.5 m $s^{-1}$ and 180° through 45°, respectively.

   5: Previously unflagged data subjectively determined to be outlying.

   Data set 3 is intended for use by researchers who desire to apply their own data selection criteria for improvement of data quality and identification of background measurement conditions.

4. Select data set--$N_2O$ mole fractions in dry air. The data have been adjusted by the correction factor 0.8933 (see Sec. 2.3) to express results in the NOAA/GMCC $N_2O$ calibration scale. Flags F4 (column 16) associated with data set 4 are the following.

   0: Optimum pair-sample data, with pair values averaged. Also, $N_2O$ mole fractions (with pair values averaged), flagged 1 to 4 in data set 3, that lie within ±3 r.s.d. of the regression line fitted to the optimum pair-sample data.

   1-5: As flags 1 to 5 of data set 3.

   Data flagged 0 in data set 4 presumably represent atmospheric background measurement conditions at the various stations. They are intended for use by researchers who accept as satisfactory the data selection procedures outlined in this report.

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 77 | 215 | 0153 | 050128 | 393.1 | 333.0 | 3.2 | 6.1 | 275 | 10.0 | 6.1 | 336.1 | 2 | 336.1 | 2 | 3.2 |
| BRW | 77 | 220 | 2351 | 030129 | 381.4 | 324.3 | 11.3 | 11.2 | 85 | 4.0 | 3.3 | 326.8 | 1 | 326.8 | 1 | 11.3 |
| BRW | 77 | 229 | 0200 | 020130 | 407.6 | 343.7 | 8.4 | 4.0 | 110 | 15.5 | 11.9 | 348.5 | 1 | 348.5 | 1 | 8.4 |
| BRW | 77 | 247 | 0045 | 050131 | 373.3 | 318.3 | 5.9 | 3.9 | 260 | 8.5 | 7.9 | 321.7 | 1 | 321.7 | 1 | 5.9 |
| BRW | 77 | 254 | 0011 | 020132 | 333.1 | 288.5 | 14.3 | 8.5 | 76 | 2.2 | -1.1 | 290.2 | 1 | 290.2 | 1 | 14.3 |
| BRW | 77 | 260 | 2025 | 030133 | 331.3 | 287.2 | 14.5 | 5.4 | 90 | .2 | -1.1 | 288.8 | 1 | 288.8 | 1 | 14.5 |
| BRW | 77 | 271 | 2205 | 050134 | 326.1 | 283.4 | 7.6 | 8.7 | 15 | -2.2 | -4.4 | 284.6 | 1 | 284.6 | 1 | 7.6 |
| BRW | 77 | 281 | 0005 | 020135 | 344.4 | 296.9 | 1.2 | 5.3 | 135 | -.6 | -3.1 | 298.3 | 2 | 298.3 | 2 | 1.2 |
| BRW | 77 | 284 | 2353 | 030136 | 327.0 | 284.0 | 7.9 | 16.0 | 80 | -3.3 | -6.8 | 285.1 | 1 | 285.1 | 1 | 7.9 |
| BRW | 77 | 293 | 2302 | 050137 | 320.5 | 279.2 | 13.9 | 12.0 | 70 | -7.2 | -8.3 | 280.1 | 1 | 280.1 | 1 | 13.9 |
| BRW | 77 | 306 | 0055 | 020138 | 330.7 | 286.8 | 4.7 | 5.5 | 30 | -21.3 | -21.7 | 287.1 | 1 | 287.1 | 1 | 4.7 |
| BRW | 77 | 313 | 2238 | 030139 | 337.3 | 291.6 | 5.1 | 6.5 | 10 | -26.1 | -26.4 | 291.9 | 1 | 291.9 | 1 | 5.1 |
| BRW | 77 | 330 | 2200 | 020141 | 330.2 | 286.4 | U | 3.3 | 217 | -22.5 | -26.7 | 286.6 | 1 | 286.6 | 1 | .0 |
| BRW | 77 | 215 | 0153 | 180128 | 347.3 | 309.9 | 7.8 | 6.1 | 275 | 10.0 | 6.1 | 312.8 | 1 | 312.8 | 1 | 7.8 |
| BRW | 77 | 215 | 0153 | 190128 | 339.8 | 304.1 | 4.1 | 6.1 | 275 | 10.0 | 6.1 | 307.0 | 1 | 307.0 | 1 | 4.1 |
| BRW | 77 | 220 | 2351 | 200129 | 335.7 | 301.0 | 6.3 | 11.2 | 85 | 4.0 | 3.3 | 303.3 | 1 | 302.4 | 0 | 6.3 |
| BRW | 77 | 220 | 2351 | 210129 | 333.4 | 299.2 | 10.5 | 11.2 | 85 | 4.0 | 3.3 | 301.5 | 1 | -1.0 | 0 | -1.0 |
| BRW | 77 | 229 | 0200 | 220130 | 329.9 | 296.5 | 5.1 | 4.0 | 110 | 15.5 | 11.9 | 300.7 | 1 | 300.7 | 0 | 5.1 |
| BRW | 77 | 229 | 0200 | 230130 | 323.5 | 291.6 | 12.0 | 4.0 | 110 | 15.5 | 11.9 | 295.7 | 1 | 295.7 | 1 | 12.0 |
| BRW | 77 | 247 | 0045 | 180131 | 336.2 | 301.4 | 5.3 | 3.9 | 260 | 8.5 | 7.9 | 304.6 | 1 | 304.6 | 1 | 5.3 |
| BRW | 77 | 247 | 0045 | 190131 | 339.9 | 304.2 | 1.6 | 3.9 | 260 | 8.5 | 7.9 | 307.4 | 2 | 307.4 | 2 | 1.6 |
| BRW | 77 | 254 | 0011 | 200132 | 328.6 | 295.6 | 7.3 | 8.5 | 76 | 2.2 | -1.1 | 297.2 | 1 | 297.2 | 1 | 7.3 |
| BRW | 77 | 254 | 0011 | 210132 | 335.7 | 301.0 | 17.8 | 8.5 | 76 | 2.2 | -1.1 | 302.7 | 1 | 302.7 | 0 | 17.8 |
| BRW | 77 | 260 | 2025 | 220133 | 331.8 | 298.0 | 11.7 | 5.4 | 90 | .2 | -1.1 | 299.7 | 1 | 301.7 | 0 | 11.7 |
| BRW | 77 | 260 | 2025 | 230133 | 337.1 | 302.1 | 12.0 | 5.4 | 90 | .2 | -1.1 | 303.8 | 1 | -1.0 | 0 | -1.0 |
| BRW | 77 | 271 | 2205 | 180134 | 327.5 | 294.7 | .8 | 8.7 | 15 | -2.2 | -4.4 | 296.0 | 2 | 296.0 | 2 | .8 |
| BRW | 77 | 271 | 2205 | 190134 | 327.6 | 294.8 | 7.1 | 8.7 | 15 | -2.2 | -4.4 | 296.1 | 1 | 296.1 | 1 | 7.1 |
| BRW | 77 | 281 | 0005 | 200135 | 338.7 | 303.3 | 3.7 | 5.3 | 135 | -.6 | -3.1 | 304.8 | 0 | 302.5 | 0 | 2.7 |
| BRW | 77 | 281 | 0005 | 210135 | 332.7 | 298.7 | 1.0 | 5.3 | 135 | -.6 | -3.1 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 284 | 2353 | 220136 | 329.4 | 296.2 | 4.8 | 16.0 | 80 | -3.3 | -6.8 | 297.3 | 1 | 297.3 | 1 | 4.8 |
| BRW | 77 | 284 | 2353 | 230136 | 328.4 | 295.4 | 5.0 | 16.0 | 80 | -3.3 | -6.8 | 296.5 | 1 | 296.5 | 1 | 5.0 |
| BRW | 77 | 293 | 2302 | 180137 | 336.9 | 301.9 | 3.4 | 12.0 | 70 | -7.2 | -8.3 | 302.9 | 2 | 302.9 | 0 | 3.4 |
| BRW | 77 | 293 | 2302 | 190137 | 339.1 | 303.6 | 5.7 | 12.0 | 70 | -7.2 | -8.3 | 304.6 | 1 | 304.6 | 1 | 5.7 |
| BRW | 77 | 306 | 0055 | 200138 | 333.8 | 299.5 | 2.8 | 5.5 | 30 | -21.3 | -21.7 | 299.9 | 2 | 300.5 | 0 | 2.8 |
| BRW | 77 | 306 | 0055 | 210138 | 335.4 | 300.8 | 4.7 | 5.5 | 30 | -21.3 | -21.7 | 301.1 | 1 | -1.0 | 0 | -1.0 |
| BRW | 77 | 313 | 2238 | 220139 | 331.4 | 297.7 | 3.9 | 6.5 | 10 | -26.1 | -26.4 | 297.9 | 1 | 297.9 | 1 | 3.9 |
| BRW | 77 | 313 | 2238 | 230139 | 336.4 | 301.5 | 4.6 | 6.5 | 10 | -26.1 | -26.4 | 301.8 | 1 | 301.8 | 0 | 4.6 |
| BRW | 77 | 318 | 2100 | 180140 | 334.1 | 299.8 | 2.1 | 8.0 | 62 | -23.0 | -25.6 | 300.0 | 0 | 298.1 | 0 | 2.0 |
| BRW | 77 | 318 | 2100 | 190140 | 329.0 | 295.9 | 1.9 | 8.0 | 62 | -23.0 | -25.6 | 296.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 330 | 2200 | 200141 | 346.3 | 309.1 | 7.0 | 3.3 | 217 | -22.5 | -26.7 | 309.4 | 1 | 309.4 | 1 | 7.0 |
| BRW | 77 | 330 | 2200 | 210141 | 332.2 | 298.3 | 6.7 | 3.3 | 217 | -22.5 | -26.7 | 298.5 | 1 | 298.5 | 1 | 6.7 |
| BRW | 77 | 345 | 0142 | 220142 | 330.1 | 296.7 | 7.1 | 9.6 | 320 | -30.0 | -31.7 | 296.9 | 1 | 296.9 | 1 | 7.1 |
| BRW | 77 | 345 | 0142 | 230142 | 339.3 | 303.8 | 10.4 | 9.6 | 320 | -30.0 | -31.7 | 303.9 | 1 | 303.9 | 1 | 10.4 |
| BRW | 77 | 351 | 0130 | 180143 | 338.8 | 303.4 | 1.6 | 4.5 | 125 | -34.4 | -38.1 | 303.5 | 0 | 302.9 | 0 | 2.3 |
| BRW | 77 | 351 | 0130 | 190143 | 337.2 | 302.1 | 2.9 | 4.5 | 125 | -34.4 | -38.1 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 77 | 363 | 0036 | 200144 | 339.6 | 304.0 | 2.7 | 10.2 | 115 | -16.5 | -18.9 | 304.4 | 2 | 304.4 | 2 | 2.7 |
| BRW | 77 | 363 | 0036 | 210144 | 340.3 | 304.5 | 4.5 | 10.2 | 115 | -16.5 | -18.9 | 305.0 | 1 | 305.0 | 1 | 4.5 |
| BRW | 78 | 6 | 0142 | 220145 | 336.5 | 301.6 | .5 | 6.4 | 99 | -21.3 | -25.6 | 301.9 | 0 | 302.3 | 0 | 2.2 |
| BRW | 78 | 6 | 0142 | 230145 | 337.7 | 302.5 | 3.0 | 6.4 | 99 | -21.3 | -25.6 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 13 | 0110 | 200146 | 338.3 | 303.0 | 2.1 | 9.1 | 72 | -15.3 | -15.3 | 303.6 | 2 | 303.6 | 0 | 2.1 |
| BRW | 78 | 13 | 0110 | 210146 | 339.5 | 303.9 | 6.9 | 9.1 | 72 | -15.3 | -15.3 | 304.5 | 1 | 304.5 | 1 | 6.9 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP AIR | DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 78 | 18 | 2340 | 180147 | 336.2 | 301.4 | 2.4 | 2.7 | 60 | -21.0 | -23.3 | 301.7 | 0 | 302.7 | 0 | 1.8 |
| BRW | 78 | 18 | 2340 | 190147 | 338.7 | 303.3 | .8 | 2.7 | 60 | -21.0 | -23.3 | 303.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 28 | 0150 | 200148 | 339.4 | 303.8 | 4.5 | 4.2 | 75 | -29.1 | -30.6 | 304.0 | 1 | 304.0 | 1 | 4.5 |
| BRW | 78 | 28 | 0150 | 210148 | 332.3 | 298.4 | 4.8 | 4.2 | 75 | -29.1 | -30.6 | 298.6 | 1 | 298.6 | 1 | 4.8 |
| BRW | 78 | 33 | 0100 | 220149 | 336.9 | 301.9 | 1.1 | 7.0 | 72 | -27.0 | -30.6 | 302.1 | 0 | 302.7 | 0 | 1.4 |
| BRW | 78 | 33 | 0100 | 230149 | 338.4 | 303.1 | 1.7 | 7.0 | 72 | -27.0 | -30.6 | 303.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 40 | 2158 | 180150 | 333.5 | 299.3 | 3.0 | 4.5 | 79 | -39.3 | -43.1 | 299.4 | 0 | 300.6 | 0 | 2.2 |
| BRW | 78 | 40 | 2158 | 190150 | 336.5 | 301.6 | .8 | 4.5 | 79 | -39.3 | -43.1 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 45 | 2059 | 220151 | 337.9 | 302.7 | 2.7 | 8.3 | 60 | -21.0 | -26.7 | 302.9 | 0 | 304.7 | 0 | 2.2 |
| BRW | 78 | 45 | 2059 | 230151 | 342.6 | 306.3 | 1.4 | 8.3 | 60 | -21.0 | -26.7 | 306.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 54 | 2350 | 180152 | 336.8 | 301.8 | .7 | 4.2 | 57 | -21.7 | -27.2 | 302.1 | 0 | 302.0 | 0 | .9 |
| BRW | 78 | 54 | 2350 | 190152 | 336.5 | 301.6 | 1.0 | 4.2 | 57 | -21.7 | -27.2 | 301.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 64 | 0302 | 200153 | 337.6 | 302.5 | 1.1 | 8.9 | 35 | -24.4 | -29.4 | 302.7 | 0 | 302.5 | 0 | 1.4 |
| BRW | 78 | 64 | 0302 | 210153 | 337.2 | 302.1 | 1.7 | 8.9 | 35 | -24.4 | -29.4 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 67 | 2223 | 180154 | 338.9 | 303.5 | 6.3 | 12.3 | 59 | -21.3 | -23.9 | 303.7 | 1 | 303.7 | 0 | 6.3 |
| BRW | 78 | 67 | 2223 | 190154 | 340.8 | 304.9 | 5.3 | 12.3 | 59 | -21.3 | -23.9 | 305.2 | 1 | 305.2 | 1 | 5.3 |
| BRW | 78 | 78 | 0211 | 180155 | 333.9 | 299.6 | U | 4.5 | 10 | -19.3 | -21.7 | 300.0 | 1 | 299.8 | 0 | .0 |
| BRW | 78 | 78 | 0211 | 190155 | 333.4 | 299.2 | U | 4.5 | 10 | -19.3 | -21.7 | 299.6 | 1 | -1.0 | 0 | -1.0 |
| BRW | 78 | 86 | 2037 | 220156 | 336.4 | 301.5 | 1.7 | 6.4 | 30 | -22.0 | -25.0 | 301.8 | 0 | 301.2 | 0 | 2.1 |
| BRW | 78 | 86 | 2037 | 230156 | 334.9 | 300.4 | 2.4 | 6.4 | 30 | -22.0 | -25.0 | 300.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 93 | 2034 | 200157 | 336.5 | 301.6 | 1.0 | 6.6 | 80 | -25.6 | -29.4 | 301.8 | 0 | 301.7 | 0 | 1.2 |
| BRW | 78 | 93 | 2034 | 210157 | 336.3 | 301.5 | 1.4 | 6.6 | 80 | -25.6 | -29.4 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 101 | 2139 | 220158 | 336.4 | 301.5 | 1.5 | 4.9 | 85 | -20.7 | -26.1 | 301.8 | 0 | 301.4 | 0 | 2.0 |
| BRW | 78 | 101 | 2139 | 230158 | 335.5 | 300.8 | 2.4 | 4.9 | 85 | -20.7 | -26.1 | 301.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 108 | 2339 | 180159 | 335.1 | 300.5 | 1.5 | 7.3 | 144 | -11.0 | -12.8 | 301.2 | 0 | 300.8 | 0 | 1.2 |
| BRW | 78 | 108 | 2339 | 190159 | 334.0 | 299.7 | .8 | 7.3 | 144 | -11.0 | -12.8 | 300.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 115 | 0044 | 200160 | 333.4 | 299.2 | 3.0 | 11.6 | 98 | -11.5 | -14.4 | 299.8 | 0 | 301.3 | 0 | 2.4 |
| BRW | 78 | 115 | 0044 | 210160 | 337.2 | 302.1 | 1.6 | 11.6 | 98 | -11.5 | -14.4 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 122 | 2353 | 220161 | 336.0 | 301.2 | 2.3 | 9.0 | 87 | -12.0 | -13.3 | 301.9 | 0 | 302.2 | 0 | 2.0 |
| BRW | 78 | 122 | 2353 | 230161 | 336.8 | 301.8 | 1.7 | 9.0 | 87 | -12.0 | -13.3 | 302.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 128 | 1939 | 180162 | 335.2 | 300.6 | .9 | 8.8 | 100 | -11.4 | -16.7 | 301.1 | 0 | 301.2 | 0 | .9 |
| BRW | 78 | 128 | 1939 | 190162 | 335.4 | 300.8 | .8 | 8.8 | 100 | -11.4 | -16.7 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 135 | 2340 | 200163 | 334.4 | 300.0 | 3.0 | 7.8 | 79 | -12.4 | -15.0 | 300.6 | 0 | 300.5 | 0 | 2.5 |
| BRW | 78 | 135 | 2340 | 210163 | 334.3 | 299.9 | 2.0 | 7.8 | 79 | -12.4 | -15.0 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 142 | 2250 | 220164 | 336.3 | 301.5 | 1.4 | 4.2 | 68 | -3.3 | -5.6 | 302.7 | 0 | 301.9 | 0 | 1.5 |
| BRW | 78 | 142 | 2250 | 230164 | 334.4 | 300.0 | 1.6 | 4.2 | 68 | -3.3 | -5.6 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 150 | 2350 | 200165 | 338.0 | 302.8 | 3.7 | 6.4 | 145 | -1.9 | -1.9 | 304.4 | 0 | 302.0 | 0 | 2.7 |
| BRW | 78 | 150 | 2350 | 210165 | 331.8 | 298.0 | .6 | 6.4 | 145 | -1.9 | -1.9 | 299.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 160 | 2039 | 220166 | 334.1 | 299.8 | 2.1 | 4.0 | 110 | 3.7 | -1.7 | 301.4 | 0 | 301.9 | 0 | 1.7 |
| BRW | 78 | 160 | 2039 | 230166 | 335.5 | 300.8 | 1.2 | 4.0 | 110 | 3.7 | -1.7 | 302.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 164 | 2325 | 200167 | 334.8 | 300.3 | 1.6 | 4.1 | 54 | .6 | -2.2 | 301.9 | 0 | 301.4 | 0 | 1.7 |
| BRW | 78 | 164 | 2325 | 210167 | 333.7 | 299.5 | 1.8 | 4.1 | 54 | .6 | -2.2 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 173 | 2017 | 230168 | 334.9 | 300.4 | 1.6 | 10.3 | 80 | -.8 | -5.8 | 301.6 | 0 | 301.2 | 0 | 1.4 |
| BRW | 78 | 173 | 2017 | 220168 | 333.9 | 299.6 | 1.2 | 10.3 | 80 | -.8 | -5.8 | 300.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 179 | 1935 | 200169 | 334.4 | 300.0 | .9 | 3.5 | 95 | 2.7 | -.6 | 301.7 | 0 | 301.0 | 0 | 1.0 |
| BRW | 78 | 179 | 1935 | 210169 | 332.5 | 298.5 | 1.0 | 3.5 | 95 | 2.7 | -.6 | 300.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 187 | 0115 | 220170 | 332.0 | 298.2 | .9 | 5.4 | 65 | 3.0 | 3.0 | 300.4 | 0 | 300.5 | 0 | 1.2 |
| BRW | 78 | 187 | 0115 | 230170 | 332.3 | 298.4 | 1.4 | 5.4 | 65 | 3.0 | 3.0 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 193 | 1925 | 200171 | 330.2 | 296.8 | .9 | 6.7 | 105 | 2.5 | .3 | 298.6 | 0 | 298.9 | 0 | 1.6 |
| BRW | 78 | 193 | 1925 | 210171 | 330.8 | 297.2 | 2.0 | 6.7 | 105 | 2.5 | .3 | 299.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 199 | 0140 | 220172 | 330.2 | 296.8 | 1.6 | 9.4 | 110 | 1.4 | 1.4 | 298.8 | 0 | 299.2 | 0 | 2.2 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 78 | 199 | 0140 | 230172 | 331.3 | 297.6 | 2.6 | 9.4 | 110 | 1.4 | 1.4 | 299.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 212 | 1959 | 210173 | 332.4 | 298.5 | .4 | 5.8 | 170 | 15.4 | 13.3 | 303.0 | 0 | 303.1 | 0 | .5 |
| BRW | 78 | 212 | 1959 | 200173 | 332.5 | 298.5 | .5 | 5.8 | 170 | 15.4 | 13.3 | 303.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 221 | 2250 | 220174 | 329.7 | 296.4 | .5 | 6.7 | 90 | .4 | -1.9 | 298.0 | 0 | 297.8 | 0 | 1.2 |
| BRW | 78 | 221 | 2250 | 230174 | 329.3 | 296.1 | 1.6 | 6.7 | 90 | .4 | -1.9 | 297.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 228 | 1935 | 630175 | 330.9 | 297.3 | 1.5 | 8.5 | 115 | -.7 | -1.4 | 298.9 | 2 | 298.9 | 0 | 1.5 |
| BRW | 78 | 238 | 0130 | 220176 | 330.5 | 297.0 | 1.5 | 4.0 | 75 | 2.3 | 1.1 | 299.0 | 0 | 298.4 | 0 | 1.5 |
| BRW | 78 | 238 | 0130 | 230176 | 329.0 | 295.9 | 1.5 | 4.0 | 75 | 2.3 | 1.1 | 297.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 242 | 1945 | 200177 | 332.5 | 298.5 | .4 | 5.8 | 115 | 7.1 | 6.7 | 301.5 | 0 | 301.0 | 0 | .8 |
| BRW | 78 | 242 | 1945 | 210177 | 331.2 | 297.5 | 1.0 | 5.8 | 115 | 7.1 | 6.7 | 300.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 248 | 2330 | 630178 | 333.9 | 299.6 | 1.6 | 3.6 | 115 | 7.5 | 7.5 | 302.7 | 2 | 302.7 | 0 | 1.6 |
| BRW | 78 | 256 | 2030 | 230179 | 330.3 | 296.9 | .3 | 9.3 | 80 | 2.2 | 1.7 | 298.9 | 2 | 298.9 | 0 | .3 |
| BRW | 78 | 261 | 2003 | 200180 | 332.3 | 298.4 | .8 | 5.8 | 100 | -1.6 | -4.4 | 299.7 | 0 | 299.4 | 0 | 1.0 |
| BRW | 78 | 261 | 2003 | 210180 | 331.5 | 297.8 | 1.2 | 5.8 | 100 | -1.6 | -4.4 | 299.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 268 | 1910 | 590181 | 332.9 | 298.9 | .9 | 6.7 | 110 | .4 | .4 | 300.7 | 0 | 301.3 | 0 | 1.1 |
| BRW | 78 | 268 | 1910 | 600181 | 334.3 | 299.9 | 1.2 | 6.4 | 110 | .4 | .4 | 301.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 277 | 2005 | 220182 | 334.3 | 299.9 | 1.4 | 6.3 | 100 | -6.2 | -9.4 | 300.8 | 0 | 300.1 | 0 | 1.1 |
| BRW | 78 | 277 | 2005 | 230182 | 332.5 | 298.5 | .8 | 6.3 | 100 | -6.2 | -9.4 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 286 | 2340 | 210183 | 334.0 | 299.7 | .3 | 6.7 | 265 | -3.3 | -5.6 | 300.9 | 0 | 300.5 | 0 | 1.2 |
| BRW | 78 | 286 | 2340 | 200183 | 332.9 | 298.9 | 1.6 | 6.7 | 265 | -3.3 | -5.6 | 300.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 290 | 2030 | 600184 | 332.5 | 298.5 | .2 | 4.9 | 70 | -18.9 | -18.9 | 299.0 | 0 | 300.2 | 0 | 1.3 |
| BRW | 78 | 290 | 2030 | 590184 | 335.8 | 301.1 | 1.8 | 4.9 | 70 | -18.9 | -18.9 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 297 | 0055 | 230185 | 331.1 | 297.5 | 1.7 | 6.7 | 85 | -21.1 | -23.9 | 297.8 | 0 | 299.6 | 0 | 1.3 |
| BRW | 78 | 297 | 0055 | 220185 | 336.0 | 301.2 | .8 | 6.7 | 85 | -21.1 | -23.9 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 304 | 2020 | 210186 | 334.5 | 300.1 | 1.2 | 4.5 | 40 | -23.4 | -26.0 | 300.3 | 0 | 300.2 | 0 | .9 |
| BRW | 78 | 304 | 2020 | 200186 | 334.2 | 299.8 | .3 | 4.5 | 40 | -23.4 | -26.0 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 316 | 1622 | 590187 | 334.7 | 300.2 | .2 | 3.1 | 135 | -7.0 | -9.4 | 301.1 | 0 | 301.3 | 0 | .8 |
| BRW | 78 | 316 | 1622 | 600187 | 335.0 | 300.5 | 1.1 | 3.1 | 135 | -7.0 | -9.4 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 320 | 0125 | 630188 | 334.0 | 299.7 | .5 | 5.4 | 150 | -24.2 | -26.8 | 299.9 | 0 | 300.3 | 0 | .6 |
| BRW | 78 | 320 | 0125 | 220188 | 335.0 | 300.5 | .6 | 5.4 | 150 | -24.2 | -26.8 | 300.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 329 | 2325 | 200189 | 335.1 | 300.5 | .3 | 8.9 | 73 | -23.4 | -23.4 | 300.8 | 0 | 301.1 | 0 | .6 |
| BRW | 78 | 329 | 2325 | 210189 | 335.8 | 301.1 | .8 | 8.9 | 73 | -23.4 | -23.4 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 341 | 2245 | 590190 | 336.3 | 301.5 | 1.2 | 6.7 | 30 | -21.0 | -23.6 | 301.8 | 2 | 301.8 | 0 | 1.2 |
| BRW | 78 | 346 | 2150 | 200191 | 334.4 | 300.0 | .5 | 4.5 | 115 | -27.8 | -31.2 | 300.2 | 0 | 300.7 | 0 | .6 |
| BRW | 78 | 346 | 2150 | 210191 | 335.7 | 301.0 | .6 | 4.5 | 115 | -27.8 | -31.2 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 354 | 0205 | 590192 | 334.3 | 299.9 | .3 | 4.9 | 75 | -34.5 | -37.8 | 300.0 | 0 | 299.3 | 0 | .7 |
| BRW | 78 | 354 | 0205 | 600192 | 332.3 | 298.4 | 1.0 | 4.9 | 75 | -34.5 | -37.8 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 78 | 361 | 2005 | 220193 | 335.2 | 300.6 | .7 | 4.5 | 105 | -36.6 | -41.0 | 300.7 | 0 | 301.1 | 0 | .5 |
| BRW | 78 | 361 | 2005 | 630193 | 336.3 | 301.5 | .1 | 4.5 | 105 | -36.6 | -41.0 | 301.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 3 | 0335 | 200194 | 334.0 | 299.7 | 1.2 | 4.9 | 127 | -11.4 | -13.2 | 300.4 | 0 | 300.4 | 0 | 1.1 |
| BRW | 79 | 3 | 0335 | 210194 | 334.2 | 299.8 | .9 | 4.9 | 127 | -11.4 | -13.2 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 8 | 2110 | 600195 | 334.2 | 299.8 | .8 | 5.8 | 105 | -18.9 | -21.7 | 300.2 | 0 | 300.0 | 0 | .9 |
| BRW | 79 | 8 | 2110 | 590195 | 333.6 | 299.4 | 1.0 | 5.8 | 105 | -18.9 | -21.7 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 15 | 2305 | 220196 | 333.0 | 298.9 | .2 | 5.8 | 60 | -20.7 | -23.6 | 299.2 | 0 | 299.3 | 0 | .3 |
| BRW | 79 | 15 | 2305 | 630196 | 333.3 | 299.2 | .4 | 5.8 | 60 | -20.7 | -23.6 | 299.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 18 | 2040 | 200197 | 337.1 | 302.1 | 1.1 | 10.3 | 70 | -17.2 | -19.8 | 302.5 | 0 | 302.1 | 0 | .8 |
| BRW | 79 | 18 | 2040 | 210197 | 336.1 | 301.3 | .1 | 10.3 | 70 | -17.2 | -19.8 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 33 | 2110 | 590198 | 333.9 | 299.6 | 1.6 | 3.5 | 300 | -33.1 | -37.7 | 299.7 | 0 | 300.4 | 0 | 1.2 |
| BRW | 79 | 33 | 2110 | 600198 | 335.6 | 300.9 | .4 | 3.5 | 300 | -33.1 | -37.7 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 39 | 1935 | 220199 | 334.7 | 300.2 | .6 | 3.1 | 20 | -25.2 | -28.6 | 300.4 | 0 | 300.9 | 0 | .8 |
| BRW | 79 | 39 | 1935 | 630199 | 335.8 | 301.1 | 1.0 | 3.1 | 20 | -25.2 | -28.6 | 301.3 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 79 | 43 | 2035 | 200200 | 336.7 | 301.8 | 2.5 | 7.5 | 90 | -34.9 | -38.6 | 301.9 | 0 | 301.6 | 0 | 2.1 |
| BRW | 79 | 43 | 2035 | 210200 | 335.9 | 301.2 | 1.5 | 7.5 | 90 | -34.9 | -38.6 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 49 | 2250 | 590201 | 334.9 | 300.4 | .3 | 3.5 | 110 | -28.3 | -32.7 | 300.5 | 0 | 300.2 | 0 | 1.1 |
| BRW | 79 | 49 | 2250 | 600201 | 334.0 | 299.7 | 1.5 | 3.6 | 110 | -28.3 | -32.7 | 299.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 57 | 2205 | 630202 | 336.1 | 301.3 | .5 | 5.4 | 90 | -27.6 | -32.1 | 301.5 | 0 | 302.0 | 0 | .8 |
| BRW | 79 | 57 | 2205 | 220202 | 337.4 | 302.3 | 1.0 | 5.4 | 90 | -27.6 | -32.1 | 302.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 64 | 2030 | 200203 | 334.7 | 300.2 | .8 | 11.6 | 65 | -29.8 | -34.8 | 300.4 | 0 | 301.1 | 0 | .6 |
| BRW | 79 | 64 | 2030 | 210203 | 336.5 | 301.6 | .2 | 11.6 | 65 | -29.8 | -34.8 | 301.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 71 | 1955 | 600204 | 334.5 | 300.1 | .5 | 5.4 | 70 | -30.3 | -35.1 | 300.2 | 0 | 301.3 | 0 | .6 |
| BRW | 79 | 71 | 1955 | 590204 | 337.3 | 302.2 | .6 | 5.4 | 70 | -30.3 | -35.1 | 302.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 78 | 2325 | 220205 | 337.2 | 302.1 | 2.1 | 2.2 | 20 | -31.5 | -37.3 | 302.3 | 0 | 303.2 | 0 | 1.5 |
| BRW | 79 | 78 | 2325 | 630205 | 339.6 | 304.0 | .3 | 2.2 | 20 | -31.5 | -37.3 | 304.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 86 | 2005 | 200206 | 335.8 | 301.1 | 1.4 | 8.2 | 105 | -14.6 | -17.2 | 301.6 | 0 | 301.4 | 0 | 2.0 |
| BRW | 79 | 86 | 2005 | 210206 | 335.3 | 300.7 | 2.4 | 8.2 | 105 | -14.6 | -17.2 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 94 | 0215 | 630207 | 338.6 | 303.2 | 1.5 | 10.3 | 80 | -23.0 | -26.5 | 303.5 | 0 | 302.3 | 0 | 1.5 |
| BRW | 79 | 94 | 0215 | 220207 | 335.6 | 300.9 | 1.5 | 10.3 | 80 | -23.0 | -26.5 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 102 | 0130 | 590208 | 335.6 | 300.9 | 1.3 | 7.1 | 98 | -24.2 | -30.0 | 301.1 | 0 | 301.1 | 0 | 1.5 |
| BRW | 79 | 102 | 0130 | 600208 | 335.6 | 300.9 | 1.7 | 7.1 | 98 | -24.2 | -30.0 | 301.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 108 | 2155 | 210209 | 334.9 | 300.4 | .7 | 6.4 | 70 | -22.7 | -26.5 | 300.6 | 0 | 301.2 | 0 | 1.1 |
| BRW | 79 | 108 | 2151 | 200209 | 336.3 | 301.5 | 1.4 | 5.4 | 70 | -22.7 | -26.5 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 114 | 0220 | 630210 | 337.4 | 302.3 | .4 | 8.9 | 110 | -4.2 | -6.7 | 303.4 | 0 | 302.6 | 0 | 1.0 |
| BRW | 79 | 114 | 0220 | 220210 | 335.4 | 300.8 | 1.3 | 8.9 | 110 | -4.2 | -6.7 | 301.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 121 | 2055 | 600211 | 337.6 | 302.5 | 1.3 | 4.0 | 115 | -4.5 | -7.7 | 303.5 | 2 | 303.5 | 0 | 1.3 |
| BRW | 79 | 127 | 2055 | 200212 | 338.1 | 302.8 | 3.6 | 7.5 | 100 | -2.3 | -5.8 | 304.0 | 0 | 303.3 | 0 | 2.8 |
| BRW | 79 | 127 | 2055 | 210212 | 336.3 | 301.5 | 1.7 | 7.6 | 100 | -2.3 | -5.8 | 302.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 135 | 1955 | 630213 | 336.8 | 301.8 | 1.7 | 4.0 | 70 | -9.5 | -12.3 | 302.6 | 0 | 302.5 | 0 | 1.7 |
| BRW | 79 | 135 | 1955 | 220213 | 336.5 | 301.6 | 1.6 | 4.0 | 70 | -9.5 | -12.3 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 141 | 1855 | 590214 | 336.4 | 301.5 | 2.1 | 4.9 | 40 | -9.6 | -11.1 | 302.3 | 0 | 301.7 | 0 | 1.8 |
| BRW | 79 | 141 | 1855 | 600214 | 334.8 | 300.3 | 1.4 | 4.9 | 40 | -9.6 | -11.1 | 301.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 151 | 2325 | 210215 | 336.3 | 301.5 | 1.2 | 4.5 | 220 | 4.8 | -.2 | 303.3 | 0 | 303.1 | 0 | 1.4 |
| BRW | 79 | 151 | 2325 | 200215 | 336.0 | 301.2 | 1.5 | 4.5 | 220 | 4.8 | -.2 | 303.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 155 | 1925 | 220216 | 337.0 | 302.0 | 2.0 | 5.8 | 75 | .7 | -2.1 | 303.6 | 0 | 302.6 | 0 | 2.1 |
| BRW | 79 | 155 | 1925 | 630216 | 334.5 | 300.1 | 2.2 | 5.8 | 75 | .7 | -2.1 | 301.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 166 | 0001 | 600217 | 335.0 | 300.5 | 1.9 | 4.0 | 340 | -.8 | -2.6 | 302.0 | 0 | 302.4 | 0 | 1.4 |
| BRW | 79 | 166 | 0001 | 590217 | 336.1 | 301.3 | .7 | 4.0 | 340 | -.8 | -2.6 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 169 | 2042 | 200218 | 334.8 | 300.3 | .9 | 8.9 | 115 | 1.3 | -.5 | 302.1 | 0 | 302.5 | 0 | 1.1 |
| BRW | 79 | 169 | 2042 | 210218 | 335.9 | 301.2 | 1.2 | 8.9 | 115 | 1.3 | -.5 | 302.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 176 | 1940 | 220219 | 334.6 | 300.2 | 1.2 | 6.7 | 30 | -1.0 | -3.3 | 301.6 | 0 | 302.5 | 0 | 1.3 |
| BRW | 79 | 176 | 1940 | 630219 | 336.9 | 301.9 | 1.4 | 6.7 | 30 | -1.0 | -3.3 | 303.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 183 | 2047 | 600220 | 332.5 | 298.5 | 2.5 | 2.7 | 105 | 7.2 | 4.9 | 301.1 | 0 | 301.9 | 0 | 1.8 |
| BRW | 79 | 183 | 2047 | 590220 | 334.6 | 300.2 | .2 | 2.7 | 105 | 7.2 | 4.9 | 302.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 195 | 0215 | 200221 | 331.1 | 297.5 | 1.9 | 6.7 | 270 | 11.2 | 7.3 | 300.5 | 0 | 301.0 | 0 | 1.6 |
| BRW | 79 | 195 | 0215 | 210221 | 332.4 | 298.5 | 1.2 | 6.7 | 270 | 11.2 | 7.3 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 200 | 1920 | 600222 | 333.8 | 299.5 | .4 | 3.6 | 130 | 11.2 | 8.4 | 302.8 | 0 | 302.3 | 0 | 1.1 |
| BRW | 79 | 200 | 1920 | 590222 | 332.4 | 298.5 | 1.5 | 3.5 | 130 | 11.2 | 8.4 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 204 | 2108 | 630223 | 332.7 | 298.7 | 1.1 | 5.0 | 115 | 4.0 | 3.0 | 300.9 | 0 | 301.1 | 0 | 1.0 |
| BRW | 79 | 204 | 2108 | 220223 | 333.2 | 299.1 | .8 | 5.0 | 115 | 4.0 | 3.0 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 211 | 0441 | 210224 | 331.9 | 298.1 | 1.7 | 4.9 | 105 | 4.9 | 4.7 | 300.6 | 0 | 301.1 | 0 | 1.7 |
| BRW | 79 | 211 | 0441 | 200224 | 333.1 | 299.0 | 1.7 | 4.9 | 105 | 4.9 | 4.7 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 218 | 1950 | 590225 | 331.8 | 298.0 | 2.4 | 10.7 | 90 | 1.8 | 1.2 | 300.0 | 0 | 300.0 | 0 | 1.8 |
| BRW | 79 | 218 | 1950 | 600225 | 331.9 | 298.1 | .7 | 10.7 | 90 | 1.8 | 1.2 | 300.1 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRW | 79 | 225 | 1855 | 200226 | 330.7 | 297.2 | 1.0 | 8.9 | 105 | 7.4 | 5.3 | 299.8 | 0 | 299.8 | 0 | 1.0 |
| BRW | 79 | 225 | 1855 | 210226 | 330.6 | 297.1 | .9 | 8.9 | 105 | 7.4 | 5.3 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 232 | 2059 | 200227 | 335.7 | 301.0 | 2.5 | 4.0 | 135 | 12.4 | 11.2 | 305.0 | 0 | 304.4 | 0 | 2.0 |
| BRW | 79 | 232 | 2059 | 210227 | 334.3 | 299.9 | 1.3 | 4.0 | 135 | 12.4 | 11.2 | 303.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 249 | 1855 | 500229 | 333.8 | 299.5 | 1.3 | 9.8 | 145 | 4.2 | 2.7 | 301.7 | 0 | 301.9 | 0 | 1.6 |
| BRW | 79 | 249 | 1855 | 590229 | 334.3 | 299.9 | 1.9 | 9.8 | 145 | 4.2 | 2.7 | 302.1 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 253 | 1900 | 220230 | 340.7 | 304.8 | .5 | 4.9 | 140 | .8 | -.5 | 306.6 | 2 | 306.6 | 2 | .5 |
| BRW | 79 | 253 | 1900 | 630230 | 337.6 | 302.5 | 6.9 | 4.9 | 140 | .8 | -.5 | 304.2 | 1 | 304.2 | 1 | 6.9 |
| BRW | 79 | 262 | 1840 | 210231 | 333.7 | 299.5 | .9 | 5.4 | 85 | -.4 | -4.1 | 300.8 | 0 | 301.1 | 0 | 1.4 |
| BRW | 79 | 262 | 1840 | 200231 | 334.5 | 300.1 | 1.7 | 5.4 | 85 | -.4 | -4.1 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 268 | 2015 | 590232 | 331.2 | 297.5 | 1.0 | 8.0 | 115 | 1.8 | -.2 | 299.3 | 0 | 300.0 | 0 | 2.6 |
| BRW | 79 | 268 | 2015 | 600232 | 332.9 | 298.9 | 3.5 | 8.0 | 115 | 1.8 | -.2 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 274 | 1845 | 220233 | 333.9 | 299.6 | 2.5 | 8.1 | 85 | -.6 | -2.2 | 301.2 | 0 | 300.2 | 0 | 2.2 |
| BRW | 79 | 274 | 1845 | 630233 | 331.3 | 297.6 | 1.9 | 8.1 | 85 | -.6 | -2.2 | 299.2 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 281 | 2105 | 590234 | 333.2 | 299.1 | 2.9 | 7.5 | 80 | -4.5 | -5.7 | 300.3 | 0 | 301.5 | 0 | 2.2 |
| BRW | 79 | 281 | 2105 | 600234 | 336.4 | 301.5 | 1.3 | 7.5 | 80 | -4.5 | -5.7 | 302.7 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 289 | 2016 | 630235 | 333.7 | 299.5 | 1.8 | 4.5 | 100 | -11.0 | -14.0 | 300.1 | 0 | 299.7 | 0 | 1.5 |
| BRW | 79 | 289 | 2016 | 220235 | 332.8 | 298.8 | 1.0 | 4.5 | 100 | -11.0 | -14.0 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 295 | 2140 | 210236 | 334.8 | 300.3 | 1.3 | 11.6 | 70 | -8.8 | -9.7 | 301.2 | 0 | 301.1 | 0 | 1.5 |
| BRW | 79 | 295 | 2140 | 200236 | 334.6 | 300.2 | 1.6 | 11.6 | 70 | -8.8 | -9.7 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 302 | 0130 | 220237 | 330.9 | 297.3 | 2.1 | 4.5 | 65 | -18.2 | -19.5 | 297.7 | 0 | 299.8 | 0 | 2.0 |
| BRW | 79 | 302 | 0130 | 630237 | 336.2 | 301.4 | 1.9 | 4.5 | 65 | -18.2 | -19.5 | 301.8 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 309 | 2030 | 210238 | 331.7 | 297.9 | 3.8 | 6.7 | 90 | -11.0 | -16.0 | 298.5 | 0 | 300.2 | 0 | 2.8 |
| BRW | 79 | 309 | 2030 | 200238 | 336.2 | 301.4 | 1.2 | 6.7 | 90 | -11.0 | -16.0 | 301.9 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 319 | 0030 | 590239 | 335.3 | 300.7 | 1.8 | 4.9 | 70 | -12.7 | -18.0 | 301.2 | 2 | 301.2 | 0 | 1.8 |
| BRW | 79 | 326 | 2150 | 630240 | 335.9 | 301.2 | 1.2 | 9.1 | 30 | -23.6 | -27.5 | 301.4 | 2 | 301.4 | 0 | 1.2 |
| BRW | 79 | 338 | 2130 | 590241 | 338.4 | 303.1 | 2.5 | 6.9 | 98 | -23.6 | -27.5 | 303.3 | 0 | 302.4 | 0 | 1.8 |
| BRW | 79 | 338 | 2130 | 600241 | 336.0 | 301.2 | .3 | 6.9 | 98 | -23.6 | -27.5 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 348 | 2300 | 630242 | 338.0 | 302.8 | 1.4 | 12.4 | 230 | -10.7 | -12.3 | 303.5 | 2 | 303.5 | 0 | 1.4 |
| BRW | 79 | 352 | 2030 | 210243 | 339.9 | 304.2 | 1.2 | 4.5 | 60 | -20.0 | -24.4 | 304.5 | 0 | 303.3 | 0 | 1.3 |
| BRW | 79 | 352 | 2030 | 200243 | 336.7 | 301.8 | 1.4 | 4.5 | 60 | -20.0 | -24.4 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| BRW | 79 | 358 | 2200 | 590244 | 335.5 | 300.8 | 1.8 | 7.7 | 68 | -31.0 | -37.3 | 301.0 | 0 | 300.5 | 0 | 1.5 |
| BRW | 79 | 358 | 2200 | 600244 | 334.2 | 299.8 | 1.1 | 7.7 | 68 | -31.0 | -37.3 | 300.0 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 77 | 166 | 2150 | 030064 | 336.8 | 301.8 | 1.4 | 2.2 | 225 | 17.6 | -11.0 | 303.1 | 2 | 303.1 | 2 | 1.4 |
| NWR | 77 | 166 | 2150 | 040064 | 327.2 | 294.5 | 9.8 | 2.2 | 225 | 17.6 | -11.0 | 295.7 | 1 | 295.7 | 1 | 9.8 |
| NWR | 77 | 172 | 1800 | 050065 | 324.9 | 292.7 | 2.2 | 4.5 | 270 | 14.0 | -7.2 | 294.3 | 3 | 294.3 | 3 | 2.2 |
| NWR | 77 | 172 | 1800 | 060065 | 358.7 | 318.6 | 2.6 | 4.5 | 270 | 14.0 | -7.2 | 320.4 | 3 | 320.4 | 3 | 2.6 |
| NWR | 77 | 179 | 1845 | 010066 | 530.6 | 450.5 | U | 2.2 | 135 | 17.5 | 7.0 | 457.4 | 1 | 457.4 | 1 | .0 |
| NWR | 77 | 179 | 1845 | 020066 | 377.4 | 333.0 | U | 2.2 | 135 | 17.5 | 7.0 | 338.1 | 1 | 338.1 | 1 | .0 |
| NWR | 77 | 194 | 1830 | 030067 | 327.6 | 294.8 | 8.0 | 8.9 | 270 | 11.5 | 3.7 | 298.3 | 1 | 298.3 | 0 | 8.0 |
| NWR | 77 | 194 | 1830 | 040067 | 318.5 | 287.8 | 2.9 | 8.9 | 270 | 11.5 | 3.7 | 291.3 | 2 | 291.3 | 2 | 2.9 |
| NWR | 77 | 200 | 1840 | 050068 | 334.5 | 300.1 | 10.2 | 0.0 | CLM | 16.0 | 4.2 | 303.8 | 1 | 303.8 | 1 | 10.2 |
| NWR | 77 | 200 | 1840 | 060068 | 327.8 | 294.9 | 9.1 | 0.0 | CLM | 16.0 | 4.2 | 298.6 | 1 | 298.6 | 0 | 9.1 |
| NWR | 77 | 208 | 2125 | 010069 | 342.9 | 306.5 | U | 11.2 | 90 | 16.2 | 1.8 | 309.7 | 1 | 309.7 | 1 | .0 |
| NWR | 77 | 208 | 2125 | 020069 | 334.4 | 300.0 | 4.1 | 11.2 | 90 | 16.2 | 1.8 | 303.2 | 1 | 303.2 | 1 | 4.1 |
| NWR | 77 | 214 | 2030 | 030070 | 331.6 | 297.9 | 11.1 | 6.7 | 270 | 19.0 | -4.2 | 299.9 | 1 | 299.9 | 0 | 11.1 |
| NWR | 77 | 214 | 2030 | 040070 | 328.1 | 295.2 | 11.1 | 6.7 | 270 | 19.0 | -4.2 | 297.2 | 1 | 297.2 | 1 | 11.1 |
| NWR | 77 | 222 | 1800 | 050071 | 332.8 | 298.8 | 2.6 | 2.2 | 270 | 15.0 | .5 | 301.6 | 0 | 302.7 | 0 | 3.1 |
| NWR | 77 | 222 | 1800 | 060071 | 335.5 | 300.8 | 3.6 | 2.2 | 270 | 15.0 | .5 | 303.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 229 | 1700 | 010072 | 328.0 | 295.1 | 3.2 | 1.3 | 180 | 12.0 | 7.1 | 299.6 | 2 | 299.6 | 0 | 3.2 |
| NWR | 77 | 237 | 1830 | 030073 | 328.4 | 295.4 | 10.6 | 4.5 | 293 | 11.0 | 6.0 | 299.6 | 1 | 299.6 | 0 | 10.6 |
| NWR | 77 | 237 | 1830 | 040073 | 325.2 | 292.9 | 10.0 | 4.5 | 293 | 11.0 | 6.0 | 297.1 | 1 | 297.1 | 1 | 10.0 |
| NWR | 77 | 244 | 2120 | 050074 | 328.5 | 295.5 | 1.6 | 0.0 | CLM | 14.5 | -4.5 | 297.4 | 2 | 297.4 | 2 | 1.6 |
| NWR | 77 | 258 | 2000 | 040075 | 328.1 | 295.2 | 7.0 | 2.2 | 270 | -4.0 | -8.5 | 296.6 | 1 | 296.6 | 1 | 7.0 |
| NWR | 77 | 258 | 2000 | 030075 | 332.1 | 298.2 | 1.4 | 2.2 | 270 | -4.0 | -8.5 | 299.7 | 2 | 299.7 | 0 | 1.4 |
| NWR | 77 | 265 | 2245 | 010076 | 333.2 | 299.1 | 6.3 | 1.3 | 270 | 13.5 | -14.8 | 300.0 | 1 | 300.0 | 0 | 6.3 |
| NWR | 77 | 265 | 2245 | 020076 | 341.4 | 305.4 | 8.5 | 1.3 | 270 | 13.5 | -14.8 | 306.3 | 1 | 306.3 | 1 | 8.5 |
| NWR | 77 | 272 | 2020 | 030077 | 330.3 | 296.9 | 8.4 | 2.2 | 270 | MSG | MSG | 299.2 | 1 | 299.2 | 0 | 8.4 |
| NWR | 77 | 272 | 2020 | 040077 | 328.5 | 295.5 | 5.0 | 2.2 | 270 | MSG | MSG | 297.8 | 1 | 297.8 | 1 | 5.0 |
| NWR | 77 | 281 | 2300 | 010078 | 336.5 | 301.6 | 10.3 | 6.7 | 270 | -2.0 | -9.8 | 303.0 | 1 | 303.0 | 0 | 10.3 |
| NWR | 77 | 281 | 2300 | 020078 | 330.2 | 296.8 | 1.1 | 6.7 | 270 | -2.0 | -9.8 | 298.1 | 2 | 298.1 | 2 | 1.1 |
| NWR | 77 | 286 | 2140 | 030079 | 331.2 | 297.5 | 4.7 | 4.5 | 270 | 6.0 | -10.5 | 298.8 | 1 | 298.8 | 0 | 4.7 |
| NWR | 77 | 286 | 2140 | 040079 | 330.1 | 296.7 | .9 | 4.5 | 270 | 6.0 | -10.5 | 298.0 | 2 | 298.0 | 2 | .9 |
| NWR | 77 | 296 | 2215 | 010080 | 330.5 | 297.0 | 2.1 | 2.2 | 270 | 2.5 | -5.8 | 298.8 | 2 | 300.0 | 0 | 2.1 |
| NWR | 77 | 296 | 2215 | 020080 | 333.7 | 299.5 | 5.1 | 2.2 | 270 | 2.5 | -5.8 | 301.3 | 1 | -1.0 | 0 | -1.0 |
| NWR | 77 | 300 | 2110 | 030081 | 367.0 | 325.0 | 3.2 | 2.2 | 180 | 6.5 | -8.5 | 326.6 | 2 | 326.6 | 2 | 3.2 |
| NWR | 77 | 300 | 2110 | 040081 | 355.5 | 316.2 | 6.8 | 2.2 | 180 | 6.5 | -8.5 | 317.7 | 1 | 317.7 | 1 | 6.8 |
| NWR | 77 | 307 | 2315 | 010082 | 333.9 | 299.6 | 1.1 | 2.2 | 225 | 3.5 | -12.2 | 300.7 | 0 | 299.9 | 0 | 2.8 |
| NWR | 77 | 307 | 2315 | 020082 | 331.7 | 297.9 | 3.8 | 2.2 | 225 | 3.5 | -12.2 | 299.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 77 | 315 | 2020 | 030083 | 331.1 | 297.5 | 11.1 | 4.5 | 270 | 3.0 | -16.2 | 298.3 | 1 | 298.3 | 0 | 11.1 |
| NWR | 77 | 315 | 2020 | 040083 | 329.8 | 296.5 | 8.6 | 4.5 | 270 | 3.0 | -16.2 | 297.3 | 1 | 297.3 | 1 | 8.6 |
| NWR | 77 | 325 | 2200 | 010084 | 333.9 | 299.6 | 23.5 | 4.5 | 270 | -7.0 | MSG | 302.0 | 1 | 301.0 | 0 | 23.5 |
| NWR | 77 | 325 | 2200 | 020084 | 331.3 | 297.6 | 2.2 | 4.5 | 270 | -7.0 | MSG | 300.0 | 2 | -1.0 | 0 | -1.0 |
| NWR | 77 | 333 | 2100 | 030085 | 329.5 | 296.2 | 9.1 | 4.5 | 270 | -9.4 | MSG | 296.6 | 1 | 299.9 | 0 | 9.1 |
| NWR | 77 | 333 | 2100 | 040085 | 332.8 | 298.8 | 1.1 | 4.5 | 270 | -9.4 | MSG | 301.2 | 2 | -1.0 | 0 | -1.0 |
| NWR | 77 | 341 | 2030 | 010086 | 345.0 | 308.1 | 10.9 | 2.2 | 270 | -6.5 | -8.8 | 309.6 | 1 | 309.6 | 1 | 10.9 |
| NWR | 77 | 341 | 2030 | 020086 | 343.6 | 307.1 | 10.5 | 2.2 | 270 | -6.5 | -8.8 | 308.5 | 1 | 308.5 | 1 | 10.5 |
| NWR | 77 | 351 | 0000 | 030087 | 339.6 | 304.0 | 5.9 | 11.2 | 270 | -13.0 | -99.9 | 306.4 | 1 | 306.4 | 1 | 5.9 |
| NWR | 77 | 351 | 0000 | 050087 | 345.6 | 308.6 | 3.2 | 11.2 | 270 | -13.0 | -99.9 | 311.1 | 2 | 311.1 | 2 | 3.2 |
| NWR | 77 | 365 | 0040 | 060088 | 340.2 | 304.5 | 5.4 | 11.2 | 270 | -5.0 | MSG | 306.9 | 1 | 306.9 | 1 | 5.4 |
| NWR | 78 | 7 | 2130 | 010089 | 328.1 | 295.2 | 1.7 | 8.9 | 270 | MSG | MSG | 297.5 | 0 | 300.2 | 0 | 1.5 |
| NWR | 78 | 7 | 2130 | 020089 | 335.1 | 300.5 | 1.2 | 8.9 | 270 | MSG | MSG | 302.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 11 | 2150 | 030090 | 329.2 | 296.0 | 11.6 | 8.9 | 270 | -8.6 | -9.5 | 297.4 | 1 | 297.4 | 1 | 11.6 |
| NWR | 78 | 11 | 2150 | 040090 | 319.8 | 288.8 | 8.4 | 8.9 | 270 | -8.6 | -9.5 | 290.1 | 1 | 290.1 | 1 | 8.4 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 78 | 17 | 2020 | 050091 | 341.5 | 305.4 | 2.2 | 4.5 | 270 | -8.5 | -10.8 | 306.7 | 2 | 306.7 | 2 | 2.2 |
| NWR | 78 | 17 | 2020 | 060091 | 336.5 | 301.6 | 6.8 | 4.5 | 270 | -8.5 | -10.8 | 302.9 | 1 | 302.9 | 0 | 6.8 |
| NWR | 78 | 28 | 2200 | 010092 | 339.2 | 303.7 | 2.4 | 17.9 | 270 | -7.0 | -13.1 | 304.7 | 2 | 304.7 | 2 | 2.4 |
| NWR | 78 | 28 | 2200 | 020092 | 329.3 | 296.1 | 13.1 | 17.9 | 270 | -7.0 | -13.1 | 297.1 | 1 | 297.1 | 1 | 13.1 |
| NWR | 78 | 35 | 0030 | 030093 | 333.9 | 299.6 | 2.5 | 17.9 | 270 | -7.2 | -8.3 | 301.1 | 0 | 300.8 | 0 | 2.5 |
| NWR | 78 | 35 | 0030 | 040093 | 333.1 | 299.0 | 2.4 | 17.9 | 270 | -7.2 | -8.3 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 50 | 0000 | 010094 | 331.3 | 297.6 | 3.1 | 6.7 | 270 | MSG | MSG | 300.0 | 0 | 301.3 | 0 | 2.8 |
| NWR | 78 | 50 | 0000 | 020094 | 334.6 | 300.2 | 2.4 | 6.7 | 270 | MSG | MSG | 302.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 54 | 2109 | 030095 | 335.7 | 301.0 | 1.4 | 15.5 | 270 | -6.5 | -15.0 | 301.9 | 0 | 301.6 | 0 | 1.9 |
| NWR | 78 | 54 | 2109 | 040095 | 335.0 | 300.5 | 2.3 | 15.5 | 270 | -6.5 | -15.0 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 63 | 2045 | 050096 | 331.2 | 297.5 | 6.1 | 17.9 | 270 | -5.0 | -7.0 | 299.2 | 1 | 299.1 | 0 | 6.1 |
| NWR | 78 | 63 | 2045 | 060096 | 330.9 | 297.3 | 3.5 | 17.9 | 270 | -5.0 | -7.0 | 298.9 | 2 | -1.0 | 0 | -1.0 |
| NWR | 78 | 67 | 2150 | 010097 | 335.6 | 300.9 | 2.7 | 7.8 | 270 | -4.0 | -11.2 | 302.1 | 2 | 300.3 | 0 | 2.7 |
| NWR | 78 | 67 | 2150 | 020097 | 330.9 | 297.3 | 7.4 | 7.8 | 270 | -4.0 | -11.2 | 298.5 | 1 | -1.0 | 0 | -1.0 |
| NWR | 78 | 86 | 1930 | 030098 | 335.2 | 300.6 | 1.0 | 0.0 | CLM | 2.0 | -11.2 | 301.8 | 4 | 301.6 | 0 | .9 |
| NWR | 78 | 86 | 1930 | 040098 | 334.7 | 300.2 | .8 | 0.0 | CLM | 2.0 | -11.2 | 301.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 103 | 2330 | 020099 | 334.1 | 299.8 | 2.1 | 1.1 | 180 | -2.5 | -6.1 | 301.5 | 4 | 301.8 | 0 | 2.4 |
| NWR | 78 | 103 | 2330 | 060099 | 334.7 | 300.2 | 2.6 | 1.1 | 180 | -2.5 | -6.1 | 302.0 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 123 | 1650 | 010100 | 336.3 | 301.5 | 2.2 | 17.5 | 270 | 2.0 | -2.2 | 303.8 | 0 | 303.9 | 0 | 2.3 |
| NWR | 78 | 123 | 1650 | 030100 | 336.5 | 301.6 | 2.4 | 17.5 | 270 | 2.0 | -2.2 | 304.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 130 | 1810 | 040101 | 325.7 | 293.3 | 2.5 | 17.5 | 270 | 1.5 | -9.9 | 294.6 | 5 | 294.0 | 5 | 2.0 |
| NWR | 78 | 130 | 1810 | 050101 | 324.2 | 292.2 | 1.4 | 17.5 | 270 | 1.5 | -9.9 | 293.5 | 5 | -1.0 | 5 | -1.0 |
| NWR | 78 | 138 | 2150 | 010102 | 332.4 | 298.5 | 2.0 | 7.5 | 270 | 0.0 | -3.3 | 300.6 | 0 | 300.7 | 0 | 1.6 |
| NWR | 78 | 138 | 2150 | 020102 | 332.5 | 298.5 | .9 | 7.5 | 270 | 0.0 | -3.3 | 300.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 152 | 2030 | 030103 | 330.9 | 297.3 | 1.8 | 2.2 | 180 | 1.5 | -1.6 | 299.8 | 0 | 300.5 | 0 | 1.7 |
| NWR | 78 | 152 | 2030 | 060103 | 332.8 | 298.8 | 1.6 | 2.2 | 180 | 1.5 | -1.6 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 158 | 2235 | 010104 | 331.1 | 297.5 | 1.1 | 11.3 | 270 | 2.0 | -2.2 | 299.8 | 0 | 301.3 | 0 | 2.5 |
| NWR | 78 | 158 | 2235 | 020104 | 334.9 | 300.4 | 3.4 | 11.3 | 270 | 2.0 | -2.2 | 302.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 165 | 1840 | 030105 | 331.7 | 297.9 | 1.1 | 1.1 | 270 | 15.5 | -2.7 | 300.2 | 4 | 297.5 | 0 | 2.3 |
| NWR | 78 | 165 | 1840 | 040105 | 324.8 | 292.6 | 3.0 | 1.1 | 270 | 15.5 | -2.7 | 294.9 | 4 | -1.0 | 4 | -1.0 |
| NWR | 78 | 173 | 2205 | 050106 | 331.6 | 297.9 | 2.7 | 1.1 | 220 | 17.5 | .6 | 300.7 | 4 | 301.3 | 0 | 2.5 |
| NWR | 78 | 173 | 2205 | 060106 | 333.1 | 299.0 | 2.2 | 1.1 | 220 | 17.5 | .6 | 301.9 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 179 | 2000 | 010107 | 340.8 | 304.9 | 1.9 | 1.1 | 135 | 8.5 | 6.6 | 309.4 | 3 | 309.4 | 3 | 1.9 |
| NWR | 78 | 179 | 2000 | 020107 | 355.4 | 316.1 | 1.5 | 1.1 | 135 | 8.5 | 6.6 | 320.8 | 3 | 320.8 | 3 | 1.5 |
| NWR | 78 | 188 | 2130 | 030108 | 331.0 | 297.4 | .1 | 1.1 | 180 | 15.8 | -4.7 | 299.3 | 4 | 298.8 | 0 | 1.6 |
| NWR | 78 | 188 | 2130 | 040108 | 329.5 | 296.2 | 2.3 | 1.1 | 180 | 15.8 | -4.7 | 298.2 | 4 | -1.0 | 4 | -1.0 |
| NWR | 78 | 193 | 0325 | 050109 | 330.6 | 297.1 | .7 | .8 | 270 | 11.3 | 1.2 | 300.1 | 4 | 300.6 | 0 | 1.4 |
| NWR | 78 | 193 | 0325 | 060109 | 332.0 | 298.2 | 1.8 | .8 | 270 | 11.3 | 1.2 | 301.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 200 | 2300 | 010110 | 328.0 | 295.1 | 1.5 | 3.0 | 180 | 15.5 | -.4 | 297.7 | 0 | 298.9 | 0 | 2.1 |
| NWR | 78 | 200 | 2300 | 020110 | 331.0 | 297.4 | 2.6 | 3.0 | 180 | 15.5 | -.4 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 209 | 2130 | 030111 | 332.0 | 298.2 | 1.0 | 2.0 | 270 | 17.0 | 5.6 | 302.3 | 0 | 302.2 | 0 | .8 |
| NWR | 78 | 209 | 2130 | 040111 | 331.9 | 298.1 | .6 | 2.0 | 270 | 17.0 | 5.6 | 302.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 215 | 2040 | 060112 | 330.1 | 296.7 | 2.4 | 2.0 | 90 | 11.0 | 4.1 | 300.4 | 4 | 300.7 | 0 | 2.2 |
| NWR | 78 | 215 | 2040 | 050112 | 330.8 | 297.2 | 2.0 | 2.0 | 90 | 11.0 | 4.1 | 300.9 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 222 | 1915 | 020113 | 326.7 | 294.1 | 1.2 | 2.0 | 270 | 13.5 | 5.2 | 298.0 | 0 | 298.4 | 0 | 1.0 |
| NWR | 78 | 222 | 1915 | 010113 | 327.6 | 294.8 | .8 | 2.0 | 270 | 13.5 | 5.2 | 298.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 230 | 0000 | 030114 | 331.2 | 297.5 | 1.1 | 11.0 | 270 | 1.0 | -6.0 | 299.3 | 0 | 299.0 | 0 | 1.0 |
| NWR | 78 | 230 | 0000 | 040114 | 330.4 | 296.9 | .9 | 11.0 | 270 | 1.0 | -6.0 | 298.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 235 | 1830 | 060115 | 332.6 | 298.6 | 1.0 | 5.0 | 270 | 14.5 | -.7 | 301.2 | 0 | 301.3 | 0 | 1.1 |
| NWR | 78 | 235 | 1830 | 050115 | 332.7 | 298.7 | 1.1 | 5.0 | 270 | 14.5 | -.7 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 246 | 1900 | 010116 | 332.5 | 298.5 | 1.3 | 2.0 | 120 | 14.5 | -.2 | 301.3 | 4 | 301.2 | 0 | 1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 78 | 246 | 1900 | 020116 | 332.4 | 298.5 | .5 | 2.0 | 120 | 14.5 | -.2 | 301.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 254 | 2230 | 030117 | 331.9 | 298.1 | 1.0 | 3.5 | 270 | .5 | -4.5 | 300.1 | 0 | 300.1 | 0 | 1.0 |
| NWR | 78 | 254 | 2230 | 040117 | 332.1 | 298.2 | 1.0 | 3.5 | 270 | .5 | -4.5 | 300.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 268 | 2040 | 050118 | 331.4 | 297.7 | 1.0 | 2.0 | 60 | 9.0 | -3.2 | 299.9 | 4 | 300.0 | 0 | 1.3 |
| NWR | 78 | 268 | 2040 | 060118 | 331.8 | 298.0 | 1.6 | 2.0 | 60 | 9.0 | -3.2 | 300.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 78 | 276 | 2130 | 040119 | 334.2 | 299.8 | 1.5 | 2.9 | 270 | 9.0 | -99.9 | 302.2 | 0 | 301.2 | 0 | 1.1 |
| NWR | 78 | 276 | 2130 | 030119 | 331.4 | 297.7 | .3 | 2.9 | 270 | 9.0 | -99.9 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 283 | 2300 | 050120 | 333.8 | 299.5 | 1.7 | 2.0 | 0 | 2.0 | -22.2 | 300.0 | 0 | 299.9 | 0 | 1.4 |
| NWR | 78 | 283 | 2300 | 060120 | 333.3 | 299.2 | 1.0 | 2.0 | 0 | 2.0 | -22.2 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 289 | 2110 | 010121 | 332.6 | 298.6 | .2 | 5.6 | 270 | 10.0 | -99.9 | 301.0 | 0 | 300.5 | 0 | .7 |
| NWR | 78 | 289 | 2110 | 020121 | 331.2 | 297.5 | 1.0 | 5.6 | 270 | 10.0 | -99.9 | 299.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 301 | 1735 | 040122 | 332.5 | 298.5 | .9 | 8.8 | 270 | 5.0 | -5.6 | 300.4 | 0 | 300.3 | 0 | .7 |
| NWR | 78 | 301 | 1735 | 030122 | 332.2 | 298.3 | .4 | 8.8 | 270 | 5.0 | -5.6 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 315 | 1930 | 010123 | 333.3 | 299.2 | 1.4 | 3.3 | 270 | 5.0 | -6.4 | 300.9 | 0 | 301.6 | 0 | 1.3 |
| NWR | 78 | 315 | 1930 | 020123 | 335.2 | 300.6 | 1.1 | 3.3 | 270 | 5.0 | -6.4 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 320 | 1930 | 030124 | 332.4 | 298.5 | .8 | 8.8 | 270 | -9.5 | -11.1 | 299.7 | 0 | 300.3 | 0 | .7 |
| NWR | 78 | 320 | 1930 | 040124 | 334.0 | 299.7 | .6 | 8.8 | 270 | -9.5 | -11.1 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 326 | 2045 | 060125 | 333.7 | 299.5 | 1.0 | 3.5 | 190 | -6.8 | -15.0 | 300.4 | 0 | 300.7 | 0 | .7 |
| NWR | 78 | 326 | 2045 | 050125 | 334.7 | 300.2 | .3 | 3.5 | 190 | -6.8 | -15.0 | 301.1 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 334 | 2040 | 010126 | 335.8 | 301.1 | 3.2 | 18.0 | 270 | -7.8 | -7.8 | 302.6 | 0 | 302.2 | 0 | 2.8 |
| NWR | 78 | 334 | 2040 | 020126 | 334.6 | 300.2 | 2.3 | 18.0 | 270 | -7.8 | -7.8 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 344 | 2000 | 050128 | 334.7 | 300.2 | 1.1 | 10.0 | 270 | MSG | MSG | 302.6 | 0 | 302.8 | 0 | .8 |
| NWR | 78 | 344 | 2000 | 060128 | 335.2 | 300.6 | .1 | 10.0 | 270 | MSG | MSG | 303.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 78 | 355 | 2320 | 010129 | 333.2 | 299.1 | 1.2 | 18.0 | 270 | -13.0 | -99.9 | 301.5 | 0 | 301.6 | 0 | .9 |
| NWR | 78 | 355 | 2320 | 020129 | 333.5 | 299.3 | .3 | 18.0 | 270 | -13.0 | -99.9 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 4 | 1545 | 030130 | 331.7 | 297.9 | 2.6 | 7.7 | 270 | -6.0 | -6.0 | 299.7 | 0 | 301.0 | 0 | 2.0 |
| NWR | 79 | 4 | 1545 | 040130 | 335.2 | 300.6 | 1.2 | 7.7 | 270 | -6.0 | -6.0 | 302.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 11 | 2300 | 010131 | 331.9 | 298.1 | 2.1 | 5.0 | 270 | -2.0 | MSG | 300.5 | 0 | 301.6 | 0 | 1.7 |
| NWR | 79 | 11 | 2300 | 020131 | 334.8 | 300.3 | 1.2 | 5.0 | 270 | -2.0 | MSG | 302.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 18 | 2310 | 030132 | 334.2 | 299.8 | 2.0 | 5.0 | 270 | -9.0 | MSG | 302.2 | 0 | 302.7 | 0 | 1.4 |
| NWR | 79 | 18 | 2310 | 040132 | 335.4 | 300.8 | .4 | 5.0 | 270 | -9.0 | MSG | 303.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 26 | 2200 | 030133 | 336.9 | 301.9 | .8 | 0.0 | CLM | -19.0 | -99.9 | 304.3 | 4 | 303.3 | 4 | 1.0 |
| NWR | 79 | 26 | 2200 | 040133 | 334.1 | 299.8 | 1.2 | 0.0 | CLM | -19.0 | -99.9 | 302.2 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 32 | 1750 | 050134 | 332.9 | 298.9 | 2.5 | 9.0 | 270 | -8.3 | -14.0 | 299.8 | 3 | 299.8 | 0 | 2.5 |
| NWR | 79 | 32 | 1750 | 060134 | 346.8 | 309.5 | 1.6 | 9.0 | 270 | -8.3 | -14.0 | 310.5 | 3 | 310.5 | 3 | 1.6 |
| NWR | 79 | 38 | 2330 | 010135 | 329.6 | 296.3 | U | 20.0 | 270 | -7.8 | -8.5 | 297.8 | 1 | 297.8 | 1 | .0 |
| NWR | 79 | 38 | 2330 | 020135 | 325.3 | 293.0 | 3.1 | 20.0 | 270 | -7.8 | -8.5 | 294.5 | 2 | 294.5 | 2 | 3.1 |
| NWR | 79 | 45 | 2045 | 030136 | 332.1 | 298.2 | 1.2 | 4.5 | 270 | 2.2 | -8.5 | 299.7 | 0 | 299.5 | 0 | 1.6 |
| NWR | 79 | 45 | 2045 | 040136 | 331.6 | 297.9 | 1.9 | 4.5 | 270 | 2.2 | -8.5 | 299.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 59 | 2045 | 040137 | 333.5 | 299.3 | 1.3 | 8.8 | 270 | -8.0 | MSG | 301.7 | 0 | 301.9 | 0 | 1.2 |
| NWR | 79 | 59 | 2045 | 030137 | 333.9 | 299.6 | 1.1 | 8.8 | 270 | -8.0 | MSG | 302.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 67 | 2200 | 040138 | 335.0 | 300.5 | 1.2 | 1.7 | 180 | -9.0 | MSG | 302.9 | 0 | 303.3 | 0 | 1.2 |
| NWR | 79 | 67 | 2200 | 030138 | 336.2 | 301.4 | 1.2 | 1.7 | 180 | -9.0 | MSG | 303.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 80 | 2330 | 050139 | 337.4 | 302.3 | 2.8 | 0.0 | CLM | -7.2 | -7.2 | 303.9 | 4 | 305.2 | 0 | 2.7 |
| NWR | 79 | 80 | 2330 | 060139 | 340.7 | 304.8 | 2.5 | 0.0 | CLM | -7.2 | -7.2 | 306.5 | 4 | -1.0 | 4 | -1.0 |
| NWR | 79 | 90 | 2120 | 030140 | 333.2 | 299.1 | 2.1 | 1.0 | 130 | 0.0 | -3.6 | 301.2 | 4 | 301.1 | 0 | 1.8 |
| NWR | 79 | 90 | 2120 | 040140 | 333.0 | 298.9 | 1.4 | 1.0 | 130 | 0.0 | -3.6 | 301.0 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 97 | 0100 | 050141 | 334.3 | 299.9 | .5 | 10.0 | 270 | -4.7 | -7.4 | 301.5 | 0 | 302.2 | 0 | .8 |
| NWR | 79 | 97 | 0100 | 060141 | 336.1 | 301.3 | 1.0 | 10.0 | 270 | -4.7 | -7.4 | 302.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 104 | 1930 | 030142 | 336.8 | 301.8 | .9 | 20.0 | 270 | -5.6 | -8.3 | 303.3 | 0 | 301.6 | 0 | .7 |
| NWR | 79 | 104 | 1930 | 040142 | 332.2 | 298.3 | .5 | 20.0 | 270 | -5.6 | -8.3 | 299.8 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 79 | 111 | 0145 | 060143 | 334.8 | 300.3 | 1.1 | 8.0 | 270 | -4.2 | -11.9 | 301.4 | 0 | 301.0 | 0 | 1.6 |
| NWR | 79 | 111 | 0145 | 050143 | 333.7 | 299.5 | 2.0 | 8.0 | 270 | -4.2 | -11.9 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 116 | 2200 | 030144 | 334.3 | 299.9 | 1.4 | 10.0 | 270 | -6.4 | -10.2 | 301.2 | 0 | 301.8 | 0 | 1.2 |
| NWR | 79 | 116 | 2200 | 040144 | 335.7 | 301.0 | 1.0 | 10.0 | 270 | -6.4 | -10.2 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 122 | 2030 | 050145 | 333.1 | 299.0 | 2.5 | 1.5 | 270 | .6 | -3.0 | 301.2 | 0 | 302.1 | 0 | 2.5 |
| NWR | 79 | 122 | 2030 | 060145 | 335.4 | 300.8 | 2.5 | 1.5 | 270 | .6 | -3.0 | 303.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 131 | 1800 | 040146 | 336.1 | 301.3 | 1.1 | 6.5 | 270 | -5.6 | -10.1 | 302.6 | 0 | 302.0 | 0 | 1.1 |
| NWR | 79 | 131 | 1800 | 030146 | 334.6 | 300.2 | 1.0 | 6.5 | 270 | -5.6 | -10.1 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 138 | 1530 | 060147 | 333.1 | 299.0 | 1.3 | 13.2 | 270 | 6.1 | -.3 | 301.7 | 0 | 301.7 | 0 | 1.6 |
| NWR | 79 | 138 | 1530 | 050147 | 333.2 | 299.1 | 1.8 | 13.2 | 270 | 6.1 | -.3 | 301.8 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 145 | 1100 | 030148 | 334.7 | 300.2 | 1.2 | 2.0 | 45 | 1.7 | -4.5 | 302.2 | 0 | 302.3 | 0 | 1.1 |
| NWR | 79 | 145 | 1100 | 040148 | 334.8 | 300.3 | 1.0 | 2.0 | 45 | 1.7 | -4.5 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 150 | 1830 | 050149 | 334.3 | 299.9 | .9 | 2.0 | 180 | -1.7 | -2.0 | 302.3 | 0 | 302.3 | 0 | .8 |
| NWR | 79 | 150 | 1830 | 060149 | 334.2 | 299.8 | .6 | 2.0 | 180 | -1.7 | -2.0 | 302.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 159 | 2115 | 030150 | 330.0 | 296.6 | 6.6 | 2.0 | 270 | -2.2 | -99.9 | 299.0 | 1 | 299.0 | 1 | 6.6 |
| NWR | 79 | 159 | 2115 | 040150 | 333.2 | 299.1 | 2.2 | 2.0 | 270 | -2.2 | -99.9 | 301.5 | 2 | 301.5 | 0 | 2.2 |
| NWR | 79 | 163 | 1500 | 060151 | 335.5 | 300.8 | 1.2 | 4.0 | 315 | 15.3 | 4.0 | 304.6 | 0 | 303.5 | 0 | 1.4 |
| NWR | 79 | 163 | 1500 | 050151 | 332.8 | 298.8 | 1.5 | 4.0 | 315 | 15.3 | 4.0 | 302.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 173 | 1600 | 030152 | 334.1 | 299.8 | 3.3 | 2.0 | 180 | 11.7 | -7.8 | 301.3 | 0 | 301.5 | 0 | 2.6 |
| NWR | 79 | 173 | 1600 | 040152 | 334.5 | 300.2 | 1.7 | 2.0 | 180 | 11.7 | -7.8 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 179 | 1300 | 050153 | 331.8 | 298.0 | 2.5 | 2.0 | 270 | 12.8 | -.7 | 300.6 | 0 | 301.4 | 0 | 2.0 |
| NWR | 79 | 179 | 1300 | 060153 | 333.8 | 299.5 | 1.4 | 2.0 | 270 | 12.8 | -.7 | 302.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 184 | 1700 | 040154 | 335.4 | 300.8 | 1.0 | 2.0 | 315 | 17.8 | -.2 | 303.5 | 0 | 302.7 | 0 | .9 |
| NWR | 79 | 184 | 1700 | 030154 | 333.4 | 299.2 | .8 | 2.0 | 315 | 17.8 | -.2 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 192 | 1630 | 060155 | 334.2 | 299.8 | 2.0 | 1.0 | 90 | 19.0 | -7.7 | 301.4 | 4 | 301.0 | 0 | 1.4 |
| NWR | 79 | 192 | 1630 | 050155 | 333.1 | 299.0 | .3 | 1.0 | 90 | 19.0 | -7.7 | 300.6 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 200 | 1700 | 030156 | 332.5 | 298.5 | 1.5 | 1.0 | 45 | 14.4 | 4.1 | 302.2 | 4 | 301.9 | 0 | 1.4 |
| NWR | 79 | 200 | 1700 | 040156 | 331.5 | 297.8 | 1.3 | 1.0 | 45 | 14.4 | 4.1 | 301.5 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 206 | 1530 | 050157 | 331.4 | 297.7 | 4.0 | 2.0 | 315 | 18.3 | -.6 | 300.3 | 1 | 301.0 | 0 | 4.0 |
| NWR | 79 | 206 | 1530 | 060157 | 333.0 | 298.9 | 1.3 | 2.0 | 315 | 18.3 | -.6 | 301.6 | 2 | -1.0 | 0 | -1.0 |
| NWR | 79 | 214 | 2130 | 030158 | 330.6 | 297.1 | 1.3 | 5.0 | 170 | 14.2 | .6 | 300.0 | 4 | 301.0 | 0 | 1.3 |
| NWR | 79 | 214 | 2130 | 040158 | 333.4 | 299.2 | 1.3 | 5.0 | 170 | 14.2 | .6 | 302.1 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 220 | 2213 | 060159 | 332.7 | 298.7 | .3 | 5.0 | 270 | 13.3 | 6.0 | 302.9 | 0 | 302.9 | 0 | 2.2 |
| NWR | 79 | 220 | 2213 | 050159 | 332.7 | 298.7 | 3.1 | 5.0 | 270 | 13.3 | 6.0 | 302.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 228 | 1830 | 040160 | 332.5 | 298.5 | .6 | 5.0 | 260 | 12.5 | 5.0 | 302.5 | 0 | 302.4 | 0 | .5 |
| NWR | 79 | 228 | 1830 | 030160 | 332.2 | 298.3 | .3 | 5.0 | 260 | 12.5 | 5.0 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 234 | 1910 | 050161 | 331.8 | 298.0 | 2.0 | 1.0 | 270 | 10.5 | -.9 | 300.6 | 4 | 301.5 | 0 | 1.4 |
| NWR | 79 | 234 | 1910 | 060161 | 334.1 | 299.8 | .3 | 1.0 | 270 | 10.5 | -.9 | 302.4 | 4 | -1.0 | 0 | -1.0 |
| NWR | 79 | 250 | 1730 | 050163 | 327.9 | 295.0 | 1.0 | 5.0 | 270 | 19.5 | -3.0 | 297.2 | 0 | 299.3 | 0 | 2.4 |
| NWR | 79 | 250 | 1730 | 060163 | 333.3 | 299.2 | 3.3 | 5.0 | 270 | 19.5 | -3.0 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 257 | 1340 | 030164 | 331.2 | 297.5 | 6.1 | 0.0 | CLM | 4.5 | -22.0 | 298.1 | 1 | 298.1 | 1 | 6.1 |
| NWR | 79 | 257 | 1340 | 040164 | 330.3 | 296.9 | 1.6 | 0.0 | CLM | 4.5 | -22.0 | 297.4 | 2 | 297.4 | 2 | 1.6 |
| NWR | 79 | 263 | 1827 | 050165 | 347.4 | 310.0 | 3.8 | 3.0 | 90 | 4.0 | -2.0 | 312.4 | 2 | 312.4 | 2 | 3.8 |
| NWR | 79 | 263 | 1827 | 060165 | 326.2 | 293.7 | 3.9 | 3.0 | 90 | 4.0 | -2.0 | 296.1 | 1 | 296.1 | 1 | 3.9 |
| NWR | 79 | 270 | 1630 | 040166 | 331.6 | 297.9 | 1.2 | 7.5 | 270 | 7.0 | -4.0 | 299.9 | 0 | 300.8 | 0 | 1.1 |
| NWR | 79 | 270 | 1630 | 030166 | 333.9 | 299.6 | .9 | 7.5 | 270 | 7.0 | -4.0 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 276 | 1700 | 060167 | 332.9 | 298.9 | 2.4 | 15.5 | 270 | -23.6 | -27.5 | 299.2 | 2 | 299.2 | 2 | 2.4 |
| NWR | 79 | 276 | 1700 | 050167 | 331.5 | 297.8 | 4.1 | 15.6 | 270 | -23.6 | -27.5 | 298.1 | 1 | 298.1 | 1 | 4.1 |
| NWR | 79 | 283 | 1930 | 030168 | 334.3 | 299.9 | 1.2 | 17.9 | 270 | 9.0 | -13.8 | 300.9 | 0 | 300.3 | 0 | 1.5 |
| NWR | 79 | 283 | 1930 | 040168 | 332.7 | 298.7 | 1.7 | 17.9 | 270 | 9.0 | -13.8 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 290 | 0100 | 050169 | 335.4 | 300.8 | 2.0 | 12.5 | 270 | 3.0 | -9.5 | 302.1 | 0 | 301.9 | 0 | 2.3 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NWR | 79 | 290 | 0100 | 060169 | 334.7 | 300.2 | 2.5 | 12.5 | 270 | 3.0 | -9.5 | 301.6 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 297 | 1740 | 040170 | 332.3 | 298.4 | 2.6 | 0.0 | CLM | 2.0 | -11.0 | 299.6 | 2 | 299.6 | 0 | 2.6 |
| NWR | 79 | 297 | 1740 | 030170 | 332.4 | 298.5 | 5.1 | 0.0 | CLM | 2.0 | -11.0 | 299.7 | 1 | -1.0 | 0 | -1.0 |
| NWR | 79 | 306 | 2301 | 050171 | 335.9 | 301.2 | .1 | 5.0 | 270 | -8.2 | MSG | 303.6 | 0 | 303.8 | 0 | .6 |
| NWR | 79 | 306 | 2301 | 060171 | 336.5 | 301.6 | .9 | 5.0 | 270 | -8.2 | MSG | 304.0 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 311 | 1930 | 030172 | 355.9 | 316.5 | 4.3 | 10.0 | 270 | MSG | MSG | 319.0 | 1 | 319.0 | 1 | 4.3 |
| NWR | 79 | 311 | 1930 | 040172 | 334.2 | 299.8 | 1.2 | 10.0 | 270 | MSG | MSG | 302.2 | 2 | 302.2 | 0 | 1.2 |
| NWR | 79 | 333 | 1530 | 040173 | 371.2 | 328.2 | 1.6 | 0.0 | CLM | -13.0 | -99.9 | 330.9 | 3 | 330.9 | 3 | 1.6 |
| NWR | 79 | 333 | 1530 | 050173 | 342.3 | 306.1 | 1.5 | 0.0 | CLM | -13.0 | -99.9 | 308.5 | 3 | 308.5 | 3 | 1.5 |
| NWR | 79 | 341 | 1400 | 050174 | 336.1 | 301.3 | 1.6 | 15.0 | 270 | -4.7 | -12.5 | 302.4 | 0 | 301.5 | 0 | 1.4 |
| NWR | 79 | 341 | 1400 | 060174 | 333.7 | 299.5 | 1.2 | 15.0 | 270 | -4.7 | -12.5 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 341 | 1400 | 740174 | 337.1 | 302.1 | .8 | 15.0 | 270 | -4.7 | -12.5 | 303.2 | 0 | 302.9 | 0 | .8 |
| NWR | 79 | 341 | 1400 | 750174 | 336.3 | 301.5 | .8 | 15.0 | 270 | -4.7 | -12.5 | 302.5 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 352 | 2305 | 030175 | 333.9 | 299.6 | .5 | 2.0 | 270 | -.8 | -20.0 | 300.2 | 0 | 299.6 | 0 | 2.1 |
| NWR | 79 | 352 | 2305 | 040175 | 332.2 | 298.3 | 2.9 | 2.0 | 270 | -.8 | -20.0 | 298.9 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 352 | 2305 | 710175 | 336.7 | 301.8 | .5 | 2.0 | 270 | -.8 | -20.0 | 302.4 | 0 | 301.8 | 0 | .5 |
| NWR | 79 | 352 | 2305 | 720175 | 335.2 | 300.6 | .4 | 2.0 | 270 | -.8 | -20.0 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| NWR | 79 | 363 | 0120 | 050176 | 345.3 | 308.4 | 2.1 | 3.5 | 270 | -14.4 | -16.9 | 309.2 | 3 | 309.2 | 3 | 2.1 |
| NWR | 79 | 363 | 0120 | 060176 | 334.8 | 300.3 | 1.8 | 3.5 | 270 | -14.4 | -16.9 | 301.1 | 3 | 301.1 | 0 | 1.8 |
| NWR | 79 | 363 | 0120 | 740176 | 337.7 | 302.5 | 1.2 | 3.5 | 270 | -14.4 | -16.9 | 303.3 | 0 | 303.7 | 0 | 1.1 |
| NWR | 79 | 363 | 0120 | 750176 | 338.8 | 303.4 | 1.0 | 3.5 | 270 | -14.4 | -16.9 | 304.2 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 77 | 173 | 2029 | 030160 | 342.4 | 295.4 | 7.6 | 10.5 | 100 | 10.6 | -8.9 | 296.8 | 1 | 296.8 | 0 | 7.6 |
| MLO | 77 | 181 | 2040 | 050161 | 368.4 | 314.7 | 2.9 | 4.5 | 320 | 8.9 | 4.8 | 318.7 | 2 | 318.7 | 2 | 2.9 |
| MLO | 77 | 187 | 2125 | 060162 | 348.7 | 300.1 | 8.4 | 12.0 | 120 | 14.4 | 0.0 | 302.8 | 1 | 302.8 | 1 | 8.4 |
| MLO | 77 | 194 | 1959 | 030163 | 360.7 | 309.0 | 7.5 | 4.1 | 300 | 12.2 | -7.8 | 310.5 | 1 | 310.5 | 1 | 7.5 |
| MLO | 77 | 200 | 2240 | 050164 | 347.1 | 298.9 | 6.6 | 5.1 | 190 | 14.4 | 4.4 | 302.6 | 1 | 302.6 | 1 | 6.6 |
| MLO | 77 | 208 | 2300 | 060165 | 358.0 | 307.0 | 2.1 | 6.2 | 120 | 13.3 | -1.1 | 309.5 | 2 | 309.5 | 2 | 2.1 |
| MLO | 77 | 215 | 2312 | 030166 | 352.8 | 303.1 | 1.9 | 4.1 | 300 | 12.2 | 2.2 | 306.3 | 2 | 306.3 | 2 | 1.9 |
| MLO | 77 | 223 | 2104 | 050167 | 338.4 | 292.5 | 16.2 | 3.1 | 360 | 13.3 | -9.4 | 293.8 | 1 | 293.8 | 1 | 16.2 |
| MLO | 77 | 242 | 2027 | 060169 | 365.7 | 312.7 | 5.5 | 7.0 | 180 | 14.4 | 3.4 | 316.3 | 1 | 316.3 | 1 | 5.5 |
| MLO | 77 | 249 | 2008 | 030170 | 344.1 | 296.7 | 2.2 | 4.1 | 270 | 11.1 | 3.6 | 300.2 | 2 | 300.2 | 0 | 2.2 |
| MLO | 77 | 258 | 2326 | 050171 | 362.5 | 310.3 | 10.7 | 3.6 | 147 | 13.1 | 8.8 | 315.5 | 1 | 315.5 | 1 | 10.7 |
| MLO | 77 | 263 | 2258 | 060172 | 422.1 | 354.4 | 18.3 | 1.8 | 360 | 9.3 | 2.0 | 358.1 | 1 | 358.1 | 1 | 18.3 |
| MLO | 77 | 271 | 2045 | 030173 | 337.4 | 291.7 | 3.0 | 9.6 | 212 | 12.9 | -19.3 | 292.3 | 2 | 292.3 | 2 | 3.0 |
| MLO | 77 | 279 | 2336 | 050174 | 346.0 | 298.1 | 6.2 | 5.0 | 340 | 15.1 | -11.3 | 299.2 | 1 | 299.2 | 0 | 6.2 |
| MLO | 77 | 286 | 2329 | 060175 | 381.8 | 324.6 | 6.6 | 5.0 | 60 | 7.9 | 5.5 | 328.9 | 1 | 328.9 | 1 | 6.6 |
| MLO | 77 | 292 | 2328 | 030176 | 317.9 | 277.3 | 15.6 | 2.1 | 60 | 10.7 | -11.2 | 278.4 | 1 | 278.4 | 1 | 15.6 |
| MLO | 77 | 308 | 0549 | 050177 | 359.2 | 307.9 | 3.1 | 3.5 | 185 | 14.0 | 4.0 | 311.6 | 2 | 311.6 | 2 | 3.1 |
| MLO | 77 | 314 | 0444 | 060178 | 352.1 | 302.6 | 4.3 | 4.1 | 185 | 4.0 | -8.0 | 304.1 | 1 | 304.1 | 1 | 4.3 |
| MLO | 77 | 321 | 0733 | 030179 | 338.0 | 292.2 | 3.2 | 4.5 | 170 | 11.0 | -4.0 | 294.1 | 2 | 294.1 | 2 | 3.2 |
| MLO | 77 | 328 | 0540 | 050180 | 335.7 | 290.5 | 5.6 | 4.3 | 250 | 7.4 | -6.1 | 292.1 | 1 | 292.1 | 1 | 5.6 |
| MLO | 77 | 237 | 2145 | 460168 | 350.9 | 312.7 | 11.9 | 6.6 | 90 | 14.5 | -2.2 | 315.1 | 1 | 315.1 | 1 | 11.9 |
| MLO | 77 | 237 | 2145 | 470168 | 353.6 | 314.7 | 6.2 | 6.5 | 90 | 14.5 | -2.2 | 317.2 | 1 | 317.2 | 1 | 6.2 |
| MLO | 77 | 258 | 2334 | 440171 | 333.1 | 299.0 | 2.9 | 3.6 | 147 | 13.1 | 8.8 | 304.0 | 2 | 304.0 | 2 | 2.9 |
| MLO | 77 | 258 | 2334 | 450171 | 334.9 | 300.4 | 4.0 | 3.6 | 147 | 13.1 | 8.8 | 305.4 | 1 | 305.4 | 1 | 4.0 |
| MLO | 77 | 263 | 2304 | 420172 | 332.6 | 298.6 | 8.4 | 1.8 | 360 | 9.3 | 2.0 | 301.7 | 1 | 301.7 | 0 | 8.4 |
| MLO | 77 | 263 | 2304 | 430172 | 340.6 | 304.8 | 11.2 | 1.8 | 360 | 9.3 | 2.0 | 307.9 | 1 | 307.9 | 1 | 11.2 |
| MLO | 77 | 271 | 2049 | 460173 | 332.9 | 298.9 | .8 | 9.6 | 212 | 12.9 | -19.3 | 299.5 | 0 | 298.8 | 0 | 1.9 |
| MLO | 77 | 271 | 2049 | 470173 | 331.1 | 297.5 | 2.5 | 9.5 | 212 | 12.9 | -19.3 | 298.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 279 | 2342 | 440174 | 328.5 | 295.5 | 4.0 | 5.0 | 340 | 15.1 | -11.3 | 296.6 | 1 | 296.3 | 0 | 4.0 |
| MLO | 77 | 279 | 2342 | 450174 | 327.7 | 294.9 | 6.7 | 5.0 | 340 | 15.1 | -11.3 | 296.0 | 1 | -1.0 | 0 | -1.0 |
| MLO | 77 | 286 | 2334 | 420175 | 331.3 | 297.6 | 1.5 | 5.0 | 60 | 7.9 | 5.5 | 301.6 | 0 | 302.7 | 0 | 2.8 |
| MLO | 77 | 286 | 2334 | 430175 | 334.0 | 299.7 | 3.6 | 5.0 | 60 | 7.9 | 5.5 | 303.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 292 | 2333 | 460176 | 326.9 | 294.2 | 6.0 | 2.1 | 60 | 10.7 | -11.2 | 295.4 | 1 | 295.4 | 1 | 6.0 |
| MLO | 77 | 292 | 2333 | 470176 | 327.7 | 294.9 | 3.7 | 2.1 | 60 | 10.7 | -11.2 | 296.0 | 2 | 296.0 | 0 | 3.7 |
| MLO | 77 | 308 | 0555 | 420177 | 333.9 | 299.6 | 10.7 | 3.5 | 185 | 14.0 | 4.0 | 303.2 | 1 | 303.2 | 1 | 10.7 |
| MLO | 77 | 308 | 0555 | 430177 | 339.7 | 304.1 | 11.9 | 3.5 | 185 | 14.0 | 4.0 | 307.7 | 1 | 307.7 | 1 | 11.9 |
| MLO | 77 | 314 | 0451 | 440178 | 335.6 | 300.9 | 3.3 | 4.1 | 185 | 4.0 | -8.0 | 302.4 | 2 | 302.4 | 0 | 3.3 |
| MLO | 77 | 314 | 0451 | 450178 | 322.3 | 290.7 | 6.7 | 4.1 | 185 | 4.0 | -8.0 | 292.2 | 1 | 292.2 | 1 | 6.7 |
| MLO | 77 | 321 | 0740 | 460179 | 327.5 | 294.7 | 2.0 | 4.5 | 170 | 11.0 | -4.0 | 296.7 | 0 | 298.0 | 0 | 1.7 |
| MLO | 77 | 321 | 0740 | 470179 | 331.0 | 297.4 | 1.4 | 4.5 | 170 | 11.0 | -4.0 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 328 | 0543 | 420180 | 331.0 | 297.4 | 3.4 | 4.3 | 250 | 7.4 | -6.1 | 299.1 | 2 | 299.1 | 0 | 3.4 |
| MLO | 77 | 328 | 0543 | 430180 | 326.6 | 294.0 | 8.8 | 4.3 | 250 | 7.4 | -6.1 | 295.7 | 1 | 295.7 | 1 | 8.8 |
| MLO | 77 | 342 | 0650 | 420181 | 331.4 | 297.7 | 5.0 | 5.2 | 180 | 5.2 | 1.7 | 300.7 | 1 | 300.7 | 0 | 5.0 |
| MLO | 77 | 342 | 0650 | 430181 | 324.1 | 292.1 | 13.5 | 5.2 | 180 | 5.2 | 1.7 | 295.1 | 1 | 295.1 | 1 | 13.5 |
| MLO | 77 | 349 | 0620 | 440182 | 329.7 | 296.4 | 5.2 | 5.1 | 140 | 8.0 | -2.3 | 298.7 | 1 | 299.4 | 0 | 5.2 |
| MLO | 77 | 349 | 0620 | 450182 | 331.7 | 297.9 | 3.6 | 5.1 | 140 | 8.0 | -2.3 | 300.2 | 2 | -1.0 | 0 | -1.0 |
| MLO | 77 | 356 | 0421 | 460183 | 335.2 | 300.6 | 2.3 | 3.6 | 281 | 3.7 | -22.2 | 301.1 | 0 | 301.4 | 0 | 2.2 |
| MLO | 77 | 356 | 0421 | 470183 | 335.9 | 301.2 | 2.1 | 3.5 | 281 | 3.7 | -22.2 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 77 | 363 | 0555 | 420184 | 333.5 | 299.3 | 7.3 | 2.6 | 298 | 3.6 | 1.7 | 302.4 | 1 | 302.4 | 0 | 7.3 |
| MLO | 77 | 363 | 0555 | 430184 | 334.3 | 299.9 | 4.9 | 2.5 | 298 | 3.6 | 1.7 | 303.0 | 1 | 303.0 | 1 | 4.9 |
| MLO | 78 | 5 | 0700 | 440185 | 329.7 | 296.4 | 4.5 | 4.7 | 180 | 5.0 | -16.0 | 297.2 | 1 | 298.8 | 0 | 4.5 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP AIR | DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 78 | 5 | 0700 | 450185 | 333.9 | 299.6 | 3.5 | 4.7 | 180 | 5.0 | -16.0 | 300.4 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 12 | 0543 | 460186 | 335.6 | 300.9 | 1.4 | 6.2 | 260 | 4.0 | -16.0 | 301.7 | 0 | 301.3 | 0 | 1.3 |
| MLO | 78 | 12 | 0543 | 470186 | 334.5 | 300.1 | 1.1 | 6.2 | 260 | 4.0 | -16.0 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 19 | 0510 | 420187 | 326.5 | 293.9 | 7.0 | 10.1 | 210 | 7.0 | -14.4 | 294.8 | 1 | 294.8 | 1 | 7.0 |
| MLO | 78 | 19 | 0510 | 430187 | 329.7 | 296.4 | 2.2 | 10.1 | 210 | 7.0 | -14.4 | 297.3 | 2 | 297.3 | 0 | 2.2 |
| MLO | 78 | 26 | 0423 | 440188 | 331.5 | 297.8 | 5.9 | 6.3 | 290 | 8.0 | 0.0 | 300.5 | 1 | 300.5 | 0 | 5.9 |
| MLO | 78 | 26 | 0423 | 450188 | 335.2 | 300.6 | 3.7 | 6.3 | 290 | 8.0 | 0.0 | 303.3 | 2 | 303.3 | 2 | 3.7 |
| MLO | 78 | 33 | 0641 | 460189 | 332.4 | 298.5 | 1.6 | 3.2 | 190 | 5.0 | -10.0 | 299.7 | 2 | 298.7 | 0 | 1.6 |
| MLO | 78 | 33 | 0641 | 470189 | 329.8 | 296.5 | 4.8 | 3.2 | 190 | 5.0 | -10.0 | 297.7 | 1 | -1.0 | 0 | -1.0 |
| MLO | 78 | 40 | 0410 | 420190 | 327.1 | 294.4 | 1.8 | 2.5 | 270 | 12.0 | -25.0 | 294.8 | 3 | 294.8 | 3 | 1.8 |
| MLO | 78 | 40 | 0410 | 430190 | 349.5 | 311.6 | 3.7 | 2.6 | 270 | 12.0 | -25.0 | 312.0 | 3 | 312.0 | 3 | 3.7 |
| MLO | 78 | 47 | 0555 | 440191 | 332.3 | 298.4 | 7.1 | 4.8 | 120 | 8.0 | -4.0 | 300.4 | 1 | 300.9 | 0 | 7.1 |
| MLO | 78 | 47 | 0555 | 450191 | 333.5 | 299.3 | 2.4 | 4.8 | 120 | 8.0 | -4.0 | 301.3 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 54 | 0410 | 460192 | 330.4 | 296.9 | 2.0 | 5.1 | 280 | 4.0 | -1.1 | 299.4 | 0 | 299.7 | 0 | 1.4 |
| MLO | 78 | 54 | 0410 | 470192 | 331.2 | 297.5 | .4 | 5.1 | 280 | 4.0 | -1.1 | 300.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 62 | 0450 | 420193 | 335.6 | 300.9 | 3.6 | 9.8 | 24 | 4.7 | -24.0 | 301.4 | 0 | 301.1 | 0 | 2.9 |
| MLO | 78 | 62 | 0450 | 430193 | 335.0 | 300.5 | 2.0 | 9.8 | 24 | 4.7 | -24.0 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 69 | 0440 | 440194 | 335.5 | 300.8 | 2.6 | 4.1 | 140 | 8.0 | -22.0 | 301.4 | 0 | 302.2 | 0 | 3.0 |
| MLO | 78 | 69 | 0440 | 450194 | 337.7 | 302.5 | 3.3 | 4.1 | 140 | 8.0 | -22.0 | 303.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 76 | 0440 | 460195 | 335.7 | 301.0 | 2.5 | 2.1 | 160 | 3.0 | -3.0 | 303.2 | 0 | 304.9 | 0 | 2.0 |
| MLO | 78 | 76 | 0440 | 470195 | 340.2 | 304.5 | 1.2 | 2.1 | 160 | 3.0 | -3.0 | 306.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 83 | 0440 | 420196 | 333.5 | 299.3 | 1.3 | 6.2 | 270 | 7.0 | -17.8 | 300.0 | 0 | 300.5 | 0 | 1.0 |
| MLO | 78 | 83 | 0440 | 430196 | 334.7 | 300.2 | .5 | 6.2 | 270 | 7.0 | -17.8 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 97 | 0330 | 420197 | 332.5 | 298.5 | 1.1 | 5.1 | 110 | 8.0 | -9.4 | 299.9 | 0 | 300.4 | 0 | 1.1 |
| MLO | 78 | 97 | 0330 | 430197 | 333.9 | 299.6 | 1.1 | 5.1 | 110 | 8.0 | -9.4 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 103 | 2351 | 440198 | 331.8 | 298.0 | 2.0 | 4.6 | 341 | 7.8 | -21.8 | 298.5 | 0 | 298.6 | 0 | 1.8 |
| MLO | 78 | 103 | 2351 | 450198 | 332.0 | 298.2 | 1.5 | 4.6 | 341 | 7.8 | -21.8 | 298.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 111 | 0010 | 460199 | 332.5 | 298.5 | 4.9 | 7.5 | 270 | 12.0 | -2.2 | 300.8 | 1 | 300.0 | 0 | 4.9 |
| MLO | 78 | 111 | 0010 | 470199 | 330.2 | 296.8 | 3.2 | 7.5 | 270 | 12.0 | -2.2 | 299.1 | 2 | -1.0 | 0 | -1.0 |
| MLO | 78 | 117 | 2144 | 420200 | 330.1 | 296.7 | 2.3 | 3.3 | 344 | 9.0 | -5.8 | 298.5 | 0 | 299.8 | 0 | 2.0 |
| MLO | 78 | 117 | 2144 | 430200 | 333.7 | 299.5 | 1.7 | 3.3 | 344 | 9.0 | -5.8 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 124 | 2118 | 440201 | 327.3 | 294.6 | 1.1 | 3.3 | 33 | 10.0 | -17.0 | 295.3 | 0 | 297.1 | 0 | 1.2 |
| MLO | 78 | 124 | 2118 | 450201 | 332.1 | 298.2 | 1.2 | 3.3 | 33 | 10.0 | -17.0 | 299.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 131 | 2148 | 460202 | 332.7 | 298.7 | .8 | 3.5 | 294 | 12.7 | -15.6 | 299.5 | 0 | 299.9 | 0 | 1.0 |
| MLO | 78 | 131 | 2148 | 470202 | 333.8 | 299.5 | 1.2 | 3.5 | 294 | 12.7 | -15.6 | 300.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 138 | 2142 | 420203 | 332.8 | 298.8 | .9 | 9.8 | 260 | 9.2 | -17.9 | 299.5 | 0 | 298.7 | 0 | 1.0 |
| MLO | 78 | 138 | 2142 | 430203 | 330.9 | 297.3 | 1.1 | 9.8 | 260 | 9.2 | -17.9 | 298.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 145 | 2134 | 440204 | 329.4 | 296.2 | 1.5 | 3.8 | 351 | 9.2 | -17.9 | 296.9 | 0 | 297.3 | 0 | 1.9 |
| MLO | 78 | 145 | 2134 | 450204 | 330.5 | 297.0 | 2.3 | 3.8 | 351 | 9.2 | -17.9 | 297.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 152 | 2228 | 460205 | 333.4 | 299.2 | 3.3 | 4.1 | 20 | 9.9 | -17.9 | 299.9 | 0 | 299.2 | 0 | 2.4 |
| MLO | 78 | 152 | 2228 | 470205 | 331.5 | 297.8 | .9 | 4.1 | 20 | 9.9 | -17.9 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 166 | 2324 | 420206 | 329.9 | 296.5 | 1.9 | 4.0 | 30 | 14.7 | -13.6 | 297.5 | 0 | 298.1 | 0 | 1.5 |
| MLO | 78 | 166 | 2324 | 430206 | 331.5 | 297.8 | 1.0 | 4.0 | 30 | 14.7 | -13.6 | 298.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 172 | 0234 | 440207 | 331.6 | 297.9 | 1.3 | 4.0 | 30 | 7.0 | 5.0 | 301.7 | 0 | 301.6 | 0 | 2.0 |
| MLO | 78 | 172 | 0234 | 450207 | 331.4 | 297.7 | 2.5 | 4.0 | 30 | 7.0 | 5.0 | 301.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 180 | 2137 | 460208 | 331.5 | 297.8 | .5 | 5.0 | 300 | 11.7 | 8.0 | 302.5 | 0 | 302.1 | 0 | .7 |
| MLO | 78 | 180 | 2137 | 470208 | 330.3 | 296.9 | .8 | 5.0 | 300 | 11.7 | 8.0 | 301.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 187 | 2132 | 420209 | 329.3 | 296.1 | 1.4 | 5.7 | 138 | 8.6 | -19.0 | 296.7 | 0 | 297.1 | 0 | 1.4 |
| MLO | 78 | 187 | 2132 | 430209 | 330.3 | 296.9 | 1.4 | 5.7 | 138 | 8.6 | -19.0 | 297.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 194 | 2139 | 440210 | 330.7 | 297.2 | .7 | 4.2 | 20 | 10.8 | -16.8 | 297.9 | 0 | 298.3 | 0 | 1.8 |
| MLO | 78 | 194 | 2139 | 450210 | 331.7 | 297.9 | 2.5 | 4.2 | 20 | 10.8 | -16.8 | 298.7 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 78 | 208 | 2245 | 420212 | 332.8 | 298.8 | .8 | 5.3 | 64 | 14.0 | -6.4 | 300.5 | 0 | 301.2 | 0 | .8 |
| MLO | 78 | 208 | 2245 | 430212 | 334.8 | 300.3 | .7 | 5.3 | 64 | 14.0 | -6.4 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 215 | 2145 | 440213 | 332.9 | 298.9 | 1.9 | 3.2 | 354 | 10.7 | -2.4 | 301.1 | 0 | 301.2 | 0 | 1.5 |
| MLO | 78 | 215 | 2145 | 450213 | 333.1 | 299.0 | 1.0 | 3.2 | 354 | 10.7 | -2.4 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 229 | 2337 | 470214 | 327.8 | 294.9 | .8 | 4.1 | 20 | 10.3 | -18.3 | 295.6 | 0 | 295.8 | 0 | .6 |
| MLO | 78 | 229 | 2337 | 460214 | 328.2 | 295.2 | .2 | 4.1 | 20 | 10.3 | -18.3 | 295.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 236 | 2233 | 430215 | 332.1 | 298.2 | .8 | 4.1 | 36 | 11.9 | -16.6 | 299.0 | 0 | 298.7 | 0 | .9 |
| MLO | 78 | 236 | 2233 | 430215 | 331.2 | 297.5 | .9 | 4.1 | 36 | 11.9 | -16.6 | 298.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 243 | 2323 | 440216 | 331.1 | 297.5 | 1.0 | 7.0 | 131 | 10.8 | -17.4 | 298.2 | 0 | 298.8 | 0 | .7 |
| MLO | 78 | 243 | 2323 | 450216 | 332.6 | 298.8 | .3 | 7.0 | 131 | 10.8 | -17.4 | 299.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 250 | 2240 | 460217 | 331.8 | 298.0 | .8 | 7.1 | 50 | 13.0 | -5.9 | 299.7 | 0 | 300.1 | 0 | .9 |
| MLO | 78 | 250 | 2240 | 470217 | 332.8 | 298.8 | .9 | 7.1 | 50 | 13.0 | -5.9 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 257 | 2137 | 420218 | 330.9 | 297.3 | 1.6 | 3.0 | 337 | 9.6 | -17.1 | 298.0 | 0 | 298.6 | 0 | 1.3 |
| MLO | 78 | 257 | 2137 | 430218 | 332.3 | 298.4 | .8 | 3.0 | 337 | 9.6 | -17.1 | 299.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 264 | 2134 | 440219 | 331.9 | 298.1 | 1.2 | 3.6 | 350 | 9.8 | -17.0 | 298.8 | 0 | 298.9 | 0 | 1.3 |
| MLO | 78 | 264 | 2134 | 450219 | 332.2 | 298.3 | 1.4 | 3.6 | 350 | 9.8 | -17.0 | 299.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 271 | 2124 | 460220 | 332.1 | 298.2 | .9 | 4.5 | 70 | 14.5 | -11.0 | 299.4 | 0 | 299.0 | 0 | .9 |
| MLO | 78 | 271 | 2124 | 470220 | 330.9 | 297.3 | .9 | 4.5 | 70 | 14.5 | -11.0 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 276 | 2303 | 420221 | 331.8 | 298.0 | .1 | 2.5 | 40 | 12.4 | -15.1 | 298.9 | 0 | 298.5 | 0 | .6 |
| MLO | 78 | 276 | 2303 | 430221 | 330.9 | 297.3 | .8 | 2.5 | 40 | 12.4 | -15.1 | 298.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 284 | 2314 | 440222 | 331.8 | 298.0 | 1.3 | 4.1 | 350 | 10.5 | -17.7 | 298.7 | 0 | 298.6 | 0 | 1.0 |
| MLO | 78 | 284 | 2314 | 450222 | 331.6 | 297.9 | .7 | 4.1 | 350 | 10.5 | -17.7 | 298.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 292 | 2334 | 460223 | 331.7 | 297.9 | 1.6 | 3.8 | 40 | 8.1 | -19.9 | 298.5 | 0 | 298.8 | 0 | 1.4 |
| MLO | 78 | 292 | 2334 | 470223 | 332.3 | 298.4 | 1.1 | 3.8 | 40 | 8.1 | -19.9 | 299.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 299 | 2336 | 430224 | 332.2 | 298.3 | .9 | 3.6 | 20 | 9.9 | -17.6 | 299.0 | 2 | 299.0 | 0 | .9 |
| MLO | 78 | 310 | 2016 | 440225 | 331.6 | 297.9 | 1.1 | 8.0 | 180 | 6.2 | -20.4 | 298.4 | 0 | 299.9 | 0 | 1.2 |
| MLO | 78 | 310 | 2016 | 450225 | 335.5 | 300.8 | 1.2 | 8.0 | 180 | 6.2 | -20.4 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 313 | 2140 | 460226 | 330.4 | 296.9 | .4 | 2.0 | 350 | 10.6 | -5.8 | 298.7 | 0 | 299.6 | 0 | .9 |
| MLO | 78 | 313 | 2140 | 470226 | 332.8 | 298.8 | 1.2 | 2.0 | 350 | 10.6 | -5.8 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 320 | 2335 | 420227 | 332.1 | 298.2 | 1.8 | 1.9 | 360 | 7.5 | -19.7 | 298.8 | 2 | 298.8 | 0 | 1.8 |
| MLO | 78 | 334 | 2230 | 440228 | 331.8 | 298.0 | 1.2 | 1.8 | 30 | 9.5 | -17.1 | 298.7 | 0 | 298.6 | 0 | .9 |
| MLO | 78 | 334 | 2230 | 450228 | 331.5 | 297.8 | .6 | 1.8 | 30 | 9.5 | -17.1 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 341 | 1319 | 470229 | 333.3 | 299.2 | .9 | 5.7 | 145 | 7.6 | -19.3 | 299.8 | 0 | 298.9 | 0 | .9 |
| MLO | 78 | 341 | 1319 | 460229 | 330.9 | 297.3 | .9 | 5.7 | 145 | 7.6 | -19.3 | 297.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 344 | 2334 | 420230 | 333.2 | 299.1 | .7 | 5.5 | 102 | 10.3 | -17.1 | 299.8 | 0 | 299.8 | 0 | .9 |
| MLO | 78 | 344 | 2334 | 430230 | 333.1 | 299.0 | 1.0 | 5.5 | 102 | 10.3 | -17.1 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 355 | 2114 | 440231 | 332.8 | 298.8 | 2.5 | 6.1 | 330 | 4.8 | -23.2 | 299.2 | 0 | 298.5 | 0 | 1.8 |
| MLO | 78 | 355 | 2114 | 450231 | 330.9 | 297.3 | .6 | 6.1 | 330 | 4.8 | -23.2 | 297.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 78 | 362 | 2130 | 460232 | 332.9 | 298.9 | .7 | 5.4 | 81 | 10.7 | -18.5 | 299.5 | 0 | 299.9 | 0 | 1.0 |
| MLO | 78 | 362 | 2130 | 470232 | 334.0 | 299.7 | 1.2 | 5.4 | 81 | 10.7 | -18.5 | 300.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 4 | 2128 | 420233 | 332.8 | 298.8 | .7 | 3.0 | 350 | 10.0 | -19.2 | 299.4 | 0 | 300.0 | 0 | .6 |
| MLO | 79 | 4 | 2128 | 430233 | 334.4 | 300.0 | .5 | 3.0 | 350 | 10.0 | -19.2 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 18 | 2327 | 440234 | 334.3 | 299.9 | 1.7 | 6.6 | 140 | 6.0 | -16.5 | 300.7 | 0 | 299.9 | 0 | 1.8 |
| MLO | 79 | 18 | 2327 | 450234 | 332.1 | 298.2 | 1.8 | 6.5 | 140 | 6.0 | -16.5 | 299.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 25 | 2214 | 460235 | 334.7 | 300.2 | 2.6 | 1.5 | 20 | 8.0 | -19.0 | 300.9 | 0 | 300.0 | 0 | 1.9 |
| MLO | 79 | 25 | 2214 | 470235 | 332.5 | 298.5 | .6 | 1.5 | 20 | 8.0 | -19.0 | 299.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 32 | 2219 | 420236 | 324.4 | 292.3 | 3.4 | 4.0 | 330 | 5.0 | -24.0 | 292.8 | 0 | 295.6 | 0 | 2.6 |
| MLO | 79 | 32 | 2219 | 430236 | 331.8 | 298.0 | 1.3 | 4.0 | 330 | 5.0 | -24.0 | 298.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 39 | 2033 | 440237 | 333.6 | 299.4 | .8 | 4.1 | 320 | 7.0 | -5.7 | 301.2 | 0 | 301.2 | 0 | .8 |
| MLO | 79 | 39 | 2033 | 450237 | 333.8 | 299.5 | .8 | 4.1 | 320 | 7.0 | -5.7 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 46 | 2132 | 460238 | 333.1 | 299.0 | .8 | 5.1 | 260 | 7.0 | -1.7 | 301.4 | 0 | 301.4 | 0 | 1.6 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 79 | 46 | 2132 | 470238 | 333.1 | 299.0 | 2.1 | 5.1 | 260 | 7.0 | -1.7 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 53 | 2337 | 420239 | 331.9 | 298.1 | .5 | 6.1 | 310 | 8.3 | 2.5 | 301.3 | 0 | 300.7 | 0 | 1.8 |
| MLO | 79 | 53 | 2337 | 430239 | 330.2 | 296.8 | 2.5 | 6.1 | 310 | 8.3 | 2.5 | 300.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 60 | 0020 | 450240 | 333.8 | 299.5 | 3.1 | 3.5 | 330 | 4.0 | 1.1 | 302.5 | 0 | 303.4 | 0 | 2.4 |
| MLO | 79 | 60 | 0020 | 440240 | 336.3 | 301.5 | 1.5 | 3.5 | 330 | 4.0 | 1.1 | 304.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 67 | 2121 | 430241 | 333.8 | 299.5 | 1.0 | 2.8 | 34 | 10.5 | -12.8 | 300.6 | 0 | 300.7 | 0 | 1.5 |
| MLO | 79 | 67 | 2121 | 420241 | 334.1 | 299.8 | 1.8 | 2.8 | 34 | 10.5 | -12.8 | 300.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 74 | 2100 | 460242 | 332.6 | 298.6 | 1.8 | 7.1 | 140 | 11.5 | -14.7 | 299.5 | 0 | 300.3 | 0 | 1.8 |
| MLO | 79 | 74 | 2100 | 470242 | 334.7 | 300.2 | 1.8 | 7.1 | 140 | 11.5 | -14.7 | 301.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 81 | 2147 | 440243 | 333.5 | 299.3 | 2.6 | 3.5 | 30 | 7.5 | -16.7 | 300.1 | 0 | 299.7 | 0 | 2.0 |
| MLO | 79 | 81 | 2147 | 450243 | 332.6 | 298.6 | 1.0 | 3.5 | 30 | 7.5 | -16.7 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 89 | 2136 | 460244 | 334.6 | 300.2 | .6 | 10.3 | 246 | 8.5 | -17.9 | 300.8 | 0 | 300.7 | 0 | 1.2 |
| MLO | 79 | 89 | 2136 | 470244 | 334.3 | 299.9 | 1.6 | 10.3 | 246 | 8.5 | -17.9 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 96 | 2026 | 430245 | 331.6 | 297.9 | 1.9 | 4.1 | 330 | 8.0 | 7.6 | 302.5 | 0 | 303.6 | 0 | 1.5 |
| MLO | 79 | 96 | 2026 | 420245 | 334.6 | 300.2 | .8 | 4.1 | 330 | 8.0 | 7.6 | 304.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 103 | 2331 | 440246 | 333.3 | 299.2 | 2.3 | 12.3 | 239 | 13.0 | -3.3 | 301.3 | 0 | 301.6 | 0 | 1.7 |
| MLO | 79 | 103 | 2331 | 450246 | 334.2 | 299.8 | .8 | 12.3 | 239 | 13.0 | -3.3 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 110 | 2338 | 470247 | 330.0 | 296.6 | 3.1 | 5.1 | 290 | 6.0 | -2.1 | 298.9 | 0 | 300.1 | 0 | 2.9 |
| MLO | 79 | 110 | 2338 | 460247 | 333.0 | 298.9 | 2.6 | 5.1 | 290 | 6.0 | -2.1 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 117 | 2206 | 430248 | 330.5 | 297.0 | 4.1 | 10.2 | 270 | 10.5 | -26.5 | 297.4 | 1 | 299.0 | 0 | 4.1 |
| MLO | 79 | 117 | 2216 | 420248 | 334.7 | 300.2 | 2.1 | 10.2 | 270 | 10.5 | -26.5 | 300.6 | 2 | -1.0 | 0 | -1.0 |
| MLO | 79 | 123 | 2126 | 440249 | 333.4 | 299.2 | 3.2 | 5.1 | 10 | 12.5 | -7.4 | 300.8 | 0 | 300.6 | 0 | 2.6 |
| MLO | 79 | 123 | 2126 | 450249 | 332.8 | 298.8 | 1.8 | 5.1 | 10 | 12.5 | -7.4 | 300.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 130 | 2039 | 460250 | 332.7 | 298.7 | 3.0 | 2.0 | 360 | 12.5 | -1.4 | 301.1 | 0 | 301.9 | 0 | 2.4 |
| MLO | 79 | 130 | 2039 | 470250 | 334.8 | 300.3 | 1.7 | 2.0 | 360 | 12.5 | -1.4 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 137 | 2117 | 430251 | 333.6 | 299.4 | 3.8 | 5.1 | 315 | 9.0 | 3.8 | 302.9 | 0 | 302.1 | 0 | 3.3 |
| MLO | 79 | 137 | 2117 | 420251 | 331.5 | 297.8 | 2.7 | 5.1 | 315 | 9.0 | 3.8 | 301.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 144 | 2204 | 440252 | 331.9 | 298.1 | 2.0 | 4.9 | 296 | 15.0 | -4.9 | 300.0 | 0 | 301.1 | 0 | 1.6 |
| MLO | 79 | 144 | 2204 | 450252 | 334.9 | 300.4 | 1.1 | 4.9 | 296 | 15.0 | -4.9 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 151 | 2053 | 460253 | 333.9 | 299.6 | 2.0 | 6.5 | 20 | 9.0 | MSG | 300.8 | 0 | 300.7 | 0 | 1.6 |
| MLO | 79 | 151 | 2053 | 470253 | 333.6 | 299.4 | .9 | 6.5 | 20 | 9.0 | MSG | 300.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 165 | 2327 | 430254 | 333.4 | 299.2 | 1.3 | 5.1 | 270 | 15.0 | MSG | 300.4 | 0 | 300.0 | 0 | 1.6 |
| MLO | 79 | 165 | 2327 | 420254 | 332.3 | 298.4 | 1.9 | 5.1 | 270 | 15.0 | MSG | 299.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 172 | 2245 | 450255 | 334.7 | 300.2 | .5 | 4.1 | 77 | 11.5 | -9.0 | 301.6 | 0 | 301.3 | 0 | .5 |
| MLO | 79 | 172 | 2245 | 440255 | 333.9 | 299.6 | .4 | 4.1 | 77 | 11.5 | -9.0 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 186 | 2142 | 430257 | 333.9 | 299.6 | 1.2 | 4.1 | 318 | 13.5 | -6.2 | 301.3 | 0 | 300.9 | 0 | .9 |
| MLO | 79 | 186 | 2142 | 420257 | 332.9 | 298.9 | .6 | 4.1 | 318 | 13.5 | -6.2 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 193 | 2300 | 450258 | 334.1 | 299.8 | .1 | 4.1 | 350 | 11.5 | 6.0 | 303.9 | 0 | 303.3 | 0 | 1.2 |
| MLO | 79 | 193 | 2300 | 440258 | 332.5 | 298.5 | 1.7 | 4.1 | 350 | 11.5 | 6.0 | 302.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 200 | 2339 | 470259 | 333.8 | 299.5 | .9 | 9.3 | 10 | 12.0 | -14.7 | 300.4 | 0 | 300.0 | 0 | 1.0 |
| MLO | 79 | 200 | 2339 | 460259 | 332.8 | 298.8 | 1.1 | 9.3 | 10 | 12.0 | -14.7 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 207 | 2300 | 420260 | 328.9 | 295.8 | 1.7 | 3.1 | 330 | 12.0 | -6.0 | 297.5 | 0 | 299.0 | 0 | 1.4 |
| MLO | 79 | 207 | 2300 | 430260 | 332.8 | 298.8 | .9 | 3.1 | 330 | 12.0 | -6.0 | 300.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 212 | 2010 | 450261 | 335.6 | 300.9 | .4 | 3.1 | 345 | 11.5 | -8.4 | 302.4 | 0 | 301.6 | 0 | .6 |
| MLO | 79 | 212 | 2010 | 440261 | 333.5 | 299.3 | .7 | 3.1 | 345 | 11.5 | -8.4 | 300.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 218 | 2235 | 460262 | 333.1 | 299.0 | .9 | 6.1 | 331 | 13.2 | -4.6 | 300.9 | 2 | 300.9 | 0 | .9 |
| MLO | 79 | 242 | 2120 | 470265 | 330.8 | 297.2 | 1.2 | 15.3 | 120 | 11.0 | -6.8 | 298.9 | 2 | 298.9 | 0 | 1.2 |
| MLO | 79 | 249 | 2057 | 420266 | 333.4 | 299.2 | 1.1 | 5.1 | 60 | 12.0 | -13.1 | 300.2 | 0 | 300.6 | 0 | .9 |
| MLO | 79 | 249 | 2057 | 430266 | 334.4 | 300.0 | .5 | 5.1 | 60 | 12.0 | -13.1 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 256 | 2144 | 450267 | 341.3 | 305.3 | 6.4 | 5.1 | 50 | 12.0 | -10.3 | 306.6 | 1 | 306.6 | 1 | 6.4 |
| MLO | 79 | 264 | 2132 | 470268 | 333.6 | 299.4 | 1.4 | 3.5 | 360 | 11.5 | -4.3 | 301.4 | 0 | 300.6 | 0 | 2.5 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MLO | 79 | 264 | 2132 | 460268 | 331.6 | 297.9 | 3.3 | 3.5 | 360 | 11.5 | -4.3 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 270 | 2130 | 430269 | 331.1 | 297.5 | 1.6 | 3.1 | 225 | 12.0 | -6.0 | 299.2 | 0 | 299.3 | 0 | 1.6 |
| MLO | 79 | 270 | 2130 | 440269 | 331.3 | 297.6 | 1.6 | 3.1 | 225 | 12.0 | -6.0 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 277 | 2059 | 440270 | 332.5 | 298.5 | 4.3 | 3.5 | 320 | 11.0 | 3.5 | 302.0 | 1 | 301.9 | 0 | 4.3 |
| MLO | 79 | 277 | 2059 | 450270 | 332.1 | 298.2 | 1.8 | 3.5 | 320 | 11.0 | 3.5 | 301.7 | 2 | -1.0 | 0 | -1.0 |
| MLO | 79 | 284 | 2100 | 470271 | 341.3 | 305.3 | 2.5 | 3.5 | 20 | 10.5 | 3.5 | 308.8 | 5 | 309.5 | 5 | 2.3 |
| MLO | 79 | 284 | 2100 | 460271 | 343.0 | 306.6 | 2.0 | 3.5 | 20 | 10.5 | 3.5 | 310.2 | 5 | -1.0 | 5 | -1.0 |
| MLO | 79 | 288 | 2118 | 430272 | 339.4 | 303.8 | 2.7 | 6.5 | 70 | 11.0 | .9 | 306.8 | 0 | 305.3 | 0 | 2.3 |
| MLO | 79 | 288 | 2118 | 420272 | 335.7 | 301.0 | 1.7 | 6.5 | 70 | 11.0 | .9 | 303.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 298 | 2134 | 430273 | 333.7 | 299.5 | .8 | 2.5 | 340 | 12.5 | -4.7 | 301.4 | 0 | 301.8 | 0 | 1.5 |
| MLO | 79 | 298 | 2134 | 420273 | 334.7 | 300.2 | 1.9 | 2.5 | 340 | 12.5 | -4.7 | 302.2 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 310 | 2135 | 450274 | 334.5 | 300.1 | 1.8 | 7.7 | 115 | 11.0 | -15.5 | 300.9 | 0 | 299.7 | 0 | 1.5 |
| MLO | 79 | 310 | 2135 | 440274 | 331.3 | 297.6 | 1.2 | 7.7 | 115 | 11.0 | -15.5 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 319 | 2030 | 470275 | 335.4 | 300.8 | 2.1 | 5.1 | 290 | 7.5 | 2.4 | 304.0 | 0 | 303.4 | 0 | 1.6 |
| MLO | 79 | 319 | 2030 | 460275 | 333.8 | 299.5 | .7 | 5.1 | 290 | 7.5 | 2.4 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 333 | 2039 | 430276 | 333.0 | 298.9 | 3.6 | 1.0 | 45 | 12.0 | -14.9 | 299.8 | 0 | 301.5 | 0 | 2.9 |
| MLO | 79 | 333 | 2039 | 420276 | 337.3 | 302.2 | 1.9 | 1.0 | 45 | 12.0 | -14.9 | 303.1 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 340 | 2108 | 440277 | 335.2 | 300.6 | .8 | 4.5 | 345 | 9.5 | -3.2 | 302.8 | 0 | 302.4 | 0 | .7 |
| MLO | 79 | 340 | 2108 | 450277 | 334.2 | 299.8 | .6 | 4.5 | 345 | 9.5 | -3.2 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 347 | 2132 | 470278 | 333.4 | 299.2 | 3.4 | 2.0 | 300 | 12.0 | -9.1 | 300.6 | 0 | 302.7 | 0 | 2.8 |
| MLO | 79 | 347 | 2132 | 460278 | 338.8 | 303.4 | 1.9 | 2.0 | 300 | 12.0 | -9.1 | 304.8 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 354 | 2127 | 430279 | 334.3 | 299.9 | .8 | 10.7 | 130 | 15.5 | -11.3 | 301.1 | 0 | 301.0 | 0 | 1.3 |
| MLO | 79 | 354 | 2127 | 420279 | 334.0 | 299.7 | 1.6 | 10.7 | 130 | 15.5 | -11.3 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| MLO | 79 | 361 | 2149 | 460280 | 335.0 | 300.5 | .4 | 3.0 | 50 | 8.5 | -16.3 | 301.3 | 0 | 301.5 | 0 | .7 |
| MLO | 79 | 361 | 2149 | 470280 | 335.7 | 301.0 | .9 | 3.0 | 50 | 8.5 | -16.3 | 301.8 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP CEG C AIR | TEMP CEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 77 | 169 | 0200 | 010129 | 366.4 | 313.2 | U | 8.0 | 140 | 26.6 | 21.8 | 320.1 | 1 | 320.1 | 1 | .0 |
| SMO | 77 | 174 | 2025 | 040130 | 366.6 | 313.3 | 14.0 | 7.7 | 158 | 26.7 | 23.3 | 320.2 | 1 | 320.2 | 1 | 14.0 |
| SMO | 77 | 180 | 2330 | 050131 | 371.1 | 316.7 | 2.4 | 9.0 | 120 | 27.0* | 24.5* | 323.6 | 2 | 323.6 | 2 | 2.4 |
| SMO | 77 | 195 | 0205 | 010132 | 364.6 | 311.9 | 10.7 | 8.5 | 50 | 26.8 | 24.7 | 318.7 | 1 | 318.7 | 1 | 10.7 |
| SMO | 77 | 208 | 0300 | 040133 | 338.3 | 292.4 | 3.4 | 8.0 | 170 | 27.0* | 24.5* | 298.8 | 2 | 298.8 | 0 | 3.4 |
| SMO | 77 | 216 | 0255 | 050134 | 349.6 | 300.8 | 11.5 | 6.5 | 100 | 26.1 | 20.7 | 307.4 | 1 | 307.4 | 1 | 11.5 |
| SMO | 77 | 224 | 0030 | 040135 | 350.0 | 301.1 | 7.8 | 10.0 | 130 | 26.4 | 21.0 | 307.7 | 1 | 307.7 | 1 | 7.8 |
| SMO | 77 | 231 | 0010 | 010136 | 364.4 | 311.7 | 5.4 | 8.0 | 160 | 25.2 | 12.6 | 318.6 | 1 | 318.6 | 1 | 5.4 |
| SMO | 77 | 237 | 0150 | 050137 | 350.0 | 301.1 | 16.6 | 6.0 | 160 | 25.8 | 19.7 | 307.7 | 1 | 307.7 | 1 | 16.6 |
| SMO | 77 | 243 | 2025 | 040138 | 342.2 | 295.3 | .8 | 4.0 | 170 | 24.6 | 19.9 | 301.8 | 2 | 301.8 | 2 | .8 |
| SMO | 77 | 257 | 2345 | 010139 | 342.8 | 295.7 | 7.5 | 6.0 | 160 | 27.0* | 24.5* | 302.2 | 1 | 302.2 | 1 | 7.5 |
| SMO | 77 | 264 | 2025 | 050140 | 350.1 | 301.1 | 4.3 | 5.0 | 150 | 26.4 | 19.8 | 307.7 | 1 | 307.7 | 1 | 4.3 |
| SMO | 77 | 271 | 2030 | 040141 | 343.6 | 296.3 | 4.6 | 8.0 | 140 | 27.0* | 24.5* | 302.8 | 1 | 302.8 | 1 | 4.6 |
| SMO | 77 | 280 | 0230 | 010142 | 336.0 | 290.7 | 3.7 | 10.0 | 130 | 27.0 | 19.8 | 297.1 | 2 | 297.1 | 0 | 3.7 |
| SMO | 77 | 289 | 0135 | 050143 | 346.5 | 298.5 | 2.1 | 8.0 | 150 | 25.8 | 20.6 | 305.0 | 2 | 305.0 | 2 | 2.1 |
| SMO | 77 | 293 | 0055 | 040144 | 351.1 | 301.9 | 2.0 | 4.0 | 120 | 28.0 | 20.2 | 308.5 | 2 | 308.5 | 2 | 2.0 |
| SMO | 77 | 302 | 2335 | 010145 | 333.6 | 288.9 | 2.6 | 10.0 | 130 | 25.5 | 20.6 | 295.3 | 2 | 295.3 | 2 | 2.6 |
| SMO | 77 | 307 | 2045 | 050146 | 346.5 | 298.5 | 2.3 | 3.5 | 150 | 26.5 | 21.2 | 305.0 | 2 | 305.0 | 2 | 2.3 |
| SMO | 77 | 314 | 0220 | 040147 | 354.4 | 304.3 | 13.8 | 4.5 | 150 | 27.3 | 19.8 | 311.0 | 1 | 311.0 | 1 | 13.8 |
| SMO | 77 | 321 | 0215 | 010148 | 375.6 | 320.0 | 5.8 | 9.0 | 150 | 27.6 | 23.3 | 327.0 | 1 | 327.0 | 1 | 5.8 |
| SMO | 77 | 328 | 2100 | 050149 | 353.5 | 303.6 | 6.5 | 7.5 | 135 | 26.0 | 24.4 | 310.3 | 1 | 310.3 | 1 | 6.5 |
| SMO | 77 | 224 | 0020 | 510135 | 323.9 | 291.9 | 15.5 | 10.0 | 130 | 26.4 | 21.0 | 298.4 | 1 | 298.4 | 0 | 15.5 |
| SMO | 77 | 224 | 0020 | 520135 | 324.1 | 292.1 | 7.6 | 10.0 | 130 | 26.4 | 21.0 | 298.5 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 231 | 0010 | 530136 | 346.9 | 309.6 | 11.6 | 8.0 | 160 | 25.2 | 12.6 | 316.4 | 1 | 316.4 | 1 | 11.6 |
| SMO | 77 | 231 | 0010 | 540136 | 343.5 | 307.0 | 15.7 | 8.0 | 160 | 25.2 | 12.6 | 313.7 | 1 | 313.7 | 1 | 15.7 |
| SMO | 77 | 237 | 0150 | 550137 | 376.8 | 332.5 | 10.2 | 6.0 | 160 | 25.8 | 19.7 | 339.8 | 1 | 339.8 | 1 | 10.2 |
| SMO | 77 | 237 | 0150 | 560137 | 383.9 | 338.0 | 39.3 | 6.0 | 160 | 25.8 | 19.7 | 345.4 | 1 | 345.4 | 1 | 39.3 |
| SMO | 77 | 243 | 2025 | 510138 | 322.7 | 291.0 | 4.8 | 4.0 | 170 | 24.6 | 19.9 | 297.4 | 1 | 297.4 | 0 | 4.8 |
| SMO | 77 | 243 | 2025 | 520138 | 330.2 | 296.8 | 2.6 | 4.0 | 170 | 24.6 | 19.9 | 303.3 | 2 | 303.3 | 2 | 2.6 |
| SMO | 77 | 257 | 2345 | 530139 | 348.0 | 310.4 | 4.1 | 6.0 | 160 | 27.0* | 24.5* | 317.3 | 1 | 317.3 | 1 | 4.1 |
| SMO | 77 | 257 | 2345 | 540139 | 338.4 | 303.1 | 11.1 | 6.0 | 160 | 27.0* | 24.5* | 309.7 | 1 | 309.7 | 1 | 11.1 |
| SMO | 77 | 264 | 2025 | 510140 | 324.2 | 292.2 | 13.4 | 5.0 | 150 | 26.4 | 19.8 | 298.6 | 1 | 298.6 | 0 | 13.4 |
| SMO | 77 | 264 | 2025 | 520140 | 334.0 | 299.7 | 6.4 | 5.0 | 150 | 26.4 | 19.8 | 306.3 | 1 | 306.3 | 1 | 6.4 |
| SMO | 77 | 271 | 2030 | 550141 | 329.8 | 296.5 | 3.4 | 8.0 | 140 | 27.0* | 24.5* | 303.0 | 2 | 303.0 | 2 | 3.4 |
| SMO | 77 | 271 | 2030 | 560141 | 338.4 | 303.1 | 5.2 | 8.0 | 140 | 27.0* | 24.5* | 309.7 | 1 | 309.7 | 1 | 5.2 |
| SMO | 77 | 280 | 0215 | 530142 | 339.8 | 304.1 | 5.0 | 10.0 | 130 | 27.0 | 19.8 | 310.8 | 1 | 310.8 | 1 | 5.0 |
| SMO | 77 | 280 | 0215 | 540142 | 333.4 | 299.2 | 7.9 | 10.0 | 130 | 27.0 | 19.8 | 305.8 | 1 | 305.8 | 1 | 7.9 |
| SMO | 77 | 289 | 0135 | 510143 | 327.1 | 294.4 | 1.3 | 8.0 | 150 | 25.8 | 20.6 | 300.9 | 2 | 300.3 | 0 | 1.3 |
| SMO | 77 | 289 | 0135 | 520143 | 325.7 | 293.3 | 9.4 | 8.0 | 150 | 25.8 | 20.6 | 299.8 | 1 | -1.0 | 0 | -1.0 |
| SMO | 77 | 293 | 0045 | 550144 | 325.9 | 293.5 | 2.0 | 4.0 | 115 | 28.0 | 20.2 | 299.9 | 3 | 299.9 | 0 | 2.0 |
| SMO | 77 | 293 | 0045 | 560144 | 336.4 | 301.5 | 3.2 | 4.0 | 115 | 28.0 | 20.2 | 308.2 | 3 | 308.2 | 3 | 3.2 |
| SMO | 77 | 302 | 2335 | 530145 | 308.4 | 280.1 | 1.1 | 10.0 | 130 | 25.5 | 20.6 | 286.2 | 2 | 286.2 | 2 | 1.1 |
| SMO | 77 | 302 | 2335 | 540145 | 319.2 | 288.3 | 9.1 | 10.0 | 130 | 25.5 | 20.6 | 294.7 | 1 | 294.7 | 1 | 9.1 |
| SMO | 77 | 307 | 2045 | 510146 | 329.9 | 296.5 | 5.3 | 3.5 | 150 | 26.5 | 21.2 | 303.1 | 1 | 303.1 | 1 | 5.3 |
| SMO | 77 | 307 | 2045 | 520146 | 326.3 | 293.8 | 7.7 | 3.5 | 150 | 26.5 | 21.2 | 300.2 | 1 | 300.2 | 0 | 7.7 |
| SMO | 77 | 314 | 0220 | 550147 | 329.7 | 296.4 | 2.7 | 4.5 | 150 | 27.3 | 19.8 | 302.9 | 2 | 302.9 | 2 | 2.7 |
| SMO | 77 | 314 | 0220 | 560147 | 329.9 | 296.5 | 12.4 | 4.5 | 150 | 27.3 | 19.8 | 303.1 | 1 | 303.1 | 1 | 12.4 |
| SMO | 77 | 321 | 0210 | 530148 | 325.8 | 293.4 | 3.3 | 9.0 | 150 | 27.6 | 23.3 | 299.9 | 0 | 300.2 | 0 | 2.5 |
| SMO | 77 | 321 | 0210 | 540148 | 326.8 | 294.2 | 1.3 | 9.0 | 150 | 27.6 | 23.3 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 77 | 328 | 2100 | 510149 | 324.5 | 292.4 | 6.9 | 7.5 | 135 | 26.0 | 24.4 | 298.8 | 1 | 298.5 | 0 | 6.9 |
| SMO | 77 | 328 | 2100 | 520149 | 323.6 | 291.7 | 3.6 | 7.5 | 135 | 26.0 | 24.4 | 298.1 | 2 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 77 | 337 | 2045 | 550150 | 324.2 | 292.2 | 8.3 | 4.0 | 150 | 29.8 | 25.8 | 298.6 | 1 | 298.6 | 0 | 8.3 |
| SMO | 77 | 337 | 2045 | 560150 | 330.6 | 297.1 | 3.9 | 4.0 | 150 | 29.8 | 25.8 | 303.6 | 1 | 303.6 | 1 | 3.9 |
| SMO | 77 | 341 | 2355 | 530151 | 322.3 | 290.7 | 3.8 | 7.5 | 140 | 29.2 | 24.9 | 297.1 | 3 | 297.1 | 0 | 3.8 |
| SMO | 77 | 341 | 2355 | 540151 | 344.2 | 307.5 | .9 | 7.5 | 140 | 29.2 | 24.9 | 314.3 | 3 | 314.3 | 3 | .9 |
| SMO | 77 | 349 | 0250 | 510152 | 319.7 | 288.7 | 15.2 | 8.5 | 140 | 28.4 | 25.4 | 295.1 | 1 | 295.1 | 1 | 15.2 |
| SMO | 77 | 349 | 0250 | 520152 | 327.0 | 294.3 | 9.1 | 8.5 | 140 | 28.4 | 25.4 | 300.8 | 1 | 300.8 | 0 | 9.1 |
| SMO | 77 | 364 | 2035 | 550153 | 319.2 | 288.3 | 6.3 | 5.1 | 52 | 29.0 | 27.7 | 294.7 | 1 | 294.7 | 1 | 6.3 |
| SMO | 77 | 364 | 2035 | 560153 | 328.3 | 295.3 | 6.9 | 5.1 | 52 | 29.0 | 27.7 | 301.8 | 1 | 301.8 | 0 | 6.9 |
| SMO | 78 | 5 | 0245 | 530154 | 326.7 | 294.1 | 1.8 | 4.5 | 60 | 27.5 | 26.2 | 300.6 | 0 | 299.5 | 0 | 2.8 |
| SMO | 78 | 5 | 0245 | 540154 | 323.9 | 291.9 | 3.6 | 4.5 | 60 | 27.5 | 26.2 | 298.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 15 | 0230 | 510155 | 331.2 | 297.5 | 6.2 | 6.0 | 130 | 27.7 | 24.7 | 304.1 | 1 | 304.1 | 1 | 6.2 |
| SMO | 78 | 15 | 0230 | 520155 | 328.8 | 295.7 | 5.0 | 6.0 | 130 | 27.7 | 24.7 | 302.2 | 1 | 302.2 | 0 | 5.0 |
| SMO | 78 | 21 | 0250 | 550156 | 319.1 | 288.3 | .6 | 5.0 | 100 | 28.0 | 23.9 | 294.6 | 0 | 296.2 | 0 | 2.0 |
| SMO | 78 | 21 | 0250 | 560156 | 323.1 | 291.3 | 2.7 | 5.0 | 100 | 28.0 | 23.9 | 297.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 33 | 2230 | 510157 | 326.8 | 294.2 | 5.0 | 3.0 | 40 | 27.0* | 24.5* | 300.6 | 1 | 300.9 | 0 | 5.0 |
| SMO | 78 | 33 | 2230 | 520157 | 327.5 | 294.7 | 2.7 | 3.0 | 40 | 27.0* | 24.5* | 301.2 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 42 | 2305 | 530158 | 323.9 | 291.9 | 3.1 | 2.8 | 130 | 27.5 | 26.2 | 298.4 | 0 | 299.1 | 0 | 3.1 |
| SMO | 78 | 42 | 2305 | 540158 | 325.8 | 293.4 | 3.0 | 2.8 | 130 | 27.5 | 26.2 | 299.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 61 | 2145 | 550159 | 322.0 | 290.5 | .4 | 5.0 | 120 | 28.0 | 23.9 | 296.9 | 0 | 299.2 | 0 | 2.5 |
| SMO | 78 | 61 | 2145 | 560159 | 327.9 | 295.0 | 3.5 | 5.0 | 120 | 28.0 | 23.9 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 68 | 0305 | 510160 | 320.4 | 289.3 | 2.4 | 9.0 | 140 | 28.5 | 25.1 | 295.6 | 2 | 295.6 | 2 | 2.4 |
| SMO | 78 | 68 | 0305 | 520160 | 323.8 | 291.9 | 4.5 | 9.0 | 140 | 28.5 | 25.1 | 298.3 | 1 | 298.3 | 0 | 4.5 |
| SMO | 78 | 81 | 0100 | 530161 | 354.5 | 315.4 | U | 9.0 | 20 | 28.0 | 26.0 | 322.4 | 1 | 322.4 | 1 | .0 |
| SMO | 78 | 81 | 0100 | 540161 | 337.9 | 302.7 | 10.1 | 9.0 | 20 | 28.0 | 26.0 | 309.3 | 1 | 309.3 | 1 | 10.1 |
| SMO | 78 | 87 | 2025 | 550162 | 330.1 | 296.7 | 3.6 | 7.5 | 340 | 26.7 | 24.7 | 303.2 | 0 | 304.5 | 0 | 2.8 |
| SMO | 78 | 87 | 2025 | 560162 | 333.4 | 299.2 | 1.7 | 7.5 | 340 | 26.7 | 24.7 | 305.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 99 | 0100 | 510163 | 330.4 | 296.9 | 4.3 | 6.0 | 130 | 27.8 | 26.5 | 303.5 | 1 | 303.5 | 1 | 4.3 |
| SMO | 78 | 99 | 0100 | 520163 | 329.1 | 295.9 | 2.0 | 6.0 | 130 | 27.8 | 26.5 | 302.4 | 2 | 302.4 | 0 | 2.0 |
| SMO | 78 | 108 | 0440 | 530164 | 326.6 | 294.0 | 4.2 | 3.0 | 315 | 28.0 | 25.3 | 300.5 | 1 | 299.6 | 0 | 4.2 |
| SMO | 78 | 108 | 0440 | 540164 | 324.3 | 292.3 | 1.6 | 3.0 | 315 | 28.0 | 25.3 | 298.7 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 121 | 0255 | 560165 | 327.8 | 294.9 | 2.6 | 4.5 | 150 | 26.8 | 23.5 | 301.4 | 0 | 300.8 | 0 | 2.9 |
| SMO | 78 | 121 | 0255 | 550165 | 326.3 | 293.8 | 3.1 | 4.5 | 150 | 26.8 | 23.5 | 300.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 126 | 2355 | 520166 | 327.1 | 294.4 | 1.2 | 6.0 | 160 | 28.1 | 26.0 | 300.9 | 0 | 301.1 | 0 | 1.9 |
| SMO | 78 | 126 | 2355 | 510166 | 327.8 | 294.9 | 2.4 | 6.0 | 160 | 28.1 | 26.0 | 301.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 133 | 2250 | 540167 | 327.1 | 294.4 | 1.3 | 9.0 | 330 | 26.2 | 24.4 | 300.9 | 2 | 300.9 | 0 | 1.3 |
| SMO | 78 | 137 | 2100 | 550168 | 325.6 | 293.3 | 1.6 | 7.5 | 120 | 27.4 | 24.4 | 299.7 | 0 | 300.8 | 0 | 1.5 |
| SMO | 78 | 137 | 2100 | 560168 | 328.5 | 295.5 | 1.4 | 7.5 | 120 | 27.4 | 24.4 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 148 | 0355 | 510169 | 328.5 | 295.5 | 2.0 | 6.0 | 80 | 26.3 | 23.1 | 302.0 | 0 | 301.4 | 0 | 1.9 |
| SMO | 78 | 148 | 0355 | 520169 | 327.0 | 294.3 | 1.8 | 6.0 | 80 | 26.3 | 23.1 | 300.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 159 | 2025 | 530170 | 325.9 | 293.5 | 1.5 | 5.0 | 130 | 27.3 | 24.4 | 299.9 | 0 | 299.7 | 0 | 1.7 |
| SMO | 78 | 159 | 2025 | 540170 | 325.2 | 292.9 | 1.9 | 5.0 | 130 | 27.3 | 24.4 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 168 | 0025 | 520171 | 329.1 | 295.9 | 5.0 | 8.0 | 140 | 26.1 | 21.7 | 302.4 | 1 | 302.6 | 0 | 5.0 |
| SMO | 78 | 168 | 0025 | 510171 | 329.5 | 296.2 | 2.9 | 8.0 | 140 | 26.1 | 21.7 | 302.8 | 2 | -1.0 | 0 | -1.0 |
| SMO | 78 | 176 | 0240 | 560172 | 326.3 | 293.8 | 2.2 | 7.0 | 30 | 27.6 | 24.6 | 300.2 | 0 | 300.0 | 0 | 2.1 |
| SMO | 78 | 176 | 0240 | 550172 | 325.6 | 293.3 | 2.0 | 7.0 | 30 | 27.6 | 24.6 | 299.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 189 | 0055 | 510173 | 326.0 | 293.6 | 1.6 | 2.5 | 30 | 28.0 | 23.0 | 300.0 | 0 | 300.1 | 0 | 1.8 |
| SMO | 78 | 189 | 0055 | 520173 | 326.1 | 293.6 | 2.0 | 2.5 | 30 | 28.0 | 23.0 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 196 | 2230 | 530174 | 324.3 | 292.3 | .3 | 6.7 | 160 | 27.0 | 22.1 | 298.7 | 0 | 299.1 | 0 | .4 |
| SMO | 78 | 196 | 2230 | 540174 | 325.5 | 293.2 | .4 | 6.7 | 160 | 27.0 | 22.1 | 299.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 202 | 0340 | 550175 | 327.9 | 295.0 | .7 | 8.0 | 150 | 26.4 | 23.3 | 301.5 | 0 | 301.2 | 0 | .7 |
| SMO | 78 | 202 | 0340 | 560175 | 327.2 | 294.5 | .6 | 8.0 | 150 | 26.4 | 23.3 | 301.0 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 78 | 208 | 2005 | 510176 | 324.7 | 292.6 | .5 | 7.0 | 140 | 27.0 | 24.3 | 299.0 | 0 | 299.2 | 0 | .5 |
| SMO | 78 | 208 | 2005 | 520176 | 325.3 | 293.0 | .4 | 7.0 | 140 | 27.0 | 24.3 | 299.5 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 217 | 0310 | 530177 | 328.4 | 295.4 | .1 | 8.5 | 150 | 27.0 | 21.3 | 301.9 | 0 | 302.2 | 0 | .8 |
| SMO | 78 | 217 | 0310 | 540177 | 329.1 | 295.9 | 1.1 | 8.5 | 150 | 27.0 | 21.3 | 302.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 225 | 0145 | 560178 | 323.3 | 291.5 | .9 | 3.0 | 30 | 26.0 | 23.2 | 297.9 | 0 | 297.6 | 0 | .7 |
| SMO | 78 | 225 | 0145 | 550178 | 322.5 | 290.9 | .5 | 3.0 | 30 | 26.0 | 23.2 | 297.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 229 | 0100 | 520179 | 328.9 | 295.8 | .8 | 8.0 | 150 | 27.6 | 24.9 | 302.3 | 0 | 302.2 | 0 | .9 |
| SMO | 78 | 229 | 0100 | 510179 | 328.6 | 295.6 | .9 | 8.0 | 150 | 27.6 | 24.9 | 302.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 238 | 0000 | 530180 | 326.7 | 294.1 | .5 | 7.0 | 90 | 28.5 | 24.8 | 300.6 | 0 | 301.1 | 0 | 1.3 |
| SMO | 78 | 238 | 0000 | 540180 | 328.2 | 295.2 | 1.8 | 7.0 | 90 | 28.5 | 24.8 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 244 | 2320 | 560181 | 327.0 | 294.3 | .7 | 7.5 | 150 | 25.2 | 24.3 | 300.8 | 0 | 301.9 | 0 | .8 |
| SMO | 78 | 244 | 2320 | 550181 | 329.7 | 296.4 | .8 | 7.5 | 150 | 25.2 | 24.3 | 302.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 253 | 0400 | 530182 | 323.3 | 291.5 | 1.4 | 7.0 | 160 | 24.4 | 19.4 | 297.9 | 0 | 298.8 | 0 | 2.0 |
| SMO | 78 | 253 | 0400 | 540182 | 325.7 | 293.3 | 2.4 | 7.0 | 160 | 24.4 | 19.4 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 260 | 0405 | 510183 | 332.0 | 298.2 | 1.7 | 2.5 | 150 | 26.0 | 22.9 | 304.7 | 0 | 303.2 | 0 | 2.1 |
| SMO | 78 | 260 | 0405 | 520183 | 328.2 | 295.2 | 2.5 | 2.5 | 160 | 26.0 | 22.9 | 301.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 266 | 0025 | 550184 | 328.9 | 295.8 | 1.0 | 9.0 | 130 | 28.3 | 24.5 | 302.3 | 0 | 304.6 | 0 | 1.0 |
| SMO | 78 | 266 | 0025 | 560184 | 334.7 | 300.2 | .9 | 9.0 | 130 | 28.3 | 24.5 | 306.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 272 | 0245 | 530185 | 330.7 | 297.2 | 1.5 | 6.0 | 160 | 26.3 | 22.4 | 303.7 | 0 | 303.9 | 0 | 1.7 |
| SMO | 78 | 272 | 0245 | 540185 | 331.1 | 297.5 | 1.8 | 6.0 | 160 | 26.3 | 22.4 | 304.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 280 | 0355 | 550186 | 328.8 | 295.7 | .7 | 3.0 | 100 | 26.8 | 24.6 | 302.2 | 0 | 302.2 | 0 | .5 |
| SMO | 78 | 280 | 0355 | 560186 | 328.8 | 295.7 | .2 | 3.0 | 100 | 26.8 | 24.6 | 302.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 294 | 0545 | 510187 | 329.5 | 296.2 | 1.4 | 8.0 | 150 | 26.5 | 23.7 | 302.8 | 0 | 301.9 | 0 | 2.7 |
| SMO | 78 | 294 | 0545 | 520187 | 327.3 | 294.6 | 3.5 | 8.0 | 150 | 26.5 | 23.7 | 301.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 311 | 2245 | 530188 | 327.2 | 294.5 | 2.5 | 8.0 | 150 | 29.0 | 24.8 | 301.0 | 0 | 302.5 | 0 | 2.5 |
| SMO | 78 | 311 | 2245 | 540188 | 331.1 | 297.5 | 2.4 | 8.0 | 150 | 29.0 | 24.8 | 304.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 322 | 0320 | 520189 | 332.8 | 298.8 | 2.1 | 8.0 | 120 | 25.5 | 24.1 | 305.3 | 0 | 304.1 | 0 | 1.6 |
| SMO | 78 | 322 | 0320 | 510189 | 329.7 | 296.4 | 1.0 | 8.0 | 120 | 25.5 | 24.1 | 302.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 328 | 2355 | 560190 | 328.3 | 295.3 | 1.2 | 5.0 | 60 | 29.0 | 25.0 | 301.8 | 0 | 302.6 | 0 | 1.5 |
| SMO | 78 | 328 | 2355 | 550190 | 330.2 | 296.8 | 1.7 | 5.0 | 60 | 29.0 | 25.0 | 303.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 337 | 2355 | 530191 | 325.1 | 292.9 | 2.5 | 5.0 | 360 | 29.0 | 28.0 | 299.3 | 0 | 301.6 | 0 | 2.0 |
| SMO | 78 | 337 | 0138 | 540191 | 331.0 | 297.4 | 1.4 | 5.0 | 360 | 29.0 | 28.0 | 303.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 343 | 0430 | 510192 | 329.9 | 296.5 | .5 | 7.0 | 160 | 25.9 | 24.7 | 303.1 | 0 | 303.4 | 0 | 1.6 |
| SMO | 78 | 343 | 0430 | 520192 | 330.7 | 297.2 | 2.2 | 7.0 | 160 | 25.9 | 24.7 | 303.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 350 | 0355 | 550193 | 328.2 | 295.2 | .9 | 5.0 | 160 | 27.0 | 23.7 | 301.7 | 0 | 302.0 | 0 | 1.6 |
| SMO | 78 | 350 | 0355 | 560193 | 328.9 | 295.8 | 2.1 | 5.0 | 160 | 27.0 | 23.7 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 360 | 2315 | 530194 | 328.3 | 295.3 | 2.0 | 9.0 | 80 | 27.0* | 24.5* | 301.8 | 0 | 302.4 | 0 | 1.6 |
| SMO | 78 | 360 | 2315 | 540194 | 329.9 | 296.5 | 1.2 | 9.0 | 80 | 27.0* | 24.5* | 303.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 78 | 364 | 0030 | 510195 | 330.3 | 296.9 | 2.0 | 6.0 | 330 | 30.0 | 26.7 | 303.4 | 0 | 303.1 | 0 | 1.5 |
| SMO | 78 | 364 | 0030 | 520195 | 329.5 | 296.2 | .7 | 6.0 | 330 | 30.0 | 26.7 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 4 | 0225 | 550196 | 329.6 | 296.3 | 2.3 | 7.0 | 340 | 27.3 | 24.4 | 302.5 | 0 | 303.9 | 0 | 2.3 |
| SMO | 79 | 4 | 0255 | 560196 | 333.2 | 299.1 | 2.3 | 7.0 | 340 | 27.3 | 24.4 | 305.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 13 | 0350 | 530197 | 328.2 | 295.2 | 2.8 | 10.0 | 290 | 26.8 | 24.3 | 301.2 | 0 | 302.5 | 0 | 2.0 |
| SMO | 79 | 13 | 0350 | 540197 | 331.3 | 297.6 | .6 | 10.0 | 290 | 26.8 | 24.3 | 303.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 21 | 0340 | 510198 | 330.6 | 297.1 | 3.3 | 3.0 | 150 | 28.0 | 23.9 | 302.6 | 0 | 302.7 | 0 | 3.1 |
| SMO | 79 | 21 | 0340 | 520198 | 330.9 | 297.3 | 2.9 | 3.0 | 160 | 28.0 | 23.9 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 27 | 0307 | 550199 | 330.8 | 297.2 | 2.4 | 6.8 | 110 | 27.7 | 24.5 | 302.9 | 0 | 305.2 | 0 | 2.9 |
| SMO | 79 | 27 | 0307 | 560199 | 336.5 | 301.6 | 3.3 | 6.8 | 110 | 27.7 | 24.5 | 307.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 35 | 0355 | 530200 | 330.1 | 296.7 | .7 | 4.0 | 120 | 27.3 | 24.4 | 302.7 | 0 | 302.7 | 0 | .6 |
| SMO | 79 | 35 | 0355 | 540200 | 330.2 | 296.8 | .5 | 4.0 | 120 | 27.3 | 24.4 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 44 | 2345 | 510201 | 330.6 | 297.1 | 1.7 | 2.7 | 130 | 29.0 | 24.5 | 302.6 | 0 | 302.7 | 0 | 1.3 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 79 | 44 | 2345 | 520201 | 331.0 | 297.4 | .5 | 2.7 | 130 | 29.0 | 24.5 | 302.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 51 | 0203 | 550202 | 329.4 | 296.2 | 2.0 | 7.2 | 340 | 29.0 | 24.8 | 302.3 | 0 | 302.2 | 0 | 2.9 |
| SMO | 79 | 51 | 0203 | 560202 | 329.0 | 295.9 | 3.6 | 7.2 | 340 | 29.0 | 24.8 | 302.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 59 | 2239 | 510203 | 329.9 | 296.5 | 2.1 | 3.2 | 150 | 28.9 | 24.6 | 302.5 | 0 | 303.2 | 0 | 1.6 |
| SMO | 79 | 59 | 2239 | 520203 | 331.8 | 298.0 | .8 | 3.2 | 150 | 28.9 | 24.6 | 304.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 66 | 2104 | 530204 | 320.7 | 289.5 | 1.8 | 3.6 | 75 | 30.2 | 24.6 | 295.0 | 3 | 295.0 | 3 | 1.8 |
| SMO | 79 | 66 | 2104 | 540204 | 329.4 | 296.2 | 3.0 | 3.5 | 75 | 30.2 | 24.6 | 301.8 | 3 | 301.8 | 0 | 3.0 |
| SMO | 79 | 72 | 2300 | 550205 | 327.4 | 294.6 | 1.4 | 4.5 | 120 | 28.2 | 24.3 | 300.4 | 0 | 300.8 | 0 | 1.4 |
| SMO | 79 | 72 | 2300 | 560205 | 328.5 | 295.5 | 1.3 | 4.5 | 120 | 28.2 | 24.3 | 301.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 83 | 2339 | 520206 | 329.9 | 296.5 | 1.7 | 6.2 | 325 | 29.3 | 24.8 | 303.2 | 0 | 303.2 | 0 | 2.2 |
| SMO | 79 | 83 | 2339 | 510206 | 330.0 | 296.6 | 2.6 | 6.2 | 325 | 29.3 | 24.8 | 303.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 92 | 0305 | 530207 | 326.7 | 294.1 | 3.1 | 5.0 | 140 | 28.5 | 25.8 | 300.1 | 0 | 301.2 | 0 | 2.9 |
| SMO | 79 | 92 | 0305 | 540207 | 329.4 | 296.2 | 2.7 | 5.0 | 140 | 28.5 | 25.8 | 302.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 98 | 0405 | 550208 | 328.1 | 295.2 | 1.0 | 4.0 | 150 | 27.4 | 24.1 | 301.6 | 0 | 302.8 | 0 | 1.4 |
| SMO | 79 | 98 | 0405 | 560208 | 331.2 | 297.5 | 1.7 | 4.0 | 150 | 27.4 | 24.1 | 304.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 109 | 0050 | 510209 | 329.6 | 296.3 | 1.7 | 6.0 | 330 | 30.3 | 25.9 | 302.4 | 2 | 303.9 | 0 | 1.7 |
| SMO | 79 | 109 | 0050 | 520209 | 333.6 | 299.4 | 4.3 | 6.6 | 330 | 30.3 | 25.9 | 305.5 | 1 | -1.0 | 0 | -1.0 |
| SMO | 79 | 114 | 2350 | 540210 | 331.6 | 297.9 | .3 | 2.0 | 160 | 27.8 | 24.0 | 304.1 | 0 | 303.4 | 0 | 1.4 |
| SMO | 79 | 114 | 2350 | 530210 | 329.9 | 296.5 | 2.0 | 2.0 | 160 | 27.8 | 24.0 | 302.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 122 | 0245 | 550211 | 324.2 | 292.2 | 4.7 | 10.0 | 160 | 26.5 | 23.5 | 298.0 | 1 | 298.0 | 1 | 4.7 |
| SMO | 79 | 122 | 0245 | 560211 | 330.2 | 296.8 | 2.1 | 10.0 | 160 | 26.5 | 23.5 | 302.7 | 2 | 302.7 | 0 | 2.1 |
| SMO | 79 | 129 | 0235 | 520212 | 330.0 | 296.6 | 2.3 | 8.0 | 130 | 27.5 | 25.2 | 303.0 | 0 | 303.0 | 0 | 2.3 |
| SMO | 79 | 129 | 0235 | 510212 | 330.0 | 296.6 | 2.2 | 8.0 | 130 | 27.5 | 25.2 | 303.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 135 | 2250 | 540213 | 328.4 | 295.4 | 2.5 | 8.0 | 140 | 27.0 | 24.4 | 302.6 | 0 | 304.8 | 0 | 1.9 |
| SMO | 79 | 135 | 2250 | 530213 | 333.9 | 299.6 | 1.0 | 8.0 | 140 | 27.0 | 24.4 | 306.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 143 | 0410 | 550214 | 331.2 | 297.5 | 1.4 | 2.0 | 60 | 27.7 | 24.0 | 305.8 | 0 | 305.3 | 0 | 1.9 |
| SMO | 79 | 143 | 0410 | 560214 | 329.8 | 296.5 | 2.3 | 2.0 | 60 | 27.7 | 24.0 | 304.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 150 | 0245 | 530215 | 329.7 | 296.4 | 3.0 | 4.4 | 146 | 30.0 | 21.1 | 304.7 | 0 | 304.2 | 0 | 3.0 |
| SMO | 79 | 150 | 0245 | 540215 | 328.4 | 295.4 | 3.0 | 4.4 | 146 | 30.0 | 21.1 | 303.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 157 | 0248 | 510216 | 329.8 | 296.5 | 2.3 | 1.5 | 81 | 29.7 | 23.3 | 303.7 | 0 | 303.8 | 0 | 2.2 |
| SMO | 79 | 157 | 0248 | 520216 | 330.1 | 296.7 | 2.1 | 1.5 | 81 | 29.7 | 23.3 | 303.9 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 163 | 0142 | 550217 | 329.8 | 296.5 | 1.8 | 5.0 | 150 | 25.3 | 22.6 | 303.6 | 2 | 303.6 | 0 | 1.8 |
| SMO | 79 | 163 | 0142 | 560217 | 339.2 | 303.7 | 11.2 | 5.0 | 150 | 25.3 | 22.6 | 311.0 | 1 | 311.0 | 1 | 11.2 |
| SMO | 79 | 171 | 0057 | 540218 | 329.7 | 296.4 | .9 | 2.7 | 330 | 30.8 | 25.0 | 303.5 | 0 | 303.0 | 0 | .7 |
| SMO | 79 | 171 | 0057 | 530218 | 328.3 | 295.3 | .4 | 2.7 | 330 | 30.8 | 25.0 | 302.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 178 | 0338 | 520219 | 330.4 | 296.9 | 1.3 | 8.0 | 100 | 29.0 | 23.5 | 304.3 | 0 | 304.2 | 0 | 1.4 |
| SMO | 79 | 178 | 0338 | 510219 | 330.2 | 296.8 | 1.5 | 8.0 | 100 | 29.0 | 23.5 | 304.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 185 | 0045 | 550220 | 336.4 | 301.5 | 3.4 | 2.7 | 170 | 26.0 | 24.5 | 309.2 | 0 | 306.6 | 0 | 2.6 |
| SMO | 79 | 185 | 0045 | 560220 | 329.9 | 296.5 | 1.3 | 2.7 | 170 | 26.0 | 24.5 | 304.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 192 | 0118 | 540221 | 328.8 | 295.7 | 1.6 | 5.0 | 150 | 21.6 | 21.6 | 303.0 | 0 | 301.5 | 0 | 2.5 |
| SMO | 79 | 192 | 0118 | 530221 | 325.0 | 292.8 | 3.2 | 5.0 | 150 | 21.6 | 21.6 | 300.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 199 | 0045 | 520222 | 330.2 | 296.8 | 1.5 | 7.5 | 30 | 28.3 | 25.2 | 304.3 | 0 | 304.0 | 0 | 1.5 |
| SMO | 79 | 199 | 0045 | 510222 | 329.5 | 296.2 | 1.5 | 7.5 | 30 | 28.3 | 25.2 | 303.7 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 209 | 2100 | 550223 | 332.4 | 298.5 | 1.3 | 10.4 | 145 | 25.5 | 16.5 | 306.4 | 0 | 305.5 | 0 | 1.7 |
| SMO | 79 | 209 | 2100 | 560223 | 330.2 | 296.8 | 2.1 | 10.4 | 145 | 25.5 | 16.5 | 304.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 213 | 0200 | 540224 | 331.0 | 297.4 | 2.1 | 10.4 | 140 | 26.4 | 16.2 | 304.8 | 0 | 305.1 | 0 | 1.8 |
| SMO | 79 | 213 | 0200 | 530224 | 331.8 | 298.0 | 1.5 | 10.4 | 140 | 26.4 | 16.2 | 305.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 221 | 2130 | 520225 | 333.1 | 299.0 | .9 | 3.6 | 340 | 29.0 | 26.4 | 306.1 | 0 | 305.4 | 0 | 1.3 |
| SMO | 79 | 221 | 2130 | 510225 | 331.5 | 297.8 | 1.6 | 3.6 | 340 | 29.0 | 26.4 | 304.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 227 | 0300 | 560226 | 329.8 | 296.5 | .7 | 2.7 | 110 | 27.0 | 19.8 | 303.1 | 0 | 303.1 | 0 | 1.8 |
| SMO | 79 | 227 | 0300 | 550226 | 329.7 | 296.4 | 2.5 | 2.7 | 110 | 27.0 | 19.8 | 303.0 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMO | 79 | 234 | 2120 | 510227 | 331.1 | 297.5 | 1.3 | 3.2 | 140 | 28.0 | 25.3 | 304.0 | 2 | 304.0 | 0 | 1.3 |
| SMO | 79 | 242 | 0107 | 540228 | 330.7 | 297.2 | 4.2 | 6.3 | 135 | 27.0 | 24.3 | 304.0 | 1 | 304.0 | 0 | 4.2 |
| SMO | 79 | 242 | 0107 | 530228 | 336.0 | 301.2 | 3.7 | 6.3 | 135 | 27.0 | 24.3 | 308.1 | 2 | 308.1 | 2 | 3.7 |
| SMO | 79 | 248 | 0301 | 550229 | 332.2 | 298.3 | U | 3.6 | 130 | 26.8 | 25.1 | 304.5 | 1 | 305.0 | 0 | .0 |
| SMO | 79 | 248 | 0301 | 560229 | 333.4 | 299.2 | .9 | 3.6 | 130 | 26.8 | 25.1 | 305.4 | 2 | -1.0 | 0 | -1.0 |
| SMO | 79 | 255 | 0000 | 520230 | 336.3 | 301.5 | .3 | 2.7 | 170 | 24.0 | 24.0 | 308.3 | 0 | 308.2 | 0 | 1.4 |
| SMO | 79 | 255 | 0000 | 510230 | 336.2 | 301.4 | 2.0 | 2.7 | 170 | 24.0 | 24.0 | 308.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 261 | 0054 | 540231 | 332.5 | 298.5 | 1.7 | 4.1 | 130 | 28.0 | 25.0 | 305.7 | 0 | 303.2 | 0 | 2.1 |
| SMO | 79 | 261 | 0054 | 530231 | 326.2 | 293.7 | 2.5 | 4.1 | 130 | 28.0 | 25.0 | 300.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 269 | 0146 | 550232 | 334.0 | 299.7 | .7 | 5.0 | 50 | 28.2 | 26.3 | 306.6 | 0 | 305.9 | 0 | 2.3 |
| SMO | 79 | 269 | 0146 | 560232 | 332.3 | 298.4 | 3.2 | 5.0 | 50 | 28.2 | 26.3 | 305.2 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 279 | 0200 | 510233 | 347.9 | 310.4 | 13.0 | 5.4 | 140 | 28.0 | 27.0 | 318.1 | 1 | 318.1 | 1 | 13.0 |
| SMO | 79 | 279 | 0200 | 520233 | 332.7 | 298.7 | 9.3 | 5.4 | 140 | 28.0 | 27.0 | 306.1 | 1 | 306.1 | 0 | 9.3 |
| SMO | 79 | 283 | 0259 | 540234 | 334.8 | 300.3 | 3.4 | 5.4 | 140 | 27.0 | 22.8 | 308.5 | 0 | 308.0 | 0 | 3.4 |
| SMO | 79 | 283 | 0259 | 530234 | 333.5 | 299.3 | 3.4 | 5.4 | 140 | 27.0 | 22.8 | 307.4 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 290 | 1322 | 560235 | 331.4 | 297.7 | 1.9 | 8.1 | 140 | 27.0 | 21.6 | 303.8 | 0 | 304.4 | 0 | 1.4 |
| SMO | 79 | 290 | 1322 | 550235 | 333.0 | 298.9 | .5 | 8.1 | 140 | 27.0 | 21.6 | 305.0 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 297 | 0252 | 520236 | 332.6 | 298.6 | 2.5 | 2.3 | 340 | 29.2 | 26.3 | 305.1 | 0 | 306.6 | 0 | 1.8 |
| SMO | 79 | 297 | 0252 | 510236 | 336.4 | 301.5 | .2 | 2.3 | 340 | 29.2 | 26.3 | 308.1 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 304 | 0319 | 540237 | 339.9 | 304.2 | 2.7 | 3.6 | 0 | 25.8 | 25.3 | 310.5 | 0 | 307.6 | 0 | 2.0 |
| SMO | 79 | 304 | 0319 | 530237 | 332.7 | 298.7 | .7 | 3.6 | 0 | 25.8 | 25.3 | 304.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 311 | 0214 | 560238 | 331.1 | 297.5 | 4.0 | 1.8 | 150 | 28.0 | 26.7 | 303.5 | 1 | 304.7 | 0 | 4.0 |
| SMO | 79 | 311 | 0214 | 550238 | 334.3 | 299.9 | .5 | 1.8 | 150 | 28.0 | 26.7 | 306.0 | 2 | -1.0 | 0 | -1.0 |
| SMO | 79 | 319 | 0212 | 520239 | 331.5 | 297.8 | 1.6 | 7.2 | 160 | 27.0 | 21.7 | 303.6 | 2 | 303.6 | 0 | 1.6 |
| SMO | 79 | 319 | 0212 | 510239 | 338.1 | 302.8 | 4.6 | 7.2 | 160 | 27.0 | 21.7 | 308.7 | 1 | 308.7 | 1 | 4.6 |
| SMO | 79 | 325 | 0243 | 540240 | 330.1 | 296.7 | 3.0 | 2.3 | 70 | 29.0 | 22.6 | 303.0 | 0 | 303.7 | 0 | 3.0 |
| SMO | 79 | 325 | 0243 | 530240 | 331.7 | 297.9 | 2.9 | 2.3 | 70 | 29.0 | 22.6 | 304.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 339 | 0221 | 550241 | 331.2 | 297.5 | 1.5 | 6.3 | 150 | 27.0 | 25.0 | 303.6 | 0 | 304.7 | 0 | 2.4 |
| SMO | 79 | 339 | 0221 | 560241 | 334.0 | 299.7 | 3.1 | 6.3 | 150 | 27.0 | 25.0 | 305.8 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 346 | 0048 | 510242 | 331.3 | 297.6 | 2.1 | 10.4 | 300 | 26.0 | 24.5 | 303.7 | 0 | 305.5 | 0 | 2.6 |
| SMO | 79 | 346 | 0048 | 520242 | 335.9 | 301.2 | 3.1 | 10.4 | 300 | 26.0 | 24.5 | 307.3 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 353 | 0250 | 530243 | 329.6 | 296.3 | 2.3 | 14.0 | 155 | 27.2 | 23.6 | 301.9 | 0 | 303.2 | 0 | 3.1 |
| SMO | 79 | 353 | 0250 | 540243 | 333.0 | 298.9 | 3.7 | 14.0 | 155 | 27.2 | 23.6 | 304.6 | 0 | -1.0 | 0 | -1.0 |
| SMO | 79 | 361 | 2102 | 550244 | 333.3 | 299.2 | .8 | 4.5 | 155 | 27.8 | 25.7 | 305.0 | 0 | 303.6 | 0 | 1.4 |
| SMO | 79 | 361 | 2102 | 560244 | 329.9 | 296.5 | 1.8 | 4.5 | 155 | 27.8 | 25.7 | 302.3 | 0 | -1.0 | 0 | -1.0 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP DEG C AIR | TEMP DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPO | 77 | 35 | 0230 | 040014 | 346.0 | 308.9 | U | 5.5 | 65 | -37.3 | -99.9 | 308.9 | 1 | 308.9 | 1 | .0 |
| SPO | 77 | 38 | 0445 | 050015 | 342.6 | 306.3 | U | 3.2 | 90 | -34.0 | -99.9 | 306.3 | 1 | 306.3 | 1 | .0 |
| SPO | 77 | 38 | 0445 | 060015 | 344.4 | 307.7 | U | 3.2 | 90 | -34.0 | -99.9 | 307.7 | 1 | 307.7 | 1 | .0 |
| SPO | 77 | 41 | 0300 | 070016 | 334.0 | 299.7 | U | 4.0 | 120 | -41.6 | -99.9 | 299.7 | 1 | 299.7 | 1 | .0 |
| SPO | 77 | 41 | 0300 | 080016 | 349.3 | 311.4 | U | 4.0 | 120 | -41.6 | -99.9 | 311.4 | 1 | 311.4 | 1 | .0 |
| SPO | 77 | 72 | 2230 | 090017 | 326.2 | 293.7 | U | 3.5 | 30 | -46.0 | -99.9 | 293.7 | 1 | 293.7 | 1 | .0 |
| SPO | 77 | 72 | 2230 | 100017 | 343.8 | 307.2 | U | 3.5 | 30 | -46.0 | -99.9 | 307.2 | 1 | 307.2 | 1 | .0 |
| SPO | 77 | 105 | 0355 | 110018 | 350.3 | 312.2 | U | 3.4 | 40 | -59.0 | -99.9 | 312.2 | 1 | 312.2 | 1 | .0 |
| SPO | 77 | 105 | 0355 | 120018 | 336.1 | 301.3 | U | 3.4 | 40 | -59.0 | -99.9 | 301.3 | 1 | 301.3 | 1 | .0 |
| SPO | 77 | 134 | 0230 | 130019 | 337.1 | 302.1 | U | 8.0 | 25 | -52.2 | -99.9 | 302.1 | 1 | 302.1 | 1 | .0 |
| SPO | 77 | 134 | 0230 | 140019 | 332.8 | 298.8 | U | 8.0 | 25 | -52.2 | -99.9 | 298.8 | 1 | 298.8 | 1 | .0 |
| SPO | 77 | 165 | 2340 | 150020 | 315.9 | 285.8 | U | 3.4 | 20 | -64.3 | -99.9 | 285.8 | 1 | 285.8 | 1 | .0 |
| SPO | 77 | 165 | 2340 | 160020 | 319.2 | 288.3 | U | 3.4 | 20 | -64.3 | -99.9 | 288.3 | 1 | 288.3 | 1 | .0 |
| SPO | 77 | 195 | 0410 | 170021 | 335.5 | 300.8 | U | 9.0 | 345 | -45.1 | -99.9 | 300.8 | 1 | 300.8 | 1 | .0 |
| SPO | 77 | 195 | 0410 | 270021 | 376.1 | 332.0 | U | 9.0 | 345 | -45.1 | -99.9 | 332.0 | 1 | 332.0 | 1 | .0 |
| SPO | 77 | 229 | 2150 | 280022 | 347.1 | 309.7 | U | 4.0 | 10 | -59.1 | -99.9 | 309.7 | 1 | 309.7 | 1 | .0 |
| SPO | 77 | 229 | 2150 | 290022 | 336.4 | 301.5 | U | 4.0 | 10 | -59.1 | -99.9 | 301.5 | 1 | 301.5 | 1 | .0 |
| SPO | 77 | 257 | 1140 | 300023 | 331.5 | 297.8 | U | 3.5 | 25 | -60.1 | -99.9 | 297.8 | 1 | 297.8 | 0 | .0 |
| SPO | 77 | 257 | 1140 | 310023 | 335.4 | 300.8 | U | 3.5 | 25 | -60.1 | -99.9 | 300.8 | 1 | 300.8 | 1 | .0 |
| SPO | 77 | 287 | 2350 | 320024 | 364.1 | 322.8 | U | 6.2 | 360 | -53.8 | -99.9 | 322.8 | 1 | 322.8 | 1 | .0 |
| SPO | 77 | 287 | 2350 | 330024 | 326.0 | 293.6 | U | 6.2 | 360 | -53.8 | -99.9 | 293.6 | 1 | 293.6 | 1 | .0 |
| SPO | 77 | 316 | 1155 | 340025 | 318.8 | 288.0 | U | 2.7 | 325 | -33.2 | -99.9 | 288.0 | 1 | 288.0 | 1 | .0 |
| SPO | 77 | 316 | 1155 | 350025 | 345.3 | 308.4 | U | 2.7 | 325 | -33.2 | -99.9 | 308.4 | 1 | 308.4 | 1 | .0 |
| SPO | 77 | 336 | 0750 | 010026 | 336.9 | 301.9 | .6 | 3.8 | 4 | -31.8 | -99.9 | 301.9 | 2 | 301.9 | 2 | .6 |
| SPO | 77 | 336 | 0750 | 020026 | 328.1 | 295.2 | 6.9 | 3.8 | 4 | -31.8 | -99.9 | 295.2 | 1 | 295.2 | 1 | 6.9 |
| SPO | 77 | 353 | 0345 | 030027 | 328.3 | 295.3 | 4.2 | 2.7 | 99 | -29.3 | -99.9 | 295.3 | 1 | 295.3 | 1 | 4.2 |
| SPO | 77 | 353 | 0345 | 040027 | 332.2 | 298.3 | 3.3 | 2.7 | 99 | -29.3 | -99.9 | 298.3 | 2 | 298.3 | 0 | 3.3 |
| SPO | 78 | 1 | 0425 | 050028 | 331.3 | 297.6 | 2.1 | 4.4 | 320 | -21.5 | -99.9 | 297.6 | 2 | 296.7 | 0 | 2.1 |
| SPO | 78 | 1 | 0425 | 060028 | 328.9 | 295.8 | 6.6 | 4.4 | 320 | -21.5 | -99.9 | 295.8 | 1 | -1.0 | 0 | -1.0 |
| SPO | 78 | 15 | 0855 | 070029 | 326.7 | 294.1 | 1.0 | 1.2 | 75 | -27.6 | -99.9 | 294.1 | 0 | 296.6 | 0 | 1.6 |
| SPO | 78 | 15 | 0855 | 080029 | 333.2 | 299.1 | 2.1 | 1.2 | 75 | -27.6 | -99.9 | 299.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 31 | 0200 | 240030 | 325.8 | 293.4 | 2.5 | 3.2 | 102 | -36.0 | -99.9 | 293.4 | 2 | 293.4 | 2 | 2.5 |
| SPO | 78 | 31 | 0200 | 250030 | 332.3 | 298.4 | 6.7 | 3.2 | 102 | -36.0 | -99.9 | 298.4 | 1 | 298.4 | 0 | 6.7 |
| SPO | 78 | 45 | 2355 | 370031 | 334.2 | 299.8 | U | 4.3 | 70 | -36.7 | -99.9 | 299.8 | 1 | 299.8 | 0 | .0 |
| SPO | 78 | 60 | 0212 | 270032 | 344.1 | 307.4 | U | 2.5 | 78 | -57.8 | -99.9 | 307.4 | 1 | 307.4 | 1 | .0 |
| SPO | 78 | 60 | 0212 | 280032 | 334.4 | 300.0 | 1.2 | 2.5 | 78 | -57.8 | -99.9 | 300.0 | 2 | 300.0 | 0 | 1.2 |
| SPO | 78 | 91 | 0230 | 290033 | 334.8 | 300.3 | .3 | 8.1 | 16 | -47.1 | -99.9 | 300.3 | 0 | 300.2 | 0 | .7 |
| SPO | 78 | 91 | 0230 | 300033 | 334.4 | 300.0 | .9 | 8.1 | 16 | -47.1 | -99.9 | 300.0 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 121 | 0105 | 310034 | 332.6 | 298.6 | 1.5 | 4.7 | 88 | -63.6 | -99.9 | 298.6 | 0 | 296.9 | 0 | 1.6 |
| SPO | 78 | 121 | 0105 | 320034 | 328.1 | 295.2 | 1.7 | 4.7 | 88 | -63.6 | -99.9 | 295.2 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 152 | 0918 | 330035 | 333.9 | 299.6 | .4 | 7.8 | 14 | -39.2 | -99.9 | 299.6 | 0 | 299.3 | 0 | .3 |
| SPO | 78 | 152 | 0918 | 340035 | 333.1 | 299.0 | .1 | 7.8 | 14 | -39.2 | -99.9 | 299.0 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 182 | 1012 | 350036 | 333.6 | 299.4 | .8 | 3.5 | 84 | -61.4 | -99.9 | 299.4 | 0 | 299.7 | 0 | 1.0 |
| SPO | 78 | 182 | 1012 | 090036 | 334.5 | 300.1 | 1.2 | 3.6 | 84 | -61.4 | -99.9 | 300.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 213 | 0140 | 100037 | 334.1 | 299.8 | 1.0 | 3.4 | 57 | -61.7 | -99.9 | 299.8 | 2 | 299.2 | 0 | 1.0 |
| SPO | 78 | 213 | 0140 | 110037 | 332.6 | 298.6 | 16.9 | 3.4 | 57 | -61.7 | -99.9 | 298.6 | 1 | -1.0 | 0 | -1.0 |
| SPO | 78 | 244 | 0910 | 120038 | 332.7 | 298.7 | 1.5 | 7.1 | 11 | -49.8 | -99.9 | 298.7 | 0 | 298.0 | 0 | 1.9 |
| SPO | 78 | 244 | 0910 | 130038 | 330.9 | 297.3 | 2.3 | 7.1 | 11 | -49.8 | -99.9 | 297.3 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 274 | 0450 | 150039 | 328.1 | 295.2 | 1.0 | 5.9 | 13 | -58.0 | -99.9 | 295.2 | 3 | 295.2 | 3 | 1.0 |
| SPO | 78 | 274 | 0450 | 140039 | 340.4 | 304.6 | 3.4 | 5.3 | 13 | -58.0 | -99.9 | 304.6 | 3 | 304.6 | 3 | 3.4 |
| SPO | 78 | 305 | 0834 | 160040 | 331.0 | 297.4 | 1.1 | 3.7 | 101 | -44.8 | -99.9 | 297.4 | 0 | 298.6 | 0 | 1.1 |

N2O DATA BASE

| STN | YR | JCD | GMT | SAMP. NO. | 1 PPBV | 2 PPBV | S.D. | WIND M/S | WIND DEG | TEMP AIR | DEG C DEW PT | 3 PPBV | F3 | 4 PPBV | F4 | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPO | 78 | 305 | 0834 | 170040 | 334.1 | 299.8 | 1.0 | 3.7 | 101 | -44.8 | -99.9 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 320 | 0400 | 680041 | 332.8 | 298.8 | .6 | 3.1 | 69 | -35.2 | -99.9 | 298.8 | 0 | 299.1 | 0 | .5 |
| SPO | 78 | 320 | 0400 | 690041 | 333.6 | 299.4 | .4 | 3.1 | 69 | -35.2 | -99.9 | 299.4 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 336 | 2234 | 250042 | 333.0 | 298.9 | .6 | 3.9 | 14 | -29.9 | -99.9 | 298.9 | 0 | 299.4 | 0 | .6 |
| SPO | 78 | 336 | 2234 | 240042 | 334.2 | 299.8 | .6 | 3.9 | 14 | -29.9 | -99.9 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 343 | 0140 | 010043 | 332.5 | 298.5 | .5 | 3.8 | 49 | -26.8 | -99.9 | 298.5 | 0 | 299.2 | 0 | 1.3 |
| SPO | 78 | 343 | 0140 | 020043 | 334.1 | 299.8 | 1.7 | 3.8 | 49 | -26.8 | -99.9 | 299.8 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 351 | 0210 | 060044 | 332.9 | 298.9 | 1.2 | 2.2 | 83 | -26.5 | -99.9 | 298.9 | 0 | 298.9 | 0 | 1.0 |
| SPO | 78 | 351 | 0210 | 070044 | 333.0 | 298.9 | .7 | 2.2 | 83 | -26.5 | -99.9 | 298.9 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 357 | 0045 | 030045 | 335.3 | 300.7 | .5 | 2.3 | 15 | -28.6 | -99.9 | 300.7 | 0 | 299.3 | 0 | .7 |
| SPO | 78 | 357 | 0045 | 040045 | 331.8 | 298.0 | .8 | 2.3 | 15 | -28.6 | -99.9 | 298.0 | 0 | -1.0 | 0 | -1.0 |
| SPO | 78 | 363 | 0110 | 080046 | 333.1 | 299.0 | 1.5 | 6.3 | 6 | -16.6 | -99.9 | 299.0 | 0 | 298.9 | 0 | 1.4 |
| SPO | 78 | 363 | 0110 | 050046 | 332.7 | 298.7 | 1.2 | 6.3 | 6 | -16.6 | -99.9 | 298.7 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 2 | 2240 | 340047 | 334.2 | 299.8 | .1 | 6.0 | 67 | -20.9 | -99.9 | 299.8 | 0 | 300.2 | 0 | .4 |
| SPO | 79 | 2 | 2240 | 350047 | 335.2 | 300.6 | .6 | 6.0 | 67 | -20.9 | -99.9 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 8 | 2300 | 330048 | 330.9 | 297.3 | 1.2 | 7.2 | 15 | -22.2 | -99.9 | 297.3 | 0 | 299.0 | 0 | 1.2 |
| SPO | 79 | 8 | 2300 | 370048 | 335.2 | 300.6 | 1.1 | 7.2 | 15 | -22.2 | -99.9 | 300.6 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 13 | 0145 | 290049 | 334.0 | 299.7 | .5 | 4.0 | 74 | -26.0 | -99.9 | 299.7 | 0 | 299.9 | 0 | .6 |
| SPO | 79 | 13 | 0145 | 300049 | 334.6 | 300.2 | .7 | 4.0 | 74 | -26.0 | -99.9 | 300.2 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 18 | 0155 | 260050 | 333.3 | 299.2 | .2 | 3.4 | 109 | -29.8 | -99.9 | 299.2 | 2 | 299.2 | 0 | .2 |
| SPO | 79 | 23 | 0125 | 270051 | 331.8 | 298.0 | .2 | 4.0 | 8 | -26.7 | -99.9 | 298.0 | 0 | 297.4 | 0 | .3 |
| SPO | 79 | 23 | 0125 | 280051 | 330.1 | 296.7 | .3 | 4.0 | 8 | -26.7 | -99.9 | 296.7 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 27 | 0030 | 090052 | 332.9 | 298.9 | .6 | 4.2 | 85 | -30.3 | -99.9 | 298.9 | 0 | 298.7 | 0 | 1.8 |
| SPO | 79 | 27 | 0030 | 100052 | 332.5 | 298.5 | 2.5 | 4.2 | 85 | -30.3 | -99.9 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 34 | 0025 | 110053 | 338.0 | 302.8 | 1.6 | 5.8 | 40 | -33.3 | -99.9 | 302.8 | 0 | 301.1 | 0 | 1.9 |
| SPO | 79 | 34 | 0025 | 120053 | 333.7 | 299.5 | 2.1 | 5.8 | 40 | -33.3 | -99.9 | 299.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 37 | 2325 | 130054 | 331.0 | 297.4 | .5 | 4.2 | 51 | -39.1 | -99.9 | 297.4 | 0 | 297.4 | 0 | 1.1 |
| SPO | 79 | 37 | 2325 | 140054 | 330.9 | 297.3 | 1.5 | 4.2 | 51 | -39.1 | -99.9 | 297.3 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 284 | 0040 | 020055 | 337.2 | 302.1 | 1.5 | 6.7 | 11 | -53.0 | -99.9 | 302.1 | 0 | 301.8 | 0 | 1.4 |
| SPO | 79 | 284 | 0040 | 010055 | 336.3 | 301.5 | 1.3 | 6.7 | 11 | -53.0 | -99.9 | 301.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 291 | 0430 | 060056 | 330.1 | 296.7 | .9 | 5.2 | 64 | -54.2 | -99.9 | 296.7 | 2 | 296.7 | 2 | .9 |
| SPO | 79 | 291 | 0430 | 070056 | 338.1 | 302.8 | U | 5.2 | 64 | -54.2 | -99.9 | 302.8 | 1 | 302.8 | 1 | .0 |
| SPO | 79 | 297 | 2320 | 250057 | 337.0 | 302.0 | 1.9 | 4.7 | 55 | -47.8 | -99.9 | 302.0 | 0 | 300.2 | 0 | 2.7 |
| SPO | 79 | 297 | 2320 | 240057 | 332.4 | 298.5 | 3.3 | 4.7 | 55 | -47.8 | -99.9 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 305 | 0330 | 690058 | 327.5 | 294.7 | .1 | 7.1 | 342 | -43.2 | -99.9 | 294.7 | 0 | 297.5 | 0 | 1.8 |
| SPO | 79 | 305 | 0330 | 680058 | 334.9 | 300.4 | 2.5 | 7.1 | 342 | -43.2 | -99.9 | 300.4 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 312 | 0457 | 040059 | 334.7 | 300.2 | .1 | 4.4 | 330 | -41.3 | -99.9 | 300.2 | 0 | 301.4 | 0 | .5 |
| SPO | 79 | 312 | 0457 | 050059 | 337.7 | 302.5 | .7 | 4.4 | 330 | -41.3 | -99.9 | 302.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 319 | 2340 | 330060 | 167.8 | 172.2 | .1 | 7.1 | 30 | -40.8 | -99.9 | 172.2 | 2 | 172.2 | 2 | .1 |
| SPO | 79 | 319 | 2340 | 340061 | 328.0 | 295.1 | 1.0 | 7.1 | 30 | -40.8 | -99.9 | 295.1 | 3 | 295.1 | 3 | 1.0 |
| SPO | 79 | 319 | 2340 | 380061 | 336.1 | 301.3 | 3.3 | 7.1 | 30 | -40.8 | -99.9 | 301.3 | 3 | 301.3 | 0 | 3.3 |
| SPO | 79 | 325 | 2300 | 370062 | 334.9 | 300.4 | .9 | 5.3 | 67 | -30.9 | -99.9 | 300.4 | 0 | 300.7 | 0 | .9 |
| SPO | 79 | 325 | 2300 | 130062 | 335.6 | 300.9 | .9 | 5.3 | 67 | -30.9 | -99.9 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 333 | 2310 | 620063 | 332.0 | 298.2 | 2.2 | 3.8 | 117 | 27.0 | -99.9 | 298.2 | 0 | 299.5 | 0 | 1.7 |
| SPO | 79 | 333 | 2310 | 400063 | 335.6 | 300.9 | .9 | 3.8 | 117 | 27.0 | -99.9 | 300.9 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 340 | 2320 | 350064 | 331.7 | 297.9 | 2.3 | 3.8 | 30 | -31.1 | -99.9 | 297.9 | 2 | 297.9 | 2 | 2.3 |
| SPO | 79 | 346 | 2300 | 110065 | 335.9 | 301.2 | 2.1 | 4.2 | 90 | -27.0 | -99.9 | 301.2 | 0 | 300.1 | 0 | 1.6 |
| SPO | 79 | 346 | 2300 | 140065 | 333.2 | 299.1 | 1.0 | 4.2 | 90 | -27.0 | -99.9 | 299.1 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 354 | 2255 | 120066 | 337.6 | 302.5 | 1.6 | 2.5 | 67 | -24.0 | -99.9 | 302.5 | 0 | 300.5 | 0 | 2.5 |
| SPO | 79 | 354 | 2255 | 290066 | 332.4 | 298.5 | 3.2 | 2.5 | 67 | -24.0 | -99.9 | 298.5 | 0 | -1.0 | 0 | -1.0 |
| SPO | 79 | 360 | 2305 | 080067 | 335.5 | 300.8 | 2.3 | 4.9 | 5 | -26.0 | -99.9 | 300.8 | 0 | 300.8 | 0 | 1.7 |
| SPO | 79 | 360 | 2305 | 280067 | 335.4 | 300.8 | .8 | 4.9 | 5 | -26.0 | -99.9 | 300.8 | 0 | -1.0 | 0 | -1.0 |



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