BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

HAT CREEK PROJECT

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Air quality and climatic effects of the proposed Hat Creek project

Appendix A
Meteorological and air quality data

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A1.0 INTRODUCTION

This Appendix documents meteorological and air quality data sets reviewed and utilized by Environmental Research & Technology, Inc. (ERT) in the course of preparing the report Air Quality and Climatic Effects of the Proposed Hat Creek Project. This work was performed in fulfillment of the Terms of Reference for Detailed Environmental Studies, Appendices D, D1, D2, D3, D4, D5, and E3.

The data reported in this volume were used for three major purposes: (1) to provide information regarding baseline air quality and climatology in south-central British Columbia; (2) to provide a basis for adjusting mathematical air quality assessment models to reflect conditions in the vicinity of the proposed Project; and (3) to provide inputs for these models to predict the effects of emissions from the Hat Creek coal mine, power plant, and associated facilities.

The information presented consists of descriptions of the data sources, discussions of ERT's uses of the data in the Hat Creek assessment, evaluations of the quality and representativeness of the data to characterize the conditions at the Project site, and complete tabular listings of the key data sets used.

A2.0 METEOROLOGICAL DATA

Due to the remote location of the Hat Creek Valley, the volume of historical meteorological data taken within the valley is rather limited. In order for ERT to perform a comprehensive analysis of the air quality effects of the effluents from the proposed Hat Creek generating station, it was important that the meteorological data base provide representative information on seasonal and diurnal variations of the physical characteristics of the local atmosphere. Toward this end, British Columbia Hydro & Power Authority (B.C. Hydro) has, during the past two years, undertaken an intensive data gathering program to allow characterization of the meteorology of the Hat Creek region. This section presents the meteorological data that have been made available through B.C. Hydro to assist ERT in its assessment of air quality effects of the proposed Hat Creek Project.

The data available to ERT for air quality assessment were acquired from a variety of sources. The remainder of this section discusses information derived from the North American Weather Consultants (NAWC) gas tracer study conducted in the Hat Creek Valley, the MEP meteorological measurement study, data from the network of eight mechanical weather stations operated by B.C. Hydro, and the data derived from miscellaneous data sources. A description of the data, a discussion of any data gaps or limitations, and ERT's application of the data are also given for each data set. This Appendix is thus intended to provide the user with a comprehensive description of the meteorological information that was used by ERT as support for the air quality work.

A2.1 NAWC TRACER STUDIES

Under sponsorship by B.C. Hydro, NAWC conducted an airborne tracer study during the winter and summer months of 1976 (Hovind, et al)[1]. The purpose of this program of the experiments was to document the behavior of the plume from the proposed power plant. Intensive meteorological measurements were conducted to define ambient conditions during the plume release simulations. Concentrations of the tracer material were measured by aircraft samplers and portable sensors deployed at ground-level for each experiment. Oil-fog plumes were tracked photographically, and airborne equipment was employed to provide data regarding plume dispersion characteristics for specific weather conditions.

The winter study was conducted during the periods February 16-23, 1976 and March 22-26, 1976. The summer study took place between July 31 and August 11, 1976. The two studies resulted in a total of 14 tests. Of the 14 tests, the results of 12 were suitable for use by ERT. The remaining two tests were terminated prematurely due to restrictive visibility conditions, and provided no information of the type required in the present study.

The tracer studies consisted of releases of gas tracers (oil-fog and sulfur hexafluoride - SF_6) from an aircraft to simulate emissions from the stack of the proposed 2000 Mw power plant operating at base load with no controls. Releases were made at two proposed plant sites - one in the valley proper and one near Harry Lake in the Trachyte Hills to the east of the valley. The releases were made at various effective stack heights above the proposed plant sites. However, the plume was always released low enough such that it would be under the influence of the mountain-valley circulation of the Hat Creek Valley. Plume rise calculations indicate that in most cases a plume from a 366 m (1200-ft) or 244 m (800-ft) stack would rise substantially above the levels of plume release assumed in the NAWC study. It has been assumed that turbulence parameters at the release heights accurately represent those at the predicted plume rise levels. In particular, it appears that either stack height would be sufficient to preclude fumigation conditions such as led to relatively high ground-level concentrations in the field experiments. See Appendix D on sulfur dioxide (SO_2) control measures for a discussion of these conditions.

The tracer plumes were tracked by instrumented aircraft outfitted with an Analog Technology Corporation 112C SF_6 Leak Detector, which measured volumetric SF_6 concentrations, and an integrating nephelometer to measure oil-fog droplet concentrations. Transects were made through the tracer plumes at various altitudes and distances from the release point to determine the vertical and horizontal extent of plume spread. A surface array of SF_6 samplers was operated simultaneously with the airborne sampling program to determine ground level concentrations resulting from the dispersion of the SF_6 plume in the Hat Creek Valley. The SF_6 concentrations were then scaled and converted to equivalent SO_2 concentrations corresponding to emissions from the proposed 2000 Mw plant.

NAWC also conducted a series of pilot balloon (pibal) releases during both seasonal phases of the program. The wind data from these observations, coupled with minisonde releases made during the hours centered around the plume sampling tests, provide a picture of the vertical wind and temperature structures within and above the valley on the days that plume samples were taken. Atmospheric stability was determined by the lapse rate method used by the U.S. Nuclear Regulatory Commission (U.S.NRC).

The data obtained during the tracer studies are limited in that the experiments were conducted only during periods of neutral or slightly stable atmospheric conditions. Of the twelve available tests, ten were run under conditions categorized by the U.S. NRC as neutral stability, and two during slightly stable conditions. In order to complete the tasks described below, it was necessary to use the results of experiments conducted by other researchers during unstable and stable conditions.

Another limitation of the data was the paucity of information beyond 10 km from the release point. The majority of the data were taken within 8 km of the release, since, for most of the experiments the equivalent SO_2 concentrations within the plumes were very small relative to the proposed ambient guidelines beyond this travel distance. Such a grouping of data points made it difficult to determine horizontal and vertical plume spread statistics as a function of downwind distance. Difficulty in determing the appropriate relationship was encountered for distances greater than 10 km. For the larger distances it was necessary to extrapolate based upon the available data.

The NAWC data were used by ERT for two basic purposes. First, the data were used to calibrate the dispersion coefficients of the Hat Creek Model (see Appendix B for a comprehensive discussion) and second, the results of the minisonde soundings were used to delineate vertical wind and temperature profiles to investigate the potential of fumigation episodes within the Hat Creek Valley.

The raw NAWC data used in ERT's air quality analysis are reported by Hovind, et al[1] and will not be reproduced in this volume. However, the horizontal dispersion coefficients computed by ERT, along with the meteorological conditions for each tracer release, are presented in Tables A2-1 to A2-23. In the tables, the concentrations presented are equivalent SO_2 concentrations corresponding to the emission rate expected for 2000 Mw operation of the power plant. They are obtained by scaling measured SF_6 concentrations by the ratio SO_2 to SF_6 emission rates.

A detailed discussion of the method used to compute the dispersion coefficients is presented in Appendix B. However, the footnotes of the tables require some explanation. The horizontal standard deviation (σy) of the plume spread was determined from the second moment of the center of mass calculated from data points collected during each pass through the plume at a given downwind distance. The arithmetic average was then determined at each distance from the release. However, the variance of each individual σy was determined using the so-called t-distribution of Student. If the variance was below the 95% confidence level, the σy was not used in computing the arithmetic average. Also there were cases when the maximum concentration for a given transect was at or barely above the measuring threshold of the nephelometer. For these cases, the oil fog droplet concentration fell quickly below the nephelometer threshold resulting in artificially small σy values. These cases were also eliminated from consideration.

TABLE A2-1

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 1, Set 1 - Virtual Downwind Distance 2.6 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
09:59		1420	1.06×10^{-4}	574
10:02		1405	1.56×10^{-4}	751
10:05		1390	9.90×10^{-5}	695
10:09		1370	2.74×10^{-4}	618
10:11		1355	2.09×10^{-4}	526
10:14		1340	2.28×10^{-4}	689
10:17		1325	2.47×10^{-4}	698
		1295	7.20×10^{-5}	530
10:24		1280	2.30×10^{-5}	622*
10:26		1370	1.98×10^{-4}	808
09:40	+0.42			
10:50	-0.07			

Average σy = 654 ± 76

*below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentrations corresponding to 2000 Mw plant operation.

TABLE A2-2

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 1, Set 3 - Virtual Downwind Distance 3.6 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
11:11		1340	1.03×10^{-4}	1233
11:14		1310	1.75×10^{-4}	1057
11:17		1280	1.82×10^{-4}	1497
10:50	-0.07			
12:35	-0.61			

Average σy = 1262 ± 550

*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-3

Horizontal Dispersion Coefficients Computed from Gas Tracer Data Test 2, Set 1 Virtual Downwind Distance 4.5 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
08:06		1710	3.0×10^{-5}	332
08:11		1645	1.5×10^{-5}	262
08:18		1555	5.7×10^{-5}	244
08:21		1525	3.8×10^{-5}	154+
08:23		1495	3.8×10^{-5}	189+
08:26		1465	3.0×10^{-5}	222
08:28		1435	3.8×10^{-5}	465
08:29		1405	3.0×10^{-5}	252
08:31		1375	3.0×10^{-5}	297
08:00		1770	1.9×10^{-5}	183+
08:03		1740	1.5×10^{-5}	58+
08:13		1615	2.3×10^{-5}	232
08:17		1585	2.3×10^{-5}	277
07:00	-0.68			
09:15	-0.65			

Average σy = 287 ± 58

+data points below detectable limit of nephelometer - not used in computing average.
*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-4

Horizontal Dispersion Coefficients Computed from Gas Tracer Data Test 3, Set 1 Virtual Downwind Distance 2.5 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
08:02		1890	1.90×10^{-5}	172+
08:05		1865	3.40×10^{-5}	570
08:07		1830	6.80×10^{-5}	619
08:10		1800	3.40×10^{-5}	1106*
08:13		1770	3.00×10^{-5}	409
08:16		1740	7.20×10^{-5}	285
08:19		1710	8.00×10^{-5}	366
08:22		1675	6.50×10^{-5}	290
08:25		1645	8.30×10^{-5}	696
08:27		1615	9.90×10^{-5}	424
08:30		1590	7.20×10^{-5}	343
08:32		1555	3.80×10^{-5}	471
07:45	+0.09			
09:15	+0.46			

Average σy = 447 ± 94

*below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.
+data points below detectable limit of nephelometer not used in computing average.

TABLE A2-5

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 6, Set 1 Virtual Downwind Distance 6.3 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
05:37		1770	1.37×10^{-4}	290
05:40		1740	1.10×10^{-4}	243
04:55	-0.43			
05:50	-0.45			

Average σy = 267 ± 298

*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-6

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 6, Set 2 - Virtual Downwind Distance 9.7 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
05:48		1710	2.3×10^{-5}	200
05:51		1680	3.0×10^{-5}	240*
05:53		1645	1.9×10^{-5}	215
04:55	-0.43			
05:50	-0.45			

Average σy = 208 ± 95

*below 95 percent confidence level - not used in computing average.

**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-7

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 6, Set 3 - Virtual Downwind Distance 17.7 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
06:08		1800	3.4×10^{-5}	459
06:10		1770	9.5×10^{-5}	316
06:15		1740	6.8×10^{-5}	241
06:17		1710	8.4×10^{-5}	286
04:55	-0.43			
05:50	-0.45			
05:50[x]	-0.68			

Average σy = 326 ± 150

[x]Weather Station #5

*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-8

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 6, Set 4 - Virtual Downwind Distance 20.9 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:22		1710	8.7×10^{-5}	576*
06:28		1710	1.1×10^{-4}	842
06:31		1675	2.7×10^{-5}	423*
05:50	-0.45			
05:50[x]	-0.68			
07:35[o]	-0.44			

Average σy = 842

[x] Weather Station #5

[o] Gallagher Creek

* below 95 percent confidence level - not included in computing average.

**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-9

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 7, Set 1 - Virtual Downwind Distance 4.1 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:01		1830	2.47×10^{-4}	227
06:04		1800	2.55×10^{-4}	238*
06:06		1785	3.19×10^{-4}	217*
06:08		1770	4.52×10^{-4}	238
06:11		1755	1.48×10^{-4}	298
06:13		1740	1.10×10^{-4}	339
06:15		1710	1.50×10^{-5}	162$^+$
06:18		1770	2.13×10^{-4}	313
06:20		1770	1.41×10^{-4}	396
05:30	-0.87			
06:05	-0.37			
07:10	-0.65			

Average σy = 302 ± 66

* below 95 percent confidence level - not used in computing average

**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

$^+$ data points below detectable limit of nephelometer not used in computing average.

TABLE A2-10

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 7, Set 2 - Virtual Downwind Distance 7.8 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
06:34		1785	1.56×10^{-4}	352
06:36		1800	9.12×10^{-5}	295
06:38		1770	1.18×10^{-4}	312
06:39		1755	5.70×10^{-5}	315
06:41		1740	3.80×10^{-5}	240
06:05	-0.37			
07:10	-0.65			

Average σy = 303 ± 51

*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-11

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 8, Set 1 - Virtual Downwind Distance 4.3 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
05:52		1770	2.13 X 10^{-4}	326
05:54		1740	9.12 X 10^{-5}	338
05:56		1710	1.82 X 10^{-4}	360
05:58		1680	1.44 X 10^{-4}	493
06:00		1645	9.50 X 10^{-5}	443
06:02		1615	4.56 X 10^{-5}	297
06:04		1585	2.28 X 10^{-5}	414
05:40	-0.55			
06:45	-0.75			

Average σy = 382 ± 65

*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-12

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 8, Set 2 - Virtual Downwind Distance 4.3 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:19		1770	3.42 X 10^{-5}	238
06:21		1800	3.80 X 10^{-5}	242
06:23		1830	4.94 X 10^{-5}	232*
06:24		1860	4.18 X 10^{-5}	660
05:40	-0.55			
06:45	-0.75			

Average σy = 380 ± 602

* below 95 percent confidence level - not used in computing average.

**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-13

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 9, Set 1 - Virtual Downwind Distance 4.2 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
13:34		1585	1.5 X 10^{-5}	735
13:37		1525	1.1 X 10^{-5}	470*
13:38		1465	1.9 X 10^{-5}	840
13:41		1435	1.5 X 10^{-5}	822
13:43		1375	2.7 X 10^{-5}	909*
13:47		1310	1.5 X 10^{-5}	960*
13:49		1250	1.5 X 10^{-5}	1133*
13:52		1220	1.5 X 10^{-5}	786*
13:56		1160	1.1 X 10^{-5}	977*
-		1100	1.1 X 10^{-5}	829*
13:28		1675	1.1 X 10^{-5}	437*
13:30		1645	4.2 X 10^{-5}	565
13:32		1615	1.5 X 10^{-5}	495*
12:48	-0.97			
13:13	-0.93			
14:05	-0.98			

Average σy = 740 ± 200

* below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-14

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 10, Set 1 - Virtual Downwind Distance 3.9 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:16		1950	2.30 X 10^{-5}	579*
06:18		1920	8.00 X 10^{-5}	457
06:20		1890	2.17 X 10^{-4}	415*
06:22		1860	2.70 X 10^{-4}	457
06:24		1830	2.47 X 10^{-4}	437
06:25		1800	1.14 X 10^{-4}	445
06:27		1770	8.36 X 10^{-5}	485
06:28		1740	1.90 X 10^{-5}	225+
06:30		1710	1.10 X 10^{-5}	531*
05:25	-0.50			
07:45	-0.57			

Average σy = 456 ± 23

* below 95 percent confidence level - not used in computing average
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

+ data points below the detectable limit of nephelometer not used in computing average.

TABLE A2-15

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 11, Set 1 - Virtual Downwind Distance 5.3 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:58		2015	1.1 X 10^{-5}	139+
07:00		1980	2.7 X 10^{-5}	364
07:01		1950	1.5 X 10^{-5}	271
07:03		1920	2.7 X 10^{-5}	230
07:05		1890	2.3 X 10^{-5}	217
07:06		1860	2.7 X 10^{-5}	293
07:08		1830	2.3 X 10^{-5}	274
07:09		1800	2.3 X 10^{-5}	394
07:11		0770	3.0 X 10^{-5}	218
07:12		1740	3.4 X 10^{-5}	264
07:14		1710	5.3 X 10^{-5}	270
07:15		1675	3.4 X 10^{-5}	190
07:17		1645	4.9 X 10^{-5}	276
07:18		1615	2.7 X 10^{-5}	205+
07:20		1585	1.5 X 10^{-5}	247
07:21		1555	7.6 X 10^{-6}	445*
05:50	-0.43			
07:35	-0.44			

Average σy = 270 ± 34

*below 95 percent confidence level - not used in computing average

**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

+data points below detectable limit of nephelometer not used in computing average.

TABLE A2-16

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 11, Set 2 - Virtual Downwind Distance 14.9 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
07:30		1800	2.3 X 10^{-5}	437
07:32		1830	1.1 X 10^{-5}	216+
07:34		1770	7.6 X 10^{-6}	204+
07:37		1710	1.9 X 10^{-5}	145+
07:39		1645	3.0 X 10^{-5}	475
07:40		1585	1.5 X 10^{-5}	472
07:42		1525	3.0 X 10^{-5}	357
07:35	-0.44			

Average σy = 435 ± 95

+data points below detectable limit of nephelometer not used in computing average.

*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-17

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 11, Set 3 - Virtual Source Distance 21.3 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
07:50		1525	1.5×10^{-5}	833
07:53		1585	1.1×10^{-5}	462
07:55		1465	7.6×10^{-6}	689
07:58		1405	7.6×10^{-6}	571*
07:35	-0.44			
08:08	-0.94			

Average σy = 661 ± 464

*below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-18

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 12, Set 1 - Virtual Downwind Distance 3.9 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
05:57		1860	1.44×10^{-4}	202
05:59		1830	7.22×10^{-5}	168+
06:01		1800	3.27×10^{-4}	264
06:03		1770	2.93×10^{-4}	235
06:04		1740	4.94×10^{-4}	624*
06:08		1800	5.62×10^{-4}	253
06:12		1800	6.16×10^{-4}	276
06:09		1800	6.61×10^{-4}	226
06:14		1800	4.83×10^{-4}	338
06:16		1800	3.95×10^{-4}	275
06:17		1785	5.89×10^{-4}	336
06:19		1785	5.70×10^{-4}	303
06:22		1815	8.36×10^{-5}	270
06:24		1815	3.72×10^{-4}	253
05:36	-0.85			
06:30	-0.78			

Average σy = 269 ± 26

*below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.
+data points below detectable limit of nephelometer not used in computing average.

TABLE A2-19

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 12, Set 2 - Virtual Downwind Distance 11.7 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:53		1830	3.00×10^{-5}	300
06:55		1800	5.70×10^{-5}	751
06:57		1770	1.14×10^{-4}	364
06:59		1740	3.53×10^{-4}	554
07:02		1710	3.76×10^{-4}	336
07:04		1680	1.10×10^{-5}	537*
07:07		1740	3.75×10^{-5}	421
07:09		1740	2.77×10^{-4}	364
07:11		1740	5.36×10^{-4}	410
07:14		1740	4.71×10^{-4}	256
07:16		1740	3.65×10^{-4}	368
07:20		1755	2.77×10^{-4}	371
07:23		1725	3.85×10^{-4}	479
07:25		1725	5.89×10^{-4}	369
06:30	-0.78			
07:40	-0.90			

Average σy = 411 ± 77

*below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-20

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 13, Set 1 - Virtual Downwind Distance 2.4 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
12:06		1890	1.50×10^{-5}	521*
12:09		1830	1.10×10^{-5}	987
12:11		1770	1.50×10^{-5}	1017
12:13		1710	1.50×10^{-5}	872
12:15		1645	1.50×10^{-5}	935
12:17		1585	2.70×10^{-5}	845
12:18		1525	1.50×10^{-5}	218*
12:20		1465	3.40×10^{-5}	633
12:23		1405	6.10×10^{-5}	506
12:25		1340	3.80×10^{-5}	632
12:29		1220	2.70×10^{-5}	707*
12:27		1280	2.30×10^{-5}	625
12:32		1160	1.90×10^{-5}	439*
12:34		1100	2.70×10^{-5}	1036
11:34	-0.95			
12:10	-0.90			

Average σy = 783 ± 145

* below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-21

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 14, Set 1 - Virtual Downwind Distance 5.3 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
06:09		2225	8.0×10^{-5}	183
06:11		2195	8.4×10^{-5}	392
06:14		2165	9.5×10^{-5}	443
06:16		2135	1.1×10^{-4}	567
06:19		2105	8.4×10^{-4}	664
06:22		2075	1.9×10^{-5}	337
06:25		2135	5.3×10^{-5}	791
06:27		2135	3.8×10^{-5}	967*
06:31		2135	3.4×10^{-5}	722
06:34		2150	7.6×10^{-6}	261
06:36		2150	1.1×10^{-4}	342
05:36	-0.62			
06:45	-0.78			

Average σy = 470 ± 147

* below 95 percent confidence level - not used in computing average.
**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-22

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 14, Set 2 - Virtual Downwind Distance 17.8 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration* (g/m^3)	σy (meters)
06:52		2440	1.1×10^{-5}	245+
06:58		2350	9.9×10^{-5}	387
07:04		2290	4.6×10^{-5}	649
07:08		2255	3.0×10^{-5}	986
07:11		2225	4.6×10^{-5}	755
07:14		2195	2.7×10^{-5}	1139
07:20		2165	1.9×10^{-5}	1099
06:45	-0.78			
07:30	-0.60			

Average σy = 836 ± 306

+data points below detectable limit of nephelometer not used in computing average.
*equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

TABLE A2-23

Horizontal Dispersion Coefficients Computed from Gas Tracer Data
Test 14, Set 3 - Virtual Downwind Distance 46.2 Km

Time	Lapse Rate (°C/100m)	Altitude (MSL)	Maximum Concentration** (g/m^3)	σy (meters)
08:01		2470	1.9×10^{-5}	290+
08:07		2350	4.9×10^{-5}	323
08:09		2320	1.5×10^{-5}	443
08:11		2290	4.6×10^{-5}	1539*
08:16		2260	2.7×10^{-5}	843
08:19		2195	3.0×10^{-5}	1307*
08:29		2105	1.5×10^{-5}	1053*
07:30	-0.60			
08:00	-0.58			
08:42	-0.83			

Average σy = 536 ± 676

* below 95 percent confidence level - not used in computing average.

**equivalent SO_2 concentration corresponding to 2000 Mw plant operation.

+ data points below detectable limit of nephelometer not used in computing average.

Vertical dispersion statistics were obtained directly by solving the Gaussian plume equation for σ_z using measured values of σy, wind speed, source strength, and plume concentrations. The vertical temperature gradients presented in the tables were computed for a vertical layer approximately 400 m deep which was bisected in the vertical by the plume centerline. The wind speed and direction used were also taken from data at plume height. The actual minisonde sounding data from which the lapse rates were calculated are presented in Hovind, et al[1].

A2.2 MEP STUDIES

In 1975, B.C. Hydro retained the MEP Company to gather data characterizing the meteorological conditions of the Hat Creek region during the spring and autumn seasons. This two-part project was conducted during March and September in order that the data would closely reflect typical seasonal climatic variations (Weisman[2,3]).

Because the emissions from the proposed Hat Creek Project power plant are to be released as an elevated point source, MEP Company concentrated on obtaining upper air observations during both seasonal phases of the field study to determine the vertical temperature and wind field characteristics of the region.

Throughout the duration of the spring program, four minisonde releases were made each day for an eight-day period, from each of four selected locations within the valley system. These releases were made simultaneously so that an accurate description of the vertical temperature profiles and associated vertical wind fields could be obtained. The observation program was modified during September, expanding the measurements to include nine soundings per day at two of the sites.

Data from seven mechanical weather stations, located throughout the region and operated by B.C. Hydro (see Section A2.3), were available to MEP personnel. Also, four hygrothermographs were situated on the southwest-facing slopes of the Hat Creek Valley. These surface data, in conjunction with the minisonde soundings, were used to examine the diurnal variations of the vertical temperature profile, the upper level wind velocities, surface along-valley and cross-valley drainage flows, and reverse upslope circulations due to daytime heat effects.

MEP also conducted a series of constant-level balloon flights in order to identify flow streamline characteristics within the valley. These included a series of timed releases in order to obtain statistical dispersion information.

ERT utilized the data gathered by the MEP Company to describe the climatology of the valley, to investigate the potential for stack plume fumigation within the valley, and as a data base for correlation with the information from the B.C. Hydro surface samplers to describe wind fields and mixing depths within the Hat Creek Valley (see Section A2.3).

The MEP data proved quite useful in completing the climatology appendix (Appendix E). The descriptions of both upper-level and lower level wind patterns, and the local vertical temperature structure were based in part on the data contained in the two MEP reports.

There was no difficulty incurred in either the interpretation or use of any of the data include in the MEP reports. It was found, however, that the MEP data base was rather limited for use in determining correlations with the data gathered by the B.C. Hydro network.

A2.3 B.C. HYDRO SURFACE DATA (POWER PLANT SITE)

B.C. Hydro has installed and is operating eight mechanical weather stations located within 25 km of the proposed plant site. Figure A2-1 shows the locations of these observation stations. Each of these stations

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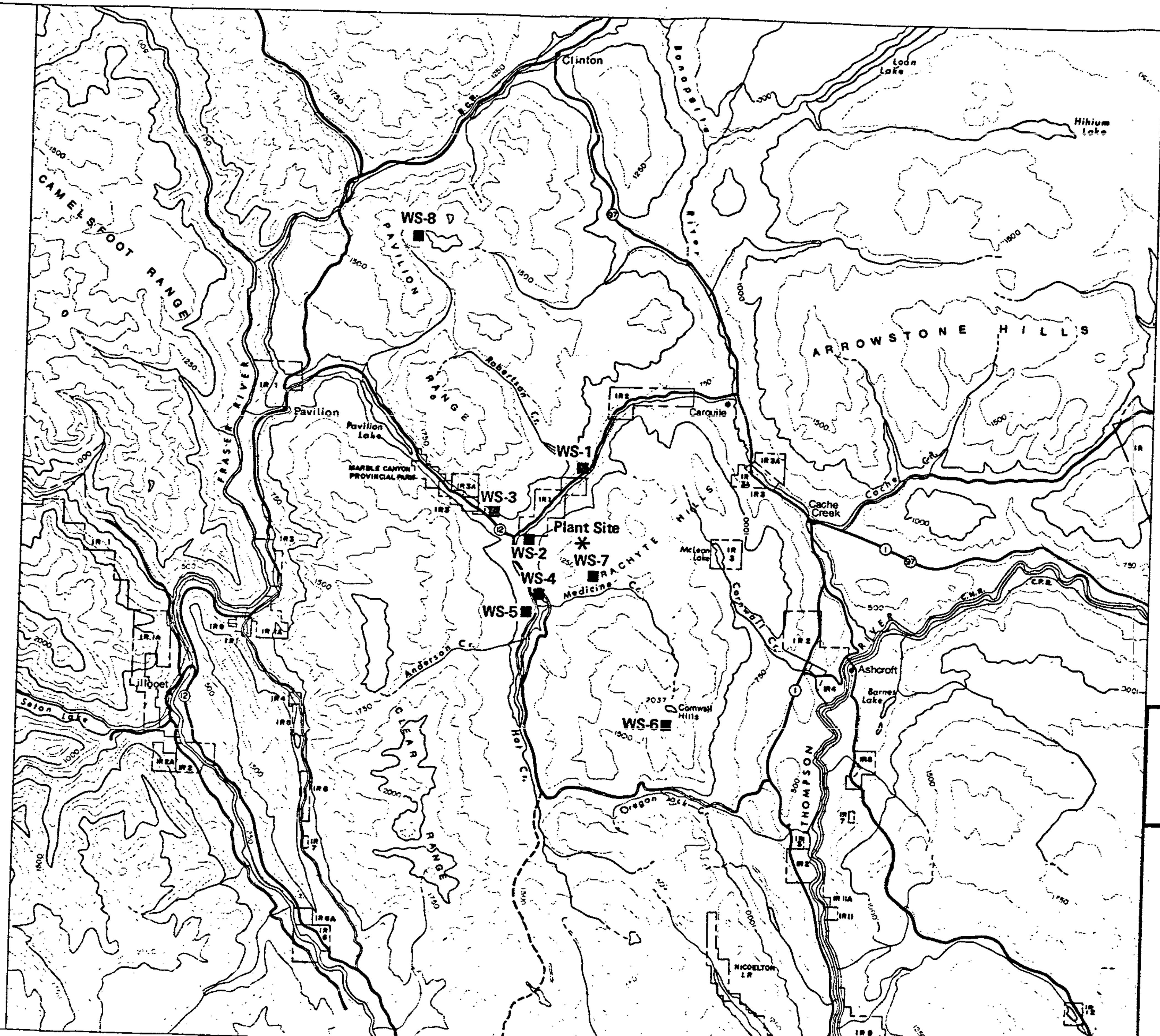

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY HAT CREEK PROJECT

DETAILED ENVIRONMENTAL STUDIES

Figure A2-1 Locations of the B.C. Hydro Mechanical Weather Stations in the Hat Creek Area

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records wind speed, wind direction, temperature, and relative humidity. Information recorded on the original strip charts was processed, validated, edited and digitized by B.C. Hydro, and given to ERT in the form of sequential hourly averages. Gaps in the data occurred due to the occasional mechanical failure of the instruments. Whenever possible, data from other stations within the B.C. Hydro network was substituted for missing data. Correlation statistics were generated prior to data substitution to ensure that the substituted data were representative of the location in question.

The data from the surface network was used by ERT in the following ways.

- A sequential meteorological data tape was constructed consisting of hourly-averaged temperature, wind speed, wind direction, mixing depth, and stability data for the calendar year 1975 at the Harry Lake site (Station 7). This data tape was used as input for the Hat Creek Model to compute surface concentration of effluents emitted from the proposed Hat Creek power plant.
- The Harry Lake data tape was also used to generate meteorological joint frequency statistics for input to the ERT models for simulation of cooling tower plume effects and drift deposition.

Prior to the construction of the sequential data tape, it was necessary to ensure that any data gaps due to mechanical failure were filled such that representative data for each hour of the year were present on the tape. If representative data were not available, persistence was assumed during the hours that data were missing. The following is a description of analysis methods used to assemble the data for storage on magnetic tape.

ERT assembled the available data, and verified that the data were sufficient to accomplish a complete assessment of the air quality impact within the region. Separate analyses were performed for each meteorological parameter.

(a) Temperature

An accurate sequential hourly surface temperature data set is essential to estimate the ambient temperature at the height of cooling tower emissions for use in ERT's cooling tower model. Sequential hourly surface temperature is also required to determine the height of the atmospheric mixing layer.

Because of its proximity to the locations of the cooling towers, temperature data from Mechanical Station 7 (January through December 1975) were used as the most representative data set. However, because of periods of missing data, it was necessary to substitute data from stations 1, 4, 5 and 6. To optimize these approximations, linear regression statistics were developed for each season to determine which data are temporally most representative of Station 7 conditions.

Temperature data from the stations in question exhibit a significant degree of correlation with Station 7 data at the 95 percent confidence level. The correlation coefficient ranged from 0.604 to 0.962.

Table A2-24 lists the time periods during which temperature data have been substituted for missing values at Station 7.

Tables A2-25 to A2-36 present the hourly-average temperature data from the meteorological data tape. The data are presented by month. The temperature is in degrees Fahrenheit. Periods for which neither Station 7 data nor valid replacement data for any other of the stations in the network were available are designated in the tables by 999.

(b) Wind Speed and Direction

Wind speed and wind direction data from Mechanical Station 7 have been analyzed to determine the representativeness of these measurements to describe winds that will transport plumes from the proposed power plant.

TABLE A2-24

Temperature Data Substituted for the Missing
B.C. Hydro Mechanical Station 7 Data

Station	January through December 1975 Time Period for Substitution of Temperature
1	May 15, hour 6, through May 31, hour 24
4	December 13, hour 5, through December 13, hour 13
5	March 1, hour 1, through March 6, hour 12 September 1, hour 1, through September 5, hour 4 September 24, hour 1, through October 22, hour 13
6	July 28, hour 2, through August 20, hour 12
8	September 8, hour 20, through September 23, hour 24

TABLE A2-25

MERGED DATA　　　DRY BULB TEMP　　　(DEGF)　　　DATA FOR JANUARY　1975

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	33.	32.	32.	32.	32.	31.	31.	32.	32.	32.	32.	34.	35.	37.	37.	36.	35.	32.	32.	34.	36.	29.	29.	30.	33.
2	30.	30.	29.	27.	27.	28.	28.	28.	29.	29.	31.	33.	36.	31.	34.	34.	32.	32.	32.	33.	34.	33.	33.	33.	31.
3	33.	33.	33.	33.	33.	32.	32.	32.	31.	32.	32.	32.	32.	32.	32.	32.	32.	31.	31.	30.	30.	29.	29.	29.	32.
4	29.	28.	28.	28.	29.	29.	27.	27.	27.	27.	27.	28.	32.	33.	34.	32.	29.	24.	28.	28.	28.	28.	27.	27.	29.
5	27.	28.	28.	29.	29.	29.	29.	29.	29.	29.	30.	32.	34.	36.	35.	33.	32.	32.	33.	32.	32.	32.	32.	32.	31.
6	33.	34.	33.	33.	32.	32.	32.	31.	31.	30.	31.	32.	32.	32.	32.	32.	31.	30.	28.	28.	28.	28.	27.	27.	31.
7	27.	27.	27.	27.	27.	27.	27.	26.	26.	27.	26.	28.	31.	30.	28.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.
8	27.	26.	28.	28.	28.	28.	28.	28.	28.	28.	28.	29.	34.	36.	34.	32.	29.	29.	26.	27.	27.	26.	26.	26.	28.
9	23.	23.	22.	22.	21.	21.	19.	19.	19.	19.	19.	21.	22.	22.	23.	24.	23.	22.	21.	21.	21.	21.	21.	21.	21.
10	21.	21.	20.	21.	21.	21.	20.	20.	19.	19.	19.	21.	22.	22.	23.	22.	21.	19.	19.	19.	18.	18.	17.	17.	20.
11	17.	17.	17.	17.	17.	17.	17.	18.	18.	19.	21.	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	20.
12	23.	25.	26.	26.	27.	27.	28.	28.	28.	28.	29.	31.	34.	34.	35.	33.	33.	33.	33.	33.	34.	34.	33.	33.	30.
13	35.	35.	33.	32.	32.	33.	34.	35.	38.	41.	42.	43.	44.	44.	44.	42.	40.	39.	39.	38.	37.	37.	35.	35.	38.
14	34.	34.	33.	32.	32.	32.	32.	32.	31.	32.	32.	33.	34.	35.	35.	32.	30.	28.	27.	25.	26.	26.	27.	27.	31.
15	27.	27.	27.	27.	27.	27.	27.	26.	26.	27.	31.	35.	38.	34.	34.	33.	29.	26.	26.	26.	27.	27.	27.	27.	28.
16	26.	27.	26.	26.	26.	26.	26.	26.	26.	28.	28.	28.	29.	32.	32.	33.	30.	28.	29.	30.	31.	32.	36.	38.	29.
17	39.	39.	41.	41.	41.	40.	41.	42.	44.	44.	44.	43.	42.	40.	40.	40.	39.	38.	38.	37.	37.	37.	37.	37.	40.
18	37.	37.	37.	37.	37.	37.	37.	35.	34.	35.	39.	43.	45.	44.	42.	39.	36.	33.	34.	34.	33.	32.	32.	31.	37.
19	31.	32.	33.	34.	34.	34.	34.	34.	35.	36.	39.	41.	46.	47.	48.	47.	48.	41.	41.	41.	40.	38.	35.	32.	38.
20	31.	29.	28.	27.	27.	28.	28.	27.	26.	27.	29.	30.	31.	31.	31.	30.	29.	28.	26.	24.	24.	25.	26.	26.	28.
21	26.	26.	26.	26.	26.	26.	26.	27.	26.	26.	27.	27.	27.	28.	28.	28.	28.	28.	27.	27.	27.	27.	27.	27.	27.
22	27.	27.	27.	27.	27.	27.	27.	28.	29.	33.	36.	38.	35.	32.	31.	30.	29.	29.	29.	30.	31.	31.	32.	33.	30.
23	32.	33.	34.	35.	37.	37.	37.	37.	36.	38.	38.	39.	39.	38.	38.	39.	37.	34.	33.	33.	33.	33.	35.	35.	36.
24	34.	34.	34.	34.	34.	33.	34.	33.	33.	33.	33.	34.	34.	35.	34.	36.	34.	33.	33.	32.	30.	29.	29.	29.	33.
25	29.	24.	26.	27.	27.	26.	25.	24.	23.	23.	23.	24.	25.	29.	30.	25.	25.	24.	23.	23.	22.	22.	22.	22.	25.
26	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	23.	23.	25.	27.	27.	27.	27.	26.	26.	26.	26.	24.	26.	25.	24.
27	25.	24.	23.	23.	23.	23.	23.	23.	23.	24.	29.	34.	34.	32.	33.	31.	29.	28.	26.	26.	26.	24.	26.	24.	27.
28	27.	27.	27.	27.	27.	27.	27.	27.	27.	28.	28.	29.	29.	30.	31.	30.	29.	29.	28.	28.	28.	28.	28.	28.	28.
29	28.	28.	28.	28.	28.	28.	28.	28.	28.	29.	30.	32.	32.	34.	35.	34.	31.	29.	26.	26.	26.	26.	26.	26.	29.
30	25.	25.	24.	24.	24.	24.	24.	24.	24.	24.	26.	26.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
31	999.	999.	999.	999.	999.	999.	999.	999.	27.	28.	29.	32.	32.	32.	32.	31.	31.	30.	30.	30.	999.	999.	999.	999.	999.
AVG	29.	29.	28.	28.	29.	28.	28.	28.	28.	29.	30.	32.	33.	33.	33.	32.	31.	30.	29.	29.	29.	29.	29.	29.	30.
DAYS	30	30	30	30	30	30	30	30	31	31	31	31	30	30	30	30	30	30	30	30	29	29	29	29	720

TOTAL HOURS = 744　NUMBER OF GOOD HOURS = 720　NUMBER OF MISSING HOURS = 24　DATA CAPTURE = 96.77 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 29.680　MAXIMUM HOURLY VALUE = 48.000　STANDARD DEVIATION = 5.5737

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-26

MERGED DATA　　　DRY BULB TEMP　　　(DEGF)　　　DATA FOR FEBRUARY　1975

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	29.	29.	31.	31.	31.	30.	28.	26.	26.	25.	25.	23.	23.	23.	22.	999.
2	22.	21.	21.	21.	21.	21.	21.	21.	21.	21.	22.	22.	24.	24.	23.	23.	23.	23.	22.	21.	21.	21.	21.	21.	22.
3	21.	21.	21.	21.	20.	20.	19.	19.	19.	20.	21.	999.	26.	26.	27.	27.	26.	25.	25.	24.	24.	24.	24.	24.	23.
4	24.	24.	24.	24.	24.	24.	24.	24.	24.	26.	25.	27.	31.	33.	32.	31.	30.	28.	28.	27.	26.	26.	26.	25.	26.
5	25.	25.	25.	24.	24.	24.	24.	24.	24.	26.	29.	31.	35.	36.	36.	36.	35.	31.	27.	27.	27.	27.	28.	28.	28.
6	27.	27.	27.	27.	27.	27.	27.	28.	28.	31.	34.	36.	36.	36.	36.	35.	34.	31.	31.	31.	29.	29.	29.	29.	31.
7	28.	28.	28.	28.	28.	28.	27.	26.	26.	28.	28.	29.	31.	31.	35.	34.	31.	29.	27.	26.	26.	26.	25.	25.	28.
8	25.	25.	25.	26.	26.	26.	26.	25.	26.	26.	31.	35.	34.	31.	31.	31.	30.	28.	26.	26.	26.	26.	26.	26.	27.
9	26.	26.	26.	26.	26.	27.	27.	27.	28.	28.	29.	31.	34.	34.	34.	34.	33.	31.	31.	31.	31.	31.	31.	31.	30.
10	31.	31.	29.	29.	28.	28.	28.	28.	28.	28.	29.	31.	31.	32.	31.	29.	29.	28.	27.	26.	26.	26.	25.	25.	28.
11	25.	25.	25.	25.	24.	24.	24.	24.	24.	24.	26.	27.	27.	29.	31.	29.	29.	29.	26.	28.	28.	28.	28.	28.	27.
12	28.	28.	28.	29.	29.	29.	29.	29.	29.	33.	36.	36.	35.	35.	34.	34.	31.	29.	28.	28.	27.	27.	26.	26.	30.
13	26.	29.	31.	34.	34.	38.	31.	31.	31.	33.	38.	40.	40.	43.	43.	41.	40.	36.	31.	29.	28.	28.	28.	28.	34.
14	28.	27.	26.	26.	26.	24.	26.	26.	29.	35.	41.	40.	46.	46.	46.	41.	34.	31.	30.	29.	29.	29.	29.	24.	33.
15	29.	29.	29.	31.	31.	31.	31.	31.	31.	31.	35.	36.	38.	38.	37.	36.	34.	31.	31.	31.	31.	31.	31.	31.	32.
16	31.	31.	31.	31.	31.	31.	31.	31.	31.	34.	40.	40.	42.	42.	44.	44.	40.	36.	31.	29.	29.	29.	29.	29.	34.
17	29.	29.	29.	29.	29.	30.	31.	31.	31.	34.	35.	38.	43.	43.	44.	41.	38.	38.	31.	31.	32.	34.	34.	34.	34.
18	34.	31.	31.	31.	31.	32.	33.	32.	34.	39.	43.	40.	46.	42.	42.	44.	38.	33.	31.	31.	31.	31.	31.	33.	36.
19	33.	33.	33.	33.	33.	33.	31.	31.	31.	34.	35.	36.	35.	35.	35.	36.	36.	34.	34.	34.	34.	33.	31.	31.	34.
20	30.	27.	26.	26.	26.	24.	26.	25.	25.	26.	26.	29.	29.	30.	31.	31.	31.	29.	29.	29.	29.	29.	29.	29.	28.
21	29.	29.	29.	29.	29.	29.	29.	29.	29.	38.	40.	43.	46.	41.	36.	34.	34.	38.	31.	31.	31.	31.	31.	31.	33.
22	33.	33.	33.	31.	33.	33.	31.	31.	31.	31.	31.	31.	33.	44.	48.	48.	46.	41.	40.	40.	38.	36.	36.	36.	36.
23	34.	33.	33.	33.	32.	33.	33.	36.	42.	45.	46.	47.	42.	42.	42.	42.	40.	38.	35.	35.	31.	29.	29.	29.	37.
24	29.	29.	29.	29.	26.	24.	27.	27.	29.	30.	34.	38.	38.	35.	38.	38.	36.	31.	29.	27.	26.	26.	26.	26.	31.
25	25.	24.	24.	24.	23.	23.	24.	28.	29.	38.	42.	41.	40.	39.	39.	38.	34.	29.	29.	28.	28.	28.	28.	27.	30.
26	27.	27.	27.	27.	27.	27.	27.	26.	29.	36.	40.	43.	46.	46.	50.	48.	41.	36.	33.	32.	33.	31.	31.	31.	34.
27	31.	33.	33.	33.	29.	29.	29.	29.	36.	40.	45.	45.	39.	34.	36.	34.	33.	32.	30.	30.	29.	29.	29.	30.	33.
28	30.	31.	31.	30.	29.	29.	29.	32.	34.	38.	43.	40.	41.	43.	38.	36.	35.	34.	33.	33.	33.	33.	33.	999.	35.
AVG	28.	28.	28.	28.	28.	28.	28.	28.	29.	31.	34.	36.	36.	37.	37.	36.	34.	31.	30.	29.	29.	29.	28.	28.	31.
DAYS	27	27	27	27	27	27	27	27	27	28	28	27	28	28	28	28	28	28	28	28	28	28	28	27	661

TOTAL HOURS = 672　NUMBER OF GOOD HOURS = 661　NUMBER OF MISSING HOURS = 11　DATA CAPTURE = 98.36 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 30.725　MAXIMUM HOURLY VALUE = 50.000　STANDARD DEVIATION = 5.7236

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-27

MERGED DATA — DRY BULB TEMP (DEGF) — DATA FOR MARCH 1975

HOURS (LST)

HOUR BEG / HOUR END / DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	35.	35.	35.	35.	34.	34.	33.	35.	35.	37.	41.	44.	44.	53.	49.	48.	45.	42.	39.	37.	37.	36.	36.	36.	39.
2	37.	37.	37.	37.	36.	36.	35.	35.	37.	40.	42.	47.	45.	48.	52.	44.	46.	45.	43.	42.	40.	40.	39.	39.	41.
3	38.	37.	35.	33.	33.	32.	30.	29.	31.	37.	40.	43.	45.	45.	42.	41.	41.	37.	36.	35.	33.	34.	35.	33.	36.
4	32.	29.	29.	23.	21.	22.	24.	25.	29.	30.	32.	33.	33.	35.	36.	34.	35.	32.	35.	29.	23.	19.	18.	15.	28.
5	15.	15.	15.	16.	16.	15.	15.	15.	18.	23.	34.	35.	34.	35.	36.	36.	35.	33.	28.	25.	18.	16.	15.	17.	23.
6	13.	13.	11.	11.	9.	9.	9.	10.	14.	22.	30.	35.	28.	29.	31.	31.	28.	24.	19.	17.	19.	19.	17.	16.	19.
7	16.	15.	17.	17.	17.	16.	16.	19.	19.	26.	30.	34.	35.	34.	32.	31.	29.	24.	22.	22.	25.	25.	25.	25.	24.
8	25.	25.	25.	24.	24.	23.	22.	22.	25.	32.	34.	36.	39.	37.	34.	32.	30.	27.	25.	25.	25.	20.	24.	26.	28.
9	24.	24.	23.	23.	23.	23.	21.	18.	17.	19.	23.	25.	25.	26.	26.	24.	21.	20.	19.	17.	17.	15.	15.	14.	21.
10	14.	17.	17.	17.	16.	15.	15.	15.	15.	18.	20.	26.	30.	34.	31.	30.	29.	25.	20.	19.	17.	15.	16.	16.	20.
11	16.	16.	16.	16.	16.	17.	17.	13.	25.	37.	40.	44.	47.	46.	47.	45.	34.	27.	25.	25.	19.	19.	19.	19.	27.
12	19.	19.	17.	17.	16.	15.	15.	15.	17.	20.	25.	24.	34.	32.	36.	39.	31.	25.	26.	21.	21.	21.	20.	20.	23.
13	20.	19.	19.	19.	19.	18.	17.	17.	22.	29.	31.	40.	40.	40.	40.	39.	36.	28.	26.	26.	26.	24.	23.	22.	27.
14	22.	21.	21.	21.	21.	20.	20.	21.	25.	28.	37.	40.	40.	33.	35.	36.	32.	28.	27.	25.	25.	24.	23.	22.	27.
15	22.	21.	21.	21.	21.	21.	21.	23.	29.	31.	33.	36.	40.	42.	38.	35.	33.	30.	29.	28.	30.	30.	30.	30.	29.
16	30.	30.	30.	30.	30.	30.	29.	29.	30.	28.	32.	34.	32.	33.	32.	32.	26.	29.	27.	26.	26.	25.	25.	25.	29.
17	26.	25.	25.	25.	25.	24.	23.	24.	26.	26.	30.	35.	37.	38.	37.	35.	34.	29.	26.	26.	26.	26.	26.	30.	29.
18	29.	29.	29.	27.	25.	25.	24.	27.	28.	31.	36.	42.	40.	34.	40.	38.	35.	32.	29.	30.	30.	30.	29.	29.	31.
19	27.	27.	27.	29.	27.	29.	29.	28.	29.	29.	33.	37.	35.	33.	33.	32.	30.	31.	28.	27.	25.	26.	24.	25.	29.
20	25.	25.	25.	24.	21.	21.	20.	22.	28.	30.	35.	36.	36.	33.	31.	30.	30.	31.	29.	26.	25.	24.	22.	22.	27.
21	22.	25.	22.	20.	20.	20.	20.	20.	25.	25.	29.	26.	30.	29.	30.	30.	28.	27.	25.	26.	26.	26.	26.	26.	25.
22	26.	29.	25.	29.	25.	24.	24.	25.	28.	35.	40.	41.	37.	40.	38.	36.	33.	30.	32.	30.	29.	29.	25.	25.	30.
23	25.	25.	25.	24.	24.	22.	22.	27.	30.	39.	999.	41.	38.	41.	41.	41.	40.	34.	33.	31.	31.	28.	29.	29.	31.
24	29.	29.	28.	25.	24.	23.	25.	29.	31.	29.	29.	31.	31.	36.	36.	36.	34.	31.	27.	25.	22.	20.	18.	18.	28.
25	18.	19.	18.	18.	18.	18.	19.	20.	23.	27.	31.	36.	40.	34.	36.	34.	31.	29.	25.	25.	24.	23.	22.	22.	26.
26	22.	22.	22.	22.	20.	20.	20.	20.	20.	23.	28.	29.	32.	34.	34.	38.	32.	29.	26.	23.	22.	22.	22.	20.	25.
27	20.	20.	20.	20.	20.	20.	22.	25.	34.	41.	40.	41.	45.	999.	52.	999.	45.	41.	36.	34.	32.	31.	31.	32.	32.
28	32.	32.	32.	32.	32.	32.	32.	32.	34.	43.	999.	49.	56.	44.	44.	43.	43.	43.	43.	42.	41.	41.	43.	45.	40.
29	45.	45.	45.	45.	45.	45.	45.	999.	54.	53.	67.	70.	77.	66.	66.	65.	59.	55.	55.	52.	50.	999.	48.	47.	55.
30	47.	45.	40.	34.	33.	32.	31.	32.	34.	36.	36.	37.	38.	38.	36.	36.	32.	31.	29.	28.	28.	29.	28.	29.	34.
31	29.	29.	29.	29.	29.	29.	29.	29.	30.	32.	32.	34.	36.	36.	36.	40.	40.	36.	34.	32.	31.	31.	29.	27.	32.
AVG	26.	26.	25.	24.	24.	23.	23.	23.	27.	31.	36.	38.	39.	38.	38.	37.	35.	32.	30.	28.	27.	26.	26.	26.	29.
DAYS	31	31	31	31	31	31	31	30	31	31	29	31	31	30	31	30	31	31	31	31	31	30	31	31	738

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 738 NUMBER OF MISSING HOURS = 6 DATA CAPTURE = 99.19 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 29.363 MAXIMUM HOURLY VALUE = 77.000 STANDARD DEVIATION = 9.4424

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-28

MERGED DATA — DRY BULB TEMP (DEGF) — DATA FOR APRIL 1975

HOURS (LST)

HOUR BEG / HOUR END / DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	28.	28.	23.	23.	23.	23.	27.	36.	41.	47.	999.	999.	47.	44.	44.	41.	40.	38.	34.	30.	36.	36.	35.	32.	36.
2	32.	31.	31.	31.	31.	31.	32.	37.	38.	41.	45.	49.	43.	41.	41.	38.	32.	36.	32.	31.	29.	28.	27.	25.	35.
3	25.	25.	25.	25.	25.	23.	27.	32.	38.	41.	41.	41.	45.	45.	41.	40.	38.	36.	34.	32.	31.	31.	29.	27.	33.
4	27.	27.	27.	27.	27.	27.	29.	32.	38.	41.	45.	999.	52.	999.	52.	999.	55.	41.	40.	38.	36.	34.	32.	31.	36.
5	31.	29.	29.	27.	26.	25.	27.	29.	32.	40.	41.	41.	999.	50.	50.	50.	999.	45.	40.	38.	36.	34.	32.	31.	36.
6	31.	31.	31.	31.	29.	27.	36.	45.	50.	54.	56.	59.	58.	56.	54.	52.	50.	47.	41.	40.	40.	39.	37.	36.	43.
7	36.	36.	32.	32.	32.	31.	34.	41.	47.	49.	52.	54.	58.	57.	59.	59.	58.	52.	45.	43.	43.	40.	40.	40.	44.
8	39.	38.	38.	38.	36.	36.	38.	41.	45.	999.	999.	57.	54.	56.	57.	56.	54.	50.	47.	45.	45.	44.	43.	41.	45.
9	41.	41.	40.	40.	40.	40.	41.	41.	45.	999.	999.	52.	54.	52.	52.	54.	52.	47.	45.	44.	41.	41.	41.	40.	45.
10	40.	41.	41.	40.	38.	38.	42.	52.	58.	59.	56.	59.	61.	67.	67.	67.	63.	59.	54.	50.	999.	999.	999.	48.	52.
11	47.	46.	45.	45.	45.	45.	999.	54.	59.	61.	63.	63.	67.	72.	72.	70.	65.	63.	56.	54.	54.	52.	51.	50.	56.
12	999.	47.	47.	47.	45.	45.	47.	50.	56.	58.	65.	67.	63.	65.	65.	63.	60.	56.	53.	50.	999.	999.	47.	49.	54.
13	44.	43.	41.	41.	40.	38.	40.	43.	45.	47.	52.	52.	999.	56.	56.	50.	45.	41.	40.	38.	38.	38.	38.	38.	44.
14	38.	37.	37.	37.	37.	36.	36.	38.	38.	38.	40.	41.	41.	42.	43.	45.	43.	41.	40.	40.	40.	40.	40.	40.	40.
15	40.	38.	38.	38.	34.	38.	39.	41.	999.	54.	59.	59.	61.	63.	63.	63.	63.	59.	52.	50.	999.	999.	47.	47.	50.
16	47.	46.	46.	46.	45.	46.	47.	999.	50.	54.	58.	59.	59.	57.	58.	58.	56.	56.	54.	51.	50.	999.	999.	47.	52.
17	45.	44.	43.	41.	41.	42.	45.	999.	52.	59.	63.	65.	67.	67.	70.	61.	63.	59.	58.	52.	51.	999.	999.	44.	54.
18	47.	45.	45.	45.	44.	47.	47.	999.	53.	50.	52.	52.	52.	53.	58.	54.	52.	999.	47.	47.	47.	45.	45.	45.	48.
19	45.	44.	44.	42.	41.	41.	45.	999.	43.	40.	43.	999.	999.	47.	45.	41.	43.	43.	40.	38.	36.	36.	36.	34.	41.
20	33.	35.	33.	34.	34.	34.	36.	35.	38.	41.	41.	42.	47.	45.	44.	43.	43.	41.	40.	39.	38.	37.	35.	34.	38.
21	36.	36.	36.	36.	36.	36.	41.	999.	52.	52.	54.	58.	52.	52.	56.	54.	52.	50.	999.	47.	45.	44.	44.	44.	46.
22	44.	44.	43.	42.	41.	42.	43.	44.	47.	999.	999.	52.	56.	54.	53.	53.	50.	999.	45.	42.	41.	40.	40.	40.	46.
23	40.	38.	38.	37.	36.	37.	40.	41.	45.	41.	47.	999.	50.	50.	50.	50.	45.	43.	40.	40.	37.	37.	37.	37.	42.
24	37.	37.	37.	36.	36.	36.	38.	40.	45.	52.	54.	50.	52.	54.	999.	999.	999.	45.	42.	41.	41.	41.	41.	41.	43.
25	41.	41.	41.	41.	41.	41.	41.	41.	42.	42.	45.	47.	47.	999.	52.	59.	56.	56.	52.	49.	49.	999.	999.	999.	46.
26	999.	48.	47.	45.	46.	999.	52.	59.	63.	67.	68.	68.	68.	68.	67.	65.	63.	58.	54.	52.	50.	48.	999.	48.	57.
27	47.	47.	45.	41.	40.	38.	36.	36.	36.	40.	43.	45.	47.	999.	49.	49.	48.	999.	47.	43.	43.	41.	41.	40.	43.
28	38.	38.	37.	36.	36.	36.	37.	40.	45.	999.	999.	50.	999.	54.	50.	50.	999.	47.	45.	43.	43.	41.	40.	40.	42.
29	38.	38.	40.	38.	38.	38.	41.	45.	999.	52.	56.	62.	63.	63.	63.	61.	60.	59.	53.	50.	50.	47.	45.	44.	50.
30	44.	44.	44.	41.	42.	45.	40.	36.	59.	64.	63.	63.	67.	67.	63.	65.	64.	60.	56.	53.	52.	50.	50.	999.	55.
AVG	39.	38.	38.	38.	37.	38.	39.	42.	46.	49.	52.	54.	55.	55.	55.	54.	52.	49.	46.	46.	42.	40.	40.	40.	45.
DAYS	28	30	30	30	30	29	29	25	28	26	25	26	26	27	29	28	27	27	29	30	27	26	25	28	663

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 663 NUMBER OF MISSING HOURS = 57 DATA CAPTURE = 92.08 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 46.462 MAXIMUM HOURLY VALUE = 72.000 STANDARD DEVIATION = 9.4762

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-29

MERGED DATA — DRY BULB TEMP (DEGF) — DATA FOR MAY 1975

HOURS (LST)

HRBEG HREND DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	999.	48.	46.	45.	45.	47.	52.	56.	59.	61.	65.	65.	45.	65.	63.	63.	62.	59.	56.	53.	52.	54.	50.	50.	56.
2	999.	999.	999.	44.	44.	48.	999.	50.	51.	52.	52.	53.	53.	50.	49.	49.	49.	48.	45.	45.	43.	42.	42.	42.	48.
3	42.	43.	43.	43.	41.	41.	41.	41.	45.	55.	52.	52.	50.	57.	50.	53.	49.	48.	47.	46.	44.	43.	43.	42.	46.
4	41.	41.	41.	40.	39.	39.	40.	40.	43.	45.	47.	999.	47.	47.	999.	999.	999.	47.	48.	47.	46.	45.	45.	45.	44.
5	45.	43.	42.	41.	42.	42.	43.	45.	47.	999.	49.	50.	52.	53.	56.	56.	56.	54.	54.	50.	58.	999.	47.	45.	49.
6	46.	45.	44.	43.	41.	43.	45.	999.	52.	54.	58.	59.	59.	58.	58.	58.	57.	54.	52.	50.	999.	44.	47.	45.	51.
7	45.	44.	43.	43.	41.	41.	45.	50.	56.	58.	59.	61.	63.	65.	65.	67.	65.	65.	59.	58.	55.	54.	51.	51.	54.
8	55.	49.	999.	47.	47.	999.	52.	54.	58.	61.	63.	67.	67.	67.	67.	50.	52.	52.	999.	47.	45.	45.	43.	43.	54.
9	43.	42.	41.	40.	38.	40.	45.	45.	47.	47.	999.	999.	999.	48.	44.	50.	999.	999.	47.	43.	42.	41.	39.	38.	43.
10	36.	37.	36.	34.	34.	36.	40.	37.	35.	33.	46.	67.	68.	70.	72.	70.	67.	63.	60.	59.	59.	54.	57.	56.	52.
11	58.	56.	54.	54.	54.	53.	54.	54.	61.	61.	58.	58.	58.	60.	61.	61.	60.	58.	55.	53.	50.	49.	999.	48.	56.
12	48.	47.	46.	40.	43.	47.	50.	52.	55.	58.	56.	59.	61.	61.	61.	61.	61.	59.	58.	58.	51.	51.	50.	999.	54.
13	999.	47.	46.	45.	44.	45.	48.	50.	54.	58.	61.	65.	67.	68.	68.	69.	70.	70.	65.	61.	61.	58.	58.	58.	58.
14	56.	54.	56.	54.	54.	54.	57.	58.	63.	67.	70.	73.	74.	74.	74.	74.	72.	68.	65.	63.	63.	61.	59.	59.	64.
15	59.	56.	54.	54.	52.	56.	57.	59.	65.	67.	67.	69.	69.	71.	71.	69.	69.	69.	67.	65.	61.	56.	53.	50.	62.
16	50.	999.	47.	47.	46.	47.	52.	57.	61.	65.	69.	69.	69.	69.	69.	69.	69.	67.	65.	62.	61.	59.	59.	56.	60.
17	54.	54.	53.	50.	50.	50.	56.	58.	59.	62.	63.	63.	65.	65.	65.	65.	65.	63.	63.	62.	59.	57.	56.	57.	59.
18	55.	52.	50.	50.	47.	47.	52.	56.	61.	62.	61.	59.	57.	53.	50.	50.	50.	50.	50.	50.	999.	47.	47.	47.	52.
19	47.	47.	47.	46.	44.	44.	47.	999.	52.	54.	54.	56.	55.	52.	53.	56.	59.	59.	59.	56.	53.	50.	47.	47.	51.
20	46.	46.	46.	46.	44.	44.	50.	57.	63.	67.	69.	69.	71.	73.	74.	71.	73.	74.	69.	67.	62.	57.	56.	56.	60.
21	54.	53.	53.	52.	50.	50.	56.	59.	62.	65.	62.	61.	63.	62.	63.	62.	63.	65.	62.	62.	59.	56.	53.	50.	58.
22	50.	50.	50.	999.	999.	999.	52.	56.	61.	62.	65.	65.	67.	63.	61.	57.	56.	56.	56.	56.	54.	53.	52.	50.	57.
23	50.	50.	50.	50.	52.	52.	52.	53.	57.	61.	62.	62.	63.	63.	62.	59.	53.	52.	50.	50.	50.	999.	50.	50.	54.
24	50.	999.	999.	999.	999.	50.	53.	54.	55.	56.	56.	54.	56.	57.	56.	54.	54.	54.	53.	53.	43.	52.	52.	52.	53.
25	52.	50.	50.	50.	999.	50.	52.	56.	57.	61.	62.	65.	67.	65.	67.	67.	67.	65.	61.	59.	57.	54.	53.	50.	56.
26	999.	999.	47.	46.	44.	46.	52.	56.	59.	62.	65.	69.	69.	69.	71.	71.	71.	69.	69.	67.	63.	61.	57.	59.	61.
27	52.	50.	50.	999.	47.	999.	56.	61.	63.	67.	71.	73.	74.	74.	74.	76.	77.	77.	74.	71.	67.	63.	59.	57.	65.
28	59.	56.	56.	53.	53.	53.	56.	60.	65.	67.	71.	74.	77.	79.	79.	79.	79.	77.	76.	63.	69.	65.	63.	63.	66.
29	62.	61.	59.	56.	56.	57.	61.	63.	69.	74.	76.	77.	79.	80.	79.	80.	79.	77.	77.	74.	69.	67.	65.	65.	69.
30	63.	61.	57.	56.	56.	56.	62.	69.	73.	74.	77.	79.	80.	82.	84.	82.	80.	79.	79.	77.	71.	65.	62.	59.	70.
31	57.	56.	56.	56.	53.	56.	61.	64.	70.	77.	80.	82.	84.	85.	86.	85.	84.	84.	82.	76.	69.	65.	62.	61.	71.
AVG	51.	50.	49.	47.	47.	48.	51.	55.	57.	60.	63.	65.	65.	64.	65.	64.	64.	63.	61.	58.	56.	54.	53.	51.	57.
DAYS	27	27	28	28	28	28	30	29	31	30	30	29	30	31	30	30	29	30	30	31	29	29	30	30	704

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 704 NUMBER OF MISSING HOURS = 40 DATA CAPTURE = 94.62 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 56.859 MAXIMUM HOURLY VALUE = 86.000 STANDARD DEVIATION = 10.2897

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-30

MERGED DATA — DRY BULB TEMP (DEGF) — DATA FOR JUNE 1975

HOURS (LST)

HRBEG HREND DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
2	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	42.	40.	40.	40.	40.	999.
3	40.	40.	40.	40.	39.	40.	44.	44.	45.	47.	51.	51.	49.	47.	47.	47.	49.	47.	47.	45.	43.	42.	40.	40.	44.
4	40.	40.	39.	39.	39.	40.	40.	42.	45.	47.	47.	45.	47.	51.	51.	51.	50.	50.	49.	48.	45.	45.	44.	42.	45.
5	42.	41.	40.	39.	38.	39.	40.	45.	47.	51.	51.	53.	51.	51.	54.	51.	53.	51.	49.	47.	44.	42.	42.	999.	46.
6	999.	999.	999.	999.	35.	35.	999.	35.	33.	999.	38.	43.	38.	40.	44.	44.	44.	41.	40.	999.	999.	999.	999.	999.	999.
7	999.	38.	38.	33.	32.	32.	33.	35.	999.	40.	44.	45.	45.	47.	45.	44.	45.	44.	46.	45.	40.	40.	38.	999.	40.
8	37.	38.	38.	999.	999.	37.	40.	42.	42.	42.	45.	45.	45.	44.	49.	47.	47.	47.	45.	45.	46.	44.	40.	40.	43.
9	41.	40.	38.	38.	38.	42.	45.	48.	49.	53.	54.	58.	59.	62.	63.	63.	63.	63.	62.	60.	56.	53.	53.	51.	52.
10	51.	49.	49.	47.	47.	49.	51.	51.	53.	56.	58.	58.	60.	60.	63.	65.	64.	62.	60.	58.	54.	53.	51.	51.	55.
11	49.	49.	47.	45.	45.	45.	48.	52.	54.	54.	58.	60.	62.	63.	62.	63.	65.	63.	60.	58.	54.	999.	999.	51.	55.
12	50.	51.	49.	48.	47.	47.	48.	51.	53.	54.	58.	60.	62.	63.	63.	62.	62.	60.	58.	54.	53.	51.	49.	49.	54.
13	49.	49.	48.	48.	48.	48.	48.	49.	51.	54.	54.	53.	54.	51.	56.	55.	59.	56.	57.	56.	53.	50.	48.	48.	52.
14	46.	46.	45.	44.	44.	47.	47.	48.	47.	46.	49.	54.	52.	53.	55.	54.	54.	56.	53.	51.	47.	49.	45.	44.	49.
15	44.	44.	44.	43.	41.	42.	45.	45.	47.	51.	53.	51.	50.	51.	45.	45.	42.	42.	42.	42.	41.	41.	40.	40.	45.
16	40.	39.	39.	39.	38.	38.	39.	42.	42.	45.	38.	37.	38.	42.	42.	42.	34.	999.	999.	999.	999.	999.	37.	37.	40.
17	38.	38.	38.	38.	38.	39.	40.	42.	43.	45.	47.	47.	53.	54.	51.	53.	49.	45.	47.	48.	46.	45.	45.	44.	45.
18	44.	43.	43.	43.	43.	44.	45.	48.	53.	56.	57.	58.	58.	60.	62.	62.	60.	58.	54.	54.	56.	51.	50.	48.	52.
19	48.	47.	45.	45.	45.	45.	47.	49.	53.	54.	58.	59.	56.	54.	56.	54.	56.	54.	54.	53.	47.	49.	47.	45.	51.
20	45.	45.	45.	44.	45.	47.	47.	51.	55.	58.	56.	60.	62.	63.	65.	65.	65.	65.	62.	60.	56.	54.	53.	51.	55.
21	49.	47.	46.	45.	45.	45.	45.	51.	51.	49.	51.	53.	54.	54.	56.	54.	57.	57.	54.	53.	47.	45.	45.	44.	50.
22	42.	45.	41.	40.	40.	40.	44.	45.	47.	47.	48.	51.	53.	54.	56.	56.	56.	55.	55.	47.	45.	45.	44.	42.	47.
23	41.	40.	39.	39.	38.	38.	40.	40.	45.	999.	41.	44.	45.	49.	52.	54.	54.	56.	55.	54.	49.	46.	46.	44.	45.
24	45.	44.	42.	41.	42.	44.	45.	47.	49.	56.	58.	54.	53.	56.	57.	59.	60.	61.	56.	54.	53.	49.	47.	46.	51.
25	45.	45.	42.	42.	41.	42.	44.	45.	49.	47.	45.	45.	47.	51.	51.	52.	47.	49.	49.	45.	42.	41.	40.	38.	45.
26	999.	999.	36.	35.	35.	34.	999.	40.	40.	999.	45.	42.	42.	47.	44.	999.	999.	999.	40.	38.	36.	999.	35.	35.	999.
27	35.	34.	33.	33.	32.	33.	35.	999.	35.	40.	42.	44.	44.	45.	45.	45.	45.	44.	42.	41.	40.	39.	38.	999.	39.
28	36.	35.	35.	35.	35.	35.	35.	35.	35.	999.	999.	999.	999.	37.	37.	37.	999.	999.	999.	999.	999.	999.	999.	36.	999.
29	36.	36.	35.	35.	35.	35.	38.	42.	42.	47.	46.	49.	54.	51.	53.	53.	54.	52.	54.	53.	47.	45.	44.	44.	45.
30	44.	42.	42.	42.	45.	46.	47.	48.	53.	54.	58.	56.	56.	61.	57.	63.	63.	62.	62.	60.	54.	53.	51.	51.	53.
AVG	43.	42.	41.	41.	40.	41.	43.	45.	46.	49.	50.	51.	51.	52.	53.	53.	54.	53.	52.	50.	47.	46.	44.	44.	47.
DAYS	25	26	27	26	27	28	26	27	27	24	27	27	27	28	28	27	26	25	26	26	26	24	26	25	631

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 631 NUMBER OF MISSING HOURS = 89 DATA CAPTURE = 87.64 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 47.284 MAXIMUM HOURLY VALUE = 65.000 STANDARD DEVIATION = 7.4725

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-31

MERGED DATA DRY BULB TEMP (DEGF) DATA FOR JULY 1979

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	AVG
1	51.	54.	48.	54.	57.	49.	51.	54.	58.	62.	65.	65.	65.	67.	69.	69.	69.	72.	69.	57.	62.	54.	56.	57.	60.
2	54.	54.	56.	55.	52.	55.	50.	56.	56.	62.	65.	65.	69.	71.	74.	72.	70.	72.	71.	65.	62.	62.	61.	59.	62.
3	58.	54.	57.	56.	54.	56.	58.	62.	61.	67.	71.	72.	76.	76.	77.	78.	74.	77.	76.	79.	69.	67.	67.	65.	67.
4	64.	64.	62.	60.	59.	58.	62.	62.	65.	69.	72.	76.	78.	80.	81.	81.	81.	82.	81.	78.	74.	69.	69.	68.	71.
5	69.	67.	65.	63.	65.	64.	65.	70.	72.	76.	78.	80.	81.	82.	82.	81.	83.	81.	80.	78.	72.	71.	69.	68.	73.
6	67.	59.	64.	65.	66.	67.	67.	71.	72.	74.	76.	78.	81.	83.	82.	83.	81.	80.	80.	76.	76.	72.	72.	71.	74.
7	64.	64.	65.	64.	65.	61.	999.	65.	69.	71.	67.	66.	63.	64.	67.	69.	65.	63.	62.	60.	58.	58.	55.	56.	64.
8	57.	57.	57.	56.	56.	54.	60.	62.	63.	69.	67.	67.	72.	71.	72.	74.	75.	74.	75.	72.	67.	65.	65.	62.	66.
9	62.	61.	60.	58.	58.	59.	59.	65.	71.	74.	76.	76.	80.	83.	83.	83.	84.	83.	80.	76.	76.	72.	72.	999.	72.
10	65.	68.	67.	63.	62.	63.	65.	71.	72.	74.	76.	80.	76.	81.	84.	83.	999.	999.	999.	999.	69.	79.	69.	69.	72.
11	69.	66.	67.	65.	66.	63.	62.	56.	55.	57.	60.	59.	58.	59.	58.	58.	56.	59.	56.	56.	57.	57.	56.	55.	60.
12	56.	56.	56.	58.	56.	56.	56.	60.	66.	69.	65.	70.	72.	72.	69.	71.	76.	72.	71.	66.	62.	60.	58.	57.	63.
13	56.	54.	56.	54.	51.	52.	56.	58.	60.	63.	67.	69.	69.	69.	69.	71.	71.	69.	67.	63.	60.	54.	55.	54.	61.
14	54.	53.	50.	49.	48.	50.	56.	57.	59.	62.	63.	65.	66.	66.	67.	63.	60.	58.	56.	54.	54.	53.	51.	50.	57.
15	49.	44.	47.	46.	45.	45.	46.	51.	51.	51.	53.	56.	56.	56.	56.	56.	51.	51.	51.	49.	49.	46.	47.	45.	50.
16	45.	45.	45.	45.	45.	45.	46.	48.	51.	54.	56.	55.	56.	56.	55.	56.	56.	55.	55.	51.	49.	46.	47.	45.	50.
17	45.	45.	46.	44.	44.	41.	43.	45.	46.	48.	50.	51.	50.	51.	51.	51.	51.	51.	51.	49.	48.	45.	45.	44.	47.
18	44.	42.	42.	42.	42.	40.	47.	50.	52.	54.	54.	54.	54.	54.	55.	56.	55.	56.	56.	51.	47.	37.	46.	45.	49.
19	46.	46.	42.	42.	45.	44.	47.	51.	56.	58.	56.	59.	59.	61.	64.	59.	59.	54.	55.	54.	52.	51.	49.	49.	52.
20	47.	47.	47.	46.	45.	45.	48.	51.	58.	56.	58.	60.	60.	60.	62.	61.	62.	60.	58.	59.	53.	51.	49.	47.	54.
21	46.	45.	42.	44.	44.	44.	46.	49.	53.	56.	55.	58.	61.	60.	63.	62.	62.	61.	59.	59.	53.	51.	50.	48.	55.
22	47.	47.	47.	45.	45.	45.	49.	52.	54.	59.	60.	62.	65.	63.	66.	67.	67.	64.	62.	60.	56.	55.	54.	59.	56.
23	53.	52.	50.	48.	47.	51.	55.	60.	63.	66.	68.	70.	72.	72.	72.	72.	72.	71.	70.	67.	65.	64.	63.	63.	63.
24	62.	58.	59.	56.	57.	57.	59.	59.	65.	68.	66.	59.	58.	61.	63.	62.	61.	62.	60.	58.	56.	51.	52.	51.	59.
25	51.	51.	51.	49.	50.	50.	53.	56.	59.	60.	62.	63.	65.	67.	67.	69.	68.	67.	65.	62.	60.	59.	56.	55.	59.
26	56.	56.	56.	54.	53.	54.	56.	60.	65.	69.	74.	76.	77.	79.	80.	78.	78.	77.	76.	72.	67.	65.	65.	63.	67.
27	63.	62.	60.	58.	58.	60.	65.	67.	71.	72.	74.	76.	75.	75.	72.	71.	71.	67.	65.	55.	67.	66.	63.	62.	66.
28	62.	50.	48.	48.	47.	49.	48.	48.	48.	50.	52.	52.	56.	56.	55.	57.	58.	58.	58.	52.	49.	47.	48.	46.	51.
29	44.	44.	44.	43.	43.	41.	41.	43.	48.	47.	48.	49.	51.	51.	52.	52.	52.	52.	52.	51.	49.	47.	48.	45.	47.
30	45.	45.	44.	44.	44.	44.	44.	46.	47.	51.	51.	51.	54.	56.	56.	60.	60.	60.	60.	56.	56.	56.	56.	55.	52.
31	52.	52.	52.	52.	51.	49.	49.	50.	51.	53.	54.	56.	57.	58.	58.	58.	58.	58.	58.	56.	56.	53.	53.	53.	54.
AVG	55.	54.	53.	52.	52.	52.	54.	56.	59.	62.	63.	64.	65.	66.	67.	67.	66.	66.	66.	62.	59.	58.	57.	55.	59.
DAYS	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	30	738

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 738 NUMBER OF MISSING HOURS = 6 DATA CAPTURE = 99.19 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 59.679 MAXIMUM HOURLY VALUE = 84.000 STANDARD DEVIATION = 10.1224

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-32

MERGED DATA DRY BULB TEMP (DEGF) DATA FOR AUGUST 1979

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	AVG
1	53.	52.	52.	51.	49.	48.	48.	51.	52.	54.	54.	56.	55.	56.	56.	56.	56.	52.	51.	51.	50.	48.	47.	47.	52.
2	47.	46.	46.	45.	45.	45.	46.	44.	46.	46.	48.	49.	50.	51.	51.	49.	49.	48.	47.	46.	46.	45.	44.	44.	47.
3	44.	44.	44.	44.	44.	44.	46.	45.	46.	46.	49.	47.	49.	52.	54.	54.	56.	56.	56.	54.	52.	52.	51.	51.	49.
4	51.	49.	49.	49.	49.	46.	49.	48.	51.	53.	56.	57.	60.	61.	63.	63.	64.	63.	62.	60.	57.	56.	56.	52.	55.
5	52.	51.	51.	51.	51.	50.	49.	49.	51.	52.	52.	54.	57.	58.	59.	57.	57.	57.	56.	53.	51.	49.	48.	47.	53.
6	48.	46.	45.	46.	45.	45.	46.	49.	47.	50.	51.	49.	51.	52.	56.	56.	56.	56.	51.	51.	51.	50.	49.	47.	49.
7	46.	46.	45.	44.	43.	43.	45.	43.	46.	47.	48.	49.	48.	49.	49.	49.	49.	48.	48.	48.	46.	45.	43.	43.	46.
8	42.	41.	41.	41.	40.	40.	40.	42.	43.	45.	45.	46.	49.	49.	51.	51.	51.	53.	51.	52.	51.	48.	47.	47.	46.
9	47.	47.	47.	47.	48.	48.	46.	49.	53.	51.	52.	56.	57.	57.	56.	55.	56.	56.	56.	53.	51.	50.	49.	49.	51.
10	48.	47.	46.	46.	46.	46.	46.	46.	49.	51.	52.	52.	52.	54.	56.	56.	55.	56.	55.	54.	51.	54.	49.	48.	50.
11	48.	47.	46.	45.	42.	40.	40.	41.	41.	41.	43.	44.	46.	49.	51.	56.	56.	56.	54.	52.	49.	47.	46.	46.	47.
12	47.	48.	47.	46.	46.	46.	46.	47.	51.	52.	53.	56.	57.	59.	60.	62.	61.	63.	61.	60.	56.	53.	52.	51.	53.
13	51.	50.	50.	49.	48.	49.	49.	50.	51.	52.	56.	58.	60.	61.	65.	65.	65.	64.	64.	63.	56.	56.	55.	55.	56.
14	56.	52.	52.	53.	54.	52.	52.	56.	58.	60.	64.	65.	66.	66.	69.	64.	68.	69.	68.	64.	65.	63.	62.	60.	61.
15	60.	60.	60.	60.	59.	59.	59.	59.	60.	61.	62.	64.	65.	65.	65.	65.	64.	65.	61.	58.	57.	57.	57.	58.	61.
16	58.	58.	59.	56.	55.	52.	52.	52.	52.	55.	54.	56.	52.	52.	52.	53.	51.	52.	52.	51.	50.	49.	49.	49.	52.
17	49.	49.	49.	49.	49.	48.	49.	50.	51.	54.	53.	53.	54.	52.	56.	52.	52.	51.	51.	51.	49.	49.	49.	49.	51.
18	49.	49.	50.	49.	49.	48.	49.	47.	47.	48.	49.	49.	49.	52.	52.	56.	53.	52.	52.	51.	51.	50.	50.	50.	50.
19	50.	48.	49.	49.	49.	49.	48.	50.	52.	52.	56.	56.	56.	999.	56.	61.	65.	63.	60.	60.	56.	56.	55.	58.	54.
20	54.	54.	53.	52.	51.	51.	51.	52.	52.	54.	55.	58.	999.	999.	55.	54.	61.	61.	60.	59.	999.	999.	999.	999.	55.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	53.	55.	58.	999.	54.	61.	61.	60.	60.	56.	999.	53.	51.	49.	999.	999.
22	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	45.	45.	46.	45.	46.	47.	47.	47.	45.	44.	42.	999.	999.	999.	999.
23	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	42.	42.	999.	999.	999.	46.	45.	47.	47.	46.	45.	45.	45.	999.	999.
24	999.	999.	999.	999.	999.	999.	999.	999.	999.	51.	56.	54.	57.	58.	56.	58.	58.	57.	56.	48.	45.	44.	43.	43.	999.
25	42.	42.	41.	41.	40.	40.	40.	40.	42.	44.	45.	46.	51.	53.	54.	51.	46.	47.	47.	45.	45.	44.	43.	42.	45.
26	42.	42.	41.	40.	40.	38.	38.	38.	39.	40.	40.	42.	45.	47.	47.	49.	51.	47.	45.	45.	45.	45.	45.	45.	43.
27	45.	44.	44.	44.	44.	44.	44.	38.	45.	45.	46.	47.	51.	55.	55.	56.	56.	54.	53.	51.	49.	44.	47.	49.	48.
28	46.	42.	40.	40.	40.	40.	40.	40.	43.	46.	49.	51.	53.	55.	53.	58.	52.	52.	49.	47.	45.	44.	44.	43.	46.
29	43.	42.	41.	41.	41.	40.	43.	40.	42.	45.	47.	48.	49.	48.	999.	53.	999.	999.	999.	999.	999.	999.	999.	999.	999.
30	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	48.	42.	41.	42.	42.	42.	999.
31	41.	40.	999.	39.	999.	999.	999.	999.	999.	999.	999.	999.	41.	999.	999.	45.	999.	45.	44.	44.	42.	42.	999.	999.	999.
AVG	48.	48.	47.	47.	47.	46.	46.	47.	48.	50.	51.	52.	53.	54.	55.	55.	56.	55.	51.	52.	50.	49.	49.	48.	50.
DAYS	26	26	25	26	25	25	25	25	25	27	29	29	27	26	27	30	28	29	30	29	29	28	27	29	648

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 648 NUMBER OF MISSING HOURS = 96 DATA CAPTURE = 87.10 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 50.530 MAXIMUM HOURLY VALUE = 69.000 STANDARD DEVIATION = 6.2167

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-33

MERGED DATA — DRY BULB TEMP (DEGF) — DATA FOR SEPTEMBER 1979

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	AVG
1	34.	34.	32.	32.	32.	32.	31.	32.	38.	44.	46.	48.	48.	49.	51.	53.	54.	52.	49.	48.	47.	44.	44.	45.	43.
2	42.	41.	41.	41.	40.	40.	38.	39.	41.	42.	46.	46.	46.	49.	49.	48.	48.	47.	46.	46.	45.	43.	42.	41.	44.
3	40.	39.	39.	39.	38.	38.	38.	38.	39.	42.	45.	46.	46.	48.	50.	52.	52.	51.	49.	50.	42.	40.	37.	39.	43.
4	34.	34.	33.	33.	32.	32.	31.	32.	38.	42.	46.	49.	51.	54.	56.	59.	62.	63.	60.	56.	53.	51.	48.	47.	46.
5	45.	42.	41.	41.	51.	51.	49.	50.	54.	57.	59.	62.	64.	69.	70.	70.	71.	71.	69.	65.	62.	59.	58.	55.	58.
6	56.	56.	56.	51.	51.	51.	49.	50.	54.	57.	60.	63.	65.	66.	69.	71.	72.	72.	71.	67.	62.	62.	62.	62.	60.
7	60.	58.	58.	58.	56.	56.	54.	53.	54.	54.	62.	63.	63.	65.	65.	67.	67.	66.	65.	62.	58.	56.	56.	58.	60.
8	53.	50.	48.	45.	46.	43.	41.	41.	42.	45.	47.	51.	53.	55.	56.	57.	58.	56.	56.	62.	58.	57.	55.	53.	51.
9	53.	53.	51.	51.	51.	51.	51.	51.	55.	57.	58.	64.	67.	71.	71.	71.	75.	73.	69.	64.	62.	60.	58.	57.	60.
10	57.	55.	53.	53.	53.	53.	53.	55.	58.	62.	64.	64.	67.	67.	71.	71.	69.	67.	67.	64.	62.	60.	58.	58.	61.
11	57.	57.	55.	57.	56.	999.	999.	999.	64.	66.	69.	53.	56.	62.	64.	67.	69.	66.	64.	62.	58.	55.	53.	57.	56.
12	57.	57.	55.	55.	53.	53.	55.	58.	62.	64.	67.	71.	75.	76.	78.	80.	84.	82.	78.	75.	71.	66.	66.	66.	67.
13	66.	62.	60.	60.	60.	60.	60.	60.	62.	66.	71.	78.	82.	84.	85.	87.	89.	91.	86.	78.	76.	73.	71.	69.	72.
14	69.	67.	69.	69.	67.	67.	71.	75.	80.	85.	89.	91.	91.	95.	96.	100.	102.	98.	96.	96.	88.	80.	80.	78.	83.
15	78.	76.	75.	75.	73.	73.	73.	75.	76.	80.	87.	91.	91.	91.	95.	91.	91.	84.	76.	75.	75.	75.	73.	71.	80.
16	69.	67.	66.	67.	67.	67.	64.	64.	66.	67.	67.	66.	62.	62.	62.	62.	62.	62.	62.	58.	58.	58.	58.	57.	63.
17	55.	55.	55.	55.	55.	55.	55.	58.	64.	67.	71.	67.	67.	66.	66.	69.	67.	67.	64.	62.	62.	60.	60.	58.	62.
18	58.	58.	58.	58.	58.	57.	57.	57.	57.	58.	58.	62.	66.	67.	67.	67.	66.	66.	66.	62.	62.	62.	62.	62.	61.
19	62.	62.	62.	62.	62.	62.	62.	64.	64.	67.	71.	78.	80.	80.	85.	86.	82.	78.	75.	71.	71.	67.	66.	66.	70.
20	64.	64.	62.	60.	58.	58.	58.	58.	60.	62.	62.	62.	62.	64.	67.	71.	73.	75.	71.	66.	62.	62.	62.	58.	65.
21	58.	56.	57.	55.	55.	53.	55.	57.	62.	64.	64.	71.	71.	71.	71.	71.	71.	67.	62.	62.	56.	57.	51.	55.	61.
22	46.	38.	35.	33.	31.	31.	31.	37.	999.	999.	46.	47.	47.	47.	51.	51.	51.	51.	47.	46.	999.	999.	46.	46.	43.
23	44.	999.	999.	999.	40.	40.	40.	40.	40.	40.	999.	999.	999.	999.	46.	46.	47.	47.	47.	47.	47.	47.	47.	47.	999.
24	51.	48.	45.	42.	41.	42.	42.	42.	42.	46.	49.	53.	56.	56.	55.	54.	52.	51.	49.	48.	47.	46.	46.	46.	48.
25	44.	45.	38.	38.	35.	35.	35.	36.	41.	43.	46.	49.	44.	50.	49.	49.	49.	46.	44.	42.	38.	36.	34.	33.	42.
26	34.	32.	32.	31.	31.	30.	30.	999.	35.	41.	44.	48.	51.	56.	56.	56.	56.	56.	52.	47.	44.	42.	42.	42.	43.
27	42.	41.	40.	38.	38.	37.	35.	35.	37.	41.	43.	46.	49.	54.	55.	56.	56.	55.	51.	48.	47.	48.	46.	46.	45.
28	46.	45.	42.	42.	42.	41.	42.	41.	42.	45.	46.	48.	51.	53.	52.	52.	51.	51.	46.	42.	40.	37.	35.	35.	44.
29	33.	32.	32.	31.	31.	31.	31.	31.	36.	42.	45.	48.	51.	55.	56.	58.	57.	56.	51.	46.	42.	41.	40.	37.	42.
30	36.	35.	36.	34.	33.	32.	32.	32.	37.	42.	46.	49.	52.	56.	57.	59.	59.	57.	51.	46.	41.	40.	38.	37.	43.
AVG	51.	50.	49.	48.	47.	47.	47.	49.	51.	54.	57.	60.	61.	63.	64.	65.	65.	64.	61.	59.	56.	55.	53.	52.	55.
DAYS	30	29	29	29	30	29	29	26	29	29	29	29	29	29	30	30	30	30	30	30	29	29	30	30	705

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 705 NUMBER OF MISSING HOURS = 15 DATA CAPTURE = 97.92 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 55.457 MAXIMUM HOURLY VALUE = 102.000 STANDARD DEVIATION = 13.8793

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-34

MERGED DATA — DRY BULB TEMP (DEGF) — DATA FOR OCTOBER 1979

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	AVG
1	36.	36.	36.	34.	34.	34.	32.	32.	38.	46.	49.	52.	56.	59.	62.	63.	63.	60.	56.	48.	46.	44.	42.	42.	46.
2	42.	40.	40.	41.	41.	41.	41.	41.	42.	46.	52.	56.	58.	60.	64.	65.	64.	62.	60.	58.	56.	54.	53.	50.	51.
3	48.	46.	46.	44.	42.	41.	41.	42.	44.	45.	46.	46.	46.	45.	45.	44.	43.	42.	41.	41.	40.	38.	37.	39.	43.
4	35.	36.	37.	37.	37.	37.	37.	39.	41.	42.	43.	43.	43.	43.	42.	42.	41.	40.	37.	37.	37.	37.	37.	37.	39.
5	37.	36.	35.	35.	35.	35.	35.	35.	36.	37.	39.	40.	41.	41.	41.	41.	39.	37.	34.	33.	32.	29.	999.	999.	37.
6	28.	26.	25.	25.	25.	25.	25.	28.	25.	34.	38.	42.	43.	42.	42.	42.	41.	39.	35.	33.	30.	999.	27.	25.	32.
7	25.	24.	24.	22.	22.	21.	20.	22.	999.	33.	37.	40.	41.	42.	42.	41.	41.	37.	35.	32.	31.	999.	28.	26.	31.
8	25.	25.	24.	23.	22.	22.	23.	25.	30.	33.	36.	41.	43.	43.	42.	42.	41.	39.	36.	32.	32.	32.	31.	32.	32.
9	32.	35.	35.	35.	35.	35.	35.	36.	39.	40.	43.	43.	44.	45.	45.	43.	42.	39.	39.	38.	38.	37.	37.	37.	39.
10	37.	37.	37.	36.	35.	35.	35.	37.	41.	43.	42.	43.	44.	45.	44.	42.	42.	41.	39.	39.	39.	39.	39.	38.	40.
11	39.	39.	38.	38.	38.	38.	38.	38.	39.	41.	43.	43.	42.	42.	43.	43.	42.	37.	33.	32.	32.	32.	33.	34.	38.
12	35.	35.	35.	35.	35.	35.	34.	33.	39.	43.	44.	48.	48.	50.	50.	50.	48.	42.	39.	37.	33.	32.	32.	30.	39.
13	30.	31.	32.	32.	31.	29.	30.	30.	36.	42.	44.	47.	48.	48.	47.	45.	43.	42.	41.	37.	35.	34.	35.	37.	38.
14	39.	37.	38.	40.	37.	35.	35.	35.	35.	35.	35.	37.	40.	42.	42.	42.	42.	41.	40.	40.	40.	38.	37.	37.	38.
15	36.	35.	33.	33.	32.	30.	28.	30.	33.	41.	43.	44.	45.	45.	44.	43.	41.	39.	37.	37.	36.	36.	36.	35.	37.
16	35.	35.	35.	35.	35.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
17	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
18	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
19	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
20	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	31.	32.	33.	33.	31.	29.	999.	27.	25.	25.	25.	24.	24.	24.	999.
22	24.	24.	24.	24.	24.	23.	22.	22.	24.	30.	999.	30.	31.	26.	26.	24.	22.	22.	22.	22.	22.	22.	22.	22.	24.
23	22.	22.	22.	22.	22.	22.	21.	21.	21.	22.	24.	26.	26.	26.	26.	26.	26.	23.	23.	23.	21.	21.	21.	20.	23.
24	20.	21.	21.	21.	20.	20.	20.	19.	21.	22.	26.	29.	30.	33.	33.	31.	29.	26.	26.	25.	24.	23.	23.	22.	24.
25	22.	22.	22.	22.	22.	22.	22.	22.	22.	24.	26.	28.	29.	29.	29.	28.	28.	26.	26.	24.	24.	24.	24.	28.	25.
26	25.	25.	24.	24.	22.	21.	21.	21.	22.	26.	28.	29.	29.	29.	29.	26.	25.	24.	23.	23.	23.	22.	22.	22.	24.
27	22.	22.	22.	22.	22.	22.	22.	22.	24.	26.	28.	31.	31.	31.	31.	31.	29.	28.	28.	27.	26.	26.	22.	22.	26.
28	22.	22.	22.	22.	21.	22.	22.	22.	22.	23.	28.	29.	33.	34.	33.	31.	29.	26.	24.	26.	26.	24.	24.	24.	25.
29	23.	22.	22.	22.	22.	22.	23.	23.	24.	25.	26.	29.	29.	29.	29.	29.	29.	28.	27.	26.	25.	25.	26.	26.	26.
30	26.	26.	24.	24.	24.	26.	26.	24.	26.	28.	33.	31.	33.	33.	31.	31.	28.	26.	26.	26.	24.	26.	26.	27.	27.
31	27.	27.	26.	27.	29.	31.	31.	29.	29.	29.	999.	37.	37.	42.	44.	42.	38.	36.	36.	37.	39.	38.	37.	37.	34.
AVG	30.	30.	30.	30.	29.	29.	29.	29.	31.	34.	37.	38.	39.	40.	40.	39.	38.	36.	36.	33.	32.	32.	31.	31.	33.
DAYS	26	26	26	26	26	25	25	25	24	25	24	26	26	26	26	26	25	26	26	26	26	24	25	25	611

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 611 NUMBER OF MISSING HOURS = 133 DATA CAPTURE = 82.12 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 33.435 MAXIMUM HOURLY VALUE = 65.000 STANDARD DEVIATION = 9.1005

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-35

MERGED DATA   DRY BULB TEMP   (DEGF)   DATA FOR NOVEMBER 1975

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	AVG
1	999.	33.	32.	31.	31.	29.	30.	31.	32.	33.	33.	33.	33.	31.	33.	35.	32.	31.	30.	30.	30.	29.	29.	29.	31.
2	29.	29.	29.	28.	29.	28.	29.	28.	29.	29.	29.	29.	29.	32.	32.	33.	31.	30.	29.	29.	29.	29.	32.	34.	30.
3	999.	999.	37.	41.	41.	42.	42.	43.	44.	46.	49.	49.	50.	46.	47.	46.	44.	42.	40.	40.	40.	42.	42.	44.	44.
4	44.	46.	47.	47.	47.	47.	47.	47.	47.	47.	48.	47.	50.	50.	49.	47.	47.	48.	45.	46.	45.	42.	42.	42.	46.
5	41.	41.	41.	41.	41.	41.	41.	42.	42.	42.	42.	40.	39.	38.	37.	999.	33.	30.	27.	25.	24.	24.	24.	23.	36.
6	22.	22.	22.	22.	21.	21.	21.	21.	22.	27.	26.	28.	29.	24.	29.	26.	26.	27.	26.	26.	26.	24.	26.	26.	24.
7	26.	24.	25.	28.	28.	27.	27.	26.	25.	27.	28.	29.	29.	29.	31.	29.	27.	26.	26.	24.	22.	21.	21.	21.	26.
8	21.	22.	22.	21.	21.	21.	21.	21.	22.	24.	26.	24.	21.	22.	24.	22.	21.	19.	19.	17.	17.	16.	16.	15.	21.
9	15.	15.	15.	13.	13.	13.	13.	15.	17.	20.	22.	23.	26.	26.	23.	22.	19.	16.	14.	12.	12.	12.	12.	12.	17.
10	12.	12.	12.	12.	12.	12.	12.	12.	12.	15.	16.	18.	19.	21.	21.	21.	19.	16.	16.	17.	17.	15.	15.	13.	15.
11	14.	15.	14.	14.	14.	14.	14.	15.	15.	17.	18.	19.	21.	22.	22.	22.	23.	23.	25.	24.	25.	26.	26.	26.	19.
12	26.	29.	29.	29.	27.	27.	27.	27.	27.	29.	33.	33.	34.	34.	34.	32.	29.	29.	29.	29.	31.	31.	30.	31.	30.
13	30.	29.	29.	33.	33.	33.	34.	36.	37.	38.	38.	34.	38.	37.	999.	34.	33.	37.	34.	33.	32.	31.	30.	30.	34.
14	30.	29.	29.	29.	29.	31.	31.	31.	33.	999.	999.	999.	999.	34.	33.	33.	31.	30.	29.	29.	30.	33.	31.	32.	32.
15	33.	33.	33.	31.	29.	29.	26.	26.	25.	26.	26.	26.	26.	26.	26.	24.	24.	23.	22.	22.	22.	21.	21.	22.	26.
16	27.	22.	22.	21.	19.	17.	15.	15.	15.	17.	19.	21.	22.	24.	26.	22.	21.	19.	18.	17.	19.	19.	19.	17.	20.
17	16.	16.	16.	15.	16.	17.	16.	15.	15.	17.	19.	21.	21.	22.	22.	22.	19.	16.	15.	15.	14.	13.	12.	12.	17.
18	12.	10.	9.	9.	10.	9.	8.	8.	10.	13.	16.	19.	19.	22.	22.	19.	15.	15.	14.	12.	12.	12.	12.	12.	13.
19	12.	12.	12.	12.	10.	9.	8.	8.	8.	8.	10.	11.	12.	12.	13.	12.	12.	12.	12.	14.	12.	12.	12.	13.	11.
20	13.	14.	13.	13.	12.	12.	12.	12.	12.	12.	15.	19.	21.	22.	22.	21.	15.	12.	12.	14.	12.	12.	11.	10.	14.
21	10.	10.	9.	8.	8.	8.	8.	8.	10.	12.	14.	14.	14.	14.	13.	13.	13.	13.	13.	13.	13.	13.	13.	15.	12.
22	15.	14.	16.	16.	16.	17.	17.	17.	17.	19.	22.	22.	26.	24.	23.	22.	21.	21.	21.	21.	20.	19.	20.	22.	20.
23	22.	21.	21.	21.	21.	21.	19.	19.	19.	19.	21.	28.	22.	24.	24.	23.	26.	27.	29.	28.	24.	29.	29.	24.	24.
24	29.	27.	26.	26.	26.	25.	25.	24.	24.	24.	25.	29.	29.	28.	26.	25.	22.	24.	21.	21.	21.	21.	21.	21.	25.
25	20.	19.	17.	15.	16.	15.	14.	15.	15.	21.	22.	22.	21.	20.	19.	15.	17.	18.	19.	19.	19.	21.	26.	24.	19.
26	29.	25.	25.	22.	22.	21.	19.	17.	17.	17.	17.	17.	17.	17.	17.	15.	14.	13.	13.	13.	12.	12.	12.	12.	17.
27	11.	10.	10.	9.	8.	9.	7.	8.	8.	8.	8.	8.	7.	7.	7.	4.	5.	4.	4.	4.	1.	3.	3.	4.	6.
28	6.	6.	6.	6.	6.	6.	6.	6.	9.	12.	12.	13.	17.	17.	16.	15.	14.	15.	13.	13.	13.	13.	13.	13.	10.
29	13.	13.	13.	13.	13.	13.	13.	13.	13.	17.	21.	24.	24.	23.	22.	18.	16.	16.	15.	15.	15.	15.	15.	15.	16.
30	16.	16.	16.	16.	17.	17.	17.	17.	17.	18.	19.	19.	19.	19.	20.	20.	20.	21.	21.	21.	21.	21.	21.	24.	19.
AVG	21.	21.	22.	21.	21.	21.	21.	21.	21.	22.	24.	25.	25.	26.	25.	24.	23.	22.	22.	21.	21.	21.	21.	22.	22.
DAYS	29	29	30	30	30	30	30	30	30	29	29	29	29	30	29	29	30	30	30	30	30	30	30	30	711

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 711 NUMBER OF MISSING HOURS = 9 DATA CAPTURE = 98.75 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 22.217 MAXIMUM HOURLY VALUE = 50.000 STANDARD DEVIATION = 9.9777

NOTE 1 999 = MISSING VALUE INDICATOR

TABLE A2-36

MERGED DATA   DRY BULB TEMP   (DEGF)   DATA FOR DECEMBER 1975

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	AVG
1	31.	33.	33.	30.	30.	31.	32.	31.	31.	30.	33.	33.	33.	33.	31.	29.	26.	26.	28.	28.	29.	29.	29.	31.	30.
2	32.	33.	33.	33.	33.	33.	34.	999.	999.	37.	38.	37.	999.	999.	999.	34.	36.	35.	33.	33.	33.	33.	34.	999.	36.
3	999.	999.	33.	33.	32.	32.	32.	32.	32.	32.	33.	33.	33.	32.	31.	30.	29.	29.	29.	29.	29.	29.	29.	29.	31.
4	28.	27.	26.	22.	21.	19.	17.	17.	17.	19.	21.	22.	21.	22.	22.	19.	17.	17.	17.	18.	19.	19.	19.	20.	20.
5	20.	21.	21.	22.	22.	22.	22.	22.	22.	26.	28.	29.	29.	29.	29.	24.	22.	21.	21.	21.	21.	21.	21.	22.	23.
6	22.	25.	25.	25.	26.	26.	26.	26.	27.	28.	28.	28.	28.	29.	28.	26.	26.	26.	25.	24.	24.	24.	24.	24.	26.
7	24.	24.	26.	26.	28.	29.	29.	29.	27.	27.	29.	33.	37.	999.	33.	29.	29.	27.	26.	26.	26.	26.	26.	29.	28.
8	33.	33.	33.	32.	32.	33.	33.	36.	36.	37.	38.	37.	37.	40.	38.	999.	32.	999.	999.	999.	33.	31.	32.	32.	34.
9	32.	33.	33.	33.	32.	31.	30.	29.	29.	24.	28.	29.	29.	26.	24.	22.	22.	22.	21.	21.	19.	19.	18.	18.	26.
10	17.	17.	17.	17.	15.	14.	12.	12.	11.	11.	12.	12.	12.	12.	12.	10.	8.	4.	8.	7.	6.	6.	4.	4.	11.
11	4.	3.	3.	3.	3.	3.	2.	1.	2.	8.	10.	13.	13.	8.	6.	4.	3.	1.	0.	-1.	-1.	-1.	-1.	0.	4.
12	0.	31.	31.	0.	-1.	-1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	3.
13	0.	0.	0.	0.	29.	29.	29.	29.	29.	29.	30.	31.	31.	31.	31.	29.	28.	28.	27.	27.	27.	27.	26.	26.	20.
14	28.	31.	29.	29.	29.	28.	27.	27.	28.	29.	29.	30.	30.	30.	30.	29.	29.	30.	30.	31.	31.	30.	30.	30.	29.
15	30.	30.	31.	31.	30.	30.	29.	29.	30.	31.	31.	32.	32.	32.	33.	32.	30.	29.	29.	28.	28.	28.	27.	27.	30.
16	27.	27.	27.	27.	27.	27.	27.	27.	27.	28.	29.	30.	31.	32.	32.	31.	31.	31.	31.	31.	31.	31.	31.	31.	29.
17	31.	31.	31.	31.	30.	30.	30.	30.	30.	30.	32.	33.	33.	25.	20.	16.	12.	12.	12.	12.	12.	12.	12.	12.	23.
18	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	14.	18.	20.	18.	15.	16.	14.	40.	16.	13.	13.	14.	16.	17.	14.
19	12.	12.	12.	12.	12.	12.	12.	12.	11.	12.	12.	15.	16.	16.	16.	13.	12.	11.	11.	11.	11.	10.	10.	10.	12.
20	10.	9.	9.	9.	11.	11.	11.	11.	11.	12.	16.	18.	23.	23.	20.	18.	15.	14.	14.	14.	12.	12.	9.	9.	13.
21	9.	9.	9.	9.	9.	9.	9.	9.	9.	12.	14.	15.	15.	15.	12.	12.	12.	12.	12.	13.	14.	14.	14.	14.	12.
22	14.	15.	15.	15.	15.	15.	16.	16.	16.	14.	21.	25.	27.	27.	23.	19.	15.	14.	14.	14.	14.	14.	14.	16.	17.
23	16.	16.	16.	16.	16.	17.	17.	18.	18.	18.	19.	19.	20.	20.	19.	18.	18.	14.	16.	18.	18.	18.	18.	18.	18.
24	18.	19.	20.	20.	21.	22.	23.	23.	23.	23.	27.	33.	38.	38.	38.	33.	999.	31.	31.	31.	31.	30.	30.	29.	27.
25	28.	29.	27.	25.	25.	22.	21.	21.	21.	22.	24.	25.	28.	28.	25.	23.	21.	21.	21.	21.	21.	21.	21.	21.	23.
26	21.	21.	21.	21.	21.	25.	25.	25.	27.	30.	31.	999.	31.	30.	30.	30.	29.	29.	27.	27.	27.	27.	27.	25.	26.
27	23.	21.	21.	21.	21.	20.	20.	20.	20.	21.	25.	24.	23.	23.	22.	21.	21.	20.	20.	20.	20.	20.	20.	19.	21.
28	19.	19.	18.	18.	18.	18.	18.	19.	20.	23.	23.	23.	23.	27.	27.	23.	22.	21.	21.	21.	21.	21.	21.	22.	21.
29	23.	26.	27.	29.	30.	27.	30.	30.	30.	30.	30.	33.	33.	33.	999.	31.	29.	29.	29.	27.	26.	23.	23.	22.	28.
30	20.	20.	20.	20.	20.	14.	14.	17.	17.	18.	18.	19.	19.	18.	18.	18.	16.	15.	14.	12.	12.	12.	10.	9.	17.
31	9.	8.	7.	7.	5.	5.	3.	3.	2.	2.	4.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
AVG	20.	21.	21.	20.	21.	21.	21.	20.	21.	22.	25.	25.	26.	25.	24.	22.	21.	21.	20.	20.	20.	20.	20.	19.	21.
DAYS	30	30	31	31	31	31	31	30	30	31	31	29	29	28	28	29	29	29	29	29	30	30	30	29	715

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 715 NUMBER OF MISSING HOURS = 29 DATA CAPTURE = 96.10 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 21.351 MAXIMUM HOURLY VALUE = 40.000 STANDARD DEVIATION = 9.3059

NOTE 1 999 = MISSING VALUE INDICATOR

Correlation analyses based on the available MEP data showed that Station 7 winds most accurately represented flow that would transport the plume of the proposed power plant (see Table A2-37). Whenever data were missing from Station 7, substitutions were made with data from Stations 8, 6, 5, 4, and 1 on the basis of seasonal correlations. The correlation coefficients for the wind direction are presented in Table A2-37.

Tables A2-38 and A2-39 indicate the periods for which wind direction and wind speed are substituted. For periods when replacement data were missing at the station with the best seasonal correlation, information from the next-best station was used. In some rare cases where only one station reported data, these values were used regardless of the correlation analysis results.

Hourly-averaged wind speed data presented monthly for the year of 1975 are given in Tables A2-40 to A2-51. The tabulated values are given in miles per hour. Periods for which no valid replacement data were available are designated by 999. Hours with variable winds are indicated by 888 in the table.

The wind direction data are similarly presented as the wind speed data in Tables A2-52 to A2-63. The units are angular degrees measured clockwise from true north and reported to the nearest 5 degrees.

(c) Humidity

Humidity is an important variable in ERT's cooling tower model. It is necessary that the humidity data be in the form of sequential, hourly observations. Data from Mechanical Station 7, near the site of the proposed cooling towers, are considered to be most representative of the humidity that will be found at the height of the cooling tower plumes. The available 1975 humidity data from the mechanical weather stations are somewhat suspect in that an unusually low number of hours with high (>90%) relative humidity were reported. Conversations with B.C. Hydro personnel

TABLE A2-37

Linear Regression Statistics Between Wind Directions at Minisonde Site 4 at 600 m Above Power Plant Base and Hat Creek Valley Mechanical Stations

March 3-11, 1975: Spring

August 31-September 7, 1975: Fall

Mechanical Station Number	Spring		Fall		Total	
	N	r	N	r	N	r
7	19	.91	21	.85	40	.88
8	10	.96	22	.10	32	.64
6	16	.44	-	-	16	.44
5	35	.24	38	.51	63	.40
4	23	.71	38	.73	61	.71

N = sample size

r = correlation coefficient

TABLE A2-38

Wind Direction Data Substituted for the Missing
B.C. Hydro Mechanical Station 7 Data

Station	January through December 1975 Time Period for Substitution of Wind Direction
1	May 15, hour 4, through May 31, hour 24
4	December 13, hour 3, through December 17, hour 20
	December 21, hour 11, through December 23, hour 22
5	September 1, hour 1, through September 5, hour 8
	September 24, hour 1, through October 3, hour 23
6	July 28, hour 2, through August 20, hour 12
	October 3, hour 3, through October 18, hour 13
8	September 8, hour 20, through September 23, hour 24

TABLE A2-39

Wind Speed Data Substituted for the Missing
B.C. Hydro Mechanical Station 7 Data

Station	January through December 1975 Time Period for Substitution of Wind Speed
1	May 15, hour 5, through May 31, hour 24
4	December 13, hour 2, through December 17, hour 12 December 21, hour 11, through December 24, hour 11
5	September 1, hour 1, through September 5, hour 4 September 24, hour 1, through October 3, hour 23
6	July 28, hour 2, through August 20, hour 12 October 3, hour 3, through October 22, hour 14
8	September 8, hour 20, through September 23, hour 24

TABLE A2-40

MERGED DATA WIND SPEED-MILES (MPH) DATA FOR JANUARY 1975

HOURS (LST)

HR-BEG / HR-END / DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	2.9	3.2	2.3	1.7	2.0	3.2	1.7	3.5	3.5	5.2	8.0	2.3	5.6	6.9	10.1	8.6	9.8	7.1	13.6	13.6	10.4	5.0	8.9	13.0	6.2
2	9.2	5.0	2.0	1.4	2.6	3.2	2.3	3.5	5.0	7.1	8.6	9.8	8.6	16.0	13.9	17.5	14.7	16.9	14.5	17.2	7.1	5.6	10.4	10.7	9.0
3	6.8	5.0	15.0	13.3	17.5	21.1	4.3	8.6	6.2	11.3	5.6	8.1	6.8	3.8	8.6	3.2	2.0	4.7	3.2	2.6	1.4	5.6	10.1	13.3	7.9
4	10.4	5.9	5.3	2.6	3.5	9.5	7.1	4.6	8.9	11.3	7.4	3.5	1.1	1.7	2.3	1.4	1.7	3.5	2.0	2.3	1.4	2.3	1.7	1.7	4.4
5	2.9	4.7	6.8	9.8	3.8	5.0	4.7	7.8	0.5	5.2	2.4	2.0	2.0	4.4	5.0	2.9	4.7	5.9	6.8	4.7	9.2	6.5	5.0	8.3	5.3
6	13.3	12.8	6.8	9.6	11.0	14.5	14.5	5.9	2.9	2.6	2.4	1.7	2.3	6.5	8.3	8.9	7.7	1.4	4.1	6.8	7.1	4.7	6.4	8.0	7.1
7	5.8	8.0	10.4	5.3	6.6	5.5	4.7	4.4	9.2	8.0	4.4	3.0	4.1	7.7	8.6	10.1	11.9	11.9	11.6	11.5	8.3	8.9	10.4	9.2	7.9
8	8.9	9.0	6.8	5.9	4.1	2.9	1.4	1.7	5.5	7.4	7.1	3.8	1.4	1.1	2.0	2.3	5.0	6.8	5.0	4.1	5.6	2.3	1.1	2.3	4.2
9	2.3	1.1	0.8	1.4	0.2	0.5	0.5	0.2	0.5	0.8	0.2	0.5	0.8	0.5	0.5	1.1	0.8	0.2	1.1	0.5	0.8	0.6	1.1	3.8	0.9
10	3.5	3.5	2.6	1.4	1.7	0.5	0.5	0.8	2.0	1.4	0.4	1.4	0.8	0.6	0.2	1.1	2.3	2.9	5.0	1.4	0.8	0.2	2.6	2.9	1.7
11	2.3	1.1	0.5	0.8	2.0	4.7	4.7	2.0	1.7	1.1	0.8	5.0	8.3	7.1	7.1	7.7	7.4	7.7	7.4	6.5	8.0	9.2	8.6	8.6	5.0
12	8.6	8.9	10.8	8.0	4.1	7.1	7.4	7.7	7.1	8.3	7.4	6.8	10.4	10.1	8.0	5.9	8.6	6.5	8.6	6.2	3.8	4.4	9.8	10.4	7.9
13	7.1	11.6	12.5	11.3	10.1	10.1	11.0	8.6	4.7	2.9	4.7	5.6	5.6	2.9	5.9	3.5	3.2	3.8	6.5	7.4	5.3	1.7	3.5	1.7	6.3
14	5.0	5.9	1.4	1.1	1.7	6.2	5.0	5.0	1.1	3.2	7.1	6.5	4.1	4.7	5.9	6.5	5.9	2.6	0.8	1.4	2.6	1.1	2.0	1.7	3.7
15	1.1	1.7	2.3	0.8	0.8	0.2	1.4	0.2	3.5	3.5	1.1	0.5	0.8	2.6	5.3	4.7	7.1	9.8	4.4	3.8	3.5	1.7	2.9	5.6	3.0
16	6.8	5.3	4.0	7.4	2.0	3.2	0.8	0.2	2.6	2.6	6.5	7.1	5.3	2.9	3.2	4.3	9.5	7.7	8.0	5.6	6.8	5.0	2.3	2.9	5.0
17	3.9	1.7	2.9	12.5	10.7	8.3	5.6	3.8	0.5	7.1	8.6	5.3	8.3	3.2	0.5	1.1	0.5	0.2	99.9	99.9	0.2	0.2	1.1	1.7	4.2
18	2.9	8.0	6.8	3.8	3.2	2.6	2.9	0.5	1.1	3.1	0.5	0.2	0.6	1.1	3.2	2.0	0.8	1.4	0.8	3.5	3.2	1.1	1.4	5.9	2.5
19	2.6	2.6	1.4	1.4	2.3	2.6	3.2	3.5	3.2	2.0	3.5	2.6	2.9	6.2	5.6	5.6	4.4	5.9	9.0	7.7	14.2	7.4	8.0	6.5	4.6
20	4.1	3.8	0.8	5.9	10.1	14.8	13.9	10.7	10.7	9.2	9.5	9.5	6.2	8.3	7.1	7.1	8.6	3.2	2.3	3.2	2.3	4.7	3.8	2.9	6.8
21	1.7	0.8	0.2	1.4	2.9	2.9	2.3	2.3	2.9	4.4	4.4	6.4	6.8	3.6	4.1	4.4	6.2	2.9	5.9	5.3	6.8	6.8	6.2	3.2	4.0
22	5.4	7.1	6.8	8.0	8.6	7.7	7.4	1.5	2.9	5.0	3.8	4.1	4.1	7.1	9.5	9.5	6.8	7.1	4.7	3.8	2.3	5.3	2.6	1.6	5.6
23	1.7	7.1	6.7	6.5	9.2	6.8	4.2	4.1	5.5	6.2	4.8	12.8	9.2	11.9	12.8	8.6	8.9	6.5	11.3	11.6	8.3	5.0	14.2	8.6	8.0
24	6.5	7.4	7.1	9.2	9.5	4.7	8.9	8.0	8.3	5.3	4.1	4.6	4.4	4.7	4.7	5.0	8.5	7.4	7.7	5.9	7.7	0.7	2.3	5.3	6.1
25	2.9	1.4	2.9	5.3	3.5	1.1	1.7	3.2	3.9	0.2	2.3	2.6	1.4	0.8	0.8	1.1	0.2	0.8	0.2	2.3	2.3	3.8	2.9	3.8	2.0
26	4.7	6.8	9.2	8.3	6.5	0.2	1.7	0.6	3.4	1.4	4.1	5.1	9.2	13.3	14.2	11.3	8.9	5.9	4.4	3.2	5.9	4.1	3.5	1.0	5.6
27	1.1	99.9	0.2	0.8	1.4	2.0	1.7	1.1	1.1	0.9	9.8	3.5	1.1	1.7	1.1	1.7	0.2	0.8	1.4	0.5	0.5	3.8	3.8	3.5	1.4
28	2.9	2.6	4.7	6.5	7.1	5.0	1.5	2.3	2.9	5.0	4.4	10.4	4.1	4.7	3.2	5.9	7.1	5.3	8.9	6.5	3.8	3.5	2.6	4.7	4.9
29	3.8	5.9	6.5	7.1	7.4	5.6	4.4	9.0	3.5	1.1	4.0	4.1	4.0	2.9	1.4	1.7	4.1	1.7	0.8	1.4	0.8	1.4	0.5	1.7	3.4
30	4.7	7.1	4.7	6.2	5.3	5.6	5.5	5.0	5.6	4.4	5.0	5.3	5.0	6.2	5.3	4.1	7.4	10.4	10.1	9.5	8.3	7.7	8.3	8.3	6.4
31	7.1	7.1	6.8	6.8	8.6	6.5	7.7	8.0	5.8	5.9	6.8	7.4	7.4	7.1	6.5	5.9	5.9	6.5	6.8	4.4	3.5	6.2	8.9	9.2	6.9
AVG	4.9	5.0	5.2	5.5	5.6	5.7	4.9	4.2	4.2	4.6	4.8	4.8	4.6	5.4	5.6	5.4	5.8	5.3	5.8	5.5	4.9	4.2	5.1	5.6	5.1
DAYS	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	741

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 741 NUMBER OF MISSING HOURS = 3 DATA CAPTURE = 99.60 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 5.112 MAXIMUM HOURLY VALUE = 21.100 STANDARD DEVIATION = 3.4981

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-41

MERGED DATA WIND SPEED-MILES (MPH) DATA FOR FEBRUARY 1975

HOURS (LST)

HR-BEG / HR-END / DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	5.9	7.1	4.0	5.6	4.4	4.7	4.7	2.5	0.2	0.5	2.9	0.4	2.0	1.1	2.3	4.1	5.3	2.3	4.4	2.9	3.5	2.9	3.8	4.8	3.6
2	3.5	2.3	2.6	2.9	2.9	2.9	2.3	2.9	4.1	3.8	4.1	2.9	2.3	2.3	2.9	2.3	3.8	5.6	5.9	6.5	5.0	4.7	6.1	4.1	3.6
3	6.5	7.1	4.1	3.2	4.7	5.0	5.6	5.0	4.1	3.5	3.2	99.9	5.9	4.4	2.6	2.0	2.3	1.7	1.4	1.7	1.7	0.8	2.0	2.0	3.5
4	1.4	2.6	1.7	3.5	2.0	2.9	2.9	4.4	7.4	4.3	4.4	2.0	1.7	2.3	2.3	3.2	2.6	4.1	6.2	7.4	5.9	7.1	6.7	4.7	4.0
5	5.3	6.2	5.3	6.8	7.1	6.5	4.1	4.4	5.6	5.3	1.1	0.5	0.8	0.8	1.1	1.4	0.5	0.8	0.2	0.8	2.0	0.2	2.9	0.8	2.9
6	2.3	4.1	6.7	5.6	9.2	4.7	1.4	8.6	6.9	0.5	2.9	5.0	6.8	6.2	5.6	4.4	5.3	6.5	3.8	6.8	4.1	3.9	3.2	0.8	4.7
7	1.4	4.7	3.5	3.5	4.7	4.4	2.6	2.9	2.3	5.3	11.3	11.9	7.1	5.6	3.8	5.6	3.8	7.1	4.4	3.8	5.0	4.4	5.3	3.5	4.9
8	4.7	4.7	5.0	2.0	4.1	4.7	5.3	5.3	1.1	0.8	0.8	2.0	7.1	8.6	8.3	8.9	7.7	8.6	7.4	7.1	7.7	5.9	7.1	6.5	5.5
9	7.1	6.8	9.2	7.7	7.1	7.7	7.7	7.1	6.5	6.5	5.3	6.2	5.6	6.2	7.4	7.1	7.1	6.2	6.5	7.1	7.1	6.8	2.6	2.3	6.5
10	1.1	4.4	7.1	4.7	5.3	5.6	4.8	9.9	3.8	2.6	1.7	1.7	1.7	2.6	5.3	6.9	6.2	5.3	8.5	5.3	6.7	3.8	1.4	1.4	4.2
11	1.7	0.5	0.5	2.0	2.9	2.3	1.4	0.2	2.5	3.2	2.6	4.4	3.8	2.3	1.4	1.7	0.2	0.5	0.2	0.5	0.2	0.8	0.5	99.9	1.6
12	0.5	0.2	0.2	99.9	99.9	0.2	0.2	0.2	0.2	0.8	0.8	1.1	1.7	2.3	1.7	1.7	1.1	1.1	2.3	2.0	0.8	0.8	0.8	0.8	1.0
13	2.9	5.9	3.2	1.1	1.4	1.4	1.7	1.1	1.7	2.3	2.3	1.7	0.8	0.8	0.2	0.2	0.2	1.1	2.3	0.5	2.3	0.8	0.8	1.1	1.6
14	0.2	0.2	99.9	0.8	0.5	1.1	0.8	0.5	99.9	99.9	0.2	0.5	0.4	0.2	1.1	1.1	0.8	2.0	1.7	0.8	2.0	2.0	1.7	2.6	1.0
15	2.9	3.8	4.4	6.5	5.3	2.0	1.4	2.3	3.2	3.8	0.8	1.4	2.9	5.3	6.5	5.9	6.5	5.9	5.0	2.9	5.0	2.9	2.0	2.0	3.8
16	3.2	4.1	4.1	2.9	5.9	5.3	4.1	5.3	4.1	0.8	0.8	1.7	2.3	2.3	1.4	0.5	99.9	1.1	0.8	1.4	3.5	1.7	2.6	3.8	2.6
17	2.9	1.4	1.7	2.0	2.0	2.0	1.7	3.2	4.4	5.0	4.4	2.6	1.1	2.6	3.5	1.7	2.3	4.1	3.5	5.6	7.7	7.7	11.0	5.9	3.7
18	2.6	1.4	2.9	2.9	2.9	1.1	1.4	2.0	1.1	1.7	2.6	1.7	3.5	6.8	6.5	2.9	5.6	4.7	4.4	5.3	4.7	5.0	5.6	5.0	3.5
19	4.1	5.6	5.0	3.2	4.7	7.4	9.5	5.6	4.1	4.4	3.5	3.8	4.4	5.6	3.5	1.1	3.2	1.7	2.9	2.9	3.5	6.3	6.3	8.3	4.8
20	14.8	11.3	11.3	8.9	12.5	11.9	13.9	11.6	14.9	12.5	16.0	19.3	17.8	14.5	11.0	9.6	6.2	5.6	7.1	9.2	5.9	8.9	9.8	8.3	11.4
21	6.9	5.3	4.2	5.6	4.2	5.9	5.6	5.3	4.7	2.0	2.0	1.1	1.1	2.0	3.5	1.7	1.4	2.0	1.7	2.9	5.3	6.2	4.4	5.5	4.1
22	8.6	6.5	2.9	2.3	1.7	5.3	6.5	7.4	8.3	9.2	8.6	8.6	5.9	8.0	8.9	9.5	8.3	6.8	4.6	7.4	4.4	5.9	8.0	6.5	6.8
23	6.2	8.9	8.3	8.0	8.0	9.2	8.0	5.6	15.1	23.8	17.5	11.6	7.4	5.0	3.8	4.4	8.0	7.1	5.0	4.7	3.5	1.7	1.1	5.0	7.8
24	9.2	5.3	4.1	6.5	5.6	8.0	5.3	4.7	5.0	8.6	11.9	9.5	9.5	9.8	9.2	9.5	10.4	7.4	3.5	1.1	3.5	3.5	5.3	2.6	6.6
25	0.8	1.7	0.5	0.2	0.5	0.8	0.2	0.5	0.8	0.5	1.4	3.2	5.6	5.3	5.9	6.5	6.5	8.6	4.3	8.9	7.1	7.4	7.7	8.3	4.1
26	6.8	5.9	7.7	7.6	7.1	7.1	7.1	7.1	5.0	3.2	3.5	3.4	2.6	2.9	3.2	3.5	3.2	3.2	2.0	3.5	7.4	3.5	4.4	4.1	4.8
27	7.4	9.2	8.8	3.7	1.1	2.6	2.3	0.2	0.2	0.5	1.4	3.8	8.0	4.1	11.0	11.9	10.4	8.3	6.5	4.4	5.3	6.5	7.4	3.5	5.1
28	4.1	4.1	2.9	2.3	3.5	2.0	0.5	1.4	0.9	1.4	2.3	2.9	4.1	2.9	4.7	4.1	5.6	5.0	4.1	5.0	3.8	2.9	1.7	99.9	3.1
AVG	4.4	4.7	4.5	4.1	4.4	4.5	4.1	4.0	4.3	4.5	4.3	4.5	4.6	4.4	4.6	4.4	4.6	4.4	4.2	4.2	4.4	4.2	4.3	4.1	4.4
DAYS	28	28	27	27	27	28	28	28	27	27	28	27	28	28	28	28	27	28	28	28	28	28	28	26	663

TOTAL HOURS = 672 NUMBER OF GOOD HOURS = 663 NUMBER OF MISSING HOURS = 9 DATA CAPTURE = 98.66 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 4.355 MAXIMUM HOURLY VALUE = 23.800 STANDARD DEVIATION = 3.1326

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-42

MERGED DATA   WIND SPEED-MILES (MPH)   DATA FOR MARCH 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
2	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
3	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
4	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
5	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	2.0	3.5	3.2	3.4	4.1	2.9	1.8	1.1	0.5	0.5	1.1	1.1	99.9
7	3.2	4.4	4.7	3.5	3.1	4.4	2.9	1.0	2.3	3.8	4.4	5.0	4.7	10.1	10.7	4.3	7.2	4.3	7.1	5.3	3.2	4.4	5.0	5.3	5.2
8	5.7	4.5	4.7	3.8	4.5	5.9	4.7	1.8	4.5	0.8	1.4	2.6	2.8	3.5	5.6	5.6	4.1	3.4	1.6	3.5	3.2	99.9	1.1	1.4	3.2
9	1.1	3.8	1.1	0.5	0.2	2.2	3.4	1.1	1.4	4.3	1.7	3.4	4.7	4.1	3.9	5.6	4.7	3.4	4.1	3.8	1.4	2.9	2.3	1.1	2.4
10	2.3	1.7	1.1	1.7	2.3	2.6	3.2	3.2	2.3	4.6	3.5	1.7	2.3	3.2	4.7	5.6	4.2	4.1	3.4	4.4	5.0	3.8	2.3	4.7	3.4
11	4.1	2.9	1.7	1.4	2.9	3.5	2.0	1.7	1.7	1.4	1.1	1.4	2.9	2.9	2.0	2.9	7.1	7.7	9.0	7.4	7.1	4.1	3.8	3.2	3.5
12	5.9	5.9	7.7	8.3	4.7	7.7	7.1	2.9	3.2	1.7	4.7	4.1	4.1	3.2	1.4	1.1	3.5	2.6	2.3	2.9	4.5	5.9	5.9	4.4	4.6
13	3.5	5.3	5.3	2.9	2.6	3.2	0.8	3.2	0.5	1.5	7.1	5.0	7.6	6.9	11.9	14.2	13.8	15.0	14.5	15.1	14.8	10.7	10.1	8.6	7.6
14	4.4	4.5	2.9	1.7	1.1	3.5	4.7	7.1	8.5	13.9	4.9	7.7	5.9	4.7	4.1	2.9	4.4	4.2	2.3	2.3	3.5	3.5	3.2	4.1	4.9
15	3.5	4.1	2.9	1.7	5.9	3.8	5.9	4.7	4.9	11.3	11.3	11.3	11.3	10.4	4.9	6.9	7.7	5.0	4.3	5.9	5.9	4.1	5.6	4.1	6.7
16	5.0	3.6	2.9	1.1	3.5	2.6	2.0	4.7	5.3	4.0	13.8	14.4	14.5	15.1	12.5	12.2	12.8	9.2	7.7	12.6	10.1	3.9	11.3	10.4	9.7
17	10.4	9.2	10.7	12.5	14.2	10.1	11.9	11.9	13.1	4.9	3.6	6.9	10.1	15.7	20.2	15.4	11.4	10.1	12.2	11.9	9.8	11.9	4.9	3.5	11.2
18	3.2	6.5	5.3	5.3	2.6	3.5	4.1	2.9	2.9	3.5	3.4	4.1	5.3	11.0	9.8	4.5	10.7	3.6	7.1	4.7	4.7	4.1	2.6	3.2	5.3
19	2.9	2.9	4.1	5.2	3.2	3.5	3.5	2.3	2.6	3.5	5.3	5.0	7.4	11.9	10.7	12.2	10.7	13.0	5.9	5.9	4.1	2.6	7.4	7.1	5.9
20	8.3	6.9	9.2	4.7	2.3	2.1	1.1	2.3	1.1	1.4	5.9	7.4	7.1	11.8	15.1	16.0	14.2	10.4	7.4	8.3	4.7	5.6	4.1	4.1	6.9
21	4.6	4.2	6.8	6.5	4.4	6.2	4.5	6.5	5.1	9.8	9.5	10.1	10.1	10.7	11.9	11.0	10.7	11.3	10.7	4.5	4.2	7.7	4.6	3.5	8.4
22	1.4	1.1	3.2	1.2	1.4	0.5	0.2	1.4	0.4	1.1	0.5	1.7	3.5	3.4	2.0	7.7	10.7	7.7	5.9	3.8	2.9	3.8	4.7	4.7	3.1
23	4.1	7.1	5.3	6.4	2.0	3.6	4.7	2.6	1.1	3.2	3.8	10.1	8.9	8.3	7.7	12.5	11.3	9.5	8.5	6.5	5.0	5.0	4.7	4.8	6.9
24	5.0	5.3	3.5	2.0	2.9	2.0	5.9	7.7	7.3	10.1	9.5	5.9	5.9	2.3	2.9	3.2	3.5	6.7	5.9	5.9	2.9	1.6	0.8	1.6	4.5
25	3.1	5.9	7.8	3.2	5.0	7.1	2.3	5.9	4.3	11.9	11.3	8.9	9.2	9.4	8.0	7.4	7.1	7.4	2.9	2.3	3.2	4.7	3.8	5.3	6.4
26	4.7	4.7	4.7	4.8	4.2	4.4	5.4	8.5	10.7	10.7	7.1	8.3	7.1	7.7	7.1	9.5	4.9	4.4	3.2	1.4	1.7	1.7	0.8	0.8	5.6
27	1.1	2.3	3.5	3.5	2.3	3.5	2.5	2.3	2.0	2.6	5.0	4.4	4.1	2.9	2.0	2.0	2.6	0.8	2.9	1.7	1.4	3.8	2.3	2.6	2.5
28	2.0	3.5	4.7	4.7	3.5	4.1	4.1	3.5	2.5	2.0	1.0	4.0	0.8	2.3	5.3	6.5	5.6	4.1	6.9	5.0	2.6	5.3	6.5	7.4	3.9
29	5.9	6.2	8.9	5.9	5.3	5.3	4.1	3.5	4.5	2.6	2.0	1.4	1.1	0.8	8.9	13.6	12.5	7.7	11.3	4.7	13.6	13.0	19.0	20.0	7.0
30	15.4	19.0	17.2	25.0	23.2	19.6	21.4	16.6	17.2	16.8	17.9	18.9	15.4	16.3	16.8	13.6	9.5	8.9	7.7	7.7	7.7	8.9	9.5	9.5	14.0
31	12.5	11.9	11.9	4.3	7.1	11.8	11.9	14.3	17.8	17.8	17.5	14.8	9.5	10.3	10.1	10.1	4.3	5.9	4.6	2.9	5.5	3.8	2.3	2.3	9.9
AVG	5.3	5.6	5.7	4.8	5.0	5.1	4.9	4.7	5.2	6.2	4.7	4.8	4.6	5.0	7.0	6.3	8.2	7.0	6.6	5.6	5.2	5.2	5.2	5.1	6.0
DAYS	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26	26	26	26	25	26	26	611

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 611 NUMBER OF MISSING HOURS = 133 DATA CAPTURE = 82.12 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 6.039 MAXIMUM HOURLY VALUE = 25.000 STANDARD DEVIATION = 4.2907

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-43

MERGED DATA   WIND SPEED-MILES (MPH)   DATA FOR APRIL 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	1.4	1.1	0.8	0.3	0.8	0.5	0.8	0.2	2.6	1.1	2.0	4.7	10.1	14.2	12.8	13.0	10.1	7.7	9.2	4.4	7.1	4.7	2.0	1.4	5.7
2	2.0	2.6	4.7	7.1	10.7	7.1	5.9	7.1	6.5	4.7	11.9	17.4	19.0	16.0	12.5	11.3	7.4	3.2	6.9	8.3	5.5	4.4	2.6	1.4	7.4
3	0.8	1.7	5.6	5.6	4.4	3.2	2.3	1.1	4.7	4.1	4.2	5.9	3.5	5.0	6.7	4.7	7.7	5.9	3.5	2.6	2.9	4.7	0.5	1.4	3.9
4	5.5	6.5	4.1	2.9	4.1	3.3	2.3	4.1	4.7	5.3	5.3	4.1	5.9	5.9	4.1	4.1	5.3	4.7	4.3	7.7	10.1	8.3	5.3	4.1	5.2
5	3.5	3.5	3.5	4.7	4.1	5.9	4.3	8.9	7.7	5.0	3.8	6.5	6.5	6.2	6.2	5.3	4.7	5.3	5.2	5.5	6.1	2.9	1.1	1.4	5.1
6	1.1	0.8	2.0	1.4	0.2	0.2	0.8	0.5	1.1	1.7	3.2	4.4	3.5	5.9	5.9	7.7	4.9	6.3	5.9	6.5	6.5	6.5	5.9	5.9	3.9
7	5.1	3.2	1.7	2.0	2.6	0.3	1.4	0.5	2.6	5.9	4.7	5.3	5.9	5.9	4.1	2.3	2.3	2.3	2.3	4.1	4.1	1.4	2.9	1.4	3.1
8	3.5	5.3	4.5	7.1	5.3	4.4	4.4	4.1	6.5	5.9	9.5	10.7	12.5	7.7	7.1	4.4	7.4	6.5	4.7	6.5	7.7	4.4	4.0	6.9	6.7
9	10.1	10.7	10.7	14.2	10.1	4.9	5.3	9.5	5.9	4.7	5.9	4.7	4.7	7.7	4.7	3.3	4.7	4.1	3.5	2.6	0.8	1.4	1.4	1.1	5.9
10	1.1	1.4	2.0	0.2	1.1	0.8	1.1	0.2	1.4	2.6	3.8	3.5	4.1	2.3	3.8	2.6	3.3	3.5	4.7	2.3	1.4	1.4	1.7	1.4	2.2
11	2.3	2.6	1.7	2.3	1.7	2.9	0.8	1.7	2.3	3.2	3.5	4.7	3.5	2.3	3.8	3.8	6.9	7.1	5.9	6.5	5.0	4.1	3.8	4.4	3.6
12	1.4	2.9	5.3	1.1	1.4	2.3	1.4	2.3	2.3	1.1	2.9	2.3	3.2	3.8	8.9	8.9	13.0	11.3	13.0	11.9	10.1	10.7	7.1	7.1	5.7
13	7.7	4.7	7.7	8.3	4.5	4.9	2.9	4.1	4.1	3.2	2.3	3.2	2.9	1.4	3.8	6.1	4.1	2.3	2.0	3.8	2.3	3.5	2.9	2.3	3.9
14	3.5	6.1	2.9	3.2	3.8	1.7	0.8	2.3	2.9	2.6	4.4	4.4	5.3	6.5	4.9	9.5	4.3	4.2	3.2	6.5	6.7	5.0	6.4	4.1	4.6
15	5.9	5.6	5.9	5.9	5.9	7.4	7.1	5.9	6.1	3.2	3.2	5.0	5.0	4.1	3.5	3.2	2.0	4.1	5.3	5.0	2.6	1.7	1.4	1.7	4.4
16	2.9	2.9	3.8	3.5	2.3	3.6	2.6	4.1	5.3	5.0	2.9	3.5	5.3	4.7	2.9	4.7	6.7	5.3	5.3	3.8	1.7	1.7	3.2	3.5	3.7
17	6.5	5.9	5.9	5.3	5.9	8.5	4.7	4.7	4.7	2.0	3.2	2.3	2.3	1.7	3.5	4.1	2.0	5.6	5.9	6.2	6.8	8.3	7.4	8.3	5.0
18	8.9	7.4	4.7	5.9	5.9	5.3	5.3	6.5	7.1	7.1	10.1	7.1	10.7	10.1	9.5	11.3	12.5	11.9	13.6	13.0	11.9	12.5	10.1	13.6	9.2
19	4.9	10.1	13.0	5.9	4.5	4.1	3.2	6.4	8.3	10.1	4.5	4.7	4.7	5.3	5.9	6.5	7.7	12.5	16.0	12.5	13.6	8.9	9.0	7.6	7.9
20	2.6	5.6	9.5	9.9	6.9	4.9	13.6	11.3	14.9	14.4	9.5	6.3	7.7	16.0	16.0	17.8	16.6	12.2	9.6	6.5	9.5	11.9	3.5	3.5	9.9
21	7.7	5.9	2.9	2.9	3.5	4.0	1.7	0.5	2.9	3.2	7.1	7.7	5.3	4.7	7.7	7.1	7.1	10.7	4.9	9.5	7.7	10.1	4.5	7.1	6.0
22	8.9	7.7	10.1	7.7	7.7	8.9	10.1	10.1	10.7	12.5	14.8	14.2	13.0	14.2	14.2	13.0	14.2	11.9	7.1	5.3	7.1	5.3	5.9	6.2	10.1
23	4.4	6.2	4.1	3.6	1.7	2.3	3.5	4.1	13.5	13.9	10.1	12.2	16.6	17.8	14.8	15.4	14.8	14.2	11.9	7.7	4.7	7.1	6.8	11.6	9.6
24	7.1	10.7	4.3	3.5	5.9	9.5	4.9	7.1	6.5	6.3	8.9	10.7	11.3	11.3	10.7	6.3	6.3	7.1	5.3	1.4	1.4	4.1	2.3	1.4	7.0
25	1.3	2.6	3.5	3.8	4.1	3.8	4.4	3.5	4.7	5.3	4.1	3.5	4.4	2.6	3.2	2.6	2.9	5.3	4.1	4.1	4.7	3.0	3.2	3.5	3.8
26	4.1	4.1	7.7	6.5	3.2	1.4	1.7	1.4	2.6	2.3	3.5	4.1	6.5	10.1	10.1	14.2	17.9	16.6	11.3	13.6	22.6	25.6	20.2	11.9	9.1
27	10.7	3.5	4.1	5.9	12.5	14.8	14.8	17.8	20.2	19.0	14.2	14.4	17.4	10.6	13.6	14.8	14.2	12.5	7.7	5.3	5.3	4.7	5.9	8.0	11.6
28	5.9	5.6	5.3	3.4	3.4	3.5	6.5	4.7	2.3	2.3	5.3	5.9	3.5	2.9	4.7	3.5	4.7	2.9	1.7	3.5	5.9	7.7	3.5	2.3	4.3
29	2.3	2.9	2.6	3.2	3.4	4.4	2.9	3.5	5.9	5.0	3.2	2.9	4.1	3.8	3.8	3.8	2.9	2.6	3.5	3.5	2.3	2.8	1.1	1.1	3.2
30	1.4	3.2	3.4	3.2	8.4	99.9	0.2	1.1	2.6	3.2	3.5	3.4	3.8	4.3	5.6	7.1	5.4	10.1	6.5	5.3	5.9	5.3	5.0	4.7	4.3
AVG	4.6	4.7	5.1	4.8	4.7	4.7	4.3	4.6	5.7	5.6	6.0	6.6	7.1	7.5	7.4	7.6	7.9	7.6	6.6	6.2	6.1	6.2	4.8	4.6	5.8
DAYS	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 719 NUMBER OF MISSING HOURS = 1 DATA CAPTURE = 99.86 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 5.844 MAXIMUM HOURLY VALUE = 25.600 STANDARD DEVIATION = 3.9869

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-44

MERGED DATA — WIND SPEED-MILES (MPH) — DATA FOR MAY 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	4.1	2.6	2.3	4.1	2.0	3.6	0.4	1.7	2.6	4.1	4.7	4.5	8.3	10.1	10.1	8.4	10.7	10.1	10.7	11.9	13.6	11.6	7.1	6.2	6.6
2	4.1	2.9	5.3	7.7	11.9	9.5	11.9	13.6	11.9	11.9	11.5	10.7	11.9	10.1	11.5	13.6	12.5	11.0	14.8	8.5	5.3	4.1	9.5	11.9	9.9
3	8.9	6.9	9.5	10.1	11.9	10.7	4.1	3.5	3.5	5.9	10.7	13.5	14.2	10.7	17.5	9.5	8.3	9.5	4.7	4.1	7.1	6.5	5.3	4.6	8.2
4	2.5	3.5	4.1	5.9	4.1	5.9	10.1	10.7	10.1	7.7	9.5	4.5	3.5	5.9	13.0	15.4	12.5	5.9	3.5	5.5	4.5	5.9	9.5	6.5	7.3
5	7.7	7.1	5.9	6.5	8.5	8.9	5.3	5.3	7.4	10.7	9.5	10.4	9.5	10.1	10.1	7.7	5.3	4.1	5.0	4.4	4.7	5.3	4.1	4.7	6.9
6	4.7	2.3	3.5	3.5	3.8	3.2	1.4	2.6	4.7	4.7	5.3	6.9	10.7	11.9	15.8	16.0	19.0	13.6	5.9	4.7	4.7	2.6	2.0	1.4	6.5
7	1.4	3.5	4.7	5.3	4.7	4.1	2.3	2.9	2.9	5.3	4.1	5.4	6.2	5.9	6.8	8.3	9.5	9.5	6.8	5.0	2.3	2.3	1.4	3.3	4.8
8	3.4	5.3	5.3	4.1	0.8	1.1	2.4	2.0	4.1	4.1	4.7	6.5	6.5	7.7	8.3	7.1	4.7	6.5	5.3	4.7	5.3	7.1	6.5	6.5	5.0
9	2.3	2.9	7.1	7.1	6.5	2.0	4.4	5.6	7.7	8.9	8.9	8.3	8.3	8.3	7.1	9.5	7.1	10.1	7.7	7.7	7.1	6.5	4.4	3.2	6.6
10	4.1	4.7	4.5	6.5	5.3	3.5	4.7	9.5	8.4	9.5	8.9	4.9	9.5	9.5	8.9	7.7	14.0	9.2	2.6	5.6	3.2	1.4	0.8	3.5	6.5
11	2.9	0.5	2.0	2.6	2.6	2.6	2.6	9.1	7.4	8.3	9.5	11.3	12.5	13.6	17.2	17.2	17.8	18.6	17.8	14.2	14.8	12.5	11.3	11.3	9.8
12	11.3	7.1	4.1	1.1	0.8	0.5	0.8	2.6	4.1	4.7	5.9	10.1	9.5	10.7	12.5	13.0	13.0	12.5	11.6	8.9	4.7	4.7	3.5	2.3	6.7
13	2.9	6.5	5.9	10.7	2.0	4.4	4.4	3.2	4.1	2.9	4.1	4.7	4.7	4.7	5.3	4.7	3.5	3.5	5.3	8.5	5.6	5.0	6.5	8.9	5.1
14	6.9	6.5	4.7	2.9	1.1	2.9	2.3	4.1	3.5	3.5	3.5	4.7	9.5	16.6	11.9	16.0	14.2	18.4	17.8	10.7	10.1	5.9	4.1	3.5	7.8
15	5.0	2.6	2.3	4.1	0.8	1.4	0.5	0.2	2.9	9.2	11.3	8.9	8.0	8.3	9.5	13.6	11.3	9.5	8.0	4.7	1.4	1.4	2.3	2.3	5.4
16	2.0	3.2	2.3	2.6	2.6	2.3	1.1	2.3	2.9	2.6	3.5	4.7	6.2	8.6	8.6	9.5	8.3	11.9	10.1	4.1	2.9	0.6	6.2	1.4	4.9
17	0.8	2.0	3.2	1.7	2.0	5.3	5.3	9.5	7.1	10.7	8.6	4.4	9.5	12.5	11.6	9.2	8.6	7.1	3.5	3.2	1.4	0.8	0.5	0.5	5.5
18	1.7	0.8	1.7	3.0	0.5	1.1	4.4	5.6	9.5	5.9	10.1	10.1	8.0	9.5	6.7	3.2	0.5	1.4	0.8	1.7	2.9	5.0	2.3	4.4	4.1
19	2.3	1.1	0.8	2.3	2.6	1.9	4.1	3.0	3.5	3.8	3.5	4.7	5.3	2.0	7.7	4.1	4.3	5.3	2.0	3.5	4.1	1.1	1.1	1.7	3.5
20	0.8	1.7	0.8	0.5	1.4	0.8	0.5	1.4	2.9	4.7	5.6	7.7	7.7	4.6	3.5	1.4	2.3	2.9	2.9	0.2	0.5	1.7	2.0	0.8	2.5
21	0.2	0.5	1.4	0.5	1.7	2.6	1.1	1.1	2.5	4.1	6.8	2.0	1.4	3.2	2.3	4.7	2.0	4.7	4.7	4.7	0.8	1.7	2.0	2.6	2.9
22	1.4	0.8	1.1	0.2	0.8	0.2	1.1	2.0	2.6	2.3	2.4	2.3	4.7	6.5	5.6	2.3	2.3	1.7	0.5	1.4	0.8	0.5	0.5	0.2	1.8
23	1.4	0.5	1.1	0.8	0.5	0.5	0.5	2.0	1.7	5.3	8.5	10.7	14.8	12.5	14.8	10.7	10.7	7.7	2.9	3.8	2.0	2.6	1.4	4.1	5.1
24	3.5	5.3	8.9	2.6	4.1	5.3	6.2	6.2	5.9	4.1	4.4	10.1	8.9	5.6	2.9	2.3	1.1	0.2	1.4	0.5	0.0	0.2	3.5	4.1	4.1
25	2.9	2.9	2.9	2.0	1.1	1.4	1.7	2.9	5.6	6.8	7.1	7.7	7.7	7.7	7.7	6.2	7.1	7.7	5.9	4.1	0.5	0.8	2.9	2.6	4.4
26	3.5	5.9	1.4	0.8	2.3	4.0	0.8	4.1	6.5	8.0	8.3	8.3	7.1	9.5	3.8	2.3	2.6	4.7	2.0	2.6	3.8	0.5	0.5	2.0	3.9
27	2.6	1.4	1.4	0.2	0.2	1.4	1.7	4.4	4.7	5.9	4.2	4.7	5.3	4.1	2.0	2.9	3.8	3.8	3.8	2.6	2.6	1.7	2.3	1.7	3.0
28	5.0	4.1	2.3	1.1	1.7	0.5	1.1	2.6	3.5	4.1	5.0	5.3	4.7	5.6	4.7	6.5	2.9	1.4	0.8	0.0	0.5	1.1	2.3	2.6	2.9
29	0.5	1.1	1.4	2.3	2.3	1.7	1.4	0.8	1.4	2.6	2.9	5.0	4.4	2.9	2.0	2.0	5.0	2.9	2.3	1.1	0.8	2.6	3.8	2.9	2.3
30	2.0	1.4	1.1	1.7	2.6	3.5	1.1	1.1	3.5	3.8	3.2	3.5	3.8	4.1	4.7	3.5	3.9	2.0	2.6	2.9	1.4	1.4	2.6	2.3	2.6
31	2.6	4.1	4.4	4.4	2.4	3.5	1.4	0.8	2.3	3.2	4.4	2.9	4.1	3.5	4.7	6.5	5.0	4.7	4.1	0.5	1.7	3.5	2.0	2.3	3.3
AVG	3.4	3.3	3.4	3.5	3.0	3.1	3.0	4.0	4.9	5.8	6.5	7.3	7.6	8.0	8.1	7.9	7.7	7.2	5.7	4.7	4.0	3.8	3.7	3.8	5.1
DAYS	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 744 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 5.145 MAXIMUM HOURLY VALUE = 19.000 STANDARD DEVIATION = 3.7978

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-45

MERGED DATA — WIND SPEED-MILES (MPH) — DATA FOR JUNE 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
2	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	2.9	4.7	6.8	8.6	99.9
3	8.6	6.8	2.6	4.7	5.3	2.9	7.7	11.6	13.0	12.5	11.3	13.6	13.0	8.0	8.0	11.9	11.9	17.8	17.8	22.0	10.1	17.2	11.3	11.3	10.9
4	10.7	7.7	7.1	6.5	5.9	4.7	4.7	4.1	2.3	4.1	7.7	9.5	7.1	6.5	14.8	17.8	16.0	14.8	11.9	19.0	22.0	15.4	7.1	7.1	9.8
5	8.9	14.2	11.9	7.1	8.9	8.9	10.4	8.6	11.9	10.1	10.1	9.5	10.1	11.6	12.5	12.8	16.0	17.8	19.6	15.7	11.6	7.4	3.8	5.9	11.1
6	5.9	4.1	1.7	1.7	5.9	4.4	5.6	6.5	5.9	5.3	7.1	6.5	7.7	6.5	6.5	8.9	12.8	4.4	7.7	6.5	8.3	4.4	2.0	1.7	5.7
7	3.9	2.3	3.5	4.4	2.9	6.7	4.2	6.5	7.1	5.3	4.9	7.4	9.6	10.1	13.6	10.1	9.5	7.4	5.9	2.9	0.5	2.0	0.8	1.4	5.6
8	1.1	1.1	2.3	2.9	4.1	2.6	3.8	4.1	5.3	4.4	7.4	7.7	6.8	4.6	3.5	5.3	3.9	2.9	1.7	2.0	1.7	2.9	1.1	1.7	3.5
9	3.4	2.9	0.5	1.1	0.8	0.5	1.1	2.0	3.9	3.5	4.1	5.3	5.9	4.7	5.3	5.0	5.0	4.4	2.6	2.0	2.3	0.8	1.4	3.2	3.0
10	2.9	1.4	2.0	5.3	3.2	2.0	1.4	2.9	1.4	3.5	2.6	3.4	4.4	4.6	6.3	7.7	11.9	13.6	11.3	7.7	6.5	1.7	3.8	2.9	5.0
11	1.7	5.5	5.6	6.2	2.6	1.4	2.6	3.5	4.4	4.7	3.8	5.3	7.7	7.1	8.9	10.7	11.3	13.0	10.7	7.1	8.9	9.8	7.4	3.8	6.4
12	5.0	7.7	4.1	3.5	4.1	2.9	4.1	2.9	4.4	4.7	5.0	4.1	5.9	7.4	8.0	4.7	4.4	11.0	9.5	9.5	10.1	9.5	5.6	5.0	6.0
13	10.1	12.8	5.6	6.2	11.0	10.7	10.1	8.3	8.9	10.1	11.9	8.9	4.7	8.9	4.1	4.1	7.1	13.0	13.0	11.9	7.4	7.1	8.6	7.4	8.8
14	4.7	5.3	5.0	4.7	3.8	4.4	4.5	11.9	7.7	6.2	7.7	12.2	15.4	14.2	13.0	13.6	14.2	22.6	14.8	14.2	12.5	16.6	10.7	9.8	10.5
15	9.2	5.3	1.7	2.3	2.6	1.4	4.1	5.3	5.6	6.8	7.7	8.0	3.8	6.5	5.0	10.4	9.2	5.0	4.1	4.7	2.3	5.0	4.1	4.7	5.2
16	5.3	4.7	3.8	6.5	5.9	7.4	5.9	5.3	4.1	2.3	5.3	4.7	5.9	6.5	8.0	6.5	8.6	7.4	5.0	3.2	5.6	4.4	3.8	3.8	5.4
17	4.4	4.1	5.0	6.5	3.5	4.1	5.3	6.9	10.7	10.7	8.3	3.5	5.3	8.0	9.5	8.3	9.5	3.5	2.6	3.2	5.3	6.5	5.9	6.5	6.4
18	4.1	4.4	5.6	5.3	3.9	3.8	4.4	5.6	4.4	5.9	6.2	5.0	4.7	4.4	5.6	5.9	6.5	5.3	4.1	3.5	4.7	5.6	5.0	4.1	4.9
19	5.9	5.9	7.1	5.9	5.3	5.9	5.9	5.0	5.8	5.9	6.5	6.5	8.9	9.5	10.1	11.9	11.3	8.3	4.4	5.0	5.6	7.4	4.7	2.3	6.7
20	4.7	5.3	4.1	4.1	5.9	6.2	6.8	8.0	9.8	10.7	10.7	7.7	4.5	8.9	8.3	8.9	12.5	14.2	12.5	10.7	11.3	9.5	8.9	7.1	8.5
21	7.1	4.1	4.1	2.6	2.9	2.9	3.2	3.5	6.5	5.3	5.0	5.6	4.1	6.5	7.1	13.6	13.6	10.1	5.6	3.5	3.8	5.9	5.3	3.5	5.6
22	2.9	2.3	3.2	3.6	3.2	0.5	1.4	2.6	3.5	7.1	4.7	4.1	5.6	5.9	6.5	7.4	11.6	11.9	10.1	7.1	1.7	1.4	5.0	2.3	4.8
23	4.1	4.4	2.3	1.1	2.0	0.4	1.7	0.8	1.4	99.9	2.3	1.7	2.6	2.6	5.0	6.5	8.0	9.2	5.9	3.5	2.0	1.7	1.7	1.7	3.2
24	2.0	0.8	1.1	0.8	0.8	0.5	0.4	2.3	2.9	4.7	7.1	5.0	4.7	6.2	4.4	3.8	5.3	4.1	11.9	12.5	11.9	11.3	11.9	10.1	5.3
25	4.3	4.3	6.5	7.1	7.7	10.7	8.9	5.9	2.6	5.6	3.8	5.6	2.6	3.6	9.5	14.2	14.0	13.0	13.6	9.5	5.3	6.8	3.5	3.2	7.6
26	2.3	1.4	2.0	2.0	3.5	2.9	3.5	4.4	5.3	4.7	3.4	5.0	5.0	3.8	8.0	5.0	4.2	6.2	3.2	3.8	4.4	5.9	8.0	4.7	4.4
27	4.7	6.2	4.8	6.2	4.4	3.5	4.1	5.9	9.5	13.6	14.2	14.8	16.0	17.6	16.0	19.6	16.0	12.5	17.2	13.0	12.5	12.5	16.0	13.0	11.5
28	10.7	13.0	10.1	9.5	8.3	10.1	7.7	9.9	5.3	6.5	10.7	10.1	11.9	12.5	8.9	5.9	4.7	4.7	3.8	1.1	1.1	1.7	2.0	0.8	7.1
29	0.8	1.1	1.1	1.4	2.3	0.8	1.4	2.0	2.5	4.4	5.6	4.4	2.9	6.5	6.8	5.3	5.3	2.3	2.9	2.9	1.7	1.7	1.4	3.5	2.9
30	3.2	2.0	2.6	0.8	0.8	99.9	1.1	2.3	2.3	3.8	4.7	3.5	6.5	5.3	3.5	4.1	3.5	1.4	4.1	1.7	0.2	0.5	0.5	0.5	2.6
AVG	5.2	5.2	4.2	4.5	4.3	4.1	4.7	5.3	5.6	6.4	6.8	7.0	7.0	7.6	8.2	8.4	9.2	9.3	8.5	7.5	6.8	6.3	5.5	4.9	6.4
DAYS	28	29	28	28	28	27	28	28	28	27	28	28	28	28	28	28	28	28	28	28	29	29	29	29	674

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 674 NUMBER OF MISSING HOURS = 46 DATA CAPTURE = 93.61 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 6.375 MAXIMUM HOURLY VALUE = 22.600 STANDARD DEVIATION = 4.0212

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-46

MERGED DATA WIND SPEED--MILES (MPH) DATA FOR JULY 1975

HOURS (LST)

DAY	HR-BEG 00 HR-END 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	8.4	99.9	1.7	3.5	5.3	5.0	3.2	3.5	6.1	2.4	3.2	4.4	2.3	5.5	5.9	5.9	3.4	2.0	4.1	2.9	5.2	3.2	4.5	1.4	5.2
2	1.7	4.7	5.9	4.4	2.9	3.2	2.3	2.3	2.3	2.9	3.5	4.4	3.5	4.7	4.7	5.9	5.3	2.9	3.2	2.6	3.5	1.4	3.5	3.5	3.5
3	1.1	1.7	4.4	3.8	4.7	5.9	3.8	3.2	5.6	5.6	3.5	6.1	3.8	5.3	4.4	4.2	6.5	5.9	5.6	2.3	2.9	2.6	2.9	3.5	4.1
4	3.2	5.3	7.7	7.1	6.5	5.0	3.8	5.3	4.7	4.4	3.2	4.7	6.1	5.9	5.6	6.2	5.6	2.9	3.5	2.6	2.0	1.7	2.6	5.0	4.3
5	5.0	5.3	2.6	2.9	1.7	4.9	1.6	1.4	2.9	2.6	4.7	5.3	6.5	11.9	15.4	14.2	16.4	14.8	12.5	11.9	5.3	2.6	6.1	2.6	6.5
6	4.1	3.8	2.6	2.3	2.4	1.1	3.5	2.3	5.9	4.4	4.4	4.4	4.1	6.5	4.9	7.7	4.3	6.5	4.4	5.2	6.5	4.4	2.9	3.8	4.4
7	5.9	3.3	2.9	2.6	1.7	3.5	19.4	3.2	2.6	4.1	7.1	6.5	4.1	5.6	2.0	6.1	15.1	10.1	6.5	5.9	4.1	2.3	0.5	2.3	4.3
8	3.8	5.0	3.5	2.6	2.0	2.9	2.3	2.3	4.7	6.8	6.5	4.7	2.9	4.1	4.1	4.1	4.1	3.8	5.8	6.4	4.7	2.3	1.4	3.8	3.9
9	4.7	2.0	1.6	4.1	3.2	2.3	1.7	1.1	2.9	3.2	5.9	9.5	7.1	7.1	6.5	7.7	5.6	2.9	5.3	5.6	5.9	5.6	7.7	99.9	4.7
10	6.5	6.7	5.3	4.7	2.9	2.3	1.7	2.3	3.5	7.1	6.5	4.7	2.6	4.4	6.7	6.2	7.4	99.9	99.9	99.9	6.5	3.5	2.3	3.2	4.4
11	3.5	2.3	3.2	2.3	4.1	5.6	6.2	4.1	5.3	2.0	1.4	1.7	3.5	3.2	3.8	3.4	1.4	1.7	1.7	2.0	1.7	1.1	1.4	1.7	2.9
12	2.0	6.4	5.0	5.6	5.9	7.1	2.9	2.3	2.3	2.9	4.4	2.6	5.3	4.7	3.2	3.5	3.2	6.2	4.8	5.0	4.7	4.4	5.0	3.5	4.3
13	2.3	2.9	2.9	3.5	5.9	6.5	5.3	6.8	3.8	3.5	4.7	6.1	6.5	7.1	5.0	5.4	2.9	9.5	8.6	7.4	7.1	6.2	5.0	4.1	5.3
14	3.5	1.7	1.7	2.3	1.1	1.4	1.4	3.2	2.9	3.0	4.3	5.6	5.3	6.9	6.9	13.3	9.8	9.5	10.4	8.6	10.4	6.5	7.4	5.6	5.8
15	4.4	5.8	6.5	6.8	4.4	3.2	2.0	3.2	5.3	6.9	10.2	13.9	10.1	12.5	12.5	11.3	9.5	8.6	9.2	8.9	5.9	2.9	2.0	1.7	7.3
16	3.8	5.9	4.4	3.8	4.7	5.0	5.0	4.7	5.5	4.1	4.1	5.0	5.6	5.3	3.5	3.4	6.5	9.4	6.8	9.2	6.5	5.3	3.8	4.7	5.2
17	5.1	4.1	6.8	6.2	4.4	4.2	4.4	4.1	3.7	3.0	6.5	5.3	2.9	9.8	10.1	5.0	4.3	9.2	8.3	6.0	8.3	9.8	6.5	5.0	6.6
18	7.1	9.2	5.0	5.0	2.9	1.7	2.0	3.8	6.4	4.1	6.4	3.5	5.3	6.9	6.5	12.5	14.4	16.2	12.5	14.2	10.1	10.1	7.7	6.5	7.3
19	4.4	3.2	2.9	2.9	3.2	2.0	1.7	2.3	3.5	4.7	4.6	6.9	6.5	6.3	9.5	10.7	11.9	10.4	4.9	11.0	11.9	12.5	15.1	10.7	7.2
20	8.6	5.9	4.1	6.4	2.3	1.1	1.1	2.3	3.5	3.5	4.4	6.4	5.6	6.5	6.8	6.6	12.5	11.6	9.5	5.6	5.0	8.6	7.7	6.2	6.0
21	1.1	99.9	0.9	6.4	4.1	3.2	2.6	2.9	5.3	5.9	6.4	5.0	5.9	7.1	12.2	13.0	12.8	12.5	5.9	9.1	4.4	2.6	2.9	5.3	5.6
22	6.5	5.6	3.2	2.9	2.0	2.0	1.7	2.3	3.5	3.8	4.7	4.4	5.9	6.7	3.8	5.3	4.6	3.5	3.2	4.1	5.0	2.6	4.4	2.9	3.9
23	3.2	3.3	1.7	1.7	0.5	0.5	4.4	2.0	4.4	9.5	9.5	6.6	7.4	7.7	8.0	6.4	7.1	11.6	17.6	11.0	6.8	5.9	9.8	7.1	6.2
24	6.8	2.9	6.4	2.6	5.0	4.4	4.7	6.5	6.2	6.2	7.1	5.3	3.5	9.8	13.3	11.6	10.1	9.2	8.6	9.4	7.4	4.1	3.8	2.9	6.4
25	5.6	6.7	11.6	8.3	7.1	3.5	2.6	3.5	4.1	5.9	8.3	10.7	8.9	12.3	11.9	13.9	14.5	15.4	14.2	9.2	7.7	5.9	5.9	8.0	8.5
26	6.2	4.1	3.5	2.9	2.3	3.2	2.0	2.9	7.9	2.9	3.8	5.9	6.8	5.0	6.2	12.5	12.2	13.0	12.7	9.2	2.3	2.9	8.9	3.5	5.5
27	2.3	1.7	1.4	1.6	1.7	3.8	2.3	3.5	4.1	2.0	12.5	16.4	15.1	15.6	19.6	17.5	17.5	17.8	19.3	8.9	9.2	8.6	7.1	6.8	5.8
28	4.1	4.1	3.8	4.7	2.6	3.5	2.9	2.9	5.3	3.3	3.8	3.6	4.7	4.7	3.5	5.3	4.4	6.8	14.4	11.6	13.0	12.8	7.1	6.8	5.7
29	7.1	3.6	7.7	9.5	9.8	9.2	7.7	5.9	4.1	5.9	3.4	3.6	4.7	9.1	5.0	4.7	6.2	7.6	6.8	8.0	7.4	9.2	11.0	11.0	6.9
30	12.5	11.9	14.3	17.5	17.2	16.9	15.4	15.1	11.3	6.6	6.0	7.1	8.0	7.7	7.4	7.4	5.6	4.7	7.1	6.5	6.5	6.2	5.3	5.6	9.8
31	9.2	11.3	11.9	11.3	11.3	11.0	11.0	10.4	6.9	9.5	6.4	6.5	4.7	5.3	4.1	2.9	2.9	3.8	4.1	4.7	4.1	7.1	5.6	7.4	7.3
AVG	4.7	4.8	4.7	4.9	4.4	4.4	3.6	3.9	4.4	4.9	5.6	6.1	5.6	7.0	7.3	8.1	8.1	8.3	7.6	6.8	6.1	5.2	5.0	5.0	5.7
DAYS	31	29	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	30	30	30	31	31	31	30	737

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 737 NUMBER OF MISSING HOURS = 7 DATA CAPTURE = 99.06 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 5.692 MAXIMUM HOURLY VALUE = 19.600 STANDARD DEVIATION = 3.4218

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-47

MERGED DATA WIND SPEED--MILES (MPH) DATA FOR AUGUST 1975

HOURS (LST)

DAY	HR-BEG 00 HR-END 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	5.0	5.3	5.0	2.0	1.7	3.2	7.4	7.7	6.5	6.8	8.9	7.1	8.6	8.0	8.3	11.0	14.8	19.0	14.7	12.8	6.8	5.3	10.1	11.3	8.4
2	11.0	9.2	9.2	7.4	7.7	6.5	6.4	6.2	6.5	7.7	7.4	12.8	11.9	11.9	13.9	12.8	11.9	13.3	11.6	8.6	5.9	7.7	4.1	6.1	9.0
3	7.1	3.8	3.8	3.2	4.1	4.4	5.9	8.3	10.4	10.1	9.4	10.1	11.0	9.2	8.9	7.7	9.9	5.9	5.5	8.6	5.9	6.2	4.7	7.4	6.9
4	10.4	11.3	11.6	11.6	13.3	15.4	14.4	16.3	16.9	16.3	14.2	16.0	19.6	19.6	20.5	23.2	25.8	20.2	21.7	18.1	15.7	16.9	16.3	14.2	16.6
5	14.2	14.6	16.0	13.9	15.0	12.5	11.9	12.2	11.9	6.2	4.6	6.4	5.6	10.1	12.2	12.8	12.5	11.6	13.6	14.4	13.9	11.3	9.4	7.4	11.5
6	6.5	6.8	4.6	3.8	3.2	4.4	8.0	9.8	9.2	7.1	6.5	5.0	9.2	6.5	8.0	11.6	11.3	15.1	17.3	11.6	11.6	13.0	12.2	13.3	8.8
7	11.6	14.2	16.5	15.1	20.5	14.5	17.2	16.4	11.6	11.6	10.7	12.2	15.6	16.6	17.8	20.2	17.5	17.5	19.1	11.9	13.9	15.1	6.2	6.7	14.3
8	5.9	8.6	12.8	11.0	9.4	10.4	9.2	5.6	2.6	3.8	7.7	9.2	9.2	8.6	4.9	6.5	4.0	7.4	7.7	9.2	9.2	8.3	8.6	11.0	8.3
9	12.2	12.2	8.6	6.7	7.7	5.6	5.6	6.2	9.5	7.4	7.4	5.0	8.9	8.6	4.0	6.2	12.8	17.8	18.1	21.4	16.0	10.1	10.1	8.9	10.0
10	10.4	11.9	9.5	10.4	9.4	6.8	5.3	3.8	5.6	7.4	5.3	5.0	5.9	5.6	5.6	5.9	5.9	10.4	11.9	11.6	13.3	10.7	10.7	12.2	8.3
11	11.8	10.4	7.7	13.6	20.2	18.1	16.3	13.6	10.7	5.9	4.1	4.7	5.0	5.3	6.2	5.3	8.7	5.6	8.6	7.1	7.7	7.1	8.3	7.1	9.0
12	7.7	10.1	18.7	9.2	3.6	8.6	7.1	7.7	7.1	5.0	6.4	6.5	6.5	6.2	8.0	6.5	6.8	5.3	6.8	8.6	9.3	10.7	11.0	10.7	7.9
13	11.0	13.6	14.2	15.1	15.1	16.2	9.5	5.3	5.1	8.9	7.6	7.4	5.3	5.6	5.6	6.2	4.4	6.5	4.0	8.3	7.7	7.4	9.2	9.2	8.9
14	8.3	8.3	7.4	6.2	8.3	9.2	7.4	5.3	5.4	3.2	3.8	5.0	4.7	5.9	6.3	5.9	6.8	7.7	7.1	5.6	7.1	6.5	8.9	6.5	6.3
15	8.0	6.9	8.9	8.6	7.4	8.0	9.2	6.8	5.3	2.6	3.6	3.2	3.2	4.4	5.9	4.4	5.0	5.5	10.7	10.7	5.0	5.6	5.0	2.9	6.2
16	3.2	5.9	4.1	2.3	2.9	4.4	3.8	2.6	1.7	4.1	5.9	7.1	9.5	9.8	11.0	13.0	15.3	15.3	12.5	12.5	7.4	11.6	9.8	8.9	7.5
17	8.9	8.0	7.4	7.1	6.8	5.3	5.6	3.2	1.7	2.3	2.6	2.6	4.1	7.4	4.4	3.5	4.7	2.3	2.3	1.7	2.3	1.1	2.9	3.2	4.2
18	6.1	6.1	3.5	4.1	5.0	6.8	7.4	4.6	4.5	7.1	7.4	4.4	5.3	5.3	6.2	2.6	5.3	6.2	5.9	6.2	6.8	7.7	6.5	6.5	5.9
19	7.7	7.1	6.5	6.8	7.1	7.4	6.9	5.0	2.3	1.7	3.5	3.5	5.9	99.9	6.7	6.5	6.2	6.5	4.2	5.3	8.6	4.3	8.5	4.0	6.1
20	7.1	5.6	8.6	7.7	5.6	2.3	2.6	4.4	7.7	5.9	3.4	4.4	99.9	99.9	2.6	2.0	4.1	7.7	7.7	8.3	99.9	99.9	99.9	99.9	5.4
21	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	3.2	5.0	7.1	99.9	11.3	13.6	15.7	16.3	16.6	14.5	99.9	15.7	16.9	14.5	99.9	99.9
22	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	4.1	5.3	3.5	2.0	2.0	2.3	5.0	6.5	8.0	7.4	2.3	99.9	99.9	99.9	99.9
23	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	6.8	8.3	99.9	99.9	99.9	11.3	14.5	13.3	13.6	10.7	10.4	8.0	7.7	99.9	99.9
24	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	1.7	4.1	5.6	8.0	7.4	5.9	6.6	8.3	6.8	9.4	8.6	6.8	5.3	1.8	1.1	99.9
25	0.8	5.3	2.0	3.8	5.5	3.8	3.6	3.6	5.3	4.1	5.6	4.7	4.7	6.1	6.4	5.0	6.2	3.5	2.0	3.2	2.0	1.1	0.5	0.8	3.5
26	1.1	0.8	1.1	0.2	0.2	0.8	2.9	2.6	3.2	2.3	2.0	2.0	2.0	5.3	3.8	5.6	6.2	8.0	7.7	7.1	7.1	6.8	6.8	6.5	3.8
27	5.3	4.6	4.1	5.0	5.0	4.7	6.7	5.0	1.7	4.4	3.5	6.2	3.5	4.4	9.2	13.6	12.5	12.2	9.5	8.6	7.7	5.6	6.7	2.0	6.1
28	7.1	3.5	2.6	2.3	2.6	4.1	2.6	1.4	2.3	3.5	4.7	6.2	9.8	11.9	11.6	11.6	9.2	11.0	9.5	5.3	5.3	8.3	4.1	5.3	6.1
29	5.6	2.0	2.6	2.0	2.6	3.5	2.6	2.6	2.0	4.7	5.3	8.0	6.2	11.9	99.9	12.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
30	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	5.3	3.5	2.3	1.7	2.3	4.1	99.9
31	5.3	5.0	99.9	2.0	99.9	99.9	99.9	99.9	5.9	99.9	99.9	99.9	4.1	99.9	99.9	5.6	99.9	5.3	3.2	2.6	1.1	1.1	99.9	99.9	99.9
AVG	7.6	7.7	7.5	6.9	7.6	7.6	7.3	6.9	6.3	5.7	5.9	6.5	7.4	8.2	8.3	8.8	9.5	9.4	9.8	9.0	8.1	8.0	7.6	7.2	7.7
DAYS	26	26	25	26	25	25	25	25	26	27	24	24	27	26	27	30	28	29	30	29	29	28	27	25	649

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 649 NUMBER OF MISSING HOURS = 95 DATA CAPTURE = 87.23 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 7.747 MAXIMUM HOURLY VALUE = 25.800 STANDARD DEVIATION = 4.2862

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-48

MERGED DATA   WIND SPEED-MILES   (MPH)   DATA FOR SEPTEMBER 1975

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	5.2	4.1	5.3	5.3	5.9	5.9	5.4	5.5	1.1	2.3	6.5	7.1	7.4	3.5	2.0	7.7	4.5	6.6	5.9	4.7	7.1	3.6	2.6	7.4	5.3
2	2.9	3.5	2.0	4.7	7.9	2.0	2.6	3.5	2.5	5.9	3.2	5.9	4.7	7.1	9.2	7.7	10.4	11.0	9.2	8.0	6.5	5.0	7.4	8.3	5.7
3	2.3	6.2	4.7	2.4	1.7	2.9	0.4	0.8	1.4	3.5	4.7	5.3	4.6	5.0	4.4	5.0	5.6	6.2	4.5	4.4	4.7	5.6	5.6	6.5	4.4
4	7.4	6.8	4.7	4.7	3.5	3.5	4.7	5.6	7.4	4.1	4.1	5.0	6.2	7.4	4.7	5.9	8.1	8.3	5.6	2.6	3.5	6.5	4.7	9.5	5.4
5	8.0	10.4	7.1	7.7	2.9	1.7	2.6	2.5	0.2	1.4	2.9	3.2	5.3	3.8	4.1	7.7	5.3	4.4	5.3	5.6	5.0	7.1	4.4	0.2	4.5
6	1.7	2.9	0.5	99.9	1.1	3.2	1.1	99.9	0.2	1.7	2.0	4.1	5.0	5.0	5.3	5.9	5.3	2.9	3.2	1.7	2.6	4.7	3.8	3.2	3.0
7	3.8	2.6	5.9	6.8	1.7	1.7	2.3	2.0	3.5	4.1	4.4	8.6	8.6	11.3	12.9	13.0	12.2	11.9	10.1	11.9	5.6	2.6	2.9	4.7	6.0
8	5.6	8.6	8.3	8.3	4.4	8.9	9.5	8.5	7.7	4.4	3.8	4.4	3.5	4.7	7.1	5.6	5.6	6.5	6.2	9.2	7.4	8.9	9.5	8.6	7.0
9	11.0	13.0	11.9	7.1	4.3	11.9	13.0	11.9	12.1	10.1	9.2	9.8	12.5	12.8	15.4	16.6	16.8	17.2	14.6	14.5	10.7	8.9	8.0	7.1	11.8
10	8.0	8.3	6.5	5.9	5.6	5.6	4.7	3.8	3.9	5.0	6.8	6.0	8.3	10.1	13.6	13.0	14.2	13.3	13.0	13.3	12.5	11.9	8.9	7.4	8.8
11	9.8	8.6	7.7	10.7	13.3	15.4	11.9	6.9	6.0	6.2	6.2	4.5	4.5	5.9	6.8	6.5	5.9	6.5	6.2	6.9	11.0	10.1	8.9	10.4	8.7
12	10.7	2.9	9.2	8.0	9.8	9.4	4.3	5.9	5.6	5.6	5.6	4.5	4.1	5.3	5.0	5.3	6.5	7.1	11.3	13.6	12.2	11.9	11.0	9.8	8.2
13	11.3	9.5	10.1	14.5	13.4	10.7	10.1	10.1	9.5	7.7	5.3	5.3	3.8	6.2	6.2	8.0	6.8	5.9	9.5	12.2	16.8	11.3	12.5	10.1	9.4
14	9.2	6.2	7.1	10.4	8.0	7.7	7.7	4.1	2.3	2.6	3.2	4.1	6.8	5.9	6.2	5.6	5.9	5.0	4.7	3.5	5.3	5.3	3.8	4.1	5.6
15	4.2	5.6	4.2	6.5	4.4	5.3	4.7	4.1	3.8	3.2	2.6	4.7	5.9	6.8	8.3	9.5	8.9	10.1	5.6	4.7	8.6	6.5	6.2	4.7	6.0
16	5.3	8.3	7.7	7.1	7.1	3.8	4.1	4.1	3.2	3.2	5.6	7.7	9.5	9.5	14.2	16.6	14.8	17.0	18.4	14.8	10.4	7.1	5.6	6.8	8.8
17	4.0	5.3	7.7	3.0	4.7	5.6	5.3	4.1	9.1	2.9	2.9	3.2	5.0	7.1	7.4	4.7	3.2	4.4	3.2	2.9	2.3	0.8	2.3	1.7	4.2
18	4.7	4.7	3.4	2.9	4.1	7.0	4.8	8.0	7.7	9.2	7.4	7.1	6.0	6.2	4.1	3.5	8.3	8.6	8.0	8.9	10.1	6.5	7.1	7.7	6.6
19	5.9	3.5	2.9	4.1	4.5	6.8	5.0	2.6	4.5	1.4	2.9	4.1	4.1	5.9	5.0	6.6	5.6	7.1	6.5	6.5	7.1	7.1	6.8	5.6	5.0
20	6.2	4.4	3.8	4.1	5.0	7.7	5.5	9.2	8.9	8.3	7.7	11.9	9.2	10.1	8.0	9.2	8.9	10.7	10.7	10.7	8.9	6.8	6.8	8.9	8.1
21	8.9	8.9	4.6	6.5	6.5	5.3	4.1	4.2	5.3	7.1	8.9	11.9	14.8	14.8	16.0	16.6	16.2	17.8	17.8	18.4	23.2	19.0	20.2	14.2	12.3
22	11.9	16.0	18.4	16.6	14.8	13.0	8.9	7.4	5.9	8.3	10.7	11.9	12.2	11.9	13.0	13.0	12.5	10.1	9.5	7.7	5.3	2.3	4.1	4.2	10.4
23	6.5	6.5	5.9	7.7	11.9	13.6	15.4	17.8	14.3	11.9	15.0	12.5	14.8	13.6	23.6	19.6	21.4	17.2	17.8	17.2	14.8	15.4	13.6	13.6	14.2
24	7.7	4.7	3.5	4.1	4.1	4.1	4.7	4.7	2.9	2.0	2.9	3.7	3.5	4.0	7.7	7.4	7.7	4.7	6.5	5.9	2.0	8.9	7.4	7.1	5.0
25	6.0	2.9	5.9	7.4	6.6	5.9	7.4	6.8	2.3	5.3	5.9	7.7	9.2	10.7	9.5	7.4	6.8	5.6	5.5	4.4	5.6	9.2	6.5	8.6	6.5
26	9.5	7.4	6.8	6.8	5.9	6.2	5.3	4.7	2.3	1.7	4.7	5.9	5.9	6.5	7.1	7.4	7.4	7.1	6.8	3.5	6.5	4.1	1.7	2.3	5.4
27	3.8	4.4	6.5	5.0	7.4	5.3	6.5	4.1	4.8	2.6	4.1	3.2	4.4	5.3	7.1	6.8	5.9	4.7	3.8	2.3	3.5	5.0	4.1	5.6	4.6
28	2.6	2.9	5.6	3.5	4.4	3.8	5.9	8.3	4.7	3.2	4.7	5.0	4.7	4.1	7.1	6.8	5.6	3.5	4.8	6.2	8.3	8.9	7.1	8.3	5.4
29	9.8	8.6	7.4	7.1	8.0	8.0	5.9	7.1	2.6	2.0	5.0	8.2	4.2	4.7	2.9	2.3	5.9	7.4	6.2	6.8	9.5	8.3	6.2	5.6	6.2
30	6.5	7.1	5.6	5.3	6.5	5.9	5.6	5.6	3.2	2.0	4.1	5.3	5.9	6.8	7.7	6.0	7.4	5.9	5.8	6.5	5.9	8.5	6.0	7.7	6.0
AVG	6.6	6.7	6.6	6.8	6.2	6.6	6.2	6.1	5.7	4.6	5.3	6.5	7.2	7.4	8.4	8.6	8.6	8.6	8.1	8.0	8.0	7.6	6.9	7.1	7.0
DAYS	30	30	30	29	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	718

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 718 NUMBER OF MISSING HOURS = 2 DATA CAPTURE = 99.72 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 6.988 MAXIMUM HOURLY VALUE = 23.600 STANDARD DEVIATION = 3.7627

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-49

MERGED DATA   WIND SPEED-MILES   (MPH)   DATA FOR OCTOBER 1975

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	8.0	7.0	7.4	6.5	6.2	6.5	5.3	6.5	3.2	1.1	3.5	4.7	4.0	4.7	5.3	4.7	5.0	5.6	2.9	5.9	5.0	4.7	3.5	3.5	5.1
2	4.7	7.1	8.0	6.8	6.1	9.6	4.7	3.2	2.9	2.0	99.9	4.7	6.8	6.2	18.1	22.6	22.3	19.6	16.6	22.0	23.5	23.8	25.0	24.1	12.3
3	23.2	22.0	34.5	31.5	23.2	19.0	20.5	18.1	21.7	22.0	18.1	17.8	15.7	20.5	20.8	18.1	17.2	18.4	18.7	23.2	28.6	22.4	21.4	21.1	21.6
4	23.2	23.5	27.0	19.0	19.6	15.4	11.5	18.1	20.5	16.3	15.4	16.6	18.7	13.3	11.4	9.5	11.8	10.7	18.5	17.2	16.3	21.4	22.9	19.0	17.8
5	17.9	18.7	16.9	16.3	14.8	15.4	16.9	15.7	16.5	14.8	15.4	17.2	18.4	18.1	18.1	14.5	9.8	7.7	8.9	5.3	9.2	9.5	7.1	4.1	13.5
6	1.1	2.0	5.0	5.0	2.3	5.0	8.0	9.2	6.5	4.7	5.8	4.7	5.9	6.5	6.1	2.9	3.5	5.3	5.3	3.2	3.8	3.5	1.7	2.9	4.4
7	3.9	3.5	2.3	2.9	3.5	2.9	3.5	2.9	3.2	2.3	2.3	2.3	6.8	5.0	5.3	7.4	7.7	10.1	12.2	9.8	10.1	10.1	9.2	9.8	5.8
8	9.2	10.1	11.0	12.2	10.7	8.3	10.4	9.5	8.3	12.8	12.8	16.0	14.2	15.1	15.1	16.9	14.8	13.8	13.6	19.0	22.9	18.1	20.2	23.2	14.1
9	22.4	23.2	21.1	16.6	15.0	15.1	18.8	14.2	13.4	14.8	17.2	16.6	15.4	13.9	15.1	5.9	6.5	8.6	7.8	8.9	10.1	11.6	11.3	11.9	13.8
10	12.5	12.2	12.5	11.3	8.9	7.7	5.3	7.4	3.5	5.9	9.9	3.5	2.0	3.5	5.6	7.4	6.8	7.1	9.5	7.6	9.2	9.8	7.4	6.2	7.6
11	6.2	9.8	11.6	14.2	10.8	10.4	10.4	11.0	12.5	7.7	4.4	3.8	7.1	6.8	7.4	6.8	7.1	6.5	5.9	5.0	7.1	9.8	11.9	11.3	8.5
12	10.4	9.5	10.1	11.3	11.0	8.6	7.7	5.6	3.5	4.7	6.2	5.9	5.9	5.6	5.6	5.0	3.5	3.2	2.0	4.7	5.3	6.2	6.5	7.7	6.5
13	9.8	9.5	8.3	6.5	8.6	8.6	7.4	4.7	3.2	4.1	5.6	7.7	7.7	4.7	5.3	5.9	6.5	11.0	7.7	8.3	8.6	8.6	9.4	12.5	7.5
14	12.8	10.7	13.0	11.9	11.9	13.6	10.1	13.3	13.5	12.2	13.3	14.8	17.2	17.8	17.8	19.3	21.1	21.1	23.5	24.7	20.5	20.5	18.4	19.6	16.3
15	15.4	24.8	19.1	9.5	14.5	12.2	11.3	11.6	17.2	10.7	6.8	4.4	2.3	9.5	12.8	12.2	10.7	14.2	13.9	13.9	15.1	15.4	15.1	17.5	12.5
16	19.6	15.4	14.9	13.0	16.3	13.6	16.6	19.6	16.5	13.6	11.9	13.3	15.4	24.7	23.5	22.3	21.4	20.8	20.2	22.0	24.1	24.1	23.6	22.6	18.7
17	21.7	19.6	20.5	22.0	22.6	21.4	22.4	22.0	20.2	19.0	14.9	16.9	15.1	14.2	18.1	14.5	17.5	12.8	17.8	13.3	16.3	16.0	13.9	16.0	17.5
18	10.8	14.0	12.5	19.0	18.1	19.6	14.6	16.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
19	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
20	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
21	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	2.9	3.8	2.9	4.7	4.4	3.8	2.9	3.5	4.7	4.7	99.9
22	8.6	6.2	4.5	8.3	7.1	7.7	8.4	7.1	5.6	5.0	4.7	4.7	5.0	5.6	4.7	6.5	4.8	7.1	8.3	6.8	5.6	3.8	3.2	2.3	6.1
23	3.2	2.3	3.5	3.8	5.9	5.3	4.1	5.9	5.3	4.1	7.4	7.1	8.4	5.9	10.1	5.9	2.3	6.7	2.9	2.0	1.1	2.3	1.7	0.2	4.2
24	2.0	6.5	6.8	6.1	4.1	4.4	5.9	4.4	5.3	5.9	5.3	6.5	5.0	4.1	4.4	8.9	5.3	7.7	5.0	1.7	2.3	3.5	5.3	6.2	5.0
25	7.7	9.8	8.9	7.7	8.9	6.0	8.9	9.8	11.3	8.6	6.2	2.9	3.5	6.2	3.5	2.9	1.4	2.9	7.0	3.5	5.3	11.3	13.9	15.7	7.1
26	11.9	11.9	10.1	8.9	3.8	2.3	4.1	0.5	3.9	2.0	2.9	5.0	6.5	5.6	6.5	5.3	5.3	5.6	6.1	5.3	5.9	7.4	6.8	6.5	5.6
27	5.6	7.4	6.2	4.1	5.3	3.5	4.1	6.5	7.1	5.6	6.5	7.1	6.2	7.1	8.6	7.7	6.5	6.8	5.6	5.9	4.1	4.1	2.3	2.6	5.8
28	2.0	2.9	2.6	2.3	4.1	2.9	3.5	3.8	0.4	2.6	6.1	5.9	8.9	10.1	10.7	6.8	5.3	3.2	4.1	3.5	2.0	5.6	3.5	4.4	4.4
29	4.1	5.3	5.6	5.3	6.5	7.0	6.5	6.6	5.3	5.0	2.3	1.7	1.1	2.0	2.0	1.7	2.9	3.8	7.0	3.2	5.3	3.5	2.3	2.3	3.9
30	1.7	2.0	2.0	1.7	0.8	1.1	1.4	2.3	1.1	1.7	3.2	4.1	4.7	4.1	3.8	4.7	2.0	3.5	7.3	0.8	4.1	8.0	7.1	8.3	3.7
31	5.0	4.4	2.9	4.1	4.1	4.4	4.1	4.7	9.5	6.2	5.9	8.6	4.4	5.3	6.2	4.7	6.5	6.8	4.2	7.7	25.0	26.1	18.4	24.4	8.6
AVG	10.2	10.8	10.8	10.2	9.7	9.1	9.1	9.3	8.5	8.0	8.0	8.3	8.5	9.1	9.8	9.1	8.8	9.0	8.7	9.2	10.7	11.3	10.7	11.1	9.5
DAYS	28	28	28	28	28	28	28	28	27	27	26	27	27	27	28	28	28	28	28	28	28	28	28	28	665

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 665 NUMBER OF MISSING HOURS = 79 DATA CAPTURE = 89.38 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 9.494 MAXIMUM HOURLY VALUE = 34.500 STANDARD DEVIATION = 6.8174

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-50

MERGED DATA   WIND SPEED--MILES   (MPH)   DATA FOR NOVEMBER   1975

HOURS (LST)

HR-BEG / HR-END DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	25.3	23.6	14.1	18.1	8.2	9.8	5.6	7.1	5.5	13.6	16.6	15.1	14.4	14.8	11.9	5.5	4.8	8.9	10.1	10.1	11.3	8.5	10.1	11.5	12.0
2	7.7	11.3	14.8	18.7	14.9	19.1	11.3	7.1	5.2	2.0	4.7	9.5	7.1	11.9	9.5	12.5	13.7	9.2	8.3	10.1	11.9	9.5	4.4	4.7	9.7
3	10.7	11.0	14.0	26.7	29.1	25.1	24.2	11.9	15.7	9.4	9.4	7.6	1.6	13.9	31.2	26.7	21.7	22.0	21.4	20.2	21.1	26.4	22.6	25.6	21.2
4	26.7	28.8	28.6	28.6	29.1	32.7	31.5	28.8	21.1	19.0	21.4	15.4	16.4	23.8	22.3	25.3	25.8	23.5	22.6	17.5	17.2	15.1	15.4	16.5	22.8
5	11.9	13.9	15.6	11.9	13.9	14.4	14.4	19.6	19.3	20.2	22.0	19.4	15.7	12.2	11.9	6.2	7.4	3.5	5.9	3.5	2.0	2.3	2.6	5.9	11.3
6	11.3	9.5	8.3	8.9	9.5	10.7	9.2	11.9	16.1	17.8	16.0	14.2	11.5	5.0	5.3	15.4	11.3	12.5	14.7	18.4	17.8	17.8	19.0	19.9	13.2
7	19.6	17.0	14.8	16.2	12.8	13.0	14.5	12.2	11.3	4.1	2.3	10.7	11.6	11.9	13.6	11.3	4.7	11.9	17.0	15.4	4.5	5.0	5.9	10.4	11.3
8	13.6	15.4	12.8	15.4	12.5	11.3	11.7	5.9	7.1	14.8	19.7	10.4	11.9	10.4	11.9	6.5	7.1	7.1	11.0	2.9	7.1	2.6	3.5	2.6	10.1
9	1.7	2.9	1.4	2.0	2.3	2.3	1.1	3.6	5.5	11.9	12.5	11.3	8.9	9.5	8.9	7.1	3.6	1.7	99.9	2.6	2.9	6.5	6.5	2.3	5.3
10	3.8	4.1	5.0	3.8	3.2	2.9	4.1	2.6	2.5	3.2	5.0	8.9	8.3	6.8	5.9	4.7	4.7	4.7	6.8	6.2	7.7	3.2	2.6	2.6	4.5
11	5.3	3.8	2.9	2.0	1.5	2.9	0.5	3.5	3.2	2.3	2.0	2.6	2.9	6.8	9.5	6.8	9.2	13.9	14.2	12.8	11.9	14.3	13.0	13.3	5.7
12	11.9	17.8	9.5	7.6	8.3	9.5	10.7	12.8	13.7	11.9	11.9	7.1	10.7	8.3	11.3	9.8	8.9	9.5	6.8	7.4	10.1	8.0	4.7	4.4	9.7
13	3.8	5.9	6.7	6.6	4.1	0.2	8.3	11.9	17.3	17.8	13.6	14.2	13.6	10.0	15.7	15.7	14.8	12.8	11.9	7.4	6.4	1.7	1.4	1.7	9.8
14	2.9	7.9	5.3	5.3	8.9	6.2	7.3	7.7	15.7	15.4	17.2	17.2	17.8	22.4	16.0	11.3	9.5	4.9	11.7	14.2	12.9	8.3	10.1	16.6	11.3
15	27.4	28.4	23.8	21.8	30.9	33.9	23.4	19.6	17.2	14.0	16.0	20.2	16.0	17.8	15.6	16.6	17.8	16.6	17.4	20.2	17.8	17.2	19.4	14.5	19.9
16	17.5	19.0	14.2	5.6	5.0	2.9	1.7	4.7	1.7	3.2	2.6	2.0	2.3	4.1	3.6	5.9	4.9	2.9	5.8	3.2	7.7	6.6	4.4	2.3	9.3
17	2.0	3.2	3.2	2.3	4.1	5.5	5.3	4.7	2.3	2.9	3.5	4.1	2.3	4.3	7.7	7.7	2.3	0.4	1.4	2.0	2.0	1.1	1.4	1.1	3.6
18	0.4	0.4	0.2	1.1	2.0	0.4	1.4	0.2	0.5	0.5	1.7	2.1	2.3	2.0	1.7	5.3	4.7	4.7	5.0	4.2	4.7	2.3	4.7	5.0	2.5
19	5.6	3.5	4.7	5.9	6.5	6.5	5.3	5.9	6.5	6.5	5.3	6.2	5.6	5.3	3.6	5.9	4.6	4.7	5.5	5.5	4.6	2.3	5.9	2.3	5.1
20	2.9	2.9	5.3	4.1	0.4	1.7	2.3	2.3	1.7	3.5	0.4	2.9	2.9	2.9	2.0	0.4	0.2	0.8	1.4	0.5	1.4	2.3	1.1	1.4	2.0
21	4.1	4.7	1.7	5.0	3.6	5.3	2.6	3.3	3.7	4.7	5.3	5.9	6.2	7.7	7.1	8.9	9.2	6.6	6.3	6.5	7.7	6.9	7.1	5.5	5.9
22	5.9	7.1	7.7	5.3	5.9	3.2	3.2	6.5	7.1	3.4	2.0	2.0	3.4	2.3	2.3	4.1	4.3	4.7	2.3	3.2	1.1	2.6	2.6	4.1	4.0
23	2.6	2.0	1.7	2.6	3.6	7.1	6.1	5.6	4.2	5.3	2.0	2.3	1.4	2.3	2.6	5.3	5.3	5.6	5.0	2.6	2.6	3.0	4.4	4.7	3.6
24	3.5	4.1	4.7	3.5	4.7	3.5	3.5	2.9	2.3	4.7	4.1	5.6	4.5	4.5	5.4	3.5	2.9	2.9	2.3	2.0	7.1	7.7	5.3	3.3	4.7
25	4.4	2.9	1.7	1.1	0.2	1.1	1.4	2.0	2.3	0.4	1.4	2.0	2.0	1.4	2.0	4.4	2.9	5.1	2.6	3.6	2.6	4.5	9.2	7.7	3.0
26	19.1	5.9	6.5	6.5	6.6	11.0	12.5	16.6	15.2	11.9	15.4	15.4	14.2	11.9	2.9	4.7	3.5	1.7	4.1	3.2	2.0	2.9	1.7	2.9	7.9
27	2.3	2.3	2.9	3.2	2.6	2.9	2.4	7.7	9.2	10.7	7.1	11.9	13.6	7.1	3.5	5.0	5.6	3.2	2.9	4.4	4.7	2.6	1.7	3.3	5.2
28	4.7	4.4	2.3	4.7	1.5	3.4	3.4	5.0	3.5	3.2	2.9	3.5	5.3	4.4	3.5	4.1	4.1	4.7	5.9	5.9	5.3	5.9	4.7	3.5	4.3
29	4.1	3.4	4.1	4.4	3.5	2.5	1.7	0.5	0.5	1.7	1.4	1.7	1.4	2.6	2.0	3.2	5.0	5.9	4.4	4.7	4.1	4.1	4.1	3.6	3.2
30	4.4	4.7	4.4	4.1	4.4	5.3	5.0	5.0	5.7	5.0	5.7	5.0	5.6	5.9	6.5	5.3	5.3	4.4	4.4	5.6	6.5	6.5	6.2	3.6	5.1
AVG	8.5	8.6	8.2	8.3	8.2	8.5	8.1	8.8	8.5	8.2	8.3	8.6	8.4	8.6	8.6	8.6	7.7	7.6	8.2	7.6	7.7	7.3	6.6	7.0	8.2
DAYS	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	719

TOTAL HOURS = 720   NUMBER OF GOOD HOURS = 719   NUMBER OF MISSING HOURS = 1   DATA CAPTURE = 99.86 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 8.153   MAXIMUM HOURLY VALUE = 33.900   STANDARD DEVIATION = 6.6859

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-51

MERGED DATA   WIND SPEED--MILES   (MPH)   DATA FOR DECEMBER   1975

HOURS (LST)

HR-BEG / HR-END DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	5.0	7.1	7.1	2.3	2.0	3.8	5.5	1.7	4.4	5.3	3.2	3.6	1.7	1.4	1.4	1.4	1.4	2.3	5.2	0.8	1.1	3.5	4.4	3.8	3.1
2	8.1	5.2	4.1	5.6	5.6	6.4	7.7	5.6	3.5	3.5	5.2	8.3	16.3	23.2	23.2	25.3	24.6	24.4	23.6	17.2	14.8	16.3	16.4	23.8	12.9
3	20.8	22.0	14.0	15.4	15.4	18.6	19.6	18.4	18.4	22.0	19.8	17.4	16.2	11.9	13.3	12.5	9.8	7.7	9.0	7.1	5.3	3.5	5.6	8.5	13.6
4	2.9	2.9	5.3	9.0	6.2	4.1	9.5	11.9	11.9	13.0	11.3	13.9	10.4	4.6	6.2	2.9	3.2	6.2	6.8	9.2	7.4	4.6	7.4	7.1	7.6
5	6.1	6.8	6.5	5.6	5.6	5.3	6.4	6.7	9.5	6.4	8.0	10.1	11.9	6.9	4.7	2.9	1.7	1.7	2.9	3.5	6.5	3.5	4.7	4.7	5.7
6	5.1	6.6	3.5	5.3	9.2	11.9	11.6	13.0	11.9	4.3	5.9	5.3	9.9	3.8	2.0	1.6	4.1	3.2	5.6	4.1	5.3	2.9	2.6	2.0	5.9
7	3.5	2.6	1.7	4.1	4.0	5.6	5.3	4.1	7.7	7.7	6.5	5.0	2.6	3.8	2.0	2.0	1.7	3.2	4.4	3.2	5.5	3.8	2.3	4.4	4.1
8	6.4	6.6	4.7	4.1	4.4	4.1	3.5	4.4	10.1	12.8	9.2	8.9	4.7	4.1	3.5	3.5	6.5	9.2	11.0	11.3	6.2	4.1	2.9	2.3	6.0
9	1.1	0.8	2.0	2.3	3.8	4.7	5.5	2.9	3.8	2.3	2.6	1.1	2.6	3.0	6.5	7.1	6.5	4.1	5.2	5.6	6.2	3.8	5.0	1.4	3.7
10	1.1	1.1	2.6	7.1	13.0	11.9	9.4	11.9	9.5	4.0	4.7	2.9	4.4	4.4	3.8	3.8	2.6	2.6	1.1	2.6	5.8	2.6	4.1	3.5	5.1
11	0.2	2.9	2.8	0.8	0.5	0.2	2.0	0.8	0.5	99.9	0.5	1.4	2.9	4.1	2.9	4.1	1.4	1.4	1.1	3.8	0.5	0.2	1.4	2.6	1.6
12	3.2	3.5	3.2	2.3	1.1	2.9	1.4	1.4	1.7	1.7	0.4	1.1	0.4	4.4	6.4	7.1	6.5	4.1	7.1	9.8	6.5	7.1	7.1	9.5	4.2
13	3.5	1.8	2.0	1.7	1.1	1.7	2.0	1.6	2.3	1.4	0.4	1.4	1.4	2.3	2.3	5.0	4.1	3.6	3.8	3.2	3.2	3.2	1.1	1.7	2.3
14	2.0	1.1	0.6	0.8	1.7	3.2	1.7	2.0	2.3	4.4	3.2	2.6	0.6	2.0	1.7	2.0	2.6	2.3	2.3	2.9	2.6	3.2	3.2	3.5	2.3
15	2.9	1.9	2.9	4.4	3.2	2.0	4.1	2.6	2.9	1.7	2.0	2.3	1.1	1.7	3.2	3.2	4.7	3.5	4.1	3.6	3.5	4.4	3.8	3.8	3.0
16	3.4	4.7	4.1	4.1	3.8	3.5	2.9	3.2	3.9	2.3	0.8	0.8	99.9	2.0	2.3	1.7	0.2	0.8	1.1	0.5	1.4	2.3	1.7	1.4	2.3
17	0.9	0.8	1.7	0.5	3.8	1.1	1.7	1.1	2.5	1.4	1.1	0.4	2.0	5.1	8.0	7.6	9.2	6.6	9.0	7.4	7.1	5.3	8.3	7.4	4.3
18	8.0	7.4	4.8	5.9	9.9	7.1	6.2	6.5	7.7	5.9	4.1	4.1	4.7	4.7	6.5	5.6	2.9	1.4	6.7	7.1	6.2	5.3	6.4	6.4	5.6
19	5.7	3.0	4.7	3.2	3.5	2.9	3.2	3.5	3.7	3.5	3.8	3.5	6.8	3.8	3.8	3.4	4.1	3.6	4.4	4.4	4.1	3.8	4.1	3.8	3.9
20	3.5	4.1	3.5	3.2	3.5	2.9	0.2	3.2	2.3	2.0	1.4	1.1	99.9	1.1	0.8	0.2	1.4	1.7	1.7	1.1	1.7	2.0	3.5	2.9	2.1
21	2.5	1.7	1.4	1.1	1.4	1.1	1.1	1.1	1.1	1.1	3.2	3.5	3.5	3.5	2.6	4.4	4.1	3.3	5.1	3.2	2.9	3.5	2.9	2.3	2.7
22	2.0	1.1	1.1	1.4	0.8	0.8	0.3	2.0	2.3	1.7	0.4	1.1	2.0	2.0	2.3	0.2	2.9	2.9	3.5	3.3	2.6	1.7	0.5	0.3	1.7
23	0.8	0.2	1.4	2.3	2.6	2.3	2.3	2.0	2.9	0.8	0.5	0.2	1.1	0.8	99.9	1.4	1.4	0.5	0.2	2.0	1.1	1.4	1.1	0.8	1.3
24	1.1	1.7	1.4	2.3	2.6	4.9	2.6	4.9	3.2	1.1	3.6	7.7	10.3	14.8	15.7	13.6	13.6	9.2	13.6	7.7	10.1	7.7	6.5	6.2	7.0
25	3.2	2.6	2.6	3.5	3.5	3.5	4.1	2.3	2.3	5.0	2.0	1.1	1.1	3.5	1.4	5.3	5.3	4.7	4.7	4.5	6.5	5.3	7.1	3.6	3.9
26	5.9	7.1	6.5	3.5	7.1	3.9	5.9	4.0	6.5	9.2	12.5	13.0	7.1	8.3	13.0	13.9	19.0	19.6	15.7	13.9	12.2	15.4	15.1	9.2	10.5
27	4.1	2.3	15.7	11.3	19.0	14.8	14.2	19.2	8.9	11.0	12.5	13.6	15.6	12.8	11.9	11.6	12.2	10.7	5.3	2.0	1.4	6.6	1.4	2.3	9.5
28	2.0	2.3	1.7	1.4	1.4	2.0	1.7	3.5	2.9	2.9	2.3	1.1	2.6	2.9	3.5	4.1	3.5	3.6	4.4	7.1	5.9	2.3	2.9	5.3	3.0
29	3.4	2.3	3.5	2.6	5.9	6.4	7.4	4.1	2.3	4.7	7.4	7.7	9.8	7.4	11.9	6.9	10.7	10.1	9.9	9.5	12.2	4.6	7.7	11.3	7.2
30	7.7	6.5	7.6	12.5	12.9	12.4	11.3	9.3	10.1	10.7	10.1	14.4	17.2	19.6	16.6	13.0	10.7	5.3	6.5	12.5	14.2	16.3	15.4	16.8	11.9
31	12.9	12.3	17.6	16.3	14.5	11.3	13.3	13.0	6.2	10.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
AVG	4.2	4.1	4.4	4.7	5.5	5.6	5.6	5.3	5.5	5.8	4.9	5.3	6.5	6.1	6.3	6.0	6.1	5.5	5.7	5.6	5.5	5.2	5.2	5.3	5.6
DAYS	31	31	31	31	31	31	31	31	31	30	30	30	26	30	29	30	30	30	30	30	30	30	30	30	726

TOTAL HOURS = 744   NUMBER OF GOOD HOURS = 726   NUMBER OF MISSING HOURS = 18   DATA CAPTURE = 97.58 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 5.184   MAXIMUM HOURLY VALUE = 29.000   STANDARD DEVIATION = 4.4579

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-52

MERGED DATA   WIND DIRECTION   (DEG)   DATA FOR JANUARY 1975

HOURS (LST)

HR BEG / HR END / DAY	00 / 01	01 / 02	02 / 03	03 / 04	04 / 05	05 / 06	06 / 07	07 / 08	08 / 09	09 / 10	10 / 11	11 / 12	12 / 13	13 / 14	14 / 15	15 / 16	16 / 17	17 / 18	18 / 19	19 / 20	20 / 21	21 / 22	22 / 23	23 / 24
1	888.	330.	300.	330.	345.	270.	285.	300.	300.	270.	300.	285.	270.	270.	300.	300.	300.	270.	270.	285.	300.	240.	300.	285.
2	300.	300.	270.	270.	240.	240.	225.	120.	230.	240.	225.	225.	210.	210.	210.	210.	240.	210.	210.	225.	240.	240.	240.	270.
3	270.	270.	285.	285.	270.	285.	270.	330.	255.	270.	270.	240.	270.	240.	240.	210.	150.	105.	120.	75.	888.	105.	120.	120.
4	120.	120.	120.	120.	345.	330.	330.	330.	345.	345.	345.	360.	345.	150.	150.	120.	120.	150.	240.	240.	240.	180.	255.	150.
5	150.	120.	120.	180.	210.	180.	180.	150.	180.	165.	60.	30.	60.	120.	105.	240.	150.	210.	240.	210.	240.	240.	240.	255.
6	300.	315.	270.	285.	300.	270.	270.	270.	240.	210.	255.	270.	240.	285.	285.	270.	285.	270.	255.	255.	270.	285.	285.	285.
7	270.	270.	285.	300.	285.	270.	240.	255.	255.	270.	270.	255.	210.	135.	120.	120.	120.	135.	135.	150.	150.	150.	150.	135.
8	135.	135.	120.	150.	150.	120.	105.	30.	30.	360.	360.	360.	345.	240.	210.	75.	90.	90.	30.	105.	90.	60.	45.	285.
9	240.	240.	240.	225.	225.	225.	225.	225.	225.	255.	255.	240.	225.	195.	180.	180.	30.	225.	225.	105.	60.	60.	30.	60.
10	60.	60.	60.	45.	15.	15.	45.	60.	60.	75.	75.	75.	45.	30.	45.	30.	60.	60.	60.	60.	45.	45.	60.	75.
11	60.	45.	45.	45.	45.	135.	120.	195.	225.	225.	225.	90.	105.	105.	105.	105.	195.	105.	195.	105.	105.	120.	120.	120.
12	120.	120.	120.	120.	120.	120.	120.	90.	120.	105.	120.	105.	120.	120.	120.	120.	120.	120.	120.	105.	105.	90.	105.	105.
13	120.	105.	105.	105.	105.	105.	120.	120.	135.	195.	270.	330.	270.	270.	270.	270.	270.	360.	330.	270.	315.	315.	270.	345.
14	120.	120.	225.	225.	270.	270.	270.	270.	270.	360.	60.	90.	75.	90.	90.	75.	90.	120.	120.	165.	240.	255.	255.	255.
15	240.	360.	45.	45.	45.	15.	105.	90.	90.	90.	105.	105.	240.	90.	90.	90.	90.	90.	105.	105.	90.	180.	120.	105.
16	105.	105.	195.	105.	120.	90.	90.	75.	105.	105.	105.	90.	120.	120.	120.	105.	105.	120.	195.	90.	90.	90.	285.	270.
17	270.	330.	330.	270.	270.	270.	270.	255.	270.	300.	270.	285.	300.	300.	360.	120.	105.	105.	999.	999.	105.	105.	90.	60.
18	345.	345.	345.	345.	330.	360.	345.	15.	90.	105.	105.	135.	135.	135.	150.	180.	270.	255.	255.	255.	255.	255.	255.	255.
19	255.	255.	255.	255.	255.	255.	255.	255.	60.	60.	210.	225.	300.	270.	240.	240.	270.	240.	255.	300.	330.	330.	90.	75.
20	90.	60.	345.	345.	345.	345.	330.	315.	315.	330.	330.	330.	330.	330.	315.	330.	330.	330.	270.	210.	255.	240.	255.	285.
21	285.	300.	300.	285.	240.	240.	210.	105.	135.	105.	105.	120.	120.	120.	120.	120.	120.	150.	105.	105.	105.	105.	105.	150.
22	120.	120.	105.	120.	120.	120.	120.	120.	240.	210.	255.	240.	135.	135.	135.	135.	135.	135.	135.	135.	135.	135.	135.	135.
23	135.	135.	165.	180.	210.	210.	210.	240.	30.	300.	255.	270.	270.	270.	270.	300.	270.	285.	270.	270.	240.	240.	270.	300.
24	270.	300.	300.	270.	270.	270.	270.	270.	270.	300.	360.	300.	330.	330.	330.	330.	330.	330.	345.	60.	60.	90.	15.	345.
25	330.	345.	60.	60.	60.	360.	360.	60.	45.	45.	360.	360.	30.	60.	60.	45.	45.	30.	30.	75.	360.	360.	360.	360.
26	360.	360.	345.	360.	360.	360.	45.	30.	30.	360.	345.	345.	345.	345.	330.	345.	345.	345.	345.	345.	360.	345.	345.	30.
27	30.	999.	360.	360.	330.	330.	330.	300.	285.	270.	270.	195.	195.	345.	375.	360.	360.	45.	45.	285.	285.	30.	30.	30.
28	60.	30.	60.	345.	345.	360.	345.	135.	330.	330.	330.	330.	360.	360.	360.	330.	330.	345.	330.	345.	315.	330.	330.	345.
29	345.	345.	345.	345.	345.	360.	360.	360.	360.	360.	330.	330.	340.	360.	360.	15.	120.	120.	195.	195.	135.	315.	315.	75.
30	105.	105.	105.	105.	105.	105.	105.	105.	105.	105.	120.	120.	120.	120.	120.	120.	135.	120.	120.	135.	135.	135.	135.	135.
31	135.	120.	135.	120.	120.	135.	135.	120.	120.	135.	120.	135.	150.	150.	150.	150.	150.	150.	150.	150.	150.	120.	120.	120.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 741 NUMBER OF MISSING HOURS = 3 DATA CAPTURE = 99.60 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-53

MERGED DATA   WIND DIRECTION   (DEG)   DATA FOR FEBRUARY 1975

HOURS (LST)

HR BEG / HR END / DAY	00 / 01	01 / 02	02 / 03	03 / 04	04 / 05	05 / 06	06 / 07	07 / 08	08 / 09	09 / 10	10 / 11	11 / 12	12 / 13	13 / 14	14 / 15	15 / 16	16 / 17	17 / 18	18 / 19	19 / 20	20 / 21	21 / 22	22 / 23	23 / 24
1	135.	120.	120.	120.	120.	120.	120.	120.	105.	105.	60.	60.	345.	330.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.
2	60.	45.	45.	60.	60.	60.	60.	60.	60.	75.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.	60.
3	60.	60.	75.	75.	60.	60.	60.	60.	60.	75.	75.	999.	60.	55.	55.	42.	36.	70.	45.	42.	40.	40.	45.	45.
4	42.	42.	55.	55.	70.	70.	70.	55.	60.	65.	55.	38.	25.	25.	25.	50.	40.	55.	55.	55.	55.	54.	53.	60.
5	45.	75.	70.	65.	85.	85.	80.	55.	65.	70.	210.	210.	210.	210.	350.	100.	120.	160.	190.	185.	185.	120.	100.	85.
6	100.	100.	100.	100.	100.	110.	115.	90.	85.	75.	100.	110.	110.	110.	125.	115.	100.	105.	105.	107.	105.	70.	55.	55.
7	70.	85.	75.	35.	360.	355.	40.	25.	25.	340.	325.	320.	325.	55.	50.	55.	55.	55.	45.	40.	50.	50.	40.	50.
8	340.	355.	20.	10.	100.	115.	115.	120.	155.	100.	100.	105.	115.	115.	110.	110.	110.	115.	110.	90.	90.	85.	85.	90.
9	40.	95.	90.	95.	95.	100.	100.	100.	100.	100.	100.	110.	115.	115.	115.	110.	110.	100.	105.	115.	120.	120.	130.	130.
10	110.	55.	55.	75.	70.	55.	55.	55.	55.	55.	75.	75.	75.	85.	60.	60.	70.	80.	80.	55.	65.	70.	65.	65.
11	65.	65.	45.	65.	45.	65.	65.	65.	60.	25.	60.	55.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	999.
12	30.	30.	30.	999.	999.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.
13	888.	888.	888.	325.	325.	260.	265.	999.	280.	325.	70.	70.	70.	330.	330.	330.	330.	330.	340.	360.	40.	40.	40.	20.
14	20.	20.	999.	20.	20.	20.	20.	20.	999.	999.	20.	20.	20.	20.	100.	310.	310.	310.	310.	310.	310.	310.	310.	310.
15	310.	40.	190.	235.	115.	250.	190.	160.	110.	95.	70.	40.	75.	110.	110.	110.	110.	110.	110.	100.	100.	95.	95.	360.
16	360.	360.	340.	360.	360.	345.	350.	355.	355.	360.	360.	360.	360.	340.	350.	340.	999.	330.	330.	325.	295.	295.	265.	265.
17	280.	300.	235.	205.	250.	220.	280.	280.	235.	240.	265.	310.	235.	330.	325.	280.	190.	280.	290.	265.	250.	255.	280.	270.
18	295.	280.	290.	280.	265.	250.	240.	220.	295.	235.	225.	225.	285.	200.	285.	220.	115.	115.	205.	205.	888.	888.	888.	888.
19	190.	130.	130.	190.	190.	115.	120.	125.	115.	115.	100.	115.	110.	115.	115.	235.	180.	190.	250.	265.	360.	360.	340.	325.
20	340.	340.	300.	300.	360.	360.	340.	360.	340.	325.	340.	340.	340.	340.	320.	320.	290.	265.	290.	280.	265.	275.	280.	280.
21	265.	265.	265.	265.	265.	265.	310.	310.	325.	355.	290.	250.	250.	310.	295.	275.	250.	280.	260.	235.	235.	245.	255.	250.
22	265.	280.	340.	250.	280.	100.	100.	100.	190.	175.	110.	110.	110.	250.	235.	230.	230.	205.	210.	210.	160.	120.	135.	135.
23	100.	105.	115.	105.	100.	100.	120.	150.	230.	220.	225.	250.	285.	300.	270.	225.	245.	270.	330.	350.	60.	45.	45.	300.
24	270.	250.	250.	280.	280.	280.	280.	275.	255.	265.	270.	265.	270.	275.	275.	280.	280.	275.	260.	215.	360.	355.	355.	360.
25	330.	330.	30.	30.	75.	360.	360.	360.	360.	360.	280.	140.	125.	130.	125.	115.	195.	105.	110.	110.	100.	100.	100.	110.
26	100.	90.	100.	110.	105.	100.	100.	110.	115.	115.	340.	115.	145.	145.	280.	240.	355.	40.	150.	240.	265.	280.	250.	250.
27	265.	280.	285.	355.	355.	100.	80.	30.	30.	30.	130.	100.	100.	100.	120.	120.	115.	120.	150.	135.	120.	120.	120.	135.
28	105.	105.	100.	100.	90.	85.	195.	210.	255.	60.	15.	15.	30.	45.	45.	60.	65.	75.	75.	90.	90.	75.	75.	999.

TOTAL HOURS = 672 NUMBER OF GOOD HOURS = 663 NUMBER OF MISSING HOURS = 9 DATA CAPTURE = 98.66 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-54

MERGED DATA WIND DIRECTION (DEG) DATA FOR MARCH 1975

HOURS (LST)

HOUR BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HOUR END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
2	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
3	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
4	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
5	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
6	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	15.	15.	15.	90.	90.	60.	60.	50.	50.	50.	45.	60.
7	105.	95.	105.	120.	120.	140.	115.	115.	120.	165.	165.	165.	145.	125.	125.	125.	100.	110.	110.	120.	135.	135.	135.	115.
8	120.	105.	105.	115.	115.	105.	100.	170.	90.	165.	165.	315.	888.	125.	125.	115.	115.	115.	110.	110.	110.	999.	110.	110.
9	110.	110.	110.	110.	110.	115.	110.	888.	15.	45.	45.	40.	45.	45.	45.	60.	50.	60.	60.	40.	35.	65.	45.	40.
10	45.	35.	55.	30.	30.	25.	40.	60.	15.	145.	315.	320.	45.	40.	350.	45.	70.	65.	70.	65.	60.	60.	45.	70.
11	70.	55.	60.	60.	360.	355.	360.	45.	45.	360.	350.	345.	285.	125.	190.	105.	105.	105.	105.	105.	105.	135.	120.	120.
12	100.	105.	105.	100.	105.	135.	105.	115.	115.	105.	145.	120.	120.	130.	135.	195.	105.	105.	340.	345.	345.	345.	345.	345.
13	345.	345.	350.	330.	360.	360.	360.	360.	360.	355.	265.	265.	290.	270.	265.	265.	265.	265.	275.	265.	280.	270.	270.	230.
14	255.	888.	225.	210.	255.	225.	255.	215.	245.	245.	245.	195.	150.	150.	888.	195.	130.	135.	888.	888.	190.	165.	135.	888.
15	225.	105.	135.	255.	145.	145.	145.	180.	140.	155.	165.	165.	165.	165.	190.	195.	195.	165.	205.	145.	165.	95.	205.	150.
16	165.	145.	250.	235.	315.	260.	260.	280.	340.	275.	270.	270.	275.	270.	260.	265.	260.	340.	245.	290.	245.	290.	230.	200.
17	205.	195.	180.	180.	155.	135.	145.	180.	150.	150.	190.	195.	210.	225.	240.	240.	240.	225.	225.	230.	225.	230.	225.	225.
18	888.	888.	255.	105.	105.	105.	195.	140.	170.	195.	888.	285.	270.	240.	240.	245.	240.	270.	270.	265.	270.	280.	315.	285.
19	240.	250.	195.	888.	30.	888.	110.	105.	145.	140.	360.	265.	265.	240.	240.	260.	240.	330.	275.	275.	270.	285.	285.	265.
20	270.	285.	275.	300.	240.	240.	295.	30.	15.	195.	250.	345.	285.	240.	230.	230.	230.	230.	220.	220.	180.	135.	150.	205.
21	210.	175.	135.	150.	150.	130.	140.	180.	145.	135.	135.	135.	135.	135.	135.	135.	135.	135.	135.	135.	135.	125.	125.	120.
22	105.	105.	195.	235.	235.	115.	110.	888.	45.	340.	335.	315.	345.	265.	320.	270.	265.	240.	290.	255.	255.	245.	240.	240.
23	280.	225.	255.	280.	888.	105.	105.	105.	255.	315.	280.	350.	345.	340.	320.	310.	300.	260.	240.	230.	305.	260.	275.	260.
24	275.	250.	305.	130.	305.	300.	275.	310.	25.	65.	45.	50.	25.	350.	350.	350.	50.	50.	50.	75.	80.	80.	300.	310.
25	5.	5.	350.	335.	340.	350.	350.	330.	330.	330.	335.	335.	320.	350.	350.	350.	350.	350.	335.	30.	50.	325.	290.	35.
26	350.	340.	350.	350.	350.	340.	340.	335.	335.	335.	335.	320.	335.	335.	335.	335.	335.	335.	20.	20.	350.	350.	350.	335.
27	335.	335.	5.	20.	5.	20.	20.	20.	5.	300.	120.	35.	350.	335.	335.	335.	355.	350.	45.	45.	40.	45.	350.	350.
28	335.	5.	35.	20.	20.	20.	5.	20.	5.	165.	175.	260.	260.	340.	340.	350.	350.	350.	5.	50.	335.	5.	5.	350.
29	5.	5.	5.	5.	5.	5.	40.	20.	35.	140.	305.	245.	999.	350.	240.	290.	290.	290.	245.	305.	305.	275.	270.	270.
30	345.	305.	350.	350.	350.	350.	350.	350.	350.	330.	350.	350.	350.	335.	335.	335.	350.	320.	320.	335.	335.	335.	335.	345.
31	345.	345.	345.	345.	350.	335.	345.	345.	345.	345.	325.	335.	350.	330.	335.	350.	35.	35.	5.	350.	5.	350.	335.	335.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 613 NUMBER OF MISSING HOURS = 131 DATA CAPTURE = 82.39 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-55

MERGED DATA WIND DIRECTION (DEG) DATA FOR APRIL 1975

HOURS (LST)

HOUR BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HOUR END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	305.	335.	330.	330.	320.	320.	65.	45.	155.	255.	290.	275.	275.	290.	290.	250.	275.	265.	230.	280.	230.	230.	180.	290.
2	50.	105.	155.	140.	140.	145.	140.	140.	140.	105.	225.	240.	230.	290.	290.	340.	305.	260.	240.	250.	230.	245.	290.	230.
3	230.	230.	290.	290.	280.	290.	290.	270.	125.	125.	105.	40.	305.	135.	155.	140.	125.	140.	145.	155.	140.	125.	110.	110.
4	110.	140.	125.	110.	110.	85.	95.	65.	95.	50.	50.	125.	110.	125.	125.	25.	50.	65.	45.	65.	65.	65.	50.	50.
5	350.	360.	340.	360.	360.	360.	350.	345.	345.	350.	335.	5.	65.	65.	80.	65.	65.	80.	80.	65.	50.	50.	60.	65.
6	90.	50.	70.	20.	20.	20.	20.	20.	20.	145.	260.	305.	305.	105.	290.	275.	280.	280.	240.	280.	275.	280.	290.	290.
7	290.	290.	280.	265.	265.	280.	280.	305.	335.	335.	125.	125.	140.	140.	155.	185.	110.	70.	45.	50.	50.	50.	50.	30.
8	360.	360.	360.	360.	360.	360.	360.	360.	350.	330.	330.	320.	330.	350.	35.	35.	35.	35.	35.	350.	350.	350.	350.	340.
9	340.	340.	340.	340.	340.	355.	350.	340.	355.	35.	35.	50.	45.	65.	65.	125.	125.	125.	125.	125.	125.	135.	260.	260.
10	260.	275.	335.	335.	135.	115.	320.	320.	320.	120.	135.	335.	340.	150.	125.	110.	140.	125.	110.	170.	170.	245.	230.	230.
11	305.	305.	300.	120.	335.	335.	335.	5.	5.	130.	330.	330.	340.	335.	280.	280.	330.	275.	275.	260.	260.	340.	290.	310.
12	305.	305.	20.	360.	320.	5.	360.	350.	360.	360.	270.	350.	350.	335.	280.	260.	270.	270.	270.	270.	270.	275.	290.	290.
13	340.	60.	45.	45.	65.	85.	50.	65.	65.	35.	5.	65.	35.	35.	290.	335.	40.	20.	340.	5.	5.	5.	5.	5.
14	350.	350.	350.	340.	350.	350.	50.	35.	35.	50.	50.	35.	5.	340.	340.	350.	350.	350.	335.	340.	335.	335.	340.	350.
15	350.	360.	340.	360.	340.	360.	360.	330.	340.	330.	320.	20.	35.	35.	35.	350.	20.	65.	40.	65.	50.	50.	40.	30.
16	260.	260.	260.	350.	320.	20.	360.	360.	340.	350.	65.	335.	335.	320.	50.	50.	50.	60.	50.	65.	350.	60.	35.	335.
17	335.	350.	350.	350.	360.	355.	350.	350.	350.	335.	50.	60.	125.	295.	330.	275.	320.	270.	270.	270.	290.	280.	290.	290.
18	300.	300.	300.	305.	350.	320.	275.	290.	275.	275.	275.	275.	275.	270.	260.	260.	260.	280.	280.	260.	280.	260.	260.	280.
19	305.	320.	325.	290.	280.	245.	270.	330.	50.	65.	65.	65.	35.	65.	50.	50.	140.	105.	275.	275.	290.	275.	290.	320.
20	210.	275.	275.	290.	290.	295.	300.	300.	275.	275.	275.	275.	250.	275.	275.	275.	290.	290.	265.	265.	265.	275.	260.	260.
21	245.	290.	275.	350.	350.	35.	130.	215.	125.	140.	125.	110.	110.	350.	230.	230.	215.	265.	215.	215.	215.	215.	215.	210.
22	210.	210.	200.	200.	215.	215.	215.	225.	225.	230.	230.	230.	240.	240.	240.	240.	240.	240.	200.	200.	200.	200.	200.	200.
23	185.	150.	190.	125.	125.	200.	245.	245.	265.	350.	275.	275.	260.	245.	265.	260.	250.	240.	215.	155.	170.	200.	185.	200.
24	215.	200.	200.	150.	125.	125.	140.	140.	140.	140.	175.	185.	140.	140.	140.	140.	125.	125.	125.	170.	170.	120.	110.	80.
25	45.	65.	45.	45.	65.	85.	65.	95.	350.	350.	350.	350.	330.	360.	340.	275.	290.	335.	350.	350.	350.	360.	350.	350.
26	5.	5.	5.	5.	350.	335.	305.	20.	340.	335.	305.	320.	350.	275.	305.	290.	270.	275.	290.	275.	275.	275.	275.	295.
27	290.	350.	275.	65.	350.	335.	340.	340.	340.	340.	340.	340.	340.	340.	340.	340.	340.	340.	340.	360.	360.	350.	350.	335.
28	335.	335.	335.	350.	350.	350.	350.	330.	360.	350.	35.	35.	35.	35.	35.	35.	50.	50.	50.	50.	70.	75.	65.	35.
29	360.	350.	350.	20.	20.	20.	20.	20.	45.	35.	65.	110.	110.	110.	70.	50.	95.	130.	135.	120.	140.	140.	140.	180.
30	180.	35.	35.	35.	35.	999.	35.	30.	240.	150.	35.	335.	305.	290.	275.	290.	290.	290.	240.	275.	260.	260.	260.	275.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 719 NUMBER OF MISSING HOURS = 1 DATA CAPTURE = 99.86 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-56

MERGED DATA WIND DIRECTION (DEG) DATA FOR MAY 1975

HOURS (LST)

HR-BEG / HR-END / DAY	00 / 01	01 / 02	02 / 03	03 / 04	04 / 05	05 / 06	06 / 07	07 / 08	08 / 09	09 / 10	10 / 11	11 / 12	12 / 13	13 / 14	14 / 15	15 / 16	16 / 17	17 / 18	18 / 19	19 / 20	20 / 21	21 / 22	22 / 23	23 / 24
1	275.	310.	310.	275.	275.	275.	275.	280.	300.	290.	265.	260.	245.	260.	215.	265.	290.	290.	230.	220.	220.	230.	260.	265.
2	125.	165.	200.	200.	215.	215.	215.	215.	215.	215.	215.	230.	205.	245.	245.	215.	185.	170.	170.	155.	155.	155.	140.	140.
3	140.	170.	155.	170.	265.	295.	200.	200.	275.	230.	230.	230.	230.	240.	245.	230.	230.	250.	270.	290.	275.	275.	275.	275.
4	275.	330.	350.	350.	335.	350.	335.	300.	335.	330.	335.	335.	100.	300.	335.	335.	350.	335.	320.	300.	305.	280.	275.	275.
5	335.	350.	350.	350.	350.	350.	350.	135.	335.	335.	335.	335.	335.	350.	320.	320.	320.	260.	275.	275.	260.	280.	245.	265.
6	340.	340.	335.	350.	340.	350.	360.	290.	200.	350.	275.	305.	350.	335.	290.	305.	280.	280.	270.	270.	275.	280.	335.	50.
7	20.	360.	20.	360.	30.	365.	30.	280.	305.	160.	170.	290.	260.	335.	305.	335.	335.	335.	335.	280.	310.	300.	335.	20.
8	35.	35.	40.	35.	25.	25.	110.	280.	290.	265.	335.	145.	155.	160.	155.	155.	140.	125.	125.	125.	125.	125.	125.	125.
9	105.	95.	95.	100.	120.	115.	110.	125.	140.	180.	125.	125.	155.	155.	155.	155.	140.	125.	130.	130.	130.	140.	110.	110.
10	90.	110.	125.	125.	125.	140.	155.	140.	100.	140.	180.	160.	160.	190.	140.	135.	200.	230.	320.	275.	155.	265.	285.	100.
11	95.	120.	140.	140.	170.	320.	350.	270.	200.	330.	335.	290.	290.	290.	290.	275.	275.	275.	275.	275.	245.	290.	290.	275.
12	275.	290.	275.	240.	280.	280.	240.	280.	260.	260.	290.	265.	265.	275.	290.	290.	275.	275.	275.	225.	275.	290.	275.	270.
13	350.	360.	80.	65.	50.	50.	70.	60.	275.	305.	185.	215.	185.	360.	350.	320.	888.	320.	120.	120.	120.	110.	125.	110.
14	110.	110.	125.	110.	80.	110.	80.	110.	125.	260.	275.	275.	230.	230.	230.	230.	245.	245.	245.	215.	215.	215.	275.	260.
15	215.	350.	295.	280.	275.	275.	265.	265.	888.	250.	235.	235.	250.	235.	235.	235.	235.	235.	235.	235.	235.	235.	280.	260.
16	260.	260.	295.	265.	265.	260.	235.	80.	75.	110.	85.	250.	220.	250.	220.	220.	235.	235.	235.	265.	250.	260.	205.	270.
17	250.	280.	245.	280.	305.	265.	235.	235.	215.	235.	235.	235.	235.	235.	235.	250.	235.	220.	250.	250.	130.	90.	70.	70.
18	235.	340.	340.	280.	285.	300.	250.	235.	235.	220.	240.	220.	70.	70.	70.	50.	60.	340.	300.	285.	240.	230.	210.	245.
19	270.	215.	290.	260.	265.	260.	250.	250.	250.	220.	25.	70.	70.	70.	250.	100.	70.	70.	40.	280.	250.	255.	310.	280.
20	40.	250.	330.	255.	255.	240.	255.	120.	190.	240.	80.	80.	80.	80.	80.	888.	70.	40.	240.	275.	275.	275.	285.	300.
21	300.	300.	245.	300.	300.	265.	255.	280.	70.	265.	280.	80.	100.	30.	80.	280.	190.	250.	70.	70.	75.	310.	290.	270.
22	270.	280.	320.	320.	310.	310.	70.	70.	75.	70.	120.	340.	270.	265.	265.	190.	55.	100.	95.	240.	35.	35.	315.	45.
23	45.	280.	260.	260.	240.	260.	260.	60.	45.	250.	250.	235.	235.	235.	235.	80.	80.	70.	75.	270.	270.	240.	275.	888.
24	70.	250.	235.	260.	265.	235.	220.	235.	235.	235.	235.	235.	235.	235.	85.	65.	175.	150.	90.	50.	0.	350.	265.	260.
25	260.	250.	888.	70.	80.	80.	220.	70.	70.	70.	70.	55.	55.	55.	70.	55.	55.	55.	70.	85.	65.	65.	260.	260.
26	270.	270.	240.	260.	260.	260.	260.	85.	75.	70.	55.	55.	70.	250.	888.	888.	70.	80.	75.	55.	55.	25.	15.	310.
27	265.	270.	280.	270.	270.	270.	80.	80.	80.	80.	80.	70.	70.	55.	888.	888.	235.	250.	280.	260.	280.	280.	260.	255.
28	280.	260.	260.	340.	265.	265.	265.	80.	80.	70.	70.	70.	70.	235.	70.	235.	235.	50.	40.	0.	40.	290.	280.	285.
29	295.	280.	280.	260.	265.	275.	285.	60.	200.	888.	888.	80.	110.	230.	60.	70.	60.	80.	45.	130.	120.	250.	260.	270.
30	255.	265.	245.	310.	270.	250.	235.	230.	100.	70.	90.	55.	100.	888.	220.	70.	55.	30.	50.	45.	40.	55.	260.	265.
31	265.	265.	265.	260.	240.	250.	240.	200.	75.	70.	70.	70.	70.	75.	190.	70.	55.	30.	30.	70.	280.	280.	270.	260.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 744 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)
THE ABOVE RUN IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-57

MERGED DATA WIND DIRECTION (DEG) DATA FOR JUNE 1975

HOURS (LST)

HR-BEG / HR-END / DAY	00 / 01	01 / 02	02 / 03	03 / 04	04 / 05	05 / 06	06 / 07	07 / 08	08 / 09	09 / 10	10 / 11	11 / 12	12 / 13	13 / 14	14 / 15	15 / 16	16 / 17	17 / 18	18 / 19	19 / 20	20 / 21	21 / 22	22 / 23	23 / 24
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
2	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	75.	270.	330.	255.	255.
3	285.	315.	315.	255.	285.	285.	255.	255.	255.	255.	255.	255.	270.	270.	210.	210.	225.	270.	255.	270.	255.	270.	260.	255.
4	255.	270.	270.	270.	255.	255.	255.	270.	100.	888.	888.	135.	225.	240.	285.	270.	300.	300.	285.	240.	260.	255.	240.	280.
5	240.	240.	240.	270.	255.	255.	240.	255.	235.	255.	255.	255.	270.	270.	255.	255.	270.	270.	270.	270.	240.	270.	45.	75.
6	60.	75.	90.	90.	105.	90.	60.	45.	35.	45.	30.	30.	330.	315.	315.	315.	315.	360.	330.	315.	315.	270.	270.	330.
7	45.	330.	330.	330.	330.	345.	330.	315.	315.	315.	360.	360.	330.	315.	315.	360.	315.	360.	315.	260.	280.	285.	290.	285.
8	285.	310.	310.	360.	360.	360.	360.	360.	330.	330.	330.	330.	360.	360.	360.	360.	360.	360.	345.	345.	270.	45.	345.	330.
9	330.	330.	330.	330.	330.	330.	315.	255.	315.	315.	270.	270.	240.	240.	210.	270.	240.	240.	270.	90.	300.	195.	210.	315.
10	315.	255.	315.	330.	360.	30.	360.	360.	360.	300.	300.	300.	270.	255.	255.	255.	255.	255.	255.	240.	240.	300.	330.	270.
11	270.	330.	330.	45.	330.	330.	360.	45.	360.	270.	330.	300.	270.	255.	300.	300.	255.	255.	255.	999.	999.	255.	270.	300.
12	330.	340.	345.	330.	270.	300.	330.	315.	330.	315.	300.	270.	330.	360.	330.	360.	360.	270.	270.	240.	255.	240.	270.	285.
13	300.	270.	240.	270.	270.	270.	255.	255.	255.	255.	255.	45.	330.	45.	315.	360.	270.	270.	255.	270.	270.	270.	270.	270.
14	270.	255.	240.	240.	255.	270.	270.	255.	300.	270.	270.	270.	270.	999.	240.	270.	270.	240.	240.	255.	255.	270.	255.	270.
15	270.	270.	80.	40.	120.	200.	300.	330.	315.	270.	315.	315.	30.	45.	45.	330.	330.	270.	285.	270.	300.	330.	330.	330.
16	330.	360.	360.	350.	330.	330.	330.	270.	330.	360.	30.	250.	270.	315.	330.	330.	330.	330.	330.	330.	360.	360.	360.	360.
17	360.	360.	360.	360.	360.	270.	330.	330.	330.	330.	330.	330.	270.	300.	300.	330.	360.	120.	270.	330.	330.	330.	330.	330.
18	330.	330.	330.	330.	345.	345.	330.	330.	340.	30.	60.	30.	45.	15.	60.	60.	75.	60.	30.	15.	30.	30.	330.	315.
19	330.	330.	330.	330.	330.	330.	330.	330.	300.	300.	60.	45.	15.	330.	315.	315.	315.	315.	330.	330.	315.	315.	285.	330.
20	330.	330.	315.	330.	330.	330.	330.	315.	315.	315.	315.	315.	270.	240.	240.	240.	255.	255.	255.	240.	255.	240.	255.	270.
21	270.	255.	270.	300.	300.	300.	315.	330.	315.	315.	315.	285.	285.	285.	285.	270.	255.	30.	45.	75.	240.	270.	255.	285.
22	270.	270.	360.	360.	360.	360.	330.	315.	105.	90.	90.	300.	120.	120.	240.	210.	225.	225.	225.	255.	300.	285.	60.	360.
23	150.	120.	60.	130.	75.	90.	225.	225.	330.	999.	240.	255.	330.	225.	210.	180.	225.	240.	240.	300.	270.	255.	300.	300.
24	120.	210.	220.	225.	225.	225.	340.	360.	270.	300.	120.	150.	210.	240.	150.	195.	240.	255.	255.	255.	270.	270.	255.	255.
25	270.	270.	270.	255.	255.	255.	255.	255.	350.	90.	90.	360.	210.	270.	270.	255.	255.	270.	270.	255.	255.	270.	270.	120.
26	75.	75.	105.	270.	270.	270.	270.	270.	300.	210.	225.	180.	180.	240.	30.	45.	330.	300.	250.	255.	255.	300.	330.	255.
27	270.	300.	270.	255.	270.	270.	270.	285.	270.	270.	270.	270.	270.	255.	255.	270.	270.	255.	270.	255.	255.	255.	270.	285.
28	255.	255.	255.	255.	255.	255.	255.	270.	240.	240.	270.	270.	270.	270.	270.	240.	255.	270.	285.	285.	345.	330.	315.	345.
29	345.	345.	345.	315.	285.	270.	270.	300.	340.	90.	999.	120.	888.	255.	240.	195.	240.	240.	270.	285.	240.	240.	240.	120.
30	110.	90.	60.	15.	210.	999.	110.	270.	270.	255.	300.	90.	90.	120.	120.	888.	120.	135.	240.	255.	255.	45.	15.	15.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 671 NUMBER OF MISSING HOURS = 49 DATA CAPTURE = 93.19 (PERCENT)
THE ABOVE RUN IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-58

MERGED DATA — WIND DIRECTION (DEG) — DATA FOR JULY 1975

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
1	45.	999.	45.	360.	360.	360.	360.	330.	275.	360.	90.	888.	888.	888.	255.	270.	270.	90.	90.	75.	75.	75.	75.	360.
2	270.	360.	360.	360.	360.	360.	360.	360.	355.	315.	888.	90.	90.	270.	888.	120.	90.	120.	120.	120.	90.	255.	240.	240.
3	330.	330.	360.	360.	360.	360.	360.	360.	330.	360.	330.	300.	888.	180.	888.	270.	300.	330.	300.	300.	240.	255.	285.	330.
4	360.	360.	360.	360.	360.	360.	360.	360.	315.	360.	210.	120.	120.	180.	275.	300.	330.	90.	90.	330.	250.	255.	285.	330.
5	360.	360.	315.	330.	360.	999.	999.	15.	285.	270.	360.	270.	270.	270.	270.	270.	270.	270.	270.	270.	255.	125.	150.	270.
6	240.	270.	300.	315.	75.	75.	120.	75.	45.	90.	90.	120.	888.	120.	90.	135.	135.	135.	330.	210.	225.	270.	255.	360.
7	330.	330.	75.	999.	999.	15.	999.	105.	345.	225.	105.	105.	105.	90.	270.	120.	120.	105.	90.	105.	120.	180.	140.	180.
8	90.	105.	105.	180.	150.	45.	240.	360.	240.	240.	255.	315.	15.	60.	330.	888.	999.	120.	90.	90.	90.	60.	90.	75.
9	75.	75.	60.	360.	999.	999.	15.	888.	275.	120.	120.	195.	210.	210.	260.	360.	888.	888.	105.	90.	90.	180.	210.	999.
10	90.	90.	240.	360.	999.	360.	999.	255.	125.	90.	90.	90.	360.	270.	120.	135.	135.	120.	90.	999.	100.	325.	250.	325.
11	75.	20.	360.	5.	10.	355.	360.	55.	85.	110.	245.	115.	115.	888.	100.	100.	245.	190.	888.	888.	280.	290.	280.	275.
12	310.	290.	270.	280.	280.	290.	345.	280.	245.	10.	340.	45.	145.	145.	145.	120.	210.	240.	245.	250.	265.	275.	290.	240.
13	105.	325.	360.	300.	360.	355.	140.	340.	340.	325.	888.	888.	130.	130.	115.	180.	45.	265.	255.	265.	265.	265.	280.	295.
14	360.	330.	330.	360.	330.	360.	310.	280.	325.	115.	100.	45.	100.	190.	190.	230.	280.	250.	235.	220.	205.	220.	240.	240.
15	360.	295.	260.	265.	240.	310.	340.	330.	325.	310.	280.	265.	310.	310.	295.	325.	240.	280.	280.	270.	280.	310.	290.	45.
16	280.	265.	320.	310.	280.	300.	270.	280.	325.	140.	325.	265.	265.	265.	265.	260.	270.	265.	250.	280.	275.	275.	290.	260.
17	330.	360.	360.	360.	360.	350.	355.	340.	320.	145.	325.	325.	250.	265.	265.	325.	325.	300.	240.	250.	230.	275.	265.	255.
18	265.	260.	280.	285.	295.	295.	240.	245.	265.	888.	240.	70.	115.	255.	250.	265.	265.	265.	265.	265.	270.	255.	265.	265.
19	265.	250.	250.	250.	325.	5.	35.	265.	265.	310.	130.	235.	220.	265.	280.	295.	270.	265.	265.	220.	220.	235.	235.	235.
20	265.	270.	265.	275.	250.	250.	115.	265.	285.	888.	888.	265.	325.	340.	310.	325.	310.	300.	290.	295.	55.	55.	60.	55.
21	10.	999.	10.	360.	340.	360.	5.	360.	340.	330.	340.	325.	280.	240.	250.	280.	280.	265.	265.	25.	40.	55.	999.	55.
22	60.	55.	60.	60.	40.	40.	310.	25.	295.	250.	325.	280.	280.	360.	360.	145.	888.	100.	100.	110.	110.	130.	75.	110.
23	125.	120.	165.	210.	215.	215.	210.	240.	250.	175.	190.	190.	190.	205.	175.	150.	145.	220.	220.	220.	205.	220.	220.	235.
24	220.	260.	270.	250.	205.	220.	235.	220.	265.	265.	240.	40.	45.	320.	255.	235.	250.	225.	225.	265.	250.	295.	265.	265.
25	265.	310.	265.	250.	290.	260.	325.	340.	340.	230.	280.	295.	280.	280.	265.	265.	265.	265.	290.	290.	280.	280.	280.	265.
26	280.	360.	340.	20.	25.	25.	25.	345.	280.	280.	888.	888.	888.	888.	250.	280.	280.	280.	300.	295.	205.	175.	175.	265.
27	335.	335.	240.	275.	255.	340.	240.	295.	325.	240.	250.	250.	250.	265.	295.	290.	240.	300.	300.	55.	55.	75.	70.	70.
28	45.	225.	340.	10.	260.	220.	295.	215.	240.	255.	290.	195.	225.	340.	30.	15.	300.	30.	15.	15.	15.	15.	30.	10.
29	30.	30.	40.	20.	30.	35.	30.	30.	888.	888.	888.	15.	75.	75.	45.	45.	30.	15.	15.	30.	30.	30.	30.	30.
30	20.	360.	340.	10.	10.	15.	360.	5.	15.	10.	15.	15.	360.	360.	360.	30.	45.	60.	30.	25.	35.	15.	10.	5.
31	335.	335.	335.	335.	335.	340.	360.	10.	10.	10.	315.	315.	888.	888.	90.	225.	150.	190.	140.	180.	200.	265.	310.	310.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 730 NUMBER OF MISSING HOURS = 14 DATA CAPTURE = 98.12 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 = WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-59

MERGED DATA — WIND DIRECTION (DEG) — DATA FOR AUGUST 1975

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
1	300.	300.	270.	180.	195.	195.	240.	270.	300.	240.	240.	200.	195.	180.	210.	240.	255.	255.	255.	270.	255.	255.	270.	300.
2	300.	275.	270.	270.	270.	275.	255.	240.	225.	255.	255.	295.	270.	255.	255.	260.	255.	260.	260.	260.	255.	265.	225.	230.
3	290.	235.	240.	235.	240.	230.	210.	210.	225.	210.	215.	210.	210.	210.	180.	180.	140.	165.	165.	255.	260.	260.	205.	195.
4	195.	200.	240.	210.	210.	210.	200.	200.	200.	195.	195.	200.	205.	210.	210.	210.	210.	210.	205.	210.	215.	215.	215.	225.
5	240.	240.	240.	240.	255.	255.	255.	255.	255.	210.	888.	360.	255.	255.	265.	265.	270.	265.	265.	290.	285.	290.	300.	320.
6	330.	320.	300.	315.	300.	265.	235.	225.	210.	210.	205.	165.	180.	160.	225.	240.	240.	250.	265.	270.	260.	255.	265.	290.
7	255.	255.	260.	255.	255.	255.	260.	255.	210.	225.	210.	200.	200.	205.	205.	210.	225.	240.	240.	255.	255.	270.	285.	330.
8	290.	270.	300.	330.	345.	145.	130.	345.	360.	175.	175.	195.	195.	170.	140.	145.	165.	210.	230.	255.	255.	250.	240.	230.
9	215.	210.	200.	270.	330.	240.	225.	255.	285.	280.	295.	255.	240.	195.	195.	210.	260.	270.	255.	255.	270.	285.	285.	290.
10	265.	265.	270.	260.	310.	300.	330.	360.	300.	265.	285.	300.	210.	270.	270.	255.	255.	255.	275.	285.	270.	275.	300.	315.
11	315.	360.	5.	15.	15.	15.	20.	25.	30.	40.	45.	45.	15.	45.	25.	45.	15.	30.	15.	30.	30.	15.	15.	20.
12	15.	10.	20.	30.	30.	30.	40.	45.	40.	45.	30.	45.	35.	45.	45.	30.	45.	45.	30.	35.	30.	15.	15.	15.
13	15.	15.	15.	15.	15.	15.	15.	40.	5.	360.	30.	45.	20.	30.	45.	15.	15.	15.	15.	15.	15.	30.	20.	15.
14	20.	15.	15.	150.	360.	360.	10.	20.	15.	888.	888.	888.	888.	888.	888.	150.	140.	195.	200.	300.	300.	300.	300.	360.
15	325.	315.	310.	305.	305.	315.	315.	315.	315.	315.	15.	360.	220.	225.	210.	165.	165.	195.	255.	250.	40.	360.	310.	315.
16	330.	270.	90.	80.	135.	120.	120.	150.	180.	300.	210.	195.	195.	210.	220.	210.	255.	255.	240.	265.	290.	330.	300.	315.
17	320.	335.	320.	315.	315.	315.	315.	330.	230.	240.	60.	888.	170.	255.	255.	15.	135.	110.	150.	160.	150.	140.	60.	45.
18	65.	55.	55.	75.	60.	55.	60.	55.	50.	50.	50.	50.	25.	30.	30.	50.	360.	45.	45.	40.	50.	45.	40.	40.
19	15.	20.	50.	20.	20.	335.	20.	15.	60.	60.	60.	888.	195.	999.	205.	220.	170.	180.	175.	310.	330.	330.	310.	310.
20	310.	340.	10.	25.	25.	30.	30.	230.	220.	240.	270.	310.	999.	999.	10.	15.	265.	265.	310.	295.	999.	999.	999.	999.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	330.	310.	320.	999.	295.	280.	265.	270.	270.	295.	999.	250.	265.	240.	999.
22	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	190.	130.	100.	295.	135.	200.	230.	280.	220.	220.	220.	999.	999.	999.
23	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	140.	340.	999.	999.	999.	265.	320.	325.	325.	325.	325.	335.	340.	999.
24	999.	999.	999.	999.	999.	999.	999.	999.	999.	265.	265.	325.	270.	295.	325.	280.	250.	250.	310.	40.	70.	70.	70.	60.
25	45.	330.	355.	355.	180.	345.	350.	340.	340.	340.	310.	310.	295.	340.	100.	120.	115.	115.	115.	115.	295.	95.	85.	70.
26	20.	20.	315.	315.	315.	20.	190.	190.	135.	145.	100.	65.	310.	120.	255.	115.	130.	130.	125.	145.	115.	115.	115.	120.
27	115.	120.	100.	115.	130.	100.	105.	115.	190.	100.	205.	220.	205.	265.	235.	220.	205.	205.	205.	205.	205.	235.	220.	190.
28	295.	235.	250.	235.	250.	220.	315.	330.	280.	265.	265.	280.	280.	235.	250.	235.	220.	220.	220.	220.	190.	205.	235.	205.
29	205.	130.	275.	250.	240.	235.	75.	100.	340.	265.	275.	280.	295.	240.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
30	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	145.	265.	230.	250.	325.	335.
31	330.	330.	999.	999.	999.	999.	999.	999.	325.	999.	999.	999.	325.	999.	999.	280.	999.	65.	325.	355.	260.	280.	999.	999.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 647 NUMBER OF MISSING HOURS = 97 DATA CAPTURE = 86.96 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 = WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-60

MERGED DATA — WIND DIRECTION (DEG) — DATA FOR SEPTEMBER 1975

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
1	190.	200.	200.	210.	200.	200.	205.	195.	220.	35.	20.	20.	20.	35.	95.	230.	240.	275.	275.	185.	215.	230.	200.	350.
2	90.	105.	270.	260.	70.	70.	125.	210.	200.	355.	360.	360.	5.	80.	20.	350.	20.	355.	355.	355.	355.	355.	20.	350.
3	150.	200.	215.	350.	355.	360.	325.	325.	325.	50.	50.	35.	20.	30.	888.	120.	360.	45.	65.	65.	185.	190.	185.	185.
4	185.	195.	290.	200.	290.	200.	290.	200.	200.	35.	20.	35.	5.	355.	10.	10.	215.	245.	240.	290.	200.	205.	215.	200.
5	200.	200.	200.	200.	200.	200.	200.	200.	40.	290.	295.	325.	340.	340.	100.	115.	100.	115.	110.	100.	100.	60.	60.	70.
6	75.	75.	75.	999.	80.	120.	100.	999.	100.	190.	165.	115.	115.	100.	115.	100.	100.	100.	325.	335.	100.	220.	220.	260.
7	295.	280.	325.	295.	325.	10.	360.	350.	345.	275.	330.	325.	330.	325.	280.	270.	265.	280.	275.	265.	265.	275.	240.	355.
8	55.	55.	55.	55.	70.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	220.	275.	225.	275.	210.
9	195.	210.	210.	195.	225.	225.	275.	225.	225.	225.	240.	210.	210.	205.	210.	210.	220.	220.	220.	220.	220.	220.	220.	210.
10	200.	200.	200.	210.	270.	250.	255.	255.	255.	255.	225.	210.	240.	210.	220.	220.	210.	210.	210.	210.	220.	225.	225.	225.
11	295.	300.	305.	25.	360.	360.	360.	360.	330.	345.	345.	345.	360.	360.	345.	330.	340.	350.	340.	10.	15.	20.	335.	330.
12	345.	15.	15.	15.	15.	15.	25.	20.	15.	10.	360.	15.	60.	360.	350.	350.	345.	10.	10.	10.	30.	15.	15.	15.
13	10.	10.	10.	10.	10.	345.	335.	330.	335.	315.	330.	10.	360.	10.	360.	350.	330.	360.	10.	15.	15.	15.	100.	100.
14	10.	360.	330.	330.	305.	300.	330.	15.	15.	255.	270.	315.	270.	255.	330.	270.	230.	225.	225.	210.	45.	30.	230.	225.
15	225.	240.	240.	240.	255.	255.	255.	255.	255.	255.	195.	225.	255.	195.	220.	210.	225.	225.	320.	225.	225.	225.	225.	225.
16	225.	210.	210.	225.	195.	180.	210.	225.	210.	195.	195.	195.	195.	210.	210.	210.	210.	225.	225.	225.	250.	255.	250.	255.
17	240.	240.	250.	250.	250.	290.	290.	250.	230.	250.	210.	40.	150.	15.	90.	110.	10.	170.	345.	15.	15.	15.	15.	15.
18	30.	75.	120.	105.	50.	45.	45.	40.	10.	30.	15.	15.	15.	15.	40.	345.	10.	15.	15.	15.	30.	30.	15.	15.
19	360.	350.	315.	315.	315.	315.	330.	360.	345.	210.	200.	240.	240.	240.	225.	255.	225.	230.	240.	220.	225.	225.	250.	255.
20	310.	285.	270.	260.	295.	225.	195.	210.	195.	240.	240.	240.	240.	240.	240.	225.	225.	225.	210.	210.	210.	210.	210.	240.
21	240.	240.	240.	240.	240.	240.	240.	240.	240.	240.	225.	210.	210.	225.	225.	225.	225.	225.	225.	225.	225.	225.	225.	240.
22	340.	305.	305.	365.	345.	345.	305.	330.	240.	225.	225.	225.	225.	210.	210.	210.	210.	210.	210.	225.	210.	240.	75.	75.
23	75.	105.	45.	30.	15.	15.	15.	15.	15.	360.	345.	345.	345.	345.	345.	345.	345.	330.	330.	330.	345.	345.	330.	330.
24	270.	200.	200.	195.	888.	200.	195.	200.	215.	215.	40.	50.	20.	20.	355.	355.	290.	290.	190.	170.	185.	245.	190.	185.
25	240.	215.	200.	210.	200.	210.	205.	200.	200.	350.	350.	335.	350.	335.	35.	35.	5.	5.	350.	200.	200.	185.	185.	190.
26	190.	190.	200.	200.	290.	200.	290.	200.	200.	45.	15.	350.	355.	350.	350.	350.	350.	355.	320.	200.	195.	215.	200.	195.
27	195.	210.	295.	200.	190.	205.	205.	205.	200.	190.	360.	5.	5.	350.	350.	350.	355.	335.	335.	888.	305.	215.	215.	215.
28	190.	200.	290.	260.	230.	125.	215.	200.	185.	350.	335.	350.	20.	35.	20.	320.	290.	320.	305.	200.	200.	190.	200.	200.
29	195.	200.	200.	200.	200.	200.	200.	200.	200.	165.	5.	5.	360.	335.	305.	35.	350.	350.	335.	200.	190.	185.	200.	190.
30	200.	200.	200.	200.	200.	200.	200.	200.	200.	35.	35.	360.	355.	350.	360.	350.	350.	335.	260.	200.	200.	200.	200.	200.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 704 NUMBER OF MISSING HOURS = 16 DATA CAPTURE = 97.78 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-61

MERGED DATA — WIND DIRECTION (DEG) — DATA FOR OCTOBER 1975

HOURS (LST)

DAY	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
1	200.	200.	200.	210.	210.	205.	215.	200.	200.	210.	35.	355.	350.	350.	350.	350.	355.	345.	340.	200.	200.	190.	195.	200.
2	200.	200.	200.	200.	200.	200.	200.	230.	195.	999.	999.	355.	350.	350.	155.	180.	180.	180.	145.	165.	185.	185.	185.	185.
3	195.	185.	210.	210.	210.	225.	225.	210.	215.	220.	210.	200.	205.	225.	225.	210.	210.	200.	195.	195.	195.	195.	210.	225.
4	255.	200.	245.	290.	290.	300.	300.	270.	265.	255.	255.	265.	255.	255.	255.	240.	240.	225.	215.	220.	220.	215.	210.	205.
5	190.	190.	195.	195.	195.	195.	195.	195.	195.	195.	185.	210.	210.	210.	210.	225.	270.	270.	270.	270.	270.	270.	260.	270.
6	320.	888.	210.	270.	300.	245.	255.	260.	270.	200.	180.	180.	180.	180.	180.	170.	80.	90.	85.	90.	60.	90.	105.	330.
7	270.	270.	290.	290.	290.	285.	315.	315.	285.	295.	300.	170.	210.	180.	135.	300.	270.	245.	255.	240.	230.	225.	225.	240.
8	240.	225.	225.	225.	225.	205.	195.	210.	200.	210.	210.	210.	195.	185.	200.	205.	200.	180.	180.	190.	195.	190.	190.	200.
9	200.	205.	200.	200.	195.	195.	195.	195.	195.	200.	200.	200.	200.	200.	180.	150.	160.	180.	165.	180.	180.	180.	180.	180.
10	180.	180.	180.	180.	180.	190.	180.	190.	320.	320.	270.	355.	360.	30.	30.	30.	30.	45.	45.	45.	30.	15.	15.	15.
11	30.	30.	30.	30.	15.	15.	15.	15.	20.	15.	15.	30.	20.	20.	355.	355.	340.	15.	10.	15.	360.	10.	10.	10.
12	10.	10.	10.	10.	10.	10.	15.	30.	25.	360.	360.	360.	345.	360.	345.	345.	330.	330.	330.	315.	320.	320.	330.	340.
13	345.	10.	15.	10.	10.	15.	20.	20.	15.	210.	200.	210.	225.	225.	240.	260.	275.	285.	300.	300.	290.	300.	300.	295.
14	285.	280.	270.	270.	270.	270.	225.	240.	255.	225.	210.	215.	210.	195.	190.	195.	195.	210.	210.	215.	210.	225.	270.	270.
15	270.	270.	295.	295.	270.	270.	270.	270.	270.	270.	270.	290.	165.	225.	240.	240.	285.	250.	240.	225.	225.	215.	210.	225.
16	210.	205.	205.	195.	195.	180.	185.	195.	195.	195.	195.	195.	195.	210.	210.	210.	210.	210.	210.	210.	210.	210.	220.	225.
17	225.	225.	220.	215.	215.	210.	210.	210.	210.	210.	210.	210.	210.	210.	210.	215.	215.	225.	225.	240.	260.	260.	255.	295.
18	255.	255.	255.	255.	255.	255.	255.	255.	255.	255.	255.	255.	255.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
19	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
20	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
22	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	295.	295.	305.	295.	300.	300.	315.	315.	315.	325.	320.
23	315.	315.	315.	315.	330.	315.	315.	315.	315.	300.	300.	285.	300.	345.	300.	300.	35.	75.	40.	105.	105.	115.	75.	65.
24	210.	270.	225.	270.	225.	235.	255.	255.	240.	240.	240.	225.	280.	999.	285.	210.	195.	175.	999.	85.	265.	95.	105.	105.
25	115.	120.	120.	135.	115.	120.	135.	120.	115.	135.	135.	270.	255.	245.	220.	255.	350.	60.	225.	225.	255.	245.	245.	245.
26	999.	999.	999.	255.	255.	115.	90.	70.	70.	210.	270.	265.	260.	999.	105.	135.	85.	120.	115.	115.	115.	115.	115.	105.
27	105.	105.	90.	90.	80.	75.	95.	100.	105.	105.	115.	135.	240.	165.	145.	150.	135.	135.	115.	90.	90.	180.	45.	90.
28	210.	225.	210.	345.	60.	180.	75.	85.	85.	85.	150.	150.	999.	999.	999.	999.	999.	135.	165.	105.	255.	90.	90.	90.
29	80.	75.	75.	105.	105.	105.	105.	90.	90.	90.	120.	150.	150.	90.	45.	35.	90.	90.	60.	345.	355.	15.	30.	345.
30	350.	350.	340.	345.	360.	5.	345.	315.	285.	270.	270.	300.	300.	270.	280.	290.	210.	240.	105.	165.	180.	225.	180.	205.
31	225.	180.	245.	165.	150.	120.	90.	90.	80.	75.	225.	240.	225.	225.	255.	90.	90.	90.	90.	210.	210.	210.	195.	210.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 635 NUMBER OF MISSING HOURS = 109 DATA CAPTURE = 85.35 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-62

MERGED DATA WIND DIRECTION (DEG) DATA FOR NOVEMBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	210.	210.	210.	210.	240.	240.	60.	240.	270.	240.	245.	255.	255.	255.	240.	220.	150.	180.	180.	180.	180.	180.	180.	195.
2	195.	180.	140.	195.	195.	210.	195.	210.	205.	345.	240.	255.	245.	240.	255.	210.	195.	180.	135.	999.	999.	999.	75.	90.
3	105.	105.	225.	225.	210.	225.	215.	215.	215.	225.	240.	240.	225.	210.	210.	210.	195.	999.	195.	195.	205.	205.	210.	210.
4	210.	210.	210.	210.	210.	210.	205.	205.	195.	140.	180.	155.	195.	205.	195.	205.	210.	190.	140.	180.	180.	175.	180.	175.
5	175.	175.	175.	175.	175.	175.	175.	180.	180.	180.	180.	180.	180.	190.	210.	210.	300.	180.	20.	20.	20.	20.	20.	20.
6	20.	20.	20.	20.	20.	25.	25.	20.	20.	85.	65.	65.	140.	140.	180.	195.	175.	175.	190.	190.	180.	180.	190.	195.
7	195.	195.	195.	195.	210.	190.	195.	195.	195.	190.	210.	210.	225.	225.	240.	225.	135.	205.	225.	225.	210.	240.	135.	180.
8	180.	180.	190.	195.	210.	195.	190.	210.	195.	195.	195.	195.	999.	240.	255.	270.	255.	255.	255.	210.	240.	225.	180.	195.
9	240.	195.	195.	325.	210.	215.	180.	240.	225.	235.	240.	240.	225.	240.	240.	210.	175.	120.	999.	55.	30.	90.	80.	80.
10	90.	90.	75.	80.	75.	30.	30.	15.	15.	315.	315.	300.	300.	300.	300.	270.	255.	210.	210.	225.	240.	255.	60.	255.
11	255.	225.	210.	240.	90.	90.	240.	90.	90.	170.	65.	75.	195.	180.	180.	150.	165.	150.	190.	165.	150.	165.	150.	150.
12	165.	180.	195.	150.	120.	120.	120.	105.	105.	105.	105.	120.	180.	120.	120.	105.	120.	120.	210.	195.	210.	225.	225.	225.
13	360.	105.	190.	120.	150.	165.	165.	180.	180.	180.	150.	165.	210.	210.	195.	195.	195.	180.	180.	210.	225.	330.	195.	165.
14	90.	180.	120.	150.	195.	180.	195.	180.	180.	180.	180.	195.	999.	999.	225.	185.	195.	120.	120.	999.	135.	165.	150.	165.
15	165.	165.	165.	210.	999.	210.	210.	210.	140.	180.	195.	195.	180.	180.	195.	195.	210.	210.	195.	210.	195.	195.	195.	195.
16	195.	210.	210.	90.	60.	105.	195.	75.	125.	195.	195.	215.	240.	285.	210.	240.	230.	120.	240.	195.	210.	195.	195.	290.
17	75.	345.	300.	210.	240.	255.	240.	240.	265.	255.	315.	315.	300.	300.	300.	300.	315.	315.	315.	315.	300.	300.	300.	300.
18	300.	300.	300.	300.	360.	330.	360.	355.	350.	345.	305.	255.	255.	255.	240.	75.	75.	75.	75.	75.	75.	75.	75.	75.
19	75.	75.	75.	75.	75.	75.	75.	75.	75.	90.	90.	90.	90.	90.	90.	95.	90.	90.	75.	75.	75.	75.	15.	15.
20	999.	999.	999.	999.	999.	999.	999.	999.	999.	60.	60.	270.	255.	250.	270.	235.	235.	230.	110.	75.	75.	30.	240.	315.
21	225.	90.	45.	75.	75.	60.	60.	60.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	90.	90.	90.	90.	90.	105.
22	90.	120.	105.	90.	105.	90.	75.	90.	105.	135.	150.	125.	330.	255.	210.	75.	210.	240.	345.	315.	300.	210.	210.	240.
23	210.	165.	255.	65.	75.	90.	75.	75.	75.	75.	120.	105.	120.	75.	75.	85.	225.	210.	225.	210.	210.	210.	210.	240.
24	345.	30.	90.	15.	285.	330.	315.	300.	330.	315.	315.	290.	285.	300.	285.	330.	270.	315.	255.	240.	315.	315.	999.	315.
25	330.	300.	295.	255.	255.	255.	255.	240.	225.	45.	40.	165.	300.	120.	105.	60.	105.	90.	345.	15.	60.	195.	240.	270.
26	240.	305.	305.	360.	315.	315.	315.	300.	300.	285.	300.	300.	300.	300.	30.	315.	315.	300.	300.	315.	315.	300.	345.	15.
27	30.	30.	30.	30.	30.	360.	360.	325.	315.	300.	285.	300.	300.	285.	30.	30.	30.	30.	30.	30.	360.	30.	35.	315.
28	315.	270.	210.	315.	15.	20.	45.	45.	40.	15.	315.	30.	15.	15.	360.	15.	15.	30.	30.	30.	30.	30.	30.	360.
29	30.	30.	60.	45.	45.	45.	30.	10.	60.	90.	215.	115.	95.	90.	90.	85.	75.	75.	75.	75.	75.	75.	75.	75.
30	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	90.	90.	90.	90.	90.	90.	75.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 700 NUMBER OF MISSING HOURS = 20 DATA CAPTURE = 97.22 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

TABLE A2-63

MERGED DATA WIND DIRECTION (DEG) DATA FOR DECEMBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	270.	255.	285.	270.	270.	270.	300.	300.	75.	75.	75.	90.	105.	140.	180.	155.	60.	60.	60.	75.	65.	195.	180.	180.
2	180.	155.	205.	195.	180.	135.	195.	150.	150.	165.	165.	195.	195.	210.	210.	210.	210.	210.	210.	210.	210.	210.	210.	210.
3	210.	195.	180.	180.	180.	195.	195.	195.	195.	210.	210.	210.	210.	210.	195.	195.	140.	140.	165.	180.	165.	210.	170.	195.
4	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.
5	260.	999.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.
6	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.
7	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	260.	60.	75.	75.	90.	30.	55.	60.	60.	60.	75.	65.	210.	240.
8	210.	315.	325.	255.	270.	255.	270.	225.	240.	255.	260.	270.	285.	300.	255.	245.	225.	225.	210.	210.	75.	225.	270.	90.
9	215.	270.	165.	315.	315.	330.	330.	360.	15.	30.	330.	270.	270.	30.	30.	45.	60.	60.	60.	60.	60.	60.	75.	60.
10	45.	75.	65.	45.	65.	30.	30.	30.	30.	45.	65.	45.	60.	60.	75.	75.	90.	105.	105.	90.	75.	30.	60.	90.
11	90.	75.	90.	100.	105.	105.	90.	90.	90.	999.	155.	220.	60.	105.	80.	60.	90.	90.	235.	235.	235.	235.	225.	999.
12	999.	360.	360.	999.	999.	210.	210.	255.	330.	330.	255.	240.	230.	75.	75.	65.	75.	90.	75.	80.	105.	90.	90.	100.
13	120.	75.	155.	155.	140.	140.	140.	140.	140.	140.	265.	260.	260.	275.	265.	145.	145.	155.	155.	155.	150.	150.	140.	145.
14	999.	999.	95.	165.	20.	140.	125.	140.	20.	888.	888.	888.	65.	25.	35.	140.	140.	155.	145.	140.	140.	150.	140.	140.
15	180.	155.	155.	165.	165.	150.	195.	155.	140.	155.	155.	155.	140.	155.	320.	140.	130.	155.	150.	150.	150.	150.	150.	140.
16	155.	155.	150.	155.	150.	145.	140.	140.	155.	140.	170.	170.	999.	999.	290.	265.	250.	250.	300.	290.	350.	300.	155.	290.
17	110.	105.	310.	300.	230.	180.	130.	130.	130.	140.	160.	175.	305.	290.	265.	300.	140.	140.	150.	140.	999.	999.	999.	999.
18	999.	999.	999.	999.	999.	999.	999.	90.	90.	90.	90.	90.	90.	90.	90.	90.	90.	140.	90.	90.	90.	90.	90.	90.
19	90.	95.	95.	95.	95.	95.	90.	90.	90.	90.	90.	90.	90.	90.	90.	90.	95.	90.	45.	65.	85.	65.	85.	75.
20	75.	75.	75.	75.	70.	70.	70.	70.	70.	70.	70.	65.	999.	65.	65.	65.	65.	80.	75.	75.	70.	70.	70.	70.
21	70.	65.	65.	65.	65.	65.	65.	65.	65.	65.	170.	180.	160.	160.	160.	145.	140.	140.	140.	140.	155.	130.	130.	150.
22	165.	305.	300.	110.	110.	160.	155.	130.	140.	140.	335.	335.	290.	290.	295.	310.	140.	130.	130.	140.	140.	150.	160.	150.
23	130.	120.	115.	130.	140.	155.	150.	140.	140.	125.	125.	105.	95.	330.	999.	275.	170.	155.	155.	150.	140.	140.	999.	999.
24	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	265.	270.	260.	260.	260.	270.	260.	250.	215.	220.	260.	325.	300.
25	290.	290.	240.	80.	80.	75.	70.	30.	260.	60.	60.	65.	95.	65.	65.	80.	70.	70.	80.	90.	110.	95.	120.	95.
26	120.	110.	100.	235.	110.	110.	125.	115.	125.	170.	120.	125.	155.	300.	145.	190.	120.	125.	120.	125.	290.	280.	270.	270.
27	330.	355.	270.	270.	270.	265.	260.	270.	265.	265.	265.	265.	245.	245.	245.	265.	245.	245.	235.	235.	235.	95.	220.	320.
28	20.	65.	95.	270.	320.	290.	295.	245.	230.	255.	245.	255.	80.	285.	225.	80.	185.	95.	95.	80.	80.	80.	80.	90.
29	200.	230.	110.	215.	165.	80.	200.	35.	335.	115.	95.	190.	190.	145.	180.	215.	215.	200.	200.	215.	215.	305.	270.	275.
30	330.	305.	320.	320.	320.	320.	320.	330.	320.	320.	320.	320.	320.	320.	320.	320.	305.	10.	20.	320.	320.	320.	320.	320.
31	305.	310.	320.	320.	320.	320.	320.	320.	320.	320.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 694 NUMBER OF MISSING HOURS = 50 DATA CAPTURE = 93.28 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR 888 = VARIABLE WIND DIRECTION INDICATOR 0 WIND DIRECTION INDICATES CALM CONDITIONS

have confirmed that mechanical problems with the hygrometers and recording equipment were incurred. However, in the absence of more reliable alternative information, the mechanical weather station information has been incorporated in the Hat Creek cooling tower analysis. While some resulting errors in the predicted frequencies of some plume effects are probable, it is unlikely that the relative magnitude of such effects for different tower designs would be affected. However, due to periods of missing data from Station 7, seasonal correlation statistics were generated between Station 7 and Stations 1, 4, 5, 6, and 8 to determine which stations provide the best estimate of Station 7 humidity values. Linear regression equations were applied to data from the station with the highest correlation to Station 7 to obtain substitute humidity values for the sequential data set. Humidities at the replacement stations are highly correlated with those for Station 7 at the 95% confidence level. The correlation coefficient ranges from 0.700 to 0.826.

Table A2-64 lists the periods for which humidity data were substituted for missing values at Station 7.

On the sequential meteorology data tape the humidity data is given in terms of percent relative humidity. As with the other parameters presented previously, the data are hourly-averaged and are given for every month of 1975 in Tables A2-65 to A2-76. Missing values are designated by 999.

(d) Stability

An assessment of diffusion characteristics of the Hat Creek area depends upon an accurate estimate of stability. This estimate may be based on the measured change of temperature with height (the lapse rate method) (U.S.NRC)[4], or the Richardson number method (Golder)[5], which considers both the lapse rate and the magnitude of the wind shear in the stability estimate. In the absence of meteorological sensing equipment to determine actual temperature and wind profiles, the most widely accepted method of stability

TABLE A2-64

Relative Humidity Data Substituted for the Missing
B.C. Hydro Mechanical Station 7 Data

Station	January through December 1975 Time Period for Substitution of Relative Humidity
1	May 15, hour 6, through May 31, hour 24
4	December 13, hour 6, through December 17, hour 13
	December 21, hour 11, through December 24, hour 11
5	March 1, hour 1, through March 6, hour 12
	September 1, hour 1, through September 5, hour 4
	September 8, hour 20, through October 22, hour 13
6	July 28, hour 2, through August 20, hour 12

TABLE A2-65

MERGED DATA HUMIDITY (%RH) DATA FOR JANUARY 1975

HOURS (LST)

HR-BEG / HR-END / DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	70.	72.	75.	79.	80.	81.	82.	80.	78.	78.	78.	74.	66.	57.	49.	42.	40.	45.	49.	55.	59.	61.	60.	56.	65.
2	58.	61.	62.	61.	58.	51.	50.	52.	53.	53.	54.	55.	53.	48.	51.	56.	63.	67.	62.	55.	53.	54.	54.	56.	56.
3	56.	60.	66.	73.	73.	63.	55.	58.	52.	47.	45.	44.	45.	45.	51.	59.	62.	65.	70.	80.	85.	85.	85.	85.	63.
4	85.	86.	86.	86.	86.	86.	86.	86.	86.	86.	86.	79.	65.	56.	57.	65.	71.	74.	76.	76.	77.	77.	77.	82.	78.
5	79.	77.	78.	79.	80.	85.	86.	86.	86.	86.	86.	85.	80.	77.	82.	84.	85.	80.	73.	74.	76.	72.	68.	69.	79.
6	64.	59.	62.	64.	55.	49.	49.	53.	54.	67.	69.	70.	70.	66.	62.	58.	66.	75.	77.	77.	68.	62.	62.	61.	64.
7	60.	55.	50.	48.	46.	46.	46.	49.	51.	52.	51.	51.	54.	64.	79.	85.	86.	86.	86.	86.	86.	86.	86.	86.	66.
8	86.	86.	86.	86.	86.	86.	86.	86.	86.	86.	86.	86.	87.	88.	87.	87.	86.	86.	86.	86.	84.	85.	85.	85.	86.
9	85.	85.	84.	84.	84.	84.	84.	84.	84.	84.	83.	84.	83.	83.	84.	83.	83.	83.	83.	83.	83.	83.	83.	85.	84.
10	82.	82.	82.	82.	82.	82.	82.	81.	80.	80.	79.	76.	76.	75.	76.	75.	75.	75.	75.	75.	75.	75.	75.	75.	78.
11	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	74.	72.	72.	72.	72.	73.	74.	75.	76.	76.	77.	77.	78.	78.	75.
12	79.	79.	80.	81.	82.	82.	82.	82.	82.	82.	82.	83.	85.	85.	85.	85.	85.	86.	86.	86.	86.	86.	87.	87.	84.
13	87.	86.	87.	87.	87.	87.	87.	87.	84.	77.	72.	65.	57.	51.	49.	51.	55.	57.	60.	62.	63.	66.	69.	71.	71.
14	72.	74.	76.	81.	83.	78.	75.	75.	76.	75.	73.	73.	68.	62.	59.	60.	69.	77.	82.	84.	85.	85.	85.	85.	76.
15	85.	83.	82.	81.	81.	81.	79.	79.	82.	86.	76.	58.	42.	43.	55.	61.	69.	76.	80.	73.	71.	70.	68.	72.	72.
16	78.	79.	79.	81.	81.	81.	79.	83.	81.	78.	73.	74.	74.	75.	74.	78.	84.	86.	86.	86.	86.	87.	88.	87.	81.
17	86.	82.	81.	78.	77.	76.	74.	66.	55.	51.	50.	55.	70.	85.	89.	68.	88.	88.	88.	86.	88.	88.	88.	88.	78.
18	88.	88.	88.	88.	88.	88.	88.	88.	88.	87.	83.	71.	59.	56.	66.	74.	86.	87.	87.	87.	87.	87.	87.	87.	83.
19	86.	87.	87.	87.	87.	87.	87.	88.	87.	87.	82.	75.	63.	56.	55.	55.	57.	62.	63.	62.	60.	63.	73.	89.	78.
20	86.	86.	86.	82.	67.	49.	41.	46.	48.	38.	27.	22.	22.	24.	25.	29.	31.	39.	51.	57.	57.	58.	58.	58.	49.
21	58.	58.	58.	57.	56.	58.	59.	60.	69.	75.	79.	80.	81.	82.	82.	83.	85.	86.	86.	86.	86.	86.	86.	87.	74.
22	87.	86.	86.	86.	86.	86.	86.	86.	87.	87.	81.	71.	70.	80.	85.	86.	86.	87.	87.	87.	87.	87.	87.	87.	85.
23	87.	87.	87.	86.	86.	83.	81.	82.	86.	82.	71.	74.	69.	58.	51.	47.	50.	54.	58.	59.	62.	60.	52.	47.	69.
24	47.	48.	49.	50.	52.	56.	58.	59.	59.	60.	63.	66.	57.	56.	56.	56.	59.	60.	60.	67.	79.	86.	86.	86.	61.
25	86.	86.	86.	86.	86.	85.	85.	85.	85.	85.	81.	75.	69.	69.	55.	63.	72.	78.	82.	82.	81.	81.	82.	83.	79.
26	88.	84.	84.	84.	84.	84.	84.	84.	84.	84.	85.	85.	81.	75.	71.	70.	71.	72.	72.	73.	73.	73.	73.	74.	79.
27	77.	78.	81.	82.	83.	81.	81.	82.	82.	78.	70.	61.	54.	52.	56.	61.	69.	77.	82.	84.	84.	85.	85.	85.	75.
28	86.	86.	86.	86.	86.	86.	86.	86.	86.	86.	86.	85.	83.	82.	80.	75.	74.	77.	83.	81.	84.	82.	81.	75.	83.
29	71.	71.	73.	76.	76.	76.	74.	75.	74.	67.	55.	46.	43.	41.	40.	46.	40.	69.	75.	77.	79.	82.	83.	84.	67.
30	85.	85.	85.	85.	85.	85.	85.	85.	85.	85.	85.	85.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
31	999.	999.	999.	999.	999.	999.	999.	999.	86.	86.	81.	75.	70.	70.	70.	70.	76.	84.	86.	86.	999.	999.	999.	999.	999.
AVG	77.	77.	78.	78.	77.	76.	75.	75.	76.	75.	72.	70.	66.	64.	65.	67.	71.	74.	76.	76.	77.	77.	77.	77.	74.
DAYS	30	30	30	30	30	30	30	30	31	31	31	31	30	30	30	30	30	30	30	30	29	29	29	29	720

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 720 NUMBER OF MISSING HOURS = 24 DATA CAPTURE = 96.77 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 73.794 MAXIMUM HOURLY VALUE = 89.000 STANDARD DEVIATION = 13.5577

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-66

MERGED DATA HUMIDITY (%RH) DATA FOR FEBRUARY 1975

HOURS (LST)

HR-BEG / HR-END / DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	86.	86.	87.	87.	84.	85.	84.	83.	83.	84.	83.	83.	83.	83.	82.	999.
2	82.	82.	83.	83.	82.	82.	82.	82.	82.	81.	78.	75.	71.	67.	69.	70.	72.	75.	76.	78.	79.	79.	79.	79.	78.
3	79.	79.	78.	78.	79.	79.	79.	79.	79.	79.	77.	999.	66.	64.	62.	63.	67.	72.	74.	77.	77.	78.	78.	78.	75.
4	79.	78.	79.	79.	79.	79.	79.	79.	79.	79.	78.	64.	51.	48.	51.	60.	66.	75.	80.	80.	81.	81.	82.	82.	74.
5	82.	82.	82.	82.	82.	82.	82.	82.	82.	82.	80.	64.	54.	47.	45.	47.	55.	68.	78.	81.	80.	80.	80.	79.	73.
6	81.	81.	81.	82.	82.	84.	84.	84.	84.	78.	71.	67.	65.	63.	62.	63.	69.	75.	77.	80.	81.	85.	86.	86.	77.
7	86.	86.	86.	86.	86.	86.	85.	85.	85.	86.	80.	68.	61.	56.	55.	56.	56.	60.	64.	66.	69.	72.	74.	75.	74.
8	77.	78.	79.	79.	79.	77.	76.	76.	71.	66.	68.	37.	44.	47.	50.	54.	63.	75.	80.	82.	82.	82.	82.	82.	69.
9	82.	82.	82.	82.	82.	82.	83.	84.	85.	85.	85.	80.	77.	77.	76.	77.	79.	81.	84.	86.	86.	86.	86.	86.	82.
10	87.	87.	86.	86.	86.	86.	86.	86.	86.	86.	86.	81.	75.	66.	70.	75.	79.	80.	80.	81.	82.	82.	82.	82.	82.
11	82.	82.	82.	82.	82.	82.	82.	82.	81.	79.	67.	62.	58.	51.	45.	55.	68.	73.	75.	75.	76.	79.	81.	81.	73.
12	81.	82.	82.	83.	83.	83.	83.	83.	81.	69.	55.	47.	44.	44.	55.	54.	70.	80.	85.	85.	85.	85.	85.	85.	76.
13	85.	85.	86.	87.	87.	87.	86.	86.	86.	86.	88.	88.	80.	79.	74.	76.	80.	81.	84.	85.	85.	85.	85.	85.	84.
14	85.	85.	85.	85.	85.	85.	85.	85.	85.	83.	71.	58.	44.	42.	45.	52.	64.	81.	84.	85.	85.	85.	86.	86.	76.
15	86.	86.	86.	85.	83.	81.	81.	81.	81.	81.	77.	67.	45.	70.	79.	79.	86.	87.	87.	87.	87.	87.	87.	87.	82.
16	87.	87.	87.	87.	87.	87.	87.	87.	87.	87.	89.	85.	60.	49.	31.	31.	55.	79.	86.	86.	85.	83.	83.	81.	78.
17	75.	75.	75.	75.	75.	75.	75.	75.	72.	67.	68.	59.	40.	36.	35.	46.	60.	73.	81.	81.	74.	67.	63.	63.	66.
18	65.	71.	76.	76.	76.	76.	79.	84.	82.	66.	54.	40.	36.	41.	44.	42.	45.	40.	43.	63.	82.	82.	82.	81.	64.
19	79.	82.	82.	84.	86.	87.	87.	87.	87.	87.	85.	85.	81.	82.	87.	83.	86.	88.	88.	88.	88.	88.	88.	87.	85.
20	87.	87.	86.	79.	62.	50.	44.	50.	50.	43.	33.	32.	33.	40.	36.	31.	39.	50.	50.	52.	59.	61.	60.	60.	53.
21	60.	61.	62.	62.	62.	62.	63.	63.	61.	52.	36.	27.	26.	31.	45.	52.	57.	62.	76.	84.	84.	85.	88.	78.	60.
22	71.	71.	73.	76.	77.	81.	85.	86.	87.	87.	87.	87.	79.	59.	49.	51.	54.	63.	66.	68.	74.	82.	86.	86.	74.
23	88.	87.	87.	87.	87.	87.	87.	86.	75.	66.	65.	61.	67.	72.	73.	73.	73.	80.	85.	87.	87.	87.	87.	86.	80.
24	83.	69.	53.	48.	49.	50.	56.	57.	48.	34.	34.	30.	25.	24.	24.	25.	35.	46.	58.	62.	59.	68.	64.	63.	48.
25	71.	79.	79.	83.	84.	84.	84.	82.	68.	44.	31.	37.	42.	42.	40.	39.	40.	44.	50.	58.	63.	66.	67.	69.	60.
26	71.	72.	73.	73.	76.	77.	80.	82.	74.	62.	50.	46.	46.	44.	29.	30.	44.	58.	68.	73.	74.	81.	86.	86.	65.
27	82.	77.	74.	76.	81.	82.	86.	86.	81.	59.	46.	50.	57.	67.	70.	70.	70.	76.	79.	87.	87.	87.	87.	87.	75.
28	88.	88.	88.	88.	87.	87.	87.	88.	88.	88.	78.	58.	67.	68.	81.	86.	87.	88.	88.	88.	88.	88.	88.	999.	86.
AVG	80.	80.	80.	80.	79.	79.	80.	80.	78.	73.	67.	61.	58.	56.	56.	58.	65.	73.	77.	79.	79.	81.	81.	80.	73.
DAYS	27	27	27	27	27	27	27	27	27	28	28	27	28	28	28	28	28	28	28	28	28	28	28	27	661

TOTAL HOURS = 672 NUMBER OF GOOD HOURS = 661 NUMBER OF MISSING HOURS = 11 DATA CAPTURE = 98.36 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 73.221 MAXIMUM HOURLY VALUE = 89.000 STANDARD DEVIATION = 15.1819

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-67

MERGED DATA   HUMIDITY   (SAM)   DATA FOR MARCH   1975

HOURS (LST)

HR=BEG HR=END DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	70.	57.	52.	51.	54.	59.	62.	66.	69.	71.	73.	73.	73.	74.	69.
2	74.	74.	75.	75.	75.	74.	74.	74.	74.	74.	69.	49.	60.	58.	46.	41.	46.	49.	53.	55.	57.	58.	60.	57.	63.
3	37.	34.	39.	45.	43.	42.	47.	30.	30.	44.	39.	26.	21.	21.	23.	26.	29.	33.	39.	43.	47.	48.	49.	46.	39.
4	49.	52.	56.	60.	63.	44.	54.	66.	65.	66.	62.	58.	60.	55.	51.	50.	48.	52.	55.	56.	62.	66.	68.	67.	59.
5	67.	67.	67.	67.	67.	67.	67.	67.	67.	66.	52.	44.	42.	41.	35.	31.	29.	33.	40.	46.	51.	54.	58.	60.	53.
6	62.	64.	49.	66.	67.	68.	69.	69.	69.	61.	46.	35.	40.	36.	33.	32.	35.	41.	45.	47.	53.	62.	65.	65.	54.
7	67.	66.	69.	71.	73.	74.	76.	80.	76.	63.	53.	46.	42.	43.	43.	45.	46.	46.	52.	53.	56.	57.	57.	58.	59.
8	59.	59.	61.	70.	73.	76.	83.	84.	72.	56.	52.	48.	51.	55.	61.	67.	75.	83.	85.	85.	85.	85.	85.	85.	71.
9	86.	86.	86.	86.	86.	86.	86.	83.	82.	77.	64.	66.	65.	66.	66.	72.	75.	79.	83.	85.	83.	83.	83.	82.	79.
10	83.	85.	83.	83.	83.	83.	82.	82.	82.	83.	80.	67.	56.	55.	54.	54.	58.	57.	62.	66.	66.	70.	70.	70.	72.
11	70.	70.	69.	67.	64.	60.	56.	50.	42.	29.	20.	4.	0.	4.	11.	14.	21.	31.	40.	44.	53.	56.	56.	57.	42.
12	56.	62.	68.	74.	77.	76.	82.	83.	83.	80.	75.	74.	65.	63.	65.	56.	65.	79.	84.	84.	84.	84.	84.	84.	75.
13	84.	84.	84.	84.	83.	83.	83.	83.	84.	79.	56.	42.	38.	34.	35.	35.	38.	42.	51.	56.	57.	59.	61.	70.	63.
14	70.	75.	75.	71.	70.	70.	71.	69.	61.	56.	53.	53.	53.	54.	54.	49.	56.	64.	66.	68.	64.	66.	69.	70.	64.
15	71.	76.	79.	80.	80.	80.	80.	79.	73.	69.	66.	59.	56.	69.	52.	53.	54.	62.	69.	71.	76.	80.	82.	84.	70.
16	86.	86.	87.	87.	87.	87.	86.	86.	83.	71.	49.	37.	33.	32.	30.	35.	42.	49.	75.	63.	54.	54.	56.	58.	64.
17	57.	61.	68.	72.	75.	78.	80.	81.	82.	81.	67.	56.	53.	49.	45.	47.	52.	54.	61.	60.	60.	63.	66.	68.	66.
18	77.	86.	86.	65.	85.	83.	85.	86.	86.	75.	64.	52.	47.	49.	47.	47.	51.	59.	70.	67.	72.	71.	70.	70.	69.
19	70.	69.	66.	65.	75.	78.	82.	85.	76.	75.	67.	53.	48.	43.	45.	46.	47.	67.	75.	70.	71.	72.	70.	69.	66.
20	68.	68.	66.	65.	65.	65.	66.	66.	61.	56.	43.	45.	40.	37.	40.	43.	45.	44.	55.	61.	69.	74.	77.	77.	59.
21	75.	76.	79.	82.	82.	82.	82.	82.	81.	83.	83.	79.	81.	80.	80.	80.	86.	86.	86.	86.	86.	86.	86.	86.	83.
22	86.	86.	86.	86.	86.	85.	85.	86.	86.	83.	59.	37.	37.	36.	34.	33.	40.	50.	61.	69.	75.	75.	72.	72.	67.
23	69.	64.	61.	66.	70.	78.	82.	83.	67.	59.	57.	67.	76.	55.	43.	36.	35.	38.	44.	44.	50.	51.	51.	51.	58.
24	51.	49.	46.	51.	52.	57.	59.	56.	55.	70.	80.	78.	70.	59.	49.	42.	39.	32.	31.	30.	29.	32.	42.	44.	50.
25	40.	39.	39.	45.	58.	56.	58.	58.	56.	67.	34.	19.	12.	13.	25.	43.	43.	80.	86.	84.	84.	84.	88.	80.	53.
26	73.	82.	83.	83.	83.	85.	83.	83.	81.	71.	59.	55.	50.	44.	41.	41.	39.	47.	51.	55.	61.	61.	62.	69.	66.
27	64.	68.	66.	60.	65.	65.	61.	56.	46.	30.	24.	22.	16.	15.	5.	11.	10.	15.	20.	21.	27.	30.	33.	30.	36.
28	32.	32.	34.	36.	39.	45.	56.	65.	64.	59.	58.	55.	55.	67.	62.	68.	88.	88.	89.	89.	88.	88.	89.	89.	66.
29	89.	89.	89.	89.	89.	84.	88.	88.	74.	55.	46.	37.	27.	30.	34.	34.	38.	45.	46.	48.	50.	56.	56.	64.	61.
30	66.	67.	76.	50.	25.	20.	23.	24.	23.	25.	26.	28.	30.	34.	42.	58.	70.	77.	85.	85.	85.	69.	85.	85.	53.
31	82.	79.	75.	74.	73.	73.	73.	73.	70.	59.	53.	49.	44.	39.	36.	32.	31.	35.	40.	45.	49.	51.	53.	59.	56.
AVG	66.	69.	70.	70.	70.	71.	72.	73.	69.	63.	56.	49.	46.	45.	46.	45.	49.	55.	60.	62.	66.	66.	67.	68.	61.
DAYS	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 744 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 61.224 MAXIMUM HOURLY VALUE = 89.000 STANDARD DEVIATION = 18.5474

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-68

MERGED DATA   HUMIDITY   (SAM)   DATA FOR APRIL   1975

HOURS (LST)

HR=BEG HR=END DAY	00 01	01 02	02 03	03 04	04 05	05 06	06 07	07 08	08 09	09 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	AVG
1	60.	63.	65.	66.	66.	66.	60.	49.	31.	28.	28.	29.	25.	26.	32.	42.	51.	58.	61.	63.	63.	62.	66.	66.	51.
2	70.	72.	75.	81.	86.	86.	86.	81.	76.	72.	61.	48.	45.	45.	63.	58.	76.	78.	66.	61.	61.	65.	70.	76.	68.
3	74.	77.	76.	73.	70.	67.	64.	51.	47.	46.	44.	40.	32.	30.	34.	39.	44.	51.	58.	62.	65.	75.	85.	85.	58.
4	81.	78.	77.	77.	76.	76.	71.	61.	51.	45.	39.	33.	20.	24.	21.	26.	21.	25.	27.	30.	35.	46.	56.	61.	48.
5	65.	66.	69.	70.	73.	74.	75.	71.	63.	50.	38.	34.	34.	26.	22.	19.	22.	17.	18.	20.	20.	22.	25.	29.	45.
6	33.	36.	38.	39.	43.	44.	45.	32.	22.	16.	12.	10.	5.	2.	2.	1.	4.	8.	17.	26.	31.	34.	37.	42.	24.
7	46.	50.	57.	61.	65.	67.	66.	57.	46.	44.	36.	26.	22.	17.	15.	15.	15.	20.	23.	27.	31.	35.	38.	40.	36.
8	42.	44.	49.	56.	57.	59.	60.	61.	57.	56.	52.	47.	45.	44.	41.	41.	41.	40.	41.	49.	51.	52.	50.	51.	49.
9	51.	53.	54.	56.	54.	54.	54.	54.	52.	53.	51.	46.	44.	44.	46.	46.	52.	57.	61.	63.	66.	75.	71.	73.	55.
10	74.	75.	75.	77.	80.	82.	75.	57.	45.	41.	39.	38.	36.	35.	31.	31.	31.	34.	37.	43.	51.	56.	57.	53.	52.
11	55.	56.	58.	60.	60.	60.	65.	53.	44.	38.	37.	37.	31.	25.	19.	17.	16.	21.	28.	35.	39.	41.	44.	46.	41.
12	54.	52.	55.	56.	56.	60.	60.	56.	56.	49.	44.	40.	39.	37.	37.	40.	41.	46.	42.	56.	61.	63.	61.	63.	51.
13	65.	69.	75.	78.	79.	81.	81.	80.	79.	76.	65.	60.	70.	67.	60.	64.	82.	86.	88.	87.	87.	87.	87.	87.	77.
14	87.	87.	87.	85.	84.	85.	87.	85.	85.	65.	65.	63.	82.	74.	71.	66.	72.	75.	80.	81.	81.	84.	84.	87.	82.
15	87.	86.	86.	84.	83.	81.	77.	68.	59.	41.	36.	35.	34.	31.	28.	25.	25.	29.	36.	41.	48.	49.	49.	53.	53.
16	53.	55.	60.	61.	63.	68.	67.	72.	65.	55.	49.	41.	39.	39.	39.	38.	36.	38.	37.	29.	42.	48.	49.	59.	50.
17	74.	75.	75.	79.	83.	82.	76.	68.	50.	34.	27.	20.	28.	22.	18.	18.	23.	32.	47.	53.	56.	74.	74.	74.	53.
18	77.	79.	81.	82.	85.	88.	85.	81.	67.	67.	67.	64.	62.	65.	62.	62.	67.	75.	74.	76.	76.	76.	76.	77.	74.
19	77.	76.	76.	77.	79.	79.	73.	72.	81.	66.	83.	79.	72.	68.	71.	74.	66.	55.	50.	49.	49.	49.	50.	55.	69.
20	55.	57.	59.	59.	59.	59.	59.	59.	54.	45.	41.	39.	38.	41.	42.	43.	45.	64.	56.	57.	60.	64.	66.	68.	53.
21	64.	64.	64.	68.	67.	60.	61.	56.	45.	44.	41.	49.	45.	47.	35.	35.	39.	39.	49.	46.	43.	41.	38.	38.	49.
22	39.	38.	37.	43.	46.	46.	48.	49.	52.	59.	60.	52.	45.	43.	44.	46.	46.	52.	53.	59.	63.	67.	70.	70.	51.
23	71.	76.	79.	84.	86.	86.	82.	79.	73.	82.	56.	41.	29.	26.	25.	30.	37.	46.	56.	65.	72.	77.	77.	78.	63.
24	81.	85.	85.	87.	88.	88.	88.	89.	85.	73.	66.	61.	66.	73.	86.	90.	92.	90.	89.	89.	89.	89.	89.	89.	84.
25	89.	89.	89.	89.	89.	89.	89.	89.	89.	89.	88.	88.	85.	90.	76.	63.	66.	69.	75.	79.	80.	86.	86.	85.	83.
26	81.	76.	81.	85.	78.	75.	59.	43.	37.	31.	29.	29.	29.	26.	22.	22.	32.	43.	54.	62.	63.	63.	67.	63.	52.
27	64.	66.	69.	80.	88.	88.	86.	79.	65.	48.	40.	35.	33.	32.	28.	22.	21.	25.	23.	25.	27.	29.	34.	40.	44.
28	48.	56.	56.	59.	61.	64.	67.	69.	55.	50.	48.	45.	50.	39.	47.	47.	52.	50.	55.	57.	57.	57.	58.	59.	54.
29	63.	66.	69.	65.	66.	67.	63.	55.	51.	41.	34.	30.	27.	26.	23.	23.	22.	22.	25.	29.	31.	35.	39.	43.	42.
30	46.	46.	46.	49.	50.	52.	45.	37.	34.	28.	26.	23.	19.	17.	17.	19.	17.	18.	24.	32.	36.	41.	45.	50.	34.
AVG	66.	65.	67.	69.	71.	71.	69.	64.	57.	52.	47.	43.	41.	39.	38.	39.	42.	45.	49.	52.	55.	58.	60.	62.	55.
DAYS	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 720 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 54.939 MAXIMUM HOURLY VALUE = 92.000 STANDARD DEVIATION = 20.6582

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-69

MERGED DATA HUMIDITY (%RH) DATA FOR MAY 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	51.	50.	53.	55.	57.	57.	53.	48.	43.	38.	34.	32.	28.	25.	24.	25.	26.	29.	36.	42.	47.	51.	53.	50.	42.
2	55.	56.	58.	55.	45.	56.	60.	53.	51.	51.	51.	51.	53.	61.	69.	69.	74.	82.	87.	88.	89.	89.	89.	89.	66.
3	89.	89.	89.	90.	88.	83.	84.	82.	76.	65.	58.	53.	56.	53.	47.	47.	47.	58.	64.	66.	66.	66.	66.	65.	69.
4	63.	70.	76.	84.	88.	88.	88.	85.	82.	78.	71.	72.	77.	80.	79.	73.	76.	81.	72.	75.	79.	79.	80.	80.	78.
5	82.	89.	89.	89.	89.	89.	88.	85.	78.	73.	66.	62.	55.	46.	41.	40.	41.	43.	46.	55.	62.	67.	67.	70.	67.
6	71.	73.	77.	80.	86.	86.	80.	76.	66.	62.	56.	52.	47.	43.	42.	43.	44.	45.	48.	50.	57.	56.	56.	61.	59.
7	64.	71.	75.	80.	83.	84.	80.	73.	64.	56.	51.	47.	43.	40.	37.	34.	33.	32.	36.	43.	53.	57.	57.	57.	56.
8	56.	61.	70.	70.	73.	77.	70.	68.	65.	61.	58.	53.	47.	47.	46.	37.	37.	39.	47.	46.	48.	48.	49.	49.	55.
9	49.	50.	52.	59.	65.	65.	63.	62.	58.	56.	56.	55.	51.	44.	40.	36.	44.	47.	44.	46.	45.	48.	56.	57.	52.
10	58.	61.	64.	66.	68.	70.	65.	62.	60.	55.	58.	54.	49.	45.	40.	40.	53.	64.	66.	72.	74.	77.	78.	73.	61.
11	71.	75.	76.	75.	78.	84.	87.	85.	82.	77.	81.	83.	77.	66.	62.	57.	58.	60.	63.	67.	72.	74.	80.	77.	76.
12	78.	77.	77.	78.	78.	76.	71.	64.	57.	51.	54.	47.	41.	36.	32.	30.	30.	31.	37.	44.	48.	47.	47.	56.	54.
13	56.	58.	64.	60.	59.	57.	53.	50.	47.	45.	45.	43.	37.	33.	30.	27.	25.	25.	30.	39.	41.	44.	48.	51.	45.
14	53.	53.	53.	53.	55.	55.	58.	59.	60.	57.	53.	48.	36.	23.	21.	19.	16.	24.	42.	49.	43.	43.	45.	46.	46.
15	51.	57.	60.	62.	65.	71.	72.	71.	65.	53.	51.	49.	46.	44.	42.	41.	42.	42.	44.	47.	52.	60.	68.	72.	55.
16	75.	81.	79.	79.	79.	80.	73.	66.	62.	57.	52.	44.	44.	45.	45.	46.	46.	45.	50.	51.	55.	58.	62.	65.	60.
17	70.	79.	71.	75.	77.	77.	66.	55.	53.	50.	47.	46.	46.	46.	47.	48.	49.	51.	51.	54.	58.	64.	68.	72.	59.
18	75.	77.	78.	79.	79.	80.	73.	62.	48.	46.	50.	58.	57.	75.	77.	81.	81.	81.	81.	81.	83.	80.	80.	80.	73.
19	80.	80.	80.	79.	79.	79.	77.	70.	56.	51.	51.	51.	65.	73.	74.	62.	52.	49.	49.	57.	66.	71.	75.	77.	67.
20	79.	79.	79.	79.	79.	79.	75.	61.	51.	49.	42.	38.	35.	33.	31.	30.	31.	31.	30.	38.	49.	59.	62.	61.	53.
21	63.	66.	69.	71.	73.	75.	66.	61.	58.	54.	58.	68.	66.	69.	71.	68.	66.	61.	66.	66.	69.	76.	80.	81.	67.
22	81.	80.	80.	83.	83.	83.	77.	68.	62.	61.	56.	52.	47.	48.	60.	73.	78.	80.	81.	81.	81.	81.	81.	83.	72.
23	81.	81.	81.	81.	81.	81.	79.	77.	68.	50.	42.	37.	38.	31.	30.	44.	62.	67.	64.	62.	64.	72.	62.	55.	62.
24	52.	58.	58.	58.	58.	53.	50.	47.	45.	45.	49.	57.	65.	66.	68.	74.	77.	79.	79.	81.	79.	81.	81.	79.	64.
25	77.	77.	77.	79.	83.	81.	80.	73.	70.	63.	58.	57.	55.	52.	49.	51.	51.	53.	62.	64.	70.	76.	77.	79.	67.
26	83.	83.	78.	79.	79.	79.	75.	68.	68.	64.	56.	49.	45.	45.	42.	41.	37.	39.	41.	45.	55.	60.	68.	78.	61.
27	76.	77.	77.	80.	76.	79.	76.	60.	57.	54.	47.	43.	42.	40.	36.	32.	31.	29.	29.	34.	42.	47.	57.	63.	55.
28	62.	63.	65.	68.	71.	73.	70.	64.	61.	59.	57.	54.	47.	34.	40.	38.	38.	39.	42.	45.	57.	62.	66.	67.	56.
29	68.	70.	74.	77.	78.	77.	74.	72.	65.	58.	53.	49.	46.	42.	40.	38.	38.	39.	41.	47.	58.	59.	60.	60.	57.
30	60.	66.	71.	75.	76.	76.	69.	62.	49.	43.	42.	40.	38.	37.	32.	31.	33.	35.	36.	35.	39.	47.	57.	63.	51.
31	66.	68.	66.	69.	70.	70.	64.	60.	49.	42.	35.	33.	31.	30.	29.	27.	27.	27.	29.	36.	49.	58.	66.	67.	49.
AVG	68.	70.	72.	73.	74.	74.	72.	66.	61.	56.	53.	51.	49.	47.	46.	45.	47.	49.	51.	55.	60.	63.	66.	67.	60.
DAYS	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 744 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 59.445 MAXIMUM HOURLY VALUE = 90.000 STANDARD DEVIATION = 16.1025

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-70

MERGED DATA HUMIDITY (%RH) DATA FOR JUNE 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
2	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	89.	89.	89.	89.	94.	999.
3	82.	74.	75.	76.	76.	76.	70.	63.	59.	53.	46.	47.	49.	55.	60.	60.	58.	60.	61.	60.	61.	65.	72.	70.	66.
4	68.	68.	68.	68.	68.	68.	67.	67.	67.	64.	68.	72.	75.	69.	63.	60.	60.	60.	60.	60.	61.	61.	63.	64.	65.
5	65.	67.	67.	71.	73.	73.	69.	61.	53.	45.	39.	39.	43.	41.	40.	41.	35.	35.	38.	44.	52.	56.	61.	69.	56.
6	94.	95.	95.	95.	87.	88.	96.	88.	87.	95.	84.	74.	77.	76.	65.	51.	61.	65.	69.	86.	90.	89.	89.	90.	83.
7	90.	87.	87.	87.	87.	87.	87.	87.	84.	67.	57.	49.	48.	40.	40.	50.	48.	50.	53.	57.	62.	67.	69.	79.	67.
8	72.	80.	80.	81.	84.	78.	77.	77.	68.	68.	61.	57.	56.	63.	60.	62.	62.	62.	61.	73.	76.	72.	74.	80.	70.
9	80.	76.	78.	77.	75.	74.	66.	61.	57.	50.	41.	40.	39.	32.	27.	27.	25.	24.	22.	31.	33.	41.	42.	45.	49.
10	46.	49.	49.	51.	56.	55.	56.	54.	59.	57.	53.	49.	43.	42.	39.	37.	36.	39.	41.	42.	44.	50.	63.	69.	49.
11	65.	67.	68.	75.	83.	81.	80.	63.	60.	59.	51.	43.	39.	30.	29.	27.	28.	28.	30.	34.	35.	40.	41.	41.	50.
12	45.	43.	41.	41.	42.	44.	44.	43.	41.	43.	38.	37.	39.	39.	37.	37.	43.	45.	49.	55.	56.	56.	70.	77.	46.
13	77.	79.	78.	76.	75.	75.	75.	75.	71.	66.	61.	67.	68.	76.	73.	68.	60.	55.	58.	57.	59.	62.	60.	66.	68.
14	68.	64.	70.	72.	72.	71.	69.	68.	66.	64.	67.	68.	67.	67.	68.	66.	68.	68.	65.	64.	66.	67.	68.	68.	68.
15	68.	70.	69.	70.	78.	78.	77.	75.	68.	65.	61.	60.	63.	69.	83.	90.	89.	89.	89.	89.	89.	89.	89.	89.	77.
16	89.	89.	89.	89.	89.	89.	89.	87.	83.	81.	85.	88.	88.	87.	85.	85.	89.	96.	96.	96.	96.	96.	89.	89.	89.
17	89.	89.	89.	89.	89.	89.	84.	87.	86.	81.	75.	75.	67.	58.	65.	63.	67.	77.	77.	79.	77.	78.	81.	85.	79.
18	86.	86.	86.	87.	87.	86.	83.	77.	72.	59.	53.	47.	43.	41.	36.	34.	36.	36.	39.	41.	44.	58.	60.	64.	60.
19	66.	71.	75.	77.	78.	78.	77.	75.	72.	68.	58.	57.	56.	60.	63.	59.	57.	57.	61.	62.	73.	71.	68.	73.	67.
20	74.	73.	74.	74.	81.	73.	72.	67.	63.	55.	49.	45.	41.	34.	31.	28.	29.	31.	37.	43.	51.	57.	59.	69.	55.
21	69.	73.	77.	81.	83.	83.	83.	74.	74.	73.	69.	65.	61.	56.	55.	49.	44.	47.	57.	60.	64.	66.	68.	78.	67.
22	76.	80.	80.	81.	86.	84.	83.	81.	82.	80.	77.	71.	66.	59.	55.	46.	42.	41.	43.	63.	66.	68.	69.	69.	69.
23	76.	75.	81.	81.	82.	86.	89.	86.	84.	999.	85.	85.	85.	80.	69.	63.	54.	42.	42.	46.	56.	58.	66.	69.	71.
24	67.	70.	69.	70.	69.	68.	64.	66.	67.	58.	58.	59.	73.	64.	64.	60.	56.	50.	51.	55.	59.	62.	64.	66.	65.
25	68.	68.	69.	72.	75.	76.	74.	66.	62.	66.	72.	68.	66.	63.	56.	52.	56.	53.	53.	57.	58.	65.	69.	86.	65.
26	95.	95.	88.	85.	83.	79.	82.	65.	63.	80.	61.	61.	67.	93.	74.	95.	95.	93.	86.	84.	84.	91.	87.	88.	81.
27	88.	88.	87.	87.	87.	87.	85.	90.	82.	65.	61.	57.	52.	50.	48.	55.	53.	47.	47.	49.	50.	53.	53.	60.	67.
28	79.	82.	82.	82.	81.	81.	81.	81.	83.	91.	89.	85.	85.	75.	75.	82.	93.	95.	96.	96.	96.	96.	96.	89.	86.
29	89.	89.	88.	88.	88.	88.	82.	76.	76.	71.	70.	67.	52.	50.	50.	50.	46.	45.	41.	45.	53.	56.	60.	59.	66.
30	57.	56.	65.	65.	67.	65.	66.	64.	61.	55.	50.	41.	37.	34.	36.	30.	28.	28.	26.	34.	39.	36.	63.	65.	47.
AVG	75.	74.	76.	77.	78.	77.	76.	72.	70.	66.	62.	60.	59.	56.	55.	54.	54.	54.	55.	60.	64.	66.	69.	73.	66.
DAYS	28	28	28	28	28	28	28	28	28	27	28	28	28	28	28	28	28	28	28	29	29	29	29	29	676

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 676 NUMBER OF MISSING HOURS = 44 DATA CAPTURE = 93.89 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 65.962 MAXIMUM HOURLY VALUE = 96.000 STANDARD DEVIATION = 17.0605

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-71

MERGED DATA HUMIDITY (%RH) DATA FOR JULY 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	45.	47.	55.	55.	56.	56.	56.	55.	53.	50.	42.	39.	33.	33.	29.	26.	23.	19.	22.	23.	26.	29.	37.	36.	39.
2	41.	39.	46.	48.	51.	54.	55.	57.	58.	52.	49.	46.	44.	41.	39.	35.	36.	15.	16.	37.	43.	46.	47.	45.	45.
3	51.	51.	53.	55.	57.	61.	62.	38.	59.	51.	45.	39.	35.	35.	31.	31.	29.	27.	27.	27.	33.	34.	35.	36.	43.
4	36.	36.	41.	45.	47.	49.	48.	48.	46.	45.	41.	40.	38.	36.	32.	36.	38.	35.	25.	27.	28.	34.	35.	36.	38.
5	34.	38.	40.	41.	42.	42.	44.	45.	45.	44.	40.	30.	21.	17.	15.	11.	10.	8.	6.	7.	10.	16.	16.	18.	27.
6	19.	24.	31.	33.	31.	29.	29.	31.	36.	28.	31.	30.	30.	30.	31.	32.	32.	32.	30.	27.	32.	32.	32.	33.	30.
7	33.	33.	33.	37.	37.	39.	999.	46.	45.	47.	53.	61.	70.	76.	71.	65.	70.	72.	70.	78.	78.	77.	81.	81.	59.
8	77.	77.	79.	79.	81.	80.	81.	82.	79.	67.	66.	62.	56.	60.	61.	50.	44.	46.	51.	52.	58.	59.	62.	69.	66.
9	65.	67.	66.	75.	73.	73.	77.	73.	67.	67.	62.	55.	45.	39.	35.	30.	26.	25.	10.	38.	44.	45.	46.	999.	53.
10	61.	58.	52.	70.	66.	78.	78.	65.	63.	58.	52.	50.	54.	41.	38.	37.	37.	40.	52.	999.	62.	57.	57.	56.	55.
11	55.	57.	57.	63.	66.	73.	83.	91.	92.	93.	93.	93.	93.	93.	94.	94.	93.	94.	94.	94.	94.	93.	91.	91.	85.
12	92.	92.	92.	92.	91.	67.	61.	64.	57.	56.	49.	32.	35.	36.	41.	31.	27.	27.	28.	31.	45.	49.	52.	55.	56.
13	59.	64.	65.	68.	71.	73.	72.	70.	65.	52.	51.	50.	50.	44.	41.	38.	40.	42.	43.	44.	51.	57.	59.	73.	56.
14	66.	69.	74.	78.	80.	81.	79.	71.	71.	61.	61.	56.	53.	42.	36.	36.	43.	50.	58.	63.	63.	65.	66.	75.	62.
15	80.	80.	84.	85.	86.	86.	84.	76.	73.	70.	66.	59.	56.	57.	57.	68.	68.	68.	68.	70.	70.	74.	79.	85.	73.
16	87.	88.	89.	87.	87.	87.	89.	82.	77.	69.	61.	59.	60.	60.	60.	62.	61.	57.	54.	65.	68.	69.	73.	74.	72.
17	75.	78.	82.	80.	87.	88.	88.	89.	85.	80.	77.	71.	78.	76.	69.	65.	62.	60.	58.	58.	62.	65.	67.	67.	74.
18	66.	75.	76.	73.	71.	71.	67.	58.	53.	49.	48.	57.	54.	49.	40.	42.	44.	51.	52.	57.	62.	63.	64.	65.	59.
19	66.	67.	70.	70.	70.	64.	65.	57.	47.	44.	42.	38.	34.	33.	33.	39.	37.	38.	39.	42.	42.	44.	48.	49.	49.
20	51.	52.	53.	55.	59.	60.	60.	53.	47.	42.	41.	36.	37.	36.	33.	33.	31.	30.	32.	35.	50.	67.	72.	72.	47.
21	73.	84.	86.	86.	86.	84.	82.	77.	68.	59.	56.	50.	40.	37.	29.	27.	26.	26.	29.	44.	52.	59.	60.	62.	57.
22	72.	76.	75.	75.	75.	76.	76.	63.	55.	47.	40.	36.	31.	30.	30.	27.	27.	32.	36.	38.	41.	41.	44.	49.	50.
23	46.	48.	53.	54.	55.	57.	57.	55.	46.	35.	30.	27.	27.	25.	25.	28.	27.	25.	26.	26.	23.	23.	23.	26.	36.
24	27.	32.	36.	39.	41.	42.	44.	45.	45.	44.	45.	60.	73.	64.	63.	62.	60.	63.	64.	70.	77.	80.	83.	83.	56.
25	83.	78.	75.	73.	70.	69.	66.	61.	57.	50.	46.	39.	37.	37.	37.	37.	39.	42.	43.	51.	54.	57.	61.	66.	55.
26	69.	71.	74.	75.	77.	79.	76.	71.	61.	52.	56.	30.	31.	32.	26.	22.	22.	20.	20.	23.	30.	35.	35.	39.	46.
27	41.	43.	48.	49.	50.	51.	44.	45.	40.	32.	25.	23.	24.	25.	26.	33.	35.	44.	56.	81.	94.	94.	94.	92.	50.
28	86.	79.	72.	78.	72.	72.	72.	72.	72.	72.	68.	64.	60.	58.	54.	46.	42.	56.	62.	62.	62.	66.	68.	68.	65.
29	69.	70.	71.	71.	71.	71.	71.	68.	63.	59.	56.	55.	54.	55.	46.	45.	44.	44.	46.	49.	52.	57.	62.	67.	59.
30	71.	71.	71.	71.	71.	74.	74.	74.	60.	62.	59.	56.	46.	47.	40.	34.	31.	32.	34.	34.	37.	36.	36.	38.	53.
31	47.	48.	48.	55.	56.	64.	71.	71.	69.	65.	59.	61.	52.	54.	56.	56.	54.	54.	55.	59.	62.	64.	65.	62.	59.
AVG	60.	61.	63.	65.	66.	67.	68.	66.	60.	55.	51.	49.	47.	45.	43.	41.	41.	42.	44.	47.	52.	54.	57.	59.	56.
DAYS	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	30	741

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 741 NUMBER OF MISSING HOURS = 3 DATA CAPTURE = 99.60 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 53.968 MAXIMUM HOURLY VALUE = 94.000 STANDARD DEVIATION = 19.0221

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-72

MERGED DATA HUMIDITY (%RH) DATA FOR AUGUST 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	60.	62.	62.	66.	71.	72.	70.	71.	63.	61.	66.	68.	66.	65.	65.	63.	61.	63.	42.	72.	72.	72.	72.	72.	67.
2	71.	69.	69.	71.	71.	71.	71.	71.	71.	71.	71.	61.	53.	46.	53.	57.	61.	67.	71.	71.	71.	72.	72.	72.	67.
3	72.	72.	72.	72.	73.	73.	73.	73.	73.	73.	74.	74.	74.	66.	67.	63.	64.	64.	63.	61.	67.	69.	62.	62.	69.
4	63.	67.	68.	68.	68.	69.	69.	69.	67.	60.	59.	56.	52.	38.	31.	27.	25.	26.	31.	37.	42.	46.	46.	56.	52.
5	65.	72.	73.	73.	68.	62.	62.	62.	59.	56.	58.	47.	37.	35.	35.	34.	32.	31.	32.	36.	40.	46.	51.	54.	51.
6	56.	60.	62.	65.	67.	68.	66.	62.	61.	57.	60.	66.	62.	54.	39.	37.	39.	40.	41.	46.	45.	44.	54.	59.	55.
7	64.	64.	64.	67.	68.	71.	71.	71.	71.	70.	68.	65.	66.	67.	67.	66.	63.	62.	57.	56.	59.	65.	67.	71.	66.
8	71.	71.	71.	72.	72.	72.	72.	68.	68.	68.	71.	67.	56.	58.	53.	51.	52.	50.	54.	54.	57.	60.	62.	62.	63.
9	60.	59.	57.	51.	52.	29.	37.	39.	40.	47.	53.	53.	51.	51.	54.	56.	49.	45.	47.	50.	54.	56.	56.	56.	50.
10	57.	60.	61.	61.	62.	67.	66.	69.	66.	60.	58.	56.	62.	56.	56.	58.	58.	58.	51.	50.	55.	57.	59.	61.	59.
11	62.	68.	71.	73.	72.	72.	72.	73.	73.	74.	74.	74.	74.	72.	61.	54.	48.	48.	50.	53.	55.	57.	60.	62.	65.
12	62.	60.	59.	59.	62.	69.	65.	62.	59.	57.	54.	49.	42.	38.	33.	31.	34.	35.	36.	36.	41.	45.	45.	54.	49.
13	56.	57.	58.	64.	64.	62.	62.	65.	66.	65.	59.	52.	47.	42.	36.	33.	34.	33.	34.	34.	38.	39.	41.	47.	49.
14	46.	52.	54.	53.	47.	51.	50.	50.	56.	47.	41.	39.	37.	32.	31.	31.	31.	29.	30.	28.	27.	34.	34.	36.	41.
15	37.	40.	44.	45.	45.	45.	46.	46.	46.	48.	48.	47.	45.	42.	42.	45.	46.	47.	50.	59.	59.	59.	59.	59.	48.
16	59.	63.	66.	65.	65.	69.	73.	73.	73.	73.	73.	73.	73.	73.	73.	71.	69.	65.	64.	72.	72.	72.	72.	72.	70.
17	72.	72.	73.	73.	73.	73.	73.	72.	71.	66.	72.	73.	73.	73.	63.	74.	74.	74.	73.	73.	72.	72.	72.	72.	72.
18	73.	74.	74.	74.	74.	74.	74.	74.	74.	74.	74.	74.	74.	75.	75.	70.	66.	62.	70.	71.	72.	72.	73.	74.	73.
19	74.	74.	74.	74.	74.	74.	74.	74.	74.	73.	71.	69.	66.	999.	58.	52.	42.	49.	54.	52.	53.	56.	58.	59.	66.
20	59.	57.	59.	62.	62.	67.	66.	66.	64.	61.	59.	63.	999.	999.	81.	75.	66.	57.	53.	55.	999.	999.	999.	999.	62.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	66.	60.	58.	999.	46.	39.	36.	34.	33.	37.	999.	51.	55.	67.	999.	999.
22	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	63.	70.	70.	67.	65.	63.	62.	58.	60.	62.	62.	999.	999.	999.	999.
23	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	84.	81.	999.	999.	999.	81.	77.	73.	71.	73.	73.	72.	72.	999.	999.
24	999.	999.	999.	999.	999.	999.	999.	999.	999.	59.	53.	47.	61.	38.	37.	36.	36.	41.	49.	68.	86.	90.	89.	69.	999.
25	89.	89.	88.	89.	89.	88.	84.	89.	89.	89.	79.	67.	58.	34.	59.	69.	82.	83.	80.	80.	81.	82.	93.	87.	81.
26	89.	89.	89.	89.	89.	89.	88.	88.	89.	89.	89.	89.	89.	89.	88.	88.	88.	89.	91.	91.	91.	91.	91.	91.	89.
27	91.	90.	90.	90.	90.	90.	90.	90.	91.	91.	91.	91.	92.	83.	85.	84.	81.	82.	85.	89.	89.	75.	75.	79.	87.
28	86.	89.	89.	88.	87.	79.	81.	86.	79.	69.	56.	47.	43.	39.	38.	40.	48.	51.	57.	63.	64.	79.	73.	79.	67.
29	77.	79.	80.	79.	79.	78.	79.	79.	79.	73.	66.	61.	71.	59.	999.	61.	999.	999.	999.	999.	999.	999.	999.	999.	999.
30	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	88.	88.	88.	85.	81.	79.	999.
31	81.	83.	999.	89.	999.	999.	999.	999.	96.	999.	999.	999.	84.	999.	999.	80.	999.	80.	84.	84.	80.	85.	999.	999.	999.
AVG	67.	69.	69.	71.	69.	69.	70.	70.	70.	67.	66.	63.	62.	56.	55.	55.	53.	54.	57.	60.	62.	64.	65.	66.	63.
DAYS	24	26	25	26	25	25	25	25	26	27	29	29	27	28	27	30	28	29	30	29	29	28	27	25	649

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 649 NUMBER OF MISSING HOURS = 95 DATA CAPTURE = 87.23 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 63.393 MAXIMUM HOURLY VALUE = 96.000 STANDARD DEVIATION = 15.2786

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-73

MERGED DATA　　HUMIDITY　　(ERM)　　DATA FOR SEPTEMBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	80.	82.	82.	82.	83.	85.	85.	85.	86.	87.	79.	76.	75.	74.	66.	60.	55.	52.	52.	53.	53.	54.	57.	59.	70.
2	62.	66.	70.	71.	72.	75.	76.	77.	78.	78.	76.	69.	68.	67.	65.	64.	63.	64.	63.	64.	65.	68.	70.	78.	69.
3	76.	78.	79.	80.	82.	85.	83.	83.	83.	82.	72.	62.	59.	55.	50.	47.	44.	44.	44.	47.	52.	59.	63.	66.	66.
4	70.	73.	74.	76.	76.	78.	79.	79.	80.	75.	67.	60.	55.	52.	50.	47.	42.	38.	38.	43.	46.	52.	55.	58.	61.
5	61.	64.	67.	69.	59.	60.	64.	66.	60.	59.	56.	53.	48.	42.	38.	32.	26.	23.	20.	21.	25.	34.	50.	56.	48.
6	59.	57.	58.	59.	60.	62.	66.	72.	71.	64.	64.	62.	58.	53.	47.	42.	39.	37.	32.	34.	42.	45.	57.	37.	52.
7	42.	44.	45.	46.	46.	48.	53.	62.	63.	59.	55.	47.	43.	36.	32.	31.	30.	30.	30.	35.	43.	48.	48.	47.	44.
8	40.	39.	42.	48.	50.	54.	57.	59.	60.	60.	56.	53.	51.	48.	46.	43.	46.	41.	40.	40.	41.	49.	54.	61.	49.
9	64.	67.	70.	73.	74.	76.	77.	78.	77.	64.	54.	51.	36.	34.	34.	32.	31.	30.	30.	34.	43.	51.	56.	60.	54.
10	61.	63.	65.	67.	68.	67.	69.	72.	74.	71.	67.	63.	61.	56.	53.	52.	49.	47.	46.	46.	47.	52.	54.	56.	59.
11	61.	65.	67.	70.	71.	75.	75.	76.	78.	73.	66.	61.	57.	49.	44.	39.	37.	36.	36.	49.	49.	55.	60.	65.	59.
12	67.	66.	70.	72.	74.	74.	76.	78.	79.	73.	62.	57.	51.	47.	45.	43.	41.	40.	40.	43.	51.	57.	61.	63.	60.
13	66.	68.	70.	71.	73.	74.	76.	77.	78.	75.	67.	62.	57.	52.	49.	44.	43.	42.	42.	47.	54.	59.	61.	64.	61.
14	65.	67.	69.	69.	70.	79.	72.	72.	73.	66.	55.	52.	48.	35.	25.	22.	22.	21.	21.	24.	32.	39.	43.	50.	49.
15	54.	58.	62.	66.	67.	68.	70.	71.	73.	73.	65.	54.	50.	41.	39.	39.	39.	39.	39.	40.	42.	42.	43.	46.	55.
16	51.	54.	57.	59.	61.	63.	65.	66.	69.	70.	70.	71.	70.	70.	70.	70.	70.	71.	71.	72.	72.	73.	74.	74.	67.
17	75.	75.	75.	75.	75.	75.	75.	75.	75.	70.	63.	59.	58.	51.	48.	45.	46.	46.	46.	43.	49.	55.	60.	63.	61.
18	66.	68.	78.	80.	82.	83.	76.	85.	78.	75.	64.	53.	45.	35.	33.	26.	26.	26.	32.	41.	49.	54.	59.	61.	57.
19	63.	65.	66.	68.	70.	70.	71.	73.	74.	76.	63.	57.	51.	46.	41.	37.	36.	36.	36.	44.	51.	56.	59.	66.	57.
20	63.	65.	67.	69.	70.	71.	72.	73.	75.	71.	59.	49.	45.	42.	41.	38.	37.	37.	38.	46.	52.	57.	61.	63.	59.
21	64.	67.	68.	70.	71.	72.	73.	78.	77.	76.	73.	68.	61.	56.	52.	48.	43.	43.	43.	49.	53.	56.	60.	61.	61.
22	64.	66.	68.	70.	70.	72.	72.	74.	76.	74.	69.	65.	58.	49.	46.	41.	39.	37.	38.	44.	52.	54.	57.	59.	59.
23	60.	61.	62.	63.	63.	66.	65.	66.	69.	67.	57.	52.	49.	45.	39.	35.	33.	34.	40.	45.	51.	52.	52.	52.	55.
24	56.	55.	58.	60.	61.	65.	66.	65.	66.	67.	68.	64.	56.	53.	52.	53.	55.	55.	56.	59.	61.	65.	64.	64.	60.
25	66.	66.	75.	67.	69.	70.	71.	72.	74.	75.	70.	65.	61.	57.	57.	57.	57.	57.	59.	63.	66.	66.	70.	71.	66.
26	73.	73.	75.	76.	78.	78.	78.	80.	80.	79.	76.	69.	62.	58.	54.	52.	50.	49.	50.	54.	59.	61.	64.	65.	67.
27	68.	69.	70.	72.	74.	76.	77.	77.	79.	79.	78.	74.	69.	61.	58.	55.	52.	52.	52.	56.	59.	56.	57.	58.	66.
28	58.	59.	60.	61.	63.	66.	65.	66.	66.	67.	66.	65.	61.	55.	53.	53.	53.	52.	52.	56.	61.	65.	69.	71.	61.
29	73.	73.	75.	76.	76.	79.	79.	79.	80.	78.	71.	63.	60.	56.	50.	46.	46.	45.	47.	52.	56.	61.	62.	64.	65.
30	66.	67.	69.	70.	71.	73.	75.	75.	77.	77.	72.	67.	61.	56.	50.	48.	45.	45.	49.	54.	59.	61.	63.	65.	63.
AVE	63.	65.	67.	68.	69.	71.	72.	74.	74.	72.	66.	61.	56.	51.	48.	45.	43.	42.	43.	47.	51.	55.	58.	61.	59.
DAYS	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720

TOTAL HOURS = 720　NUMBER OF GOOD HOURS = 720　NUMBER OF MISSING HOURS = 0　DATA CAPTURE = 100.00 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 59.183　MAXIMUM HOURLY VALUE = 86.000　STANDARD DEVIATION = 13.8056

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-74

MERGED DATA　　HUMIDITY　　(ERM)　　DATA FOR OCTOBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	66.	67.	68.	70.	71.	72.	73.	74.	76.	76.	72.	66.	59.	51.	47.	45.	43.	43.	46.	51.	55.	56.	59.	60.	61.
2	60.	60.	61.	66.	67.	68.	69.	70.	70.	71.	58.	52.	47.	44.	36.	31.	29.	29.	28.	28.	30.	31.	32.	43.	49.
3	51.	52.	57.	61.	63.	65.	65.	65.	60.	57.	52.	50.	52.	55.	55.	52.	52.	52.	55.	56.	61.	63.	65.	66.	56.
4	68.	70.	70.	69.	67.	67.	67.	64.	58.	52.	48.	46.	46.	45.	45.	45.	48.	52.	55.	58.	60.	61.	68.	67.	58.
5	62.	62.	63.	64.	66.	66.	66.	68.	69.	70.	70.	70.	70.	70.	70.	70.	70.	70.	70.	70.	70.	70.	79.	79.	69.
6	71.	71.	72.	72.	73.	73.	74.	75.	74.	76.	71.	59.	52.	52.	51.	50.	50.	52.	55.	59.	61.	71.	66.	69.	65.
7	70.	71.	73.	74.	76.	76.	77.	79.	88.	79.	73.	68.	58.	48.	42.	42.	43.	46.	51.	49.	58.	68.	68.	65.	66.
8	67.	69.	70.	70.	70.	71.	71.	73.	76.	74.	73.	65.	57.	52.	52.	52.	52.	52.	56.	59.	61.	66.	66.	68.	66.
9	68.	69.	69.	70.	70.	70.	70.	72.	72.	71.	70.	68.	67.	67.	67.	67.	68.	70.	72.	73.	76.	79.	76.	76.	70.
10	77.	74.	78.	77.	77.	77.	78.	78.	78.	77.	79.	72.	70.	67.	67.	70.	70.	71.	72.	70.	75.	76.	77.	78.	75.
11	78.	78.	78.	78.	78.	78.	78.	78.	78.	76.	65.	56.	56.	56.	55.	52.	52.	53.	58.	62.	67.	70.	70.	70.	66.
12	70.	70.	70.	70.	70.	71.	71.	72.	72.	69.	62.	53.	47.	41.	35.	35.	37.	42.	46.	51.	53.	56.	58.	60.	58.
13	61.	62.	64.	66.	67.	69.	69.	70.	72.	72.	70.	64.	60.	59.	55.	55.	56.	58.	58.	61.	61.	63.	64.	65.	63.
14	65.	65.	64.	63.	62.	63.	64.	65.	65.	66.	64.	69.	66.	67.	65.	65.	65.	65.	66.	66.	66.	66.	68.	69.	66.
15	65.	65.	64.	64.	63.	64.	65.	66.	66.	57.	45.	39.	38.	38.	38.	38.	43.	47.	52.	57.	56.	55.	57.	57.	54.
16	57.	57.	55.	59.	61.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
17	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
18	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
19	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
20	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	53.	50.	49.	47.	50.	53.	66.	61.	65.	77.	76.	70.	73.	74.	999.
22	75.	76.	77.	78.	79.	79.	79.	79.	79.	75.	79.	62.	59.	52.	51.	63.	71.	74.	75.	77.	75.	75.	71.	68.	72.
23	67.	65.	66.	64.	67.	71.	75.	78.	78.	78.	74.	67.	65.	63.	67.	65.	65.	76.	78.	77.	77.	77.	77.	78.	71.
24	77.	69.	67.	66.	66.	66.	65.	65.	59.	52.	46.	39.	35.	28.	36.	39.	44.	44.	45.	46.	56.	59.	66.	72.	55.
25	78.	76.	79.	80.	80.	80.	80.	80.	80.	80.	77.	75.	72.	70.	71.	77.	81.	80.	80.	80.	80.	74.	66.	55.	76.
26	48.	47.	50.	51.	52.	54.	56.	58.	61.	49.	44.	46.	52.	49.	52.	58.	75.	76.	79.	80.	80.	80.	80.	80.	61.
27	80.	80.	80.	80.	80.	80.	80.	80.	80.	81.	74.	62.	62.	57.	57.	57.	59.	62.	66.	73.	79.	75.	74.	75.	72.
28	74.	74.	73.	72.	71.	68.	69.	73.	73.	73.	65.	57.	47.	43.	42.	47.	52.	57.	60.	60.	62.	66.	70.	72.	63.
29	77.	79.	80.	80.	80.	80.	80.	80.	80.	81.	81.	81.	80.	80.	79.	80.	81.	81.	80.	80.	80.	80.	80.	80.	80.
30	80.	80.	80.	80.	80.	80.	80.	80.	80.	81.	70.	60.	61.	61.	65.	66.	78.	79.	80.	80.	73.	63.	54.	53.	73.
31	58.	62.	63.	63.	56.	51.	52.	56.	61.	60.	69.	57.	53.	42.	36.	40.	47.	53.	52.	49.	39.	39.	44.	47.	58.
AVE	68.	68.	69.	70.	70.	70.	71.	72.	72.	70.	66.	60.	57.	54.	53.	54.	56.	60.	62.	63.	65.	66.	66.	67.	69.
DAYS	26	26	26	26	26	25	25	25	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	619

TOTAL HOURS = 744　NUMBER OF GOOD HOURS = 610　NUMBER OF MISSING HOURS = 125　DATA CAPTURE = 83.20 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 64.517　MAXIMUM HOURLY VALUE = 88.000　STANDARD DEVIATION = 12.0531

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-75

MERGED DATA HUMIDITY (28M) DATA FOR NOVEMBER 1979

HOURS (LST)

HRBEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HREND	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	60.	64.	72.	75.	76.	81.	81.	75.	67.	55.	45.	39.	39.	43.	42.	42.	45.	46.	44.	49.	51.	53.	54.	58.	58.
2	51.	51.	55.	63.	65.	66.	74.	79.	79.	61.	45.	44.	56.	39.	32.	27.	28.	38.	46.	74.	79.	79.	75.	67.	61.
3	73.	79.	56.	61.	38.	37.	38.	30.	41.	39.	36.	36.	36.	40.	46.	55.	62.	73.	76.	79.	81.	79.	75.	69.	55.
4	66.	54.	54.	52.	46.	49.	43.	42.	41.	44.	47.	51.	51.	50.	49.	46.	42.	41.	40.	42.	45.	49.	51.	52.	48.
5	53.	54.	55.	56.	56.	49.	47.	45.	47.	54.	56.	53.	64.	71.	76.	69.	82.	81.	80.	80.	80.	80.	80.	80.	66.
6	76.	82.	59.	54.	59.	66.	69.	71.	71.	59.	69.	70.	76.	72.	69.	66.	62.	61.	58.	53.	53.	53.	51.	51.	63.
7	51.	49.	46.	44.	48.	48.	49.	51.	54.	55.	60.	59.	57.	59.	47.	42.	41.	41.	42.	47.	52.	60.	59.	56.	50.
8	52.	45.	44.	50.	51.	56.	54.	57.	57.	57.	57.	63.	79.	62.	49.	56.	64.	65.	67.	66.	60.	57.	54.	57.	57.
9	53.	55.	56.	54.	53.	52.	51.	40.	42.	37.	36.	34.	28.	27.	32.	40.	40.	53.	57.	63.	62.	70.	77.	77.	50.
10	77.	77.	77.	77.	77.	77.	77.	77.	77.	70.	72.	65.	54.	44.	39.	38.	43.	50.	52.	50.	49.	49.	47.	47.	61.
11	51.	51.	51.	53.	52.	51.	51.	55.	55.	62.	64.	64.	61.	58.	55.	54.	58.	63.	65.	66.	67.	64.	68.	70.	59.
12	69.	57.	54.	63.	69.	79.	71.	72.	71.	66.	60.	51.	62.	44.	56.	60.	67.	71.	71.	64.	61.	58.	56.	55.	62.
13	55.	61.	64.	67.	67.	69.	64.	64.	43.	50.	59.	57.	56.	64.	76.	73.	75.	73.	66.	65.	65.	71.	75.	76.	66.
14	79.	82.	82.	82.	82.	82.	82.	78.	70.	76.	73.	73.	73.	62.	37.	37.	44.	58.	74.	79.	80.	82.	82.	82.	72.
15	82.	82.	87.	84.	78.	56.	49.	46.	46.	51.	51.	52.	55.	55.	58.	61.	62.	61.	61.	58.	59.	61.	58.	50.	61.
16	50.	46.	56.	67.	57.	59.	59.	60.	62.	63.	63.	61.	60.	53.	55.	55.	61.	67.	66.	67.	62.	62.	63.	65.	58.
17	60.	60.	71.	73.	69.	69.	66.	66.	66.	65.	67.	59.	52.	47.	43.	45.	51.	61.	60.	60.	60.	66.	64.	64.	63.
18	69.	74.	76.	75.	76.	76.	73.	73.	75.	64.	64.	63.	60.	59.	56.	60.	56.	67.	69.	74.	77.	77.	77.	77.	70.
19	77.	77.	77.	77.	77.	77.	77.	77.	77.	77.	77.	77.	77.	75.	78.	77.	77.	73.	63.	62.	61.	58.	57.	55.	72.
20	51.	44.	46.	47.	47.	46.	43.	43.	43.	52.	42.	37.	32.	26.	32.	41.	32.	55.	56.	57.	61.	61.	63.	64.	46.
21	60.	70.	76.	76.	76.	79.	75.	75.	70.	70.	73.	76.	76.	77.	78.	78.	78.	78.	73.	78.	78.	79.	79.	80.	76.
22	80.	80.	80.	81.	81.	81.	81.	81.	81.	81.	81.	81.	81.	80.	80.	80.	80.	80.	79.	79.	80.	80.	79.	80.	80.
23	67.	65.	65.	66.	69.	77.	80.	80.	80.	80.	80.	80.	80.	81.	81.	81.	81.	81.	79.	79.	81.	81.	82.	82.	77.
24	81.	81.	81.	81.	81.	81.	81.	80.	80.	77.	62.	54.	58.	56.	62.	63.	58.	62.	66.	62.	57.	59.	54.	54.	66.
25	57.	65.	69.	71.	72.	72.	71.	66.	56.	52.	50.	48.	64.	72.	79.	79.	78.	78.	79.	79.	79.	79.	69.	65.	69.
26	63.	64.	66.	77.	80.	80.	79.	79.	79.	79.	78.	76.	71.	70.	70.	74.	75.	76.	76.	78.	78.	75.	77.	77.	75.
27	77.	77.	77.	77.	77.	77.	76.	76.	77.	67.	68.	65.	59.	54.	61.	67.	71.	72.	74.	74.	74.	75.	75.	75.	72.
28	73.	73.	73.	72.	73.	73.	73.	73.	73.	73.	68.	62.	62.	63.	69.	71.	75.	75.	76.	76.	76.	75.	76.	76.	72.
29	76.	76.	76.	76.	76.	76.	76.	76.	76.	76.	76.	71.	66.	63.	63.	69.	73.	74.	74.	74.	74.	74.	74.	74.	73.
30	74.	74.	76.	76.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	75.	77.	77.	77.	77.	77.	77.	78.	78.	80.	76.
AVG	66.	69.	65.	66.	67.	66.	67.	66.	65.	65.	63.	61.	60.	58.	58.	60.	63.	65.	66.	67.	68.	68.	68.	66.	65.
DAYS	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 720 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 64.540 MAXIMUM HOURLY VALUE = 90.000 STANDARD DEVIATION = 13.1610

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-76

MERGED DATA HUMIDITY (28M) DATA FOR DECEMBER 1979

HOURS (LST)

HRBEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
HREND	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
DAY																									AVG
1	82.	80.	79.	76.	77.	77.	77.	77.	77.	78.	78.	68.	61.	57.	71.	81.	81.	81.	81.	81.	81.	82.	88.	82.	77.
2	79.	77.	76.	75.	75.	73.	66.	71.	70.	57.	55.	60.	62.	77.	78.	71.	72.	73.	73.	72.	72.	70.	64.	64.	71.
3	61.	60.	55.	66.	67.	67.	67.	67.	67.	64.	68.	67.	66.	64.	69.	71.	76.	80.	82.	82.	82.	81.	81.	82.	71.
4	81.	81.	81.	80.	79.	79.	79.	74.	50.	40.	33.	31.	30.	27.	30.	37.	49.	41.	42.	44.	47.	46.	50.	52.	53.
5	52.	64.	67.	67.	52.	55.	50.	55.	49.	39.	36.	32.	31.	32.	33.	53.	63.	66.	64.	66.	64.	65.	65.	60.	51.
6	57.	54.	57.	55.	51.	51.	51.	53.	51.	50.	51.	50.	51.	51.	53.	58.	65.	66.	73.	77.	78.	70.	71.	70.	59.
7	70.	70.	71.	71.	71.	66.	71.	71.	73.	78.	74.	65.	51.	64.	60.	66.	73.	76.	80.	81.	81.	81.	81.	81.	72.
8	75.	73.	73.	75.	76.	76.	76.	70.	61.	56.	50.	51.	53.	31.	31.	70.	71.	73.	71.	71.	70.	73.	72.	71.	67.
9	70.	70.	70.	72.	75.	79.	81.	82.	82.	81.	81.	82.	82.	81.	80.	80.	80.	80.	80.	79.	79.	79.	79.	79.	78.
10	79.	79.	78.	79.	78.	78.	77.	76.	70.	66.	60.	60.	61.	64.	67.	69.	70.	70.	70.	73.	74.	74.	74.	76.	72.
11	75.	76.	75.	75.	76.	76.	76.	75.	76.	76.	71.	59.	58.	62.	64.	71.	74.	75.	75.	74.	74.	74.	74.	74.	72.
12	74.	82.	76.	59.	63.	66.	69.	65.	62.	59.	56.	55.	55.	62.	69.	71.	72.	78.	72.	74.	76.	74.	75.	75.	68.
13	75.	75.	75.	75.	81.	79.	79.	79.	79.	77.	70.	65.	60.	59.	60.	67.	73.	75.	75.	75.	75.	79.	75.	76.	74.
14	76.	79.	79.	75.	75.	77.	77.	78.	78.	73.	73.	73.	73.	73.	73.	77.	78.	79.	79.	81.	81.	81.	81.	80.	77.
15	79.	81.	82.	82.	82.	81.	80.	80.	81.	76.	73.	69.	65.	63.	64.	73.	75.	78.	79.	79.	78.	78.	77.	78.	76.
16	78.	78.	79.	74.	78.	78.	78.	78.	78.	75.	70.	69.	64.	65.	67.	73.	74.	75.	77.	77.	77.	80.	80.	81.	75.
17	81.	81.	82.	81.	81.	80.	80.	80.	80.	81.	77.	70.	65.	66.	68.	77.	80.	81.	81.	81.	81.	81.	81.	82.	78.
18	82.	82.	82.	82.	82.	82.	82.	82.	82.	82.	83.	83.	84.	82.	82.	82.	82.	83.	82.	81.	82.	81.	83.	83.	82.
19	83.	83.	83.	83.	83.	82.	82.	82.	82.	82.	83.	83.	83.	83.	83.	82.	82.	82.	82.	82.	82.	81.	81.	81.	82.
20	81.	81.	81.	81.	82.	82.	82.	81.	81.	81.	82.	82.	83.	83.	82.	82.	81.	81.	82.	82.	81.	81.	80.	80.	81.
21	81.	81.	81.	81.	81.	81.	81.	82.	82.	82.	80.	77.	76.	73.	73.	77.	80.	81.	81.	81.	82.	82.	82.	82.	80.
22	82.	82.	82.	82.	82.	82.	82.	82.	82.	80.	75.	70.	69.	70.	72.	82.	82.	82.	82.	82.	82.	83.	83.	85.	80.
23	83.	87.	83.	83.	83.	83.	85.	83.	83.	82.	82.	78.	77.	81.	77.	79.	82.	83.	83.	84.	84.	84.	84.	84.	82.
24	84.	84.	84.	84.	84.	84.	84.	84.	84.	84.	77.	80.	64.	57.	54.	54.	59.	50.	46.	36.	31.	29.	39.	32.	65.
25	56.	50.	51.	71.	81.	82.	83.	82.	78.	77.	78.	72.	64.	70.	76.	83.	83.	83.	83.	83.	83.	83.	83.	84.	76.
26	84.	84.	84.	84.	84.	85.	85.	85.	85.	83.	81.	79.	83.	82.	80.	75.	74.	73.	56.	51.	61.	39.	38.	47.	73.
27	73.	79.	70.	65.	57.	57.	50.	50.	48.	45.	35.	30.	32.	38.	39.	40.	41.	45.	50.	52.	55.	65.	71.	73.	53.
28	73.	73.	76.	77.	79.	79.	81.	82.	82.	78.	77.	77.	77.	71.	70.	81.	83.	83.	83.	83.	83.	83.	83.	83.	79.
29	84.	84.	84.	84.	79.	83.	82.	80.	80.	80.	80.	78.	79.	73.	76.	72.	75.	74.	70.	76.	68.	74.	78.	67.	77.
30	82.	83.	83.	67.	66.	66.	66.	66.	61.	56.	57.	55.	56.	55.	58.	59.	56.	61.	62.	77.	69.	68.	66.	70.	67.
31	70.	70.	69.	69.	69.	70.	71.	70.	68.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
AVG	79.	76.	79.	79.	75.	75.	75.	75.	73.	71.	68.	66.	64.	65.	66.	70.	73.	74.	76.	76.	73.	73.	74.	74.	72.
DAYS	31	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	729

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 729 NUMBER OF MISSING HOURS = 15 DATA CAPTURE = 97.98 (PERCENT)
ABOVE THREE ROWS ARE TOTAL HOURLY AVERAGES, TOTAL OBSERVATIONS/HOUR AND DATA CAPTURE STATISTICS
TOTAL AVERAGE = 72.268 MAXIMUM HOURLY VALUE = 91.000 STANDARD DEVIATION = 12.2365

NOTE : 999 = MISSING VALUE INDICATOR

approximations is described by Turner[6] and requires a data base consisting of cloud cover, cloud ceiling, surface wind speed, solar elevation angle, and time of day.

To accurately characterize the seasonal stability variations of the Hat Creek region, it is necessary to have a data base of sufficient period of record. The most complete set of data for the region surrounding the Hat Creek area is from the Kamloops Atmospheric Environment Service Station. This data set includes cloud cover and ceiling data. Wind speed data from the B.C. Hydro surface stations are also available for the same period covered by the Kamloops data. Due to the nature of the available data, a method based upon routine meteorological observations is the most practical for this program.

Wind speed data from Mechanical Station 7 were used for the analysis due to the proximity of the station to the proposed power plant site. Wind speeds at other stations were substituted for missing Station 7 data as shown in Table A2-39.

A stability typing scheme was used to incorporate the effects of the rural nature of the area and the ruggedness of the terrain. Afternoon stabilities on days characterized by strong solar insolation and moderate wind speeds were designated as unstable. Periods of overcast skies and/or strong wind were classified as neutral. Night and early morning hours, which are characterized by clear skies and low wind speeds, were designated as stable.

Tables A2-77 to A2-88 present the stabilities for each hour of 1975 derived from the scheme described above. In the tables unstable conditions (Turner[6] categories A, B, C) have been grouped as stability category 3, while neutral (D) and stable conditions (E,F) have been specified as categories 4 and 5 respectively. Hours for which a stability could not be determined due to missing measurements are designated by 999.

TABLE A2-77

MERGED DATA STABILITY (DEG) DATA FOR JANUARY 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	999.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.
2	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	5.
3	5.	5.	4.	4.	4.	4.	5.	5.	5.	4.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	4.	4.
4	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
5	5.	5.	5.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	4.
6	4.	4.	5.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
7	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
8	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.
9	4.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	5.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
12	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	4.	5.
13	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	4.	4.	4.
14	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
15	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
16	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	4.
17	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	999.	999.	4.	4.	4.	4.
18	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
19	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	5.	5.
20	5.	4.	5.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
21	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
22	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
23	5.	5.	5.	4.	4.	4.	5.	5.	5.	4.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	4.	4.
24	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.
25	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	3.	5.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
26	5.	5.	4.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
27	5.	999.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.
28	4.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	3.	5.	4.	4.	4.	5.	4.	5.	5.	5.	5.	5.
29	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	5.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
30	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.
31	5.	5.	5.	5.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	4.	4.	4.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 740 NUMBER OF MISSING HOURS = 4 DATA CAPTURE = 99.46 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-78

MERGED DATA STABILITY (DEG) DATA FOR FEBRUARY 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.
2	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	999.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
3	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	5.	3.	4.	4.	5.	5.	5.	4.	5.	5.	5.
4	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.	5.
5	5.	5.	5.	5.	5.	5.	5.	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
6	5.	5.	5.	5.	5.	5.	5.	4.	4.	5.	5.	4.	4.	4.	3.	4.	4.	5.	5.	5.	5.	5.	5.	4.
7	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
9	5.	5.	5.	5.	4.	4.	4.	5.	5.	5.	4.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
10	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	5.	5.	4.	4.	5.	5.	5.
11	5.	4.	5.	5.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	999.
12	4.	4.	4.	999.	999.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.
13	4.	4.	4.	4.	4.	4.	4.	5.	999.	999.	5.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.	5.
14	5.	5.	999.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
15	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	3.	3.	3.	3.	4.	999.	4.	4.	4.	4.	4.	4.	4.
16	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	4.	4.	4.	3.	4.	4.	5.	5.	5.	5.	5.	5.	5.
17	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
18	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
20	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	3.	3.	4.	3.	4.	4.	5.	5.	5.	5.	5.	5.	5.
21	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	4.
22	4.	5.	5.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.	5.
23	5.	4.	4.	5.	5.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	4.
24	4.	4.	5.	5.	5.	5.	5.	4.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
25	5.	5.	5.	5.	5.	5.	5.	4.	5.	4.	5.	4.	4.	4.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.
26	5.	5.	5.	5.	5.	5.	5.	4.	5.	4.	5.	3.	4.	5.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
27	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.
28	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	999.

TOTAL HOURS = 672 NUMBER OF GOOD HOURS = 663 NUMBER OF MISSING HOURS = 9 DATA CAPTURE = 98.66 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-79

MERGED DATA STABILITY (DEG) DATA FOR MARCH 1975

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
2	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
3	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
4	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
5	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
6	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	5.	4.	4.	999.	4.	4.
9	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.
12	5.	5.	5.	4.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.
13	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
15	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
16	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.
17	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
18	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
20	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.
21	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
22	5.	5.	5.	5.	5.	5.	4.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.	5.
23	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
24	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
25	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
26	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
27	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	4.	5.	5.	5.	5.	5.	5.
28	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
29	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.
30	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	4.
31	5.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 611 NUMBER OF MISSING HOURS = 133 DATA CAPTURE = 82.12 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-80

MERGED DATA STABILITY (DEG) DATA FOR APRIL 1975

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
2	5.	5.	5.	5.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
3	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
4	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
5	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
6	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
9	5.	5.	5.	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	5.	4.	4.	5.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
12	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	3.	3.	5.	3.	3.	4.	4.	4.	4.	4.	5.	4.	5.	5.
13	5.	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	3.	4.	4.	5.	5.	5.	5.	5.
14	5.	5.	5.	5.	5.	4.	4.	4.	4.	3.	3.	3.	3.	5.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
15	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	5.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.
16	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	3.	5.	5.	5.
17	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	4.
18	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
19	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
20	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	5.	5.
21	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	5.
22	4.	5.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
23	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.
24	5.	4.	4.	5.	5.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.
25	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
26	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
27	4.	5.	5.	5.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
28	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	3.	3.	3.	3.	3.	4.	3.	4.	5.	5.	5.	5.	5.
29	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	5.	5.	5.	5.	5.
30	5.	5.	5.	5.	5.	999.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 719 NUMBER OF MISSING HOURS = 1 DATA CAPTURE = 99.86 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-81

MERGED DATA STABILITY (DEG) DATA FOR MAY 1979

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	6.	4.	7.	4.	4.	4.	5.	4.	5.	5.	5.
2	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	6.	5.	4.	4.	5.	4.	4.	6.
3	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	6.	4.	4.	4.	4.	5.	5.	5.	5.	5.
4	5.	5.	5.	5.	5.	4.	4.	4.	4.	6.	6.	6.	4.	4.	6.	4.	4.	4.	4.	5.	5.	5.	5.	5.
5	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	6.	4.	4.	6.	6.	4.	4.	5.	5.	5.	5.	5.
6	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	6.	4.	4.	5.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	5.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	4.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
9	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	6.	4.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	6.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	6.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
12	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	3.	4.	3.	4.	5.	4.	5.	5.	5.	5.
13	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
15	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
16	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
17	5.	5.	5.	5.	5.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
18	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
20	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.
21	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
22	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
23	4.	4.	4.	5.	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
24	5.	5.	4.	5.	5.	5.	5.	5.	4.	6.	6.	6.	4.	6.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.
25	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.
26	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	3.	4.	3.	3.	3.	4.	4.	5.	5.	5.	5.
27	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	6.	4.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.
28	5.	5.	5.	5.	5.	5.	4.	5.	5.	5.	3.	4.	3.	3.	3.	3.	4.	3.	4.	4.	5.	5.	5.	5.
29	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.
30	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.
31	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 744 NUMBER OF MISSING HOURS = 0 DATA CAPTURE = 100.00 (PERCENT)

THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-82

MERGED DATA STABILITY (DEG) DATA FOR JUNE 1979

HOURS (LST)

HR=BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR=END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
2	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	5.	5.	5.	5.
3	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
4	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	6.	4.	4.	4.	4.	5.	5.	5.	5.
5	5.	4.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
6	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	6.	4.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	4.	5.	6.	3.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.
9	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	6.	3.	3.	4.	4.	3.	4.	4.	4.	4.	4.	4.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.
12	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	6.	3.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	4.	5.
13	4.	6.	5.	5.	5.	5.	4.	4.	5.	5.	5.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
15	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
16	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	3.	3.	4.	4.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.
17	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.
18	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.
20	5.	5.	5.	5.	5.	5.	4.	5.	5.	5.	4.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
21	5.	5.	5.	5.	5.	4.	5.	5.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
22	5.	5.	5.	5.	5.	5.	5.	4.	3.	999.	4.	3.	3.	4.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.
23	3.	5.	5.	5.	4.	4.	4.	4.	4.	5.	4.	3.	3.	4.	3.	3.	4.	3.	4.	4.	4.	4.	4.	4.
24	5.	5.	5.	5.	4.	4.	4.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
25	4.	4.	5.	5.	4.	5.	4.	4.	3.	6.	3.	3.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	6.
26	5.	5.	5.	5.	5.	5.	5.	5.	4.	5.	5.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	6.
27	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	6.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
28	4.	6.	6.	4.	4.	4.	4.	4.	4.	4.	6.	6.	4.	4.	4.	3.	3.	3.	4.	4.	4.	5.	5.	5.
29	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.
30	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 675 NUMBER OF MISSING HOURS = 45 DATA CAPTURE = 93.75 (PERCENT)

THE ABOVE RUN IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-83

MERGED DATA STABILITY (DEG) DATA FOR JULY 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	5.	999.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.
2	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	3.	4.	4.	5.	5.	5.	5.
3	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
4	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	3.	4.	4.	5.	5.	5.	5.
5	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
6	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	999.	5.	5.	4.	4.	4.	3.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	999.
9	5.	5.	5.	5.	3.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	999.	999.	999.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
12	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.
13	5.	5.	5.	5.	5.	5.	5.	4.	3.	3.	3.	3.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
15	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
16	5.	5.	5.	5.	4.	4.	4.	4.	3.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
17	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
18	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.
20	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	3.	4.	4.	4.	4.	4.	5.	4.	5.	5.
21	5.	999.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
22	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.
23	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	4.	5.
24	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
25	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
26	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
27	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
28	5.	5.	4.	5.	5.	5.	4.	5.	4.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	4.	5.	5.
29	5.	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.
30	5.	5.	4.	4.	4.	4.	4.	4.	4.	3.	3.	3.	4.	4.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.
31	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	4.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 737 NUMBER OF MISSING HOURS = 7 DATA CAPTURE = 99.06 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-84

MERGED DATA STABILITY (DEG) DATA FOR AUGUST 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
2	4.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
3	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.
4	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
5	4.	4.	4.	4.	4.	4.	4.	4.	4.	3.	3.	3.	4.	4.	3.	4.	4.	4.	4.	4.	5.	4.	5.	4.
6	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	4.
7	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
8	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.
9	5.	4.	4.	5.	5.	4.	5.	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
10	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
11	5.	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.
12	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
13	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
15	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
16	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.
17	4.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
18	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	999.	3.	4.	4.	4.	4.	5.	4.	4.	4.	5.
20	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	999.	999.	3.	4.	4.	4.	4.	5.	999.	999.	999.	999.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	5.	5.	3.	999.	4.	4.	4.	4.	4.	4.	999.	4.	4.	4.	999.
22	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	5.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	999.	999.	999.
23	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	4.	4.	999.	999.	999.	4.	4.	4.	4.	4.	4.	5.	5.	999.
24	999.	999.	999.	999.	999.	999.	999.	999.	999.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
25	5.	5.	5.	5.	5.	4.	5.	5.	5.	5.	5.	3.	4.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.
26	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
27	5.	5.	5.	4.	5.	4.	5.	5.	5.	5.	5.	4.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
28	5.	5.	5.	5.	5.	5.	4.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	5.	5.
29	5.	5.	5.	5.	5.	5.	5.	4.	5.	5.	5.	4.	4.	4.	999.	4.	999.	999.	999.	999.	999.	999.	999.	999.
30	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	4.	5.	5.	5.	5.	5.
31	5.	5.	999.	5.	999.	999.	999.	999.	4.	999.	999.	999.	3.	999.	999.	4.	999.	4.	4.	5.	5.	5.	999.	999.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 649 NUMBER OF MISSING HOURS = 95 DATA CAPTURE = 87.23 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-85

MERGED DATA STABILITY (DEG) DATA FOR SEPTEMBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	4.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
2	5.	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
3	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
4	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	3.	4.	4.	5.	5.	5.	5.	5.
5	5.	5.	4.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
6	5.	5.	5.	999.	5.	5.	4.	999.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
9	5.	4.	5.	5.	5.	5.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
11	5.	5.	5.	5.	4.	4.	5.	5.	5.	5.	5.	3.	3.	5.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
12	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	5.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.
13	5.	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
15	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	6.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.
16	5.	4.	5.	5.	5.	5.	4.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
17	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	3.	4.	5.	5.	5.	5.	5.	5.
18	5.	5.	5.	4.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
20	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
21	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
22	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
23	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
24	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
25	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
26	4.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
27	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
28	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
29	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.
30	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 694 NUMBER OF MISSING HOURS = 26 DATA CAPTURE = 96.39 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-86

MERGED DATA STABILITY (DEG) DATA FOR OCTOBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
2	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	999.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
3	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
4	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
5	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	5.	5.
6	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
9	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.
10	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	3.	3.	4.	4.	4.	4.	5.	4.	5.	4.	4.	5.	5.
11	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	4.
12	5.	5.	4.	4.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
13	5.	5.	5.	5.	5.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	5.	4.	4.
14	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
15	4.	4.	4.	5.	4.	5.	5.	4.	4.	5.	5.	3.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
16	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
17	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
18	4.	4.	4.	4.	4.	4.	4.	4.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
19	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
20	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.
21	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	3.	4.	4.	5.	5.	5.	5.	5.	5.	5.
22	4.	5.	5.	4.	5.	5.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.	5.
23	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	5.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
24	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.	4.
25	5.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
26	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.
27	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	4.
28	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.
29	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
30	4.	5.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	3.	4.	4.	4.	5.	5.	4.	5.	5.	5.	4.
31	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	4.	4.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 665 NUMBER OF MISSING HOURS = 79 DATA CAPTURE = 89.38 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-87

MERGED DATA STABILITY (DEG) DATA FOR NOVEMBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	4.	4.	4.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
2	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
3	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
4	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
5	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
6	4.	4.	4.	4.	5.	5.	5.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.
7	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.
8	4.	4.	4.	4.	4.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	5.	5.	5.	5.	5.
9	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	999.	5.	5.	5.	5.	5.
10	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.
12	5.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.
13	5.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	5.	5.	5.	4.	4.
14	4.	4.	5.	5.	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	5.	5.	4.
15	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.
16	4.	4.	4.	5.	5.	5.	5.	5.	3.	5.	5.	3.	3.	3.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
17	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
18	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
20	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	5.	4.	5.
21	5.	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	5.	5.
22	5.	5.	4.	4.	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.
23	4.	4.	4.	4.	4.	5.	5.	5.	4.	5.	5.	3.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.
24	5.	5.	5.	5.	5.	4.	4.	5.	4.	4.	4.	4.	4.	3.	4.	4.	5.	4.	4.	4.	4.	4.	4.	4.
25	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	4.	5.
26	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	5.	5.	5.
27	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
28	5.	5.	5.	4.	4.	5.	5.	5.	3.	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	4.
29	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
30	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.

TOTAL HOURS = 720 NUMBER OF GOOD HOURS = 695 NUMBER OF MISSING HOURS = 25 DATA CAPTURE = 96.53 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

TABLE A2-88

MERGED DATA STABILITY (DEG) DATA FOR DECEMBER 1975

HOURS (LST)

HR-BEG	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HR-END	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DAY																								
1	4.	4.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.
2	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
3	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	4.	4.
4	4.	5.	5.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	4.	5.	5.	5.	5.
5	5.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
6	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
7	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	3.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
8	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	5.	5.	5.	5.
9	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.
10	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
11	5.	5.	5.	5.	5.	5.	5.	5.	4.	999.	4.	3.	3.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
12	5.	4.	4.	4.	4.	5.	4.	5.	3.	5.	5.	4.	4.	4.	4.	4.	4.	5.	5.	4.	5.	5.	5.	4.
13	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
14	5.	5.	5.	5.	5.	5.	5.	5.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
15	4.	4.	4.	4.	4.	4.	4.	4.	3.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
16	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	3.	999.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
17	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
18	4.	5.	5.	5.	5.	5.	5.	5.	3.	5.	5.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
19	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
20	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	999.	4.	4.	4.	5.	5.	5.	5.	5.	4.	5.	4.
21	4.	4.	4.	4.	4.	4.	4.	5.	3.	5.	5.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	4.	5.
22	5.	5.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	4.	4.	4.
23	4.	4.	4.	4.	4.	4.	4.	4.	3.	5.	5.	3.	3.	4.	999.	4.	5.	4.	4.	4.	4.	4.	4.	4.
24	4.	4.	5.	5.	5.	5.	5.	5.	3.	5.	5.	4.	4.	4.	4.	4.	4.	5.	4.	5.	4.	4.	4.	4.
25	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	4.	4.	4.
26	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	4.	5.	4.
27	5.	5.	4.	4.	4.	4.	4.	4.	3.	5.	4.	4.	4.	4.	4.	4.	5.	5.	5.	5.	5.	5.	4.	4.
28	4.	4.	4.	5.	5.	5.	5.	5.	4.	5.	5.	4.	4.	4.	4.	4.	5.	5.	4.	4.	5.	4.	5.	4.
29	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.	4.	4.	5.	4.	4.	4.	4.	4.
30	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	5.	5.	4.	4.	4.	4.	4.
31	5.	5.	4.	4.	4.	5.	4.	4.	3.	5.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.	999.

TOTAL HOURS = 744 NUMBER OF GOOD HOURS = 726 NUMBER OF MISSING HOURS = 18 DATA CAPTURE = 97.58 (PERCENT)
THE ABOVE ROW IS DATA CAPTURE STATISTICS

NOTE : 999 = MISSING VALUE INDICATOR

(e) Mixing Depth

The mixing depth is defined as the depth of the atmospheric layer nearest the earth's surface through which vigorous vertical mixing occurs. The depth of the mixing layer is directly related to the vertical temperature structure of the lower atmosphere. The determination of the mixing depth is important in modeling diffusion characteristics of the Hat Creek region.

Mixing depth calculations based on the Portelli[7] scheme have received generally wide acceptance. Mixing depths for the proposed B.C. Hydro generating station have been calculated using similar techniques to those employed by Portelli, but modified somewhat in order to account for the rugged terrain, and in order to incorporate 00 00 as well as 1200 Greenwich Mean Time (GMT) temperature soundings in the calculations.

Briefly, the method employed by Portelli utilizes the nearest upper air soundings to approximate the vertical temperature structure at a location of interest. In the case of the Hat Creek study, radiosonde data taken at Vernon, B.C., were used to delineate the vertical temperature structure of the Hat Creek region (see Section A2.4).

The morning mixing depth is calculated as the height above the surface at which the dry adiabatic lapse rate (-1° C/100 m) intersected the vertical temperature profile observed at Vernon, B.C., at 1200 GMT (0400 PST), which is adjusted to pass through the Hat Creek minimum surface temperature at the site elevation. The morning minimum surface temperature (observed at Mechanical Station 7), plus 5°C is used as the temperature from which the dry adiabatic profile started.

The afternoon mixing height is calculated in the same manner as the morning mixing height, except that the 0000 GMT (1600 PST) sounding is used with the maximum temperature observed at Station 7 between 1400 and

1800 PST. Occasionally, adjusted morning or afternoon temperatures at Station 7 are lower than the 1402 m Vernon temperature. Mixing heights for these conditions are nominally set at 10 m.

Monthly average afternoon maximum mixing depths determined by this scheme were compared to the climatological average mixing depths at Spokane, WA, approximately 470 km SE of the proposed site, and Prince George, B.C. about 370 km to the north for 4 years of data, July, 1965 through June, 1969 (Portelli[7]). Although the agreement among the stations is good, the variation of the expected mixing depth at the proposed plant site is smaller than at the other two stations, as might be expected from its elevated exposure. Moreover, at Spokane and Prince George, precipitation days and days with strong cold air advection are not included in the averages, although such days are included in the mixing depth average for the proposed plant. Consequently, Spokane and Prince George mixing depths are somewhat higher than would otherwise be expected, if they had been averaged according to the scheme used in this study.

Vernon and Prince George sounding temperatures at the elevation of the proposed power plant were compared to the temperatures observed at the same height during the MEP study. Correlation between the data pairs is very strong ($r = .98$ for Vernon; $r = .97$ for Prince George) for the morning soundings. It is very difficult to draw conclusions about the significance of these correlations because the sample size is very small. Moreover, the samples are not independent of each other, since they are temporally related. A more meaningful presentation of the significance of the correlation can be obtained from examination of the correlation coefficients from each season. The statistics are presented in Table A2-89, which shows all correlations for the morning soundings at this level, ranging from $r = .24$ at Prince George and $r = .78$ in Vernon in the early spring to $r = .95$ at Vernon and Prince George in the early fall. The afternoon soundings also showed close agreement above 1402 m.

TABLE A2-89

Linear Regression Statistics Between MEP Minisonde Site 4 and Vernon and Prince George Sounding Temperatures

March 4-11, 1975: Spring

August 31-September 7, 1975: Fall

Station Pair	Temperature Sounding Height (m)MSL	Spring N*	Morning r**	Spring N	Afternoon r	Fall N	Morning r	Fall N	Afternoon r	Total N	Morning r	Total N	Afternoon r
Site 4/ Vernon	1,402	8	0.78	7	0.08	8	0.95	7	0.99	16	0.98	14	0.99
Site 4/ Prince George	1,402	8	0.24	7	0.58	8	0.95	7	0.80	16	0.97	14	0.96
Site 4/ Vernon	1,802	7	0.58	7	0.51	8.	0.95	7	0.98	15	0.96	14	0.98
Site 4/ Prince George	1,802	7	0.75	7	0.78	8	0.83	7	0.81	15	0.97	14	0.96
Site 4/ Vernon	2,002	7	0.71	8	0.65	8	0.95	7	0.93	15	0.97	15	0.96
Site 4/ Prince George	2,002	7	0.75	8	0.82	8	0.85	7	0.80	15	0.97	15	0.95

* N = sample size

**r = correlation coefficient

A2.4 B.C. HYDRO SURFACE DATA (MINE SITE)

To model TSP concentrations resulting from fugitive dust emissions due to coal mining activities in Hat Creek Valley, ERT used a multi-source computer diffusion model, ERTAQ. As input, ERTAQ requires a stability wind rose to compute seasonal and annual ambient concentrations. Due to the proximity of mechanical weather Station 5 to the site of the proposed Hat Creek mine, wind speed, wind direction and stability data from Station 5 were used to create an annual stability wind rose.

The wind rose was organized with three stability classes (unstable, neutral and stable), 6 wind speed classes and 16 wind directions. Tables A2-90 to A2-92 present the wind rose by stability. As Table A-92 indicates, the total frequency of wind rose sums to approximately 96.7%. The error in the frequency is due to the merging of the original data which had been subdivided according to time of day (day or night) and stability. The wind rose was normalized to 100% for computational purposes.

A2.5 OTHER METEOROLOGICAL DATA

In order to perform the assessment of the effects of the effluents from the proposed Hat Creek power plant, it was necessary to acquire data from various sources other than those listed above. Data were gathered from the following sources: 1) the Atmospheric Environment Service of Canada (AES), 2) B.C. Ministry of the Environment, 3) British Columbia Hydro and Power Authority, and 4) publications from various public and private sources. The following is a description of the data from the above-mentioned sources and how the data were used to perform the air quality assessment.

The Atmospheric Environment Service of Canada routinely collects meteorological data at various locations in southern British Columbia. On several occasions, data from the 34 AES stations shown in Figure A2-2 were utilized by ERT in assessing the possible climatological and

TABLE A2-90

B.C. Hydro Station 5

Joint Frequency (%/100) of Wind Speed and Direction for Unstable Conditions, 1975

Wind Direction	Wind Speed Class* 1	2	3	4	5	6	Sum
N	.001180	.008820	.004030	.000490	.0	.0	.014520
NNE	.000350	.003430	.001530	.0	.0	.0	.005310
NE	.001180	.000490	.001670	.000140	.0	.0	.003480
ENE	.000830	.001680	.000490	.0	.0	.0	.003000
E	.0	.001050	.0	.0	.0	.0	.001050
ESE	.0	.000840	.0	.000350	.0	.0	.001190
SE	.000140	.001180	.000140	.000350	.0	.0	.001810
SSE	.0	.000350	.000350	.000830	.0	.0	.001530
S	.001040	.000490	.000490	.000350	.0	.0	.002370
SSW	.002360	.003890	.000700	.0	.0	.0	.006950
SW	.002360	.001530	.000350	.0	.0	.0	.004240
WSW	.000140	.001180	.001680	.000700	.0	.0	.003690
W	.000350	.000700	.000700	.000350	.0	.0	.002100
WNW	.000140	.001320	.001320	.0	.0	.0	.002780
NW	.001320	.001530	.000140	.0	.0	.0	.002990
NNW	.001180	.003540	.001180	.000700	.0	.0	.006600
SUM	.012570	.032020	.014760	.004260	.0	.0	.063610

*Upper limits of wind speed Classes 1 through 6 are; 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps.

TABLE A2-91

B.C. Hydro Station 5

Joint Frequency (%/100) of Wind Speed and Direction for Neutral Conditions, 1975

Wind Speed Class*

Wind Direction	1	2	3	4	5	6	Sum
N	.013610	.025400	.018590	.004990	.000910	.0	.063500
NNE	.005900	.006800	.007710	.001360	.0	.0	.021770
NE	.003630	.007710	.002720	.000910	.0	.0	.014970
ENE	.004540	.004540	.000450	.000450	.0	.0	.009980
E	.003170	.002720	.001360	.000450	.0	.0	.007700
ESE	.004080	.000910	.0	.000450	.0	.0	.005440
SE	.001360	.000450	.000450	.0	.0	.0	.002260
SSE	.004080	.002720	.002720	.006800	.001360	.0	.017680
S	.009980	.009980	.009980	.014510	.004080	.000450	.048980
SSW	.030380	.033110	.021310	.013150	.001360	.001360	.100670
SW	.011340	.010430	.014970	.005900	.001360	.001360	.045360
WSW	.002720	.003170	.010430	.012240	.000450	.0	.029010
W	.003170	.002720	.007260	.005900	.0	.0	.019050
WNW	.005900	.003170	.004080	.002270	.0	.0	.015420
NW	.003170	.001360	.000910	.000450	.0	.0	.005890
WNW	.007260	.010880	.005900	.003170	.0	.0	.027210
SUM	.114290	.126070	.108840	.073000	.009520	.003170	.434889

*Upper limits of wind speed Classes 1 through 6 are: 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps.

TABLE A2-92

B.C. Hydro Station 5

Joint Frequency (%/100) of Wind Speed and Direction for Stable Conditions, 1975

Wind Direction	Wind Speed Class* 1	2	3	4	5	6	Sum
N	.010020	.012400	.006200	.001910	.0	.0	.030530
NNE	.006200	.008110	.003340	.0	.0	.0	.017650
NE	.008110	.008590	.001430	.000480	.0	.0	.018610
ENE	.010020	.003340	.000480	.0	.0	.0	.013840
E	.007160	.001910	.000480	.0	.0	.0	.009550
ESE	.005250	.000950	.000480	.0	.0	.0	.006680
SE	.002860	.000950	.0	.0	.0	.0	.003810
SSE	.006200	.003340	.000950	.000950	.0	.0	.011440
S	.018600	.032440	.025280	.001430	.0	.0	.077750
SSW	.041500	.093490	.062490	.000950	.0	.0	.198430
SW	.012400	.014310	.009060	.000480	.0	.0	.036250
WSW	.004290	.002390	.002860	.002390	.0	.0	.011930
W	.002390	.001910	.000950	.0	.0	.0	.005250
WNW	.002860	.002390	.0	.0	.0	.0	.005250
NW	.003340	.000950	.0	.0	.0	.0	.004290
NNW	.007630	.007160	.001910	.000480	.0	.0	.017180
SUM	.148830	.194630	.115910	.009070	.0	.0	.468439

*Upper limits of wind speed Classes 1 through 6 are: 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps.

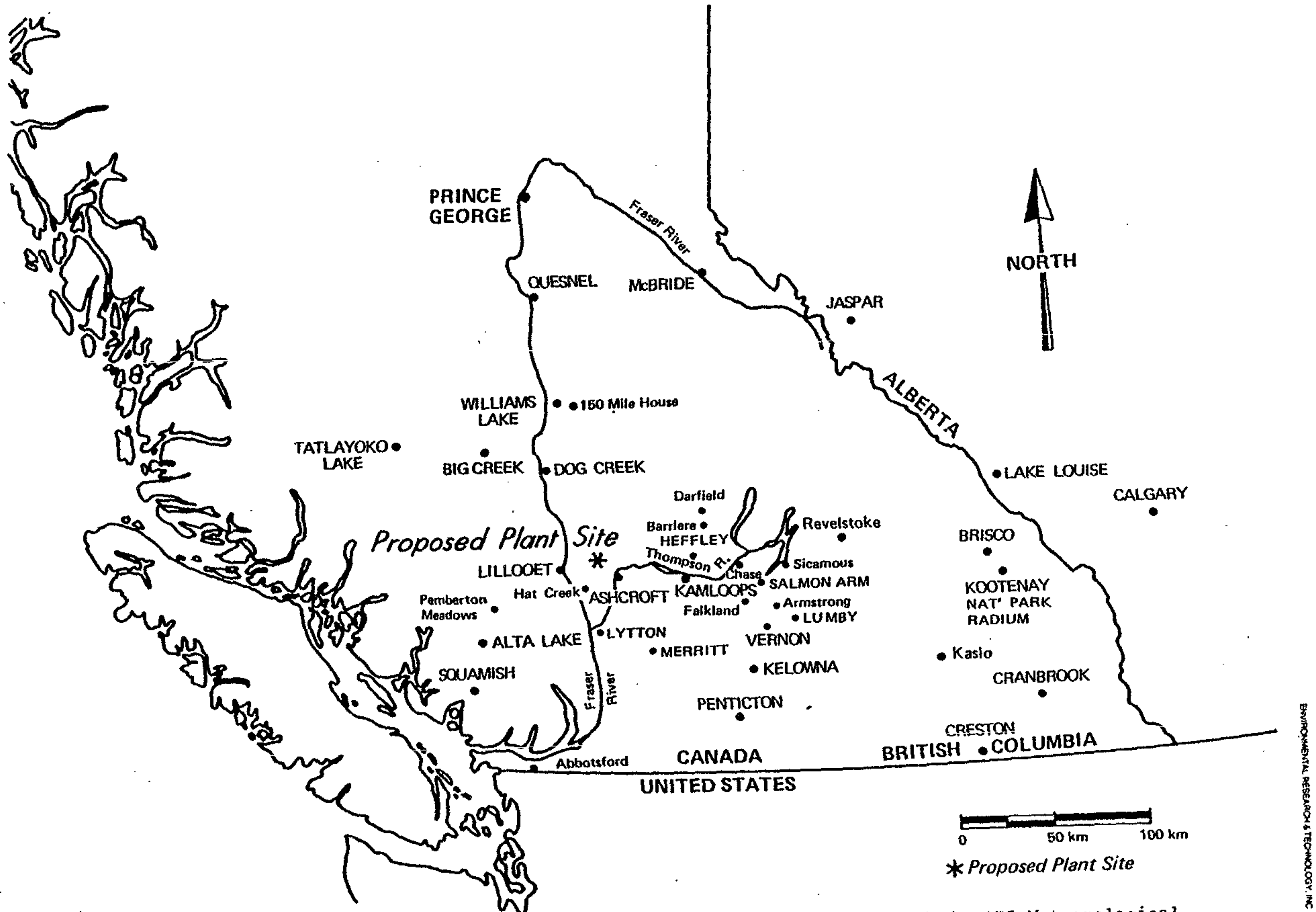

Figure A2-2 Map of Southern British Columbia with Locations of the AES Meteorological Stations air quality effects of the proposed power plant. A stability wind rose for the year 1974 was constructed from hourly measurements at Kamloops, B.C. The wind rose is presented in Tables A2-93 through A2-97. This information was used to define dispersion conditions affecting airborne material due to sources in the Kamloops area. The stability categories from very unstable to stable correspond to Turner[6] categories A through E.

Radiosonde data for the year of 1975 were obtained from Vernon, B.C., Prince George, B.C., and Port Hardy, B.C. These data were used to estimate the mixing depths in the Hat Creek area for use in the Hat Creek Model. In addition, a wind rose (joint frequencies of wind speed and wind direction) was constructed from the 700 mb data of the Vernon soundings to be used as a meteorological input for the Hat Creek regional modeling (see Appendix B for a complete discussion of the regional modeling methods). Altogether five wind rose (one annual and four seasonal) were created from the Vernon 700 mb data. The five wind roses are presented in Tables A2-98 to A2-102.

Monthly and annual averages of temperature and precipitation throughout southcentral British Columbia were obtained from publications[8,9] of the AWS. These data were used to delineate the meteorological and climatological conditions on the local and regional scales. The systematic recording of other meteorological data proved most useful in developing the climatological and air quality descriptions of the Hat Creek region. The following documents were used in conjunction with the data sources mentioned above to assess the climatological and air quality effects of the proposed Hat Creek facility:

TABLE A2-93

Kamloops 1974 Stability Wind Rose, Very Unstable Conditions

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	.00065	0	0	0	0	0
NNE	.00065	0	0	0	0	0
NE	.00076	0	0	0	0	0
ENE	.00076	0	0	0	0	0
E	.00076	0	0	0	0	0
ESE	.00099	0	0	0	0	0
SE	.00111	0	0	0	0	0
SSE	.00099	0	0	0	0	0
S	.00111	0	0	0	0	0
SSW	.00076	0	0	0	0	0
SW	.00111	0	0	0	0	0
WSW	.00156	0	0	0	0	0
W	.00088	0	0	0	0	0
WNW	.00088	0	0	0	0	0
NW	.00088	0	0	0	0	0
NNW	.00065	0	0	0	0	0

*Upper limits of wind speed categories 1 through 6 are: 1.54 mps, 3,09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps

TABLE A2-94

Kamloops 1974 Stability Wind Rose, Unstable Conditions

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	.00239	0	0	0	0	0
NNE	.00194	0	0	0	0	0
NE	.00216	.00011	0	0	0	0
ENE	.00433	0	0	0	0	0
E	.00456	.00068	0	0	0	0
ESE	.01062	.00137	0	0	0	0
SE	.00913	.00080	0	0	0	0
SSE	.00708	0	0	0	0	0
S	.00594	0	0	0	0	0
SSW	.00776	.00011	0	0	0	0
SW	.00582	.00011	0	0	0	0
WSW	.00902	.00057	0	0	0	0
W	.01016	.00205	0	0	0	0
WNW	.00685	.00023	0	0	0	0
NW	.00377	.00011	0	0	0	0
NNW	.00285	0	0	0	0	0

*Upper limits of wind speed categories 1 through 6 are: 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps

TABLE A2-95

Kamloops 1974 Stability Wind Rose, Slightly Unstable Conditions

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	.00285	0	0	0	0	0
NNE	.00320	0	0	0	0	0
NE	.00288	.00046	.00011	0	0	0
ENE	.00719	.00126	.00034	0	0	0
E	.01130	.00263	.00034	0	0	0
ESE	.01484	.00662	.00080	.00011	0	0
SE	.00651	.00240	.00023	0	0	0
SSE	.00365	.00023	0	0	0	0
S	.00400	.00068	0	.00011	0	0
SSW	.00388	.00046	.00023	0	0	0
SW	.00400	.00057	0	0	0	0
WSW	.00594	.00016	.00023	0	0	0
W	.01084	.00776	.00183	0	0	0
WNW	.00616	.00320	.00091	0	0	0
NW	.00491	.00046	.00011	0	0	0
NNW	.00354	.00011	0	0	0	0

*Upper limits of wind speed categories 1 through 6 are: 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps

TABLE A2-96

Kamloops 1974 Stability Wind Rose, Neutral Conditions

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	.00251	.00080	.00068	0	.00011	0
NNE	.00217	.00114	.00160	0	0	0
NE	.00285	.00194	.00160	.00046	.00011	0
ENE	.00970	.00982	.00685	.00046	.00011	0
E	.02021	.02979	.03139	.00548	.00080	.00023
ESE	.01838	.04315	.05936	.01301	.00285	.00011
SE	.00708	.01164	.01084	.00194	0	0
SSE	.00388	.00171	.00205	.00046	0	0
S	.00263	.00160	.00171	.00068	.00034	0
SSW	.00274	.00217	.00422	.00194	.00068	.00011
SW	.00377	.00388	.00925	.00342	.00160	.00023
WSW	.00582	.00559	.00639	.00160	.00011	.0000
W	.00799	.01530	.02683	.00559	.00091	0
WNW	.00537	.00913	.01461	.00537	.00068	0
NW	.00274	.00194	.00285	.00057	0	0
NNW	.00228	.00091	.00057	.00023	.00011	.00023

*Upper limits of wind speed categories 1 through 6 are: 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps.

TABLE A2-97

Kamloops 1974 Stability Wind Rose, Stable Conditions

	Wind Speed Categories*					
Wind Direction	1	2	3	4	5	6
N	.00833	.00034	0	0	0	0
NNE	.00890	.00057	0	0	0	0
NE	.01301	.00068	0	0	0	0
ENE	.02249	.00068	0	0	0	0
E	.03858	.00822	0	0	0	0
ESE	.02580	.00970	0	0	0	0
SE	.01358	.00228	0	0	0	0
SSE	.00970	.00091	0	0	0	0
S	.00879	.00034	0	0	0	0
SSW	.01084	.00114	0	0	0	0
SW	.01142	.00274	0	0	0	0
WSW	.01792	.00448	0	0	0	0
W	.01884	.00422	0	0	0	0
WNW	.01370	.00171	0	0	0	0
NW	.01062	.00080	0	0	0	0
NNW	.00913	.00034	0	0	0	0

*Upper limits of wind speed categories 1 through 6 are: 1.54 mps, 3.09 mps, 5.14 mps, 8.23 mps, 10.80 mps, >10.80 mps.

TABLE A2-98

Vernon 700 mb Annual Wind Rose

	Wind Speed Categories*					
Wind Direction	1	2	3	4	5	6
N	.00274	.02740	.02055	0	.00548	.00137
NNE	.00137	.01644	.00411	.00294	.00137	0
NE	.00274	.00548	.00548	.00137	0	0
ENE	.00137	.00685	.00274	0	0	0
E	.00137	.00274	.00274	0	0	0
ESE	0	.00959	.00548	0	0	0
SE	.00411	.00411	.00411	0	0	0
SSE	.00548	.00872	.00274	0	0	0
S	.00411	.01644	.01644	.00685	.00685	.00685
SSW	0	.00959	.01781	.01096	.00822	.01096
SW	.00685	.038361	.043841	.01781	.00411	.02329
WSW	.00274	.038361	.054801	.02055	.01918	.045211
W	.00137	.035621	.039731	.02329	.024546	.03425
WNW	.00685	.02329	.02466	.01644	.00959	.00685
NW	.00274	.02192	.01781	.0137	.01233	.01096
NNW	0	.03014	.01644	.00822	.01507	.01370

*Upper limits for wind speed categories 1 through 6 are: 3 mps, 6 mps, 9 mps, 12 mps, 15 mps, >15 mps.

TABLE A2-99

Vernon 700 mb Winter Wind Rose

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	0	0	.005556	0	0	.005556
NNE	0	.016667	0	0	.005556	0
NE	0	0	.005556	0	0	0
ENE	0	0	0	0	0	0
E	0	.005556	.005556	0	0	0
ESE	0	0	0	0	0	0
SE	0	0	.005556	0	0	0
SSE	0	0	0	0	0	0
S	0	.005556	0	.011111	.005556	.011111
SSW	0	.0111111	.005556	.005556	.0111111	.022222
SW	.005556	.027778	.022222	.005556	0	.016667
WSW	0	.005556	.027778	.022222	.044444	.077778
W	0	.027778	.038889	.055556	.05	.116667
WNW	.005556	.011111	.005556	.044444	.033333	.016667
NW	.005556	.022222	.011111	.027778	.022222	.044444
NNW	0	0	.016667	0	.016667	.027778

*Upper limits for wind speed categories 1 through 6 are: 3 mps, 6 mps, 9 mps, 12 mps, 15 mps, >15 mps.

TABLE A2-100

Vernon 700 mb Spring Wind Rose

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	0	.021739	.021739	0	.016304	0
NNE	0	.016304	.010870	.005435	0	0
NE	.005435	.016304	.016304	.005435	0	0
ENE	.005435	.016304	.005435	0	0	0
E	0	0	.005435	0	0	0
ESE	0	.016304	.016304	0	0	0
SE	.01087	.016304	.016304	0	0	0
SSE	.01087	0	.005435	0	0	0
S	.005435	.01087	.01087	.005435	.01087	.016304
SSW	0	.016304	.016304	.016304	.005435	0
SW	.01087	.021739	.032609	.038043	.01087	.005435
WSW	.005435	.038043	.065217	.01087	.01087	.016304
W	0	.054348	.038043	.005435	.01087	.01087
WNW	0	.027174	.016304	0	0	0
NW	0	.032609	.005435	.016304	.01087	0
NNW	0	.059783	.027174	.01087	.032609	.21739

*Upper limits for wind speed categories 1 through 6 are: 3mps, 6mps, 9 mps, 12 mps, 15 mps, >15 mps.

TABLE A2-101

Vernon 700 mb Summer Wind Rose

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	.005435	.027174	.01087	0	0	0
NNE	.005435	.016304	.005435	.005435	0	0
NE	.005435	.005435	0	0	0	0
ENE	0	.01087	.005435	0	0	0
E	0	0	0	0	0	0
ESE	0	.016304	.005435	0	0	0
SE	0	0	0	0	0	0
SSE	.01087	.016304	.005435	0	0	0
S	.01087	.048913	.032609	.005435	.01087	0
SSW	0	.01087	.027174	.021739	.005435	0
SW	.005435	.086957	.054348	.016304	0	0
WSW	.005435	.054348	.070652	.027174	0	.005435
W	.005435	.043478	.054348	.021739	.005435	0
WNW	.016304	.03609	.03609	.01087	0	0
NW	0	.021739	.027174	.005435	0	0
NNW	0	.043478	.01087	.005435	.005435	0

*Upper limits for wind speed categories 1 through 6 are: 3 mps, 6 mps, 9 mps, 12 mps, 15 mps, >15 mps.

TABLE A2-102

Vernon 700 mb Autumn Wind Rose

Wind Direction	Wind Speed Categories* 1	2	3	4	5	6
N	.005497	.060467	.043976	0	.005497	0
NNE	0	.016491	0	0	0	0
NE	0	0	0	0	0	0
ENE	0	0	0	0	0	0
E	.005497	.005497	0	0	0	0
ESE	0	.005497	0	0	0	0
SE	.005497	.005497	.010994	0	0	0
SSE	0	.016491	0	0	0	0
S	0	0	.021988	.005497	0	0
SSW	0	0	.029188	0	.010994	.029188
SW	.005497	.016491	.065964	.010994	.005497	.071461
WSW	0	.054970	.054970	.021988	.021988	.082455
W	0	.016491	.027485	.010994	.032524	.010994
WNW	.005497	.021988	.043976	.010994	.005497	.010994
NW	.005497	.010994	.027485	.005497	.016491	0
NNW	0	.016491	.010994	.016491	.005497	.005497

*Upper limits for wind speed categories 1 through 6 are: 3 mps, 6 mps, 9 mps, 12 mps, 15 mps, >15 mps.

- The Canadian Weather Review, published by the Atmospheric Environment Service of Canada (AES), 1972-1975.
- Monthly Record: Meteorological Observations in Canada, published by the AES, 1973-1975.
- Mixing Heights, Wind Speeds, and Air Pollution for Canada, written by R.V. Portelli for the AES, to be published in Atmosphere.
- World-Wide Airfield Summaries, published by the U.S. Naval Weather Service, 1967.

A3.0 AIR QUALITY DATA

The Hat Creek Valley is in a rural area, fairly remote from areas of large contaminant emissions. Therefore, the amount of historical air quality and emissions data for the area is limited. However, air quality data made available by B.C. Hydro and other sources were used by ERT as background information to assess the effects on air quality of the proposed Hat Creek Project. In addition, an emissions inventory of sources of primary contaminant within 100 km of Hat Creek was made available through B.C. Hydro.

The next sections discuss the following types of air quality data:

- measurements of total suspended particulates (TSP);
- sulfation plate measurements;
- chemical analysis of snow samples; and
- industrial emissions inventory.

A3.1 TSP MEASUREMENTS

Total particulate measurements were taken at five sites maintained by the Department of the Environment Water Resources Service. Three measurement sites are located in Kamloops; two are in Squamish. Table A3-1 shows the sampling period, and number of values at each location. Both the sampling period, and the number of samples taken vary from site to site.

Table A3-1

Sampling Times and Stations - TSP Measurements in Kamloops and Squamish, B.C.

	Site	Sampling Period	Number of Values
Kamloops	Airport	Mar 72 - Apr 76	221
	Eaton's Bldg.	Mar 72 - Sept 74	115
	Federal Bldg.	Oct 74 - Apr 76	82
Squamish	Mamquam Elementary	Jul 72 - Aug 74	114
	Mobil Air Lab	Jul 72 - May 74	92

Seasonal averages of total particulate loading are shown in Figures A3-1 through A3-3. The data from Kamloops are for a five-year period and the Squamish data cover a three-year period. The soluble and insoluble dustfall rates for each sampling year are shown in Figure A3-4 for Kamloops Airport and Figure A3-5 for other monitoring sites in Kamloops and Squamish. The total dustfall is the sum of the soluble and insoluble components.

These data were examined by ERT to assess their representativeness to characterize background TSP concentrations in southern British Columbia. The data were limited in that the measurements were conducted in the vicinity of cities and towns and do not necessarily reflect background concentrations in rural areas such as the Hat Creek Valley.

To provide an estimate of background TSP concentrations in the Hat Creek Valley, B.C. Hydro has installed hi-volume samplers at several locations. Figure A3-6 is a map showing the sampling sites. The following are the names of the sampler locations:

1. Highway 12;
2. Hat Creek Junction;
3. Hydro Camp;
4. Milner's Ranch; and
5. Valley Trailer.

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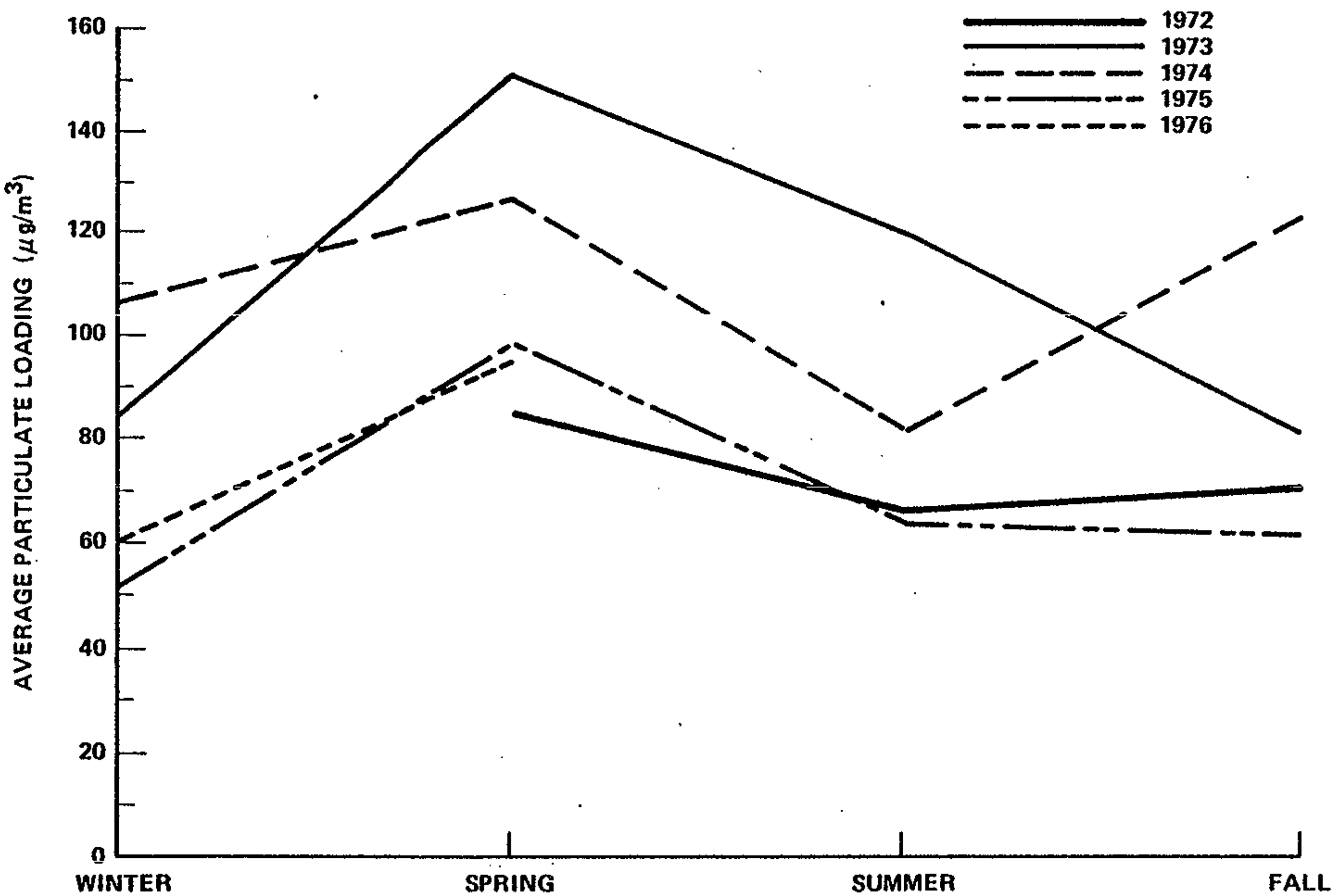

Figure A3-1 Seasonal Average Particulate Loading at Kamloops Airport, 1972-1976

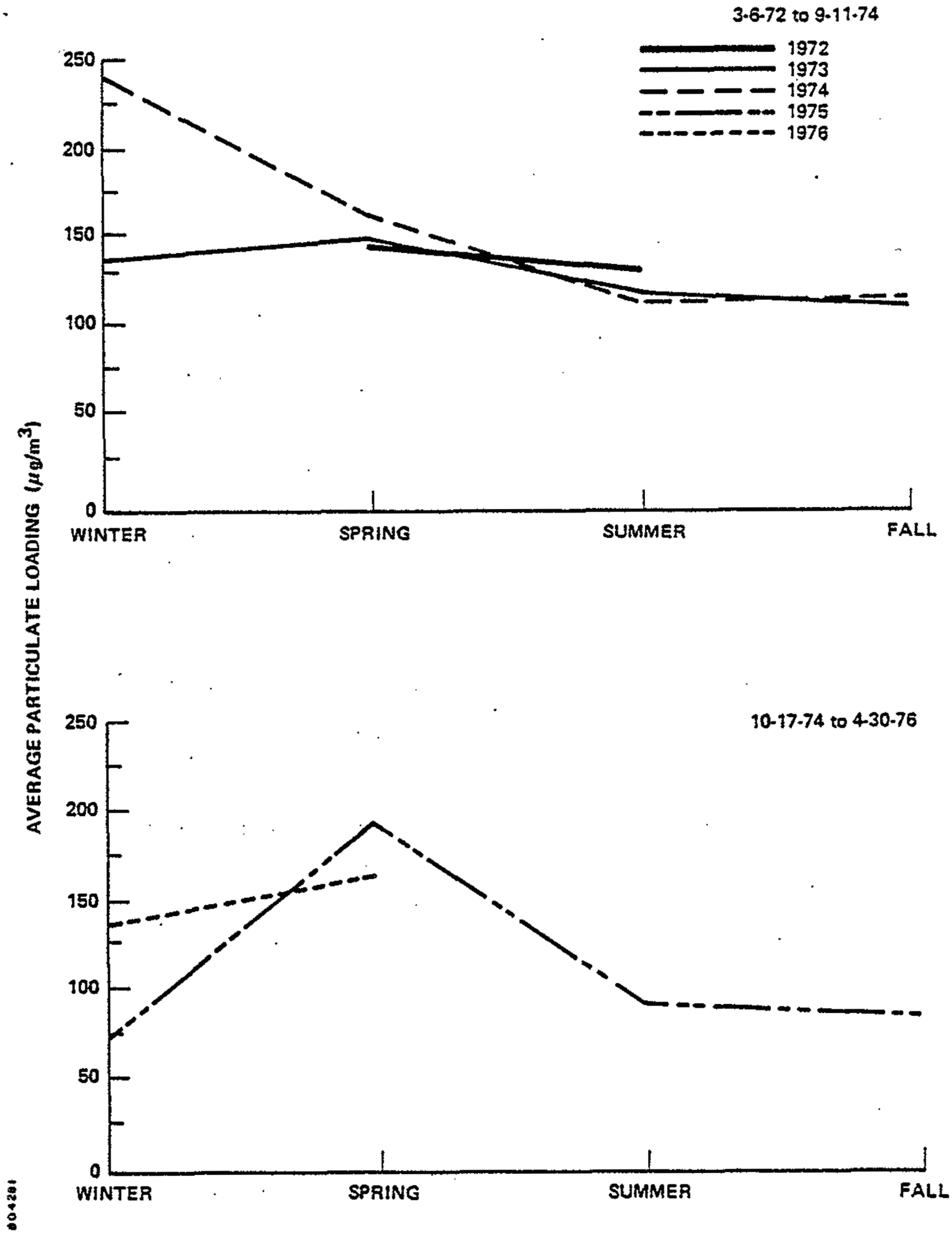

Figure A3-2 Seasonal Average Particulate Loadings at Eaton's Building (top graph) and Federal Building Monitors in Kamloops, B. C., 1972-1976

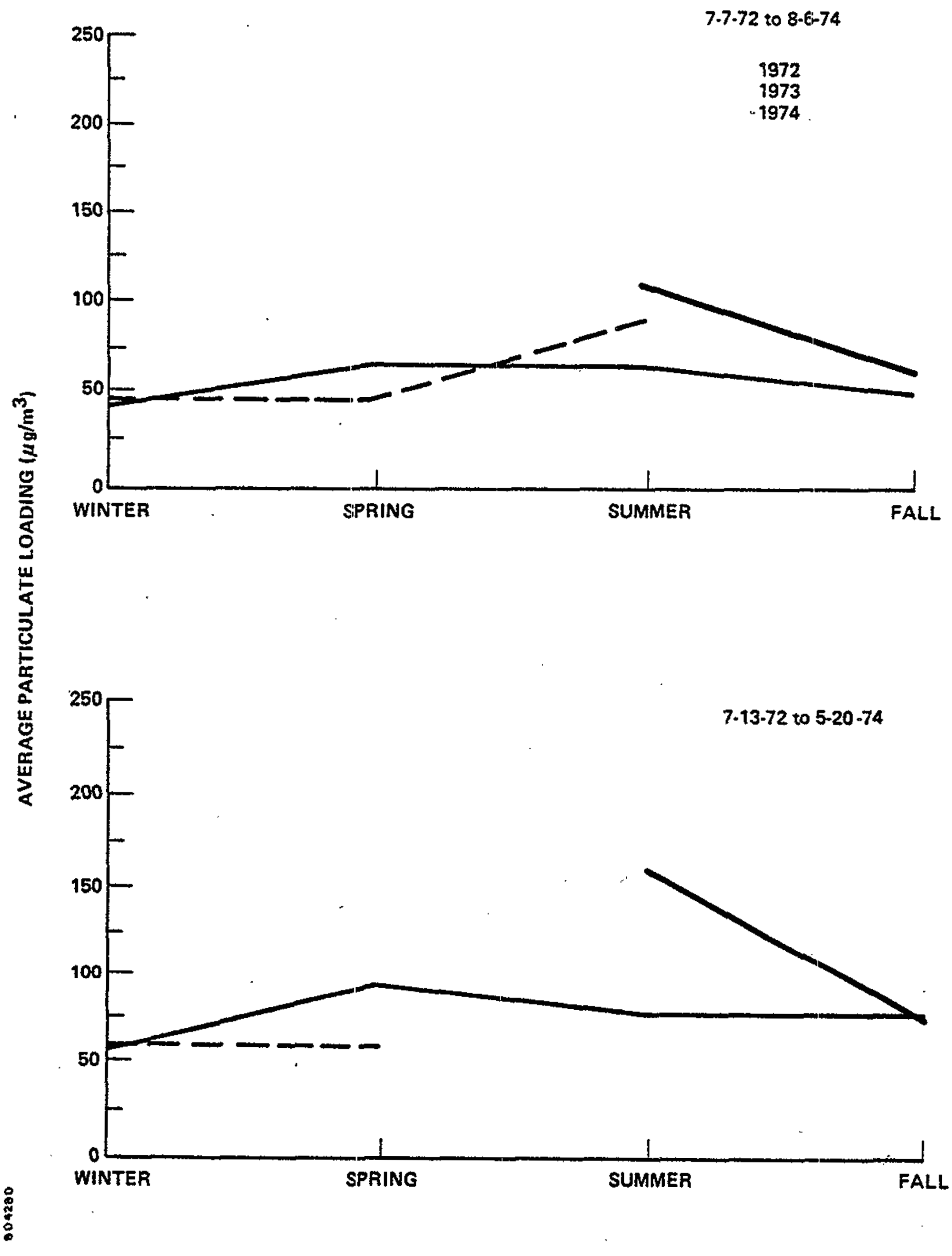

Figure A3-3 Seasonal Average Particulate Loadings at Maquam (top graph) and Mobil Air Lab Monitoring Sites in Squamish, B. C., 1972-1974

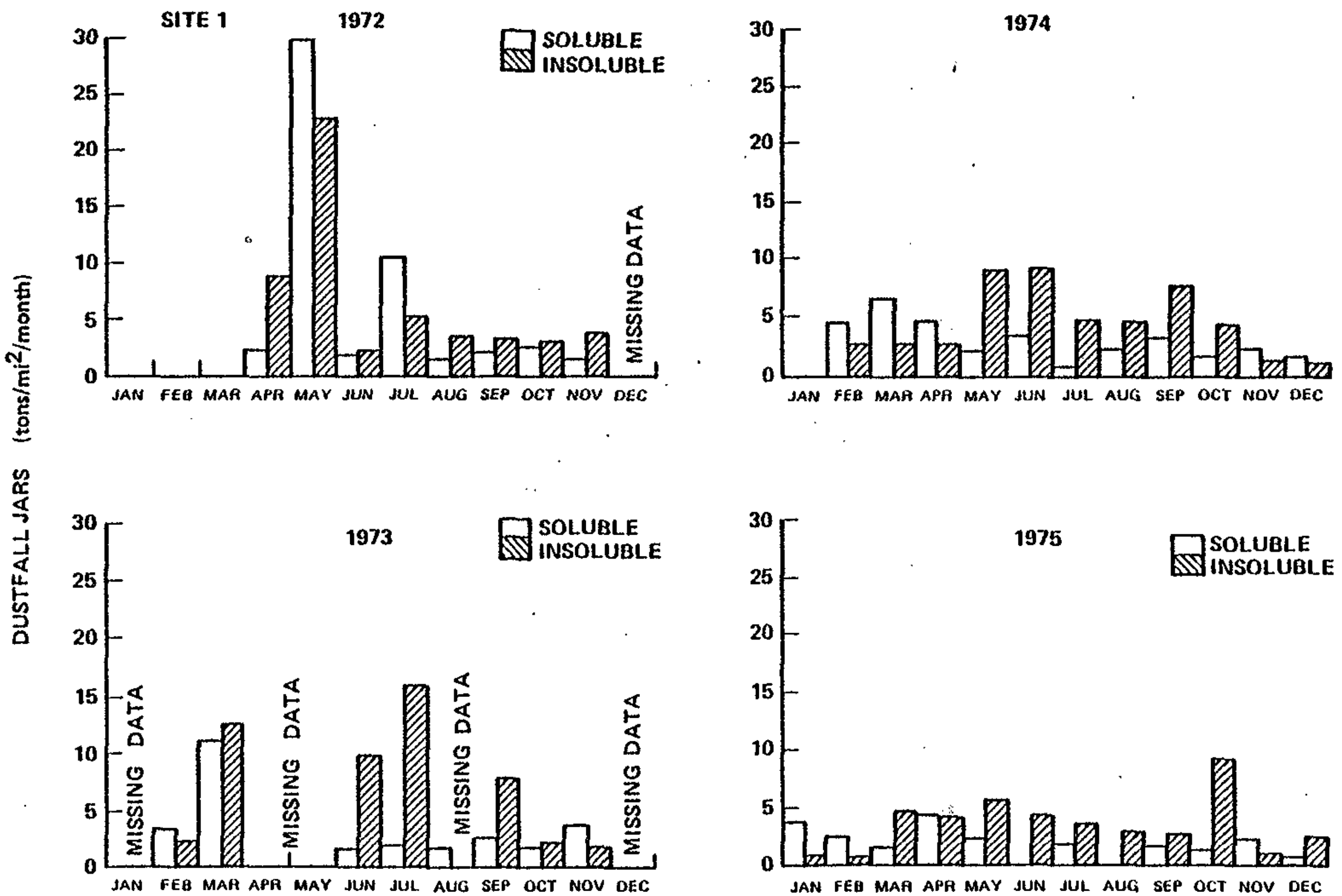

Figure A3-4 Monthly Dustfall Rates at Kamloops Airport, 1972-1975

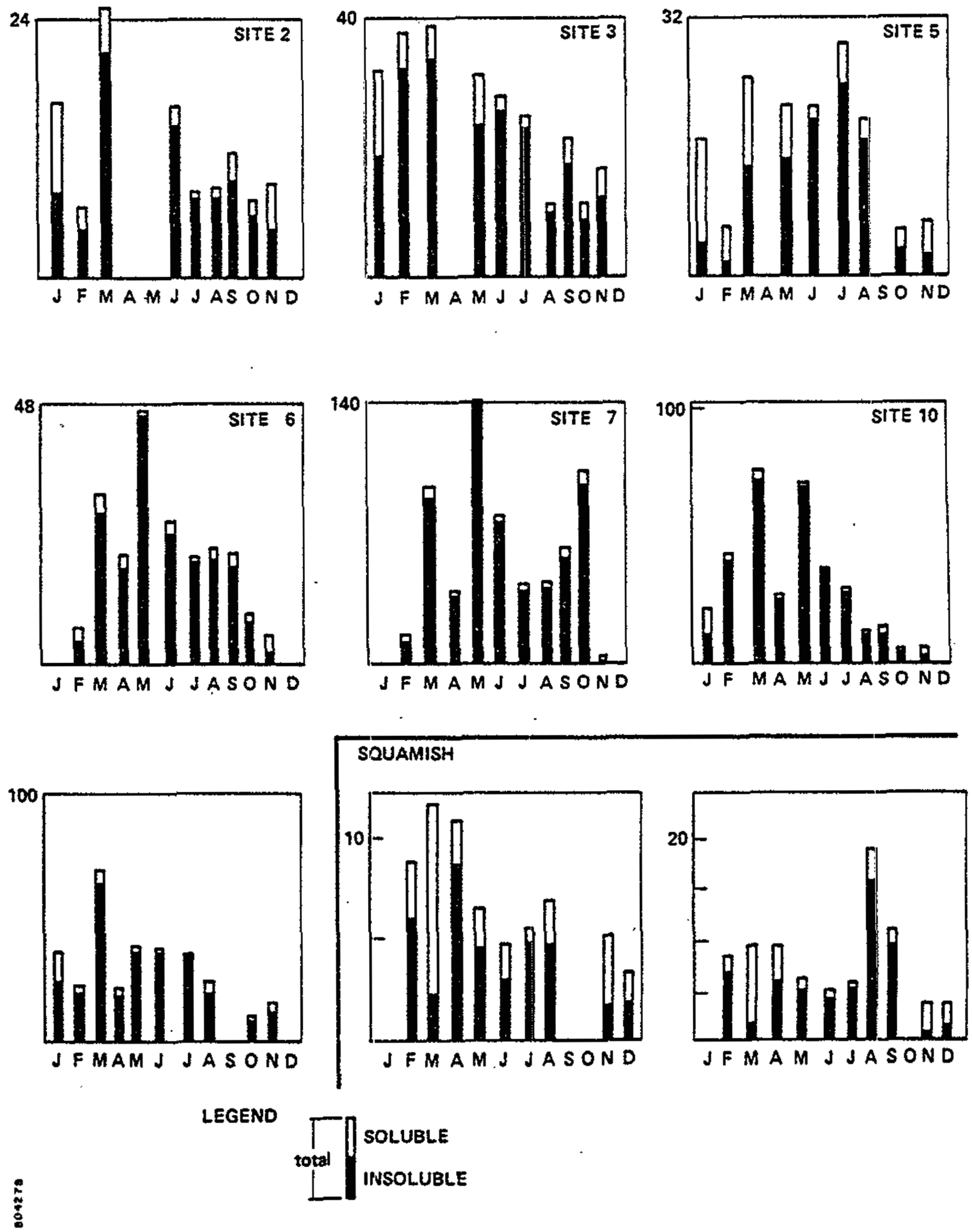

Figure A3-5 1973 Monthly Dustfall Rates at Monitoring Sites in Kamloops and Squamish, B. C.

Tables A3-2 through A3-6 present the data collected during the spring and summer of 1977. These measurements are not entirely representative of backgroud TSP concentrations since some preliminary excavation and shipment of coal took place during the monitoring period. However, on the basis of concentrations on the days when no such activities were in progress, background concentrations in the Upper and Lower Hat Creek Valley were estimated at 40 and 20 $\mu g/m^3$, respectively.

A3.2 SULFATION MEASUREMENTS

Sulfation rate was measured at 13 locations in Kamloops using a sulfation plate, which is a plastic petri dish coated with lead dioxide (PbO_2) paste which is exposed to the air for about thirty days. During this exposure period, SO_2 is absorbed by the PbO_2 to form lead sulfate ($PbSO_4$). The sulfation rate (mg SO_3/100 cm^2/day) is then determined by laboratory analysis of the residue. The average SO_2 concentration can be calculated using an empirical correlation coefficient which is determined by calibration with an automatic SO_2 analyzer. Under the assumption that the formation of $PbSO_4$ is proportional to the concentration of SO_2 for ranges encountered in the atmosphere, some information can be extracted from these data regarding spatial and temporal variations of SO_2 levels.

Sulfation plates were kept at thirteen sites around Kamloops for a period of a year or more. Measured values varied widely with location. Table A3-7 lists the location, sampling period, number of measurements, and the average sulfation rate for each of these locations.

In addition to these 13 stations, sulfation plates were placed at six rural sites southwest of Kamloops. The sulfation rate was measured for two months (April and May) in 1976. These stations all showed average values of 0.02 mg SO_3/100 cm^2/day or less.

TABLE A3-2

Hi-Volume TSP Samples Highway 12 Site

Date	Average Concentration ($\mu g/m^3$)
April 19, 1977	10.0
April 25, 1977	28.0
May 1, 1977	13.0
May 7, 1977	7.4
May 12, 1977	9.0
May 25, 1977	8.0
June 12, 1977	16.0
July 9, 1977	7.0
July 12, 1977	4.0
July 15, 1977	10.0
July 18, 1977	6.0
July 21, 1977	15.0
July 24, 1977	13.0
July 27, 1977	21.0
July 30, 1977	8.0
August 2, 1977	9.0
August 5, 1977	16.0
August 8, 1977	7.0
August 11, 1977	25.0
August 29, 1977	3.0
September 4, 1977	5.0

TABLE A3-3

Hi-Volume TSP Samples
Hat Creek Junction Site

Date	Average Concentration (μg/m^3)
May 22, 1977	21.0
May 25, 1977	11.0
June 12, 1977	57.0
June 15, 1977	41.0
June 18, 1977	58.0
June 21, 1977	53.0
June 27, 1977	82.0
June 30, 1977	59.0
July 3, 1977	18.0
July 9, 1977	13.0
July 12, 1977	9.0
July 15, 1977	19.0
July 18, 1977	62.0
July 21, 1977	131.0
July 24, 1977	36.0
July 27, 1977	61.0
July 30, 1977	17.0
August 2, 1977	28.0
August 5, 1977	43.0
August 8, 1977	36.0
August 11, 1977	49.0
August 14, 1977	18.0
August 17, 1977	77.0
August 29, 1977	8.0
September 4, 1977	9.0

TABLE A3-4

Hi-Volume TSP Samples
Hydro Camp Site

Date	Average Concentration ($\mu g/m^3$)
May 22, 1977	13.0
May 25, 1977	11.0
June 6, 1977	35.0
June 9, 1977	78.0
June 12, 1977	22.0
June 15, 1977	24.0
June 21, 1977	34.0
June 27, 1977	36.0
June 30, 1977	26.0
July 3, 1977	8.0
July 9, 1977	13.0

TABLE A3-5

Hi-Volume TSP Samples
Hat Creek Milners Site

Date	Average Concentration ($\mu g/m^3$)
April 13, 1977	6.2
April 19, 1977	6.0
April 25, 1977	32.0
May 1, 1977	14.0
May 7, 1977	19.0
May 12, 1977	11.0
May 25, 1977	9.0
June 12, 1977	21.0
June 18, 1977	20.0
June 30, 1977	12.0
July 6, 1977	7.0
July 12, 1977	4.0
July 18, 1977	7.0
July 24, 1977	22.0
July 30, 1977	19.0
August 5, 1977	20.0
August 11, 1977	16.0
August 17, 1977	36.0
August 23, 1977	17.0
August 29, 1977	4.0

TABLE A3-6

Hi-Volume TSP Samples
Valley Trailer Site

Date	Average Concentration ($\mu g/m^3$)
August 11, 1977	44.0
August 17, 1977	33.0
August 23, 1977	20.0
August 29, 1977	6.0
September 4, 1977	5.0

TABLE A3-7

Sulfation Rates at Selected Measurement Sites in Kamloops, B.C.

Site #	Location	Sampling Period	Number of Measurements	Average ($mg/SO_2/100\ cm^3/day$)
1	Airport	Mar 72 - Apr 76	45	.15
2	Oak Street Manor	Mar 72 - Mar 74	18	.10
3	Eaton's Bldg.	Mar 72 - Sep 74	26	.22
4	Brocklehurst	Mar 72 - Mar 74	22	.13
5	Mission Flats	Apr 72 - May 75	36	.15
6	Mt. Paul Indus.Pk.	Nov 72 - Jan 75	26	.12
7	PCB Office	Aug 72 - Jun 75	31	.12
8	Federal Bldg.	Sep 74 - May 76	19	.23
21	Gulf Refinery-East	Jul 74 - Jun 76	17	2.32
22	2-3 mi. N of Gulf	Jul 74 - Jan 76	17	.26
23	2-3 mi. NW of Gulf	Aug 74 - Mar 76	18	.48
24	Gulf Prop. Line-N	Nov 74 - Mar 76	15	1.59
25	Gulf Prop. Line-W	Nov 74 - Jun 76	17	1.23

These data were examined by ERT to determine their value in estimating the background levels of SO_2 in the region within 100 km of the Hat Creek Valley. As Table A3-7 indicated, most of the data were collected in the vicinity of urban sources of SO_2 emissions. Thus, their representativeness for the proposed project site is questionable. The sulfation plate measurement technique provides only a rough approximation of ambient SO_2 concentrations. For these reasons, quantitative use of these data to characterize SO_2 levels in the Hat Creek area is not generally possible.

A3.3 CHEMICAL SNOW SAMPLE ANALYSIS

ERT conducted an analysis of the effects of the emissions from the proposed power plant on the acidity of the precipitation and snow pack in the region surrounding Hat Creek Valley. Data from chemical analyses of snow and creek water samples collected near the Hat Creek site and in Wells Gray Park were examined for this purpose. Table A3-8 and A3-9 display the results of analyses for the samples from Wells Gray Park. Samples were collected in polyethylene bottles and stored at a temperature between -5°C and +5°C. Analyses were performed by the Environmental Laboratory, Ministry of the Environment. More than the recommended time had elapsed between collection and analysis. Laboratory personnel stated that this delay might induce an error of a few percent in the parameters listed.

A3.4 INDUSTRIAL EMISSIONS INVENTORY

B.C. Hydro retained B.H. Levelton's Associates Limited to construct an emissions inventory for industrial sources of primary contaminants within 100 km of the proposed Hat Creek facility. The inventory was prepared to provide information regarding the nature and magnitude of emissions of particular matter, sulfur oxides and nitrogen oxides in the Kamloops, Cache Creek, Clinton and Highland Valley areas.

There are two proposed production capacities for a copper smelter in the area of Clinton, B.C. One is a 1000-ton per day facility while the other version would produce 400 tons per day. Assuming the former figure, the estimated total emissions of existing, approved and proposed sources in the Kamloops, Cache Creek, Clinton and Highland areas are:

- SO_x (sulfur oxides) - 102,104 Kg/day (224,630 lb/day)
- NO_x (nitrogen oxides) - 20,534 Kg/day (45,174 lb/day)
- TSP (total particulates) - 22,845 Kg/day (50,260 lb/day)

TABLE A3-8

Chemical Analysis of Mountain Stream Samples:
Wells Gray Park

Sampling Date: June 3, 1977 Analysis Date: June 6, 1977

Analysis Performed by: Environmental Laboratory
B.C. Ministry of the Environment

		Sample C1	Sample C2
	Sample Elevation (ft)	5200	2500
	Sampling Time	1325 to 1330 hrs	1355 to 1400 hrs
	Site Description	Headwaters, Goat Creek	Mouth, Fall Creek
X	pH (relative units)	8.0	7.3
X	alkalinity: phnl (mg/liter as $CaCO_3$)	0.5	0.5
	chloride: dissol (mg/liter)	0.5	0.5
X	nitrogen: ammonia (mg/liter)	0.005	0.006
X	nitrogen: NO_3 (mg/liter)	0.19	0.03
	sulphate: dissol (mg/liter)	5.4	5.0
X	acidity: pH 8.3 (mg/liter)	2.1	1.4
	specific conductivity (μmho/cm)	124.0	34.0
	alkalinity: total (mg/liter as $CaCO_3$)	57.5	15.2
	flouride: dissol (mg/liter)	0.10	0.10
X	nitrogen: NO_2, NO_3 (mg/liter)	0.19	0.03
X	nitrogen: NO_2 (mg/liter)	0.005	0.005
X	carbon: (inorganic) (mg/liter)	14.0	3.0

Notes: (1) Samples kept near freezing at all times prior to analysis.

(2) X in left column indicates that more than the time normally allowed by this laboratory as acceptable had elapsed between sampling and analysis for the test.

TABLE A3-9

Chemical Analysis of Snow Samples: Wells Gray Park

Date: June 3, 1977 Analysis Date: June 6, 1977

Analysis Performed by: B.C. Ministry of the Environment

	Sample S-1	Sample S-2	Sample S-3	Sample S-4	Sample S-5
Sampling Elevation (ft)	6500	6900	7900	9400	7600
Sampling Time (approx.)	1200-1205 hrs	1230-1235 hrs	1300-1305 hrs	1315-1320 hrs	1425-1430 hrs
Site Description	Donald Mnt.	Kostal Ridge	Ivor Mnt.	Goat Mnt.	Battle Ridge
pH (relative units)	5.1	5.4	5.5	5.0	5.0
alkalinity: phenol. (mg/liter as $CaCO_3$)	0.5	0.5	0.5	0.5	0.5
chloride: dissol (mg/liter)	2.2	0.5	0.5	0.5	0.5
nitrogen: ammonia (mg/liter)	0.222	0.089	0.090	0.074	0.111
nitrogen: NO_3 (mg/liter)	0.04	0.03	0.03	0.07	0.08
sulphate: dissol (mg/liter)	5.0	5.0	5.0	5.0	5.0
acidity: pH 8.3 (mg/liter)	2.0	1.1	1.2	1.7	1.8
specific acidity (μmho/cm)	16.0	6.0	4.0	6.0	7.0
alkalinity: total (mg/liter as $CaCO_3$)	1.2	1.8	1.8	1.2	1.1
flouride: dissol (mg/liter)	0.10	0.10	0.10	0.10	0.10
nitrogen: NO_2, NO_3 (mg/liter)	0.04	0.03	0.03	0.07	0.08
nitrogen: NO_2	0.005	0.005	0.005	0.005	0.005
carbon: inorganic (mg/liter)	1.0	1.0	1.0	1.0	1.0

Notes: (1) For snow samples, alkalinity and acidity are too close to the minimum detectable limits to allow performance of full titration curves.
(2) Samples kept near freezing at all times prior to analysis.
(3) X in left column indicates that more than normal allowable time had elapsed between sampling and analysis.

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