

Donald C. Cook Nuclear Plant • Units 1 & 2

Semi-Annual Radioactive Effluent Release Report

January 1, - June 30, 1982

**Indiana & Michigan Electric Company
Bridgman, Michigan**

Docket Nos. 50-315 & 50-316

License Nos. DPR-58 & DPR-74



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I. INTRODUCTION

This report discusses the radioactive discharges from Units 1 and 2 of the Donald C. Cook Nuclear Plant during the first half of 1982. The format presented in Section 5.4.1A "Appendix B Technical Specifications" Part I for the facility has been followed in preparing this document.

UNIT

Unit 1 entered this period in Mode 5, after it was taken to cold shutdown on December 29, 1981, due to a Pressurizer Spray Valve packing leak. After the repair was completed, the Unit was returned to service on January 10, 1982. On January 31, 1982, the Main Turbine tripped from high vibration and the reactor was shut down. Following the completion of the Main Turbine repairs, the Unit was returned to service on March 5, 1982. The Unit tripped on April 27, 1982 due to low vacuum on the Main Turbine Condenser and was returned to service on April 28, 1982. On May 19, 1982, a false low pressure stator cooling water indicator from the main electrical generator tripped the Unit. The Unit was returned to service on May 22, 1982. The Unit end-of-cycle commenced on June 24, 1982 and the Unit coastdown began prior to the scheduled refueling outage.

UNIT 2

Unit 2 entered this period operating at full power. On January 16, 1982, the Unit tripped from an unknown cause and the dose equivalent I-131 spiked and exceeded the T/S limit of 1.0 uCi/gm. The Unit was returned to service on January 18, 1982. On February 22, 1982, the Unit tripped due to low vacuum that occurred while removing "B" North Condenser from service for tube repairs. The Unit was returned to service on February 23, 1982. The Unit was removed from service on March 11, 1982 for repairs to the RC pump seals and checks on the windings of RCP Motor No. 23. The Unit was returned to service on March 31, 1982 and reached full power on April 2, 1982. The Unit essentially remained at 100% power for the rest of the reporting period.

Further details on Plant operations may be obtained from the Monthly Operating Reports issued during this reporting period.

II. RADIOACTIVE RELEASES

Since a number of release points are common to both Units, the release data from both Units were combined to form this two-Unit Semi Annual Radioactive Release Report. Appendix A presents this information in accordance with the format described in Section 5.4.1A of Appendix B, Part I, to the Facility Operating Licensing containing the Environmental Technical Specifications. As in reports preceding this one, the effluents were well within the limits set forth in the Technical Specifications and Appendix I to 10 CFR Part 50.

III. RADIOLOGICAL IMPACT ON MAN

Potential doses to individuals and populations were calculated using the measured effluents and meteorological data given in Appendices A and B of this report, respectively.

LIQUID RELEASES

The liquid releases consisted of 40 Batch releases in the first quarter and 25 Batch releases in the second quarter of 1982. These releases were treated as continuous releases for the purpose of dose calculations. The estimated doses in millirems to individuals from the liquid pathways are given in Table 1.

GASEOUS RELEASES

The gaseous releases consisted of 12 Batch releases in the first quarter and 10 Batch releases in the second quarter of 1982. Doses were estimated separately for the larger releases using the measured meteorological data at the times of the releases.

Quarterly averages of meteorological data were used in estimating the dose from the continuous releases during each of the two quarters. The estimated doses in millirems to individuals through the gaseous pathways are listed in Table 1.

IV. METEOROLOGICAL DATA

Appendix B contains the cumulative joint-frequency distribution of wind speed and wind direction corresponding to various atmospheric stability classes for both quarters. The meteorological conditions during each of the batch gaseous effluent releases are also furnished in the same Appendix.

V. CONCLUSIONS

During this reporting period, Unit 1 of the Donald C. Cook Nuclear Plant generated 3,407,030 Mwh Gross of electric energy. The Monthly Operating Reports indicate that during the reporting period, Unit 1 was operating at a Unit Service Factor of 74.9% and at an average Unit Capacity Factor of 72.5%.

Unit 2 generated 4,136,080 Mwh Gross of electric energy during the first six months of 1982. During the reporting period, Unit 2 operated at a 88.1% Unit Service Factor and at an average Unit Capacity Factor of 84.9%.

Based on the information presented in this report, it is concluded that the Units performed their intended design function without causing any hazard to the health and safety of the general public.

TABLE 1
 SUMMARY OF DOSES (in mrem) FROM ALL EFFLUENT
 PATHWAYS IN ACCORDANCE WITH 40CFR190

January 1, 1982 to June 30, 1982

PATHWAY

(A)	<u>Liquid</u>	<u>Whole Body</u>	<u>Skin</u>	<u>Thyroid</u>	<u>G. I. Tract</u>	<u>Bone</u>
	Drinking Water	5.20E-4	-	4.43E-3	3.57E-4	4.53E-4
	Fish Consumption	1.79E-2	-	1.14E-3	3.33E-3	1.53E-2
	Shoreline Activities	4.55E-4	5.33E-4	-	-	-
	Swimming	6.31E-6	7.86E-6	-	-	-
	Boating	3.15E-6	3.93E-6	-	-	-
	TOTAL FOR LIQUIDS	1.89E-2	5.45E-4	5.56E-3	3.68E-3	1.57E-2
	POPULATION DOSE (man-rem)	11.8				
(B)	<u>Gaseous</u>					
	Air Submersion*	2.20E-3	2.70E-2			
	Inhalation*			5.40E-3		
	Adult Leafy Vegetable Consumption**			6.50E-3		
	TOTAL FOR GASEOUS	2.20E-3	2.70E-2	1.19E-2		
	POPULATION DOSE (man-rem)	1.67E-2				
(C)	TOTAL FROM THIS REPORT (Liquid and Gaseous)	2.11E-2	2.76E-2	1.75E-2	3.68E-3	1.57E-2
	<u>Infant Thyroid Doses</u>					
	Milk Pathway***			0.0		
	Inhalation**			4.50E-3		

*Worst Sector Site-Boundary
 **Nearest Residence (.5 Miles South)
 ***Nearest Cow Location (1.8 Miles ENE)

A. RADIOACTIVE RELEASE DATA

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT - 1st HALF OF 1982
SUPPLEMENTAL INFORMATION

Facility D. C. Cook Plant

Licensee I & M Power Company

1. Regulatory Limits

a. Fission and Activation Gases:

The annual total quantity of noble gases above background discharged from the plant should result in an air dose due to gamma radiation of less than 10 mrad, and an air dose due to beta radiation of less than 20 mrad, at any location near ground level which could be occupied by individuals at or beyond the boundary of the site.

b. Iodines:

The annual total quantity of all radioiodines and radioactive material in particulate forms above background from all reactors at a site should not result in an annual dose to any organ of an individual in an unrestricted area from all pathways of exposure in excess of 15 mrem.

The annual total quantity of iodine - 131 discharged from each reactor at a site should not exceed 1 Ci.

c. Particulates, half-lives > 8 days:

See 1b above.

d. Liquid Effluents:

The annual dose above background to the total body or any organ of an individual from all reactors at a site should not exceed 5 mrem in an unrestricted area.

The annual total quantity of radioactive materials in liquid waste, excluding tritium and dissolved gases, discharged from each reactor should not exceed 5 Ci.

2. Maximum Permissible Concentrations

a. Fission and Activation Gases:

(1) The release rate limit of noble gases from the site shall be

$$i^2 Q_{iv} (37 \bar{E}_{iY} + 112 \bar{E}_{iB}) \leq 1$$

where Q_v = release rate (sum of the unit vents and the turbine condenser steam air ejector exhaust for Unit 1 and Unit 2)

Q_V = release rate from vents in Ci/sec (ground release)

i = the i th individual nuclide

$\bar{E}_{i\gamma}$ = the average gamma energy per disintegration for nuclide i

$\bar{E}_{i\beta}$ = the average beta energy per disintegration for nuclide i .

(2) The average release rate of noble gases from the site during any calendar quarter shall be

$$\sum_i \bar{E}_{i\beta} (350 Q_{iV}) \leq 1$$

and,

$$\sum_i \bar{E}_{i\gamma} (120 Q_{iV}) \leq 1$$

(3) The average release rate of noble gases from the site during any 12 consecutive months shall be

$$\sum_i \bar{E}_{i\beta} (700 Q_{iV}) \leq 1$$

and,

$$\sum_i \bar{E}_{i\gamma} (230 Q_{iV}) \leq 1$$

b. Iodines:

(1) The release rate limit of all radioiodines and radioactive materials in particulate form with half-lives greater than eight days, released to the environs as part of the gaseous waste from the site shall be

$$1.5 \times 10^5 Q_V \leq 1$$

where Q_V is defined above

(2) The average release rate of all iodines and radioactive materials in particulate form per site with half-lives greater than eight days during any calendar quarter shall be

$$1.8 \times 10^6 Q_V \leq 1$$

(3) The average release rate of all iodines and radioactive materials per site in particulate form with half-lives greater than eight days during any period of 12 consecutive months shall be

$$3.6 \times 10^6 Q_V \leq 1$$

c. Particulates; half-lives > 8 days:

See 2b above.

d. Liquid Effluents:

The concentration of radioactive materials released in liquid waste effluents from all reactors at the site shall not exceed the values in 10 CFR Part 20, Appendix B, Table II, Column 2 for unrestricted areas.

3. Average Energy - β - 0.145

γ - 0.054

4. Measurements and Approximations of Total Radioactivity

a. Fission and Activation Gases:

Sampled and analyzed on a 4096 channel analyzer and Ge (Li) detector.

b. Iodines:

Sampled on an activated carbon filter or silver zeolite cartridge and analyzed on a 4096 channel analyzer and Ge (Li) detector.

c. Particulates:

Sampled on a glass filter and analyzed on a 4096 channel analyzer and Ge (Li) detector.

d. Liquid Effluents:

Sampled and analyzed on a 4096 channel analyzer and Ge (Li) detector.

5. Batch Releases

a. Liquid:

(1) Number of batch releases:

40 releases in the 1st quarter, 1982

25 releases in the 2nd quarter, 1982

(2) Total time period for batch releases:

10359 minutes

(3) Maximum time for a batch release:

215 minutes

(4) Average time period for batch releases:

159 minutes

(5) Minimum time period for a batch release:

103 minutes

- (6) Average stream flow during periods of release of effluent into a flowing stream:

732,462 gpm Circulating water

b. Gaseous:

- (1) Number of batch releases:

12 in 1st quarter, 1982

10 in 2nd quarter, 1982

- (2) Total time period of batch releases:

1525 minutes

- (3) Maximum time period for a batch release:

90 minutes

- (4) Average time period for batch releases:

69 minutes

- (5) Minimum time period for a batch release:

45 minutes

6. Abnormal Releases:

a. Liquid:

- (1) Number of releases:

0

- (2) Total activity releases:

0 Ci

b. Gaseous:

- (1) Number of releases:

4

- (2) Total activity released:

2.305 E+2 Ci

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT - 1982

GASEOUS EFFLUENTS - ELEVATED RELEASE

Nuclides Released	Unit	CONTINUOUS MODE		BATCH	MODE
		1 st QUARTER	2 nd QUARTER	1 st QUARTER	2 nd QUARTER
1. FISSION GASES					
Krypton - 85	Ci		1.737E-2	1.682E 0	4.901E 0
Krypton - 85m	Ci	3.818E-1	9.087E-1	5.463E-2	
Krypton - 87	Ci	1.971E-1	5.282E-1		
Krypton - 88	Ci	1.035E-1	5.011E-1		
Xenon - 133	Ci	1.872E+2	6.073E+1	1.784E+2	9.017E 0
Xenon - 135	Ci	2.214E 0	7.120E 0	1.494E 0	
Xenon - 135m	Ci				
Xenon - 138	Ci				
Xenon - 133m	Ci	1.823E-1	4.351E-1	1.120E 0	3.912E-3
Xenon - 131m	Ci	1.773E-1	2.919E-1	2.361E-1	4.037E-1
Argon - 41	Ci	3.493E-2	3.210E-1		
Total for period	Ci	1.905E+2	7.085E+1	1.830E+2	1.433E+1
2. IODINES					
Iodine - 131	Ci	2.639E-3	1.037E-3	3.771E-3	2.598E-5
Iodine - 133	Ci	1.854E-3	1.409E-3	8.907E-4	
Iodine - 135	Ci		4.536E-4	1.548E-4	
Iodine - 130	Ci			2.503E-5	
Total for period	Ci	4.493E-3	2.900E-3	4.842E-3	2.598E-5
3. PARTICULATES					
Strontium - 89	Ci	1.244E-6	*		
Strontium - 90	Ci	7.567E-7	*		
Cesium - 134	Ci	1.588E-4	1.194E-4		
Cesium - 137	Ci	4.110E-4	2.246E-4		2.987E-8
Barium-lanthanum - 140	Ci				
Cobalt - 60	Ci	2.206E-4	7.218E-6	1.344E-6	
Cobalt - 58	Ci	1.359E-5	8.232E-6		
Total for Period	Ci	8.060E-4	3.595E-4	1.344E-6	2.987E-8

* Sr-89 and Sr-90 will be reported later when the analysis by Eberline is complete.

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT - 1982

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	Units	1 st Quarter	2 nd Quarter	Est. Total Error, %
A. FISSION AND ACTIVATION GASES				
1. Total release	Ci	3.735E+2	8.518E+1	13.1
2. Average release rate for period	μCi/Sec	4.803E+1	1.083E+1	
3. Percent of technical specification limit	%	2.326E-1	6.625E-2	
B. IODINES				
1. Total iodine - 131	Ci	6.410E-3	1.063E-3	4.7
2. Average release rate for period	μCi/Sec	8.243E-4	1.352E-4	
3. Percent of technical specification limit	%	1.484E-1	2.434E-2	
C. PARTICULATES				
1. Particulates with half-lives > 8 days	Ci	8.073E-4	3.595E-4	26.2
2. Average release rate for period	μCi/Sec	1.038E-4	4.572E-5	
3. Percent of technical specification limit	%	1.869E-2	8.230E-3	
4. Gross alpha radioactivity	Ci	<3.342E-5	<3.916E-5	
D. TRITIUM				
1. Total release	Ci	5.449E-1	5.946E-1	2.2
2. Average release of rate for period	μCi/Sec	7.007E-2	7.563E-2	
3. Percent of technical specification limit	%	4.539E-1	5.235E-1	

FORM III

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT - 1982

LIQUID EFFLUENTS

Nuclides Released		BATCH	MODE	CONTINUOUS MODE	
		1 st	2 nd	1 st	2 nd
		Quarter	Quarter	Quarter	Quarter
Strontium - 89	Ci	1.503E-3	*		*
Strontium - 90	Ci	1.408E-4	*		*
Cesium - 134	Ci	3.647E-2	2.752E-2	5.138E-3	1.813E-2
Cesium - 137	Ci	6.554E-2	4.947E-2	2.175E-2	4.299E-2
Iodine - 131	Ci	3.495E-2	4.232E-2	1.010E-2	5.217E-3
Cobalt - 58	Ci	2.240E-1	1.506E-1	1.327E-2	2.760E-3
Cobalt - 60	Ci	6.514E-2	4.975E-2	9.791E-3	7.293E-4
Iron - 59	Ci	9.563E-5			
Zinc - 65	Ci	7.187E-4	4.961E-4		
Manganese - 54	Ci	5.753E-3	3.718E-3		
Chromium - 51	Ci	9.233E-3	2.013E-3	1.782E-3	
Zirconium-Niobium - 95	Ci	6.508E-3	2.075E-3	1.125E-4	
Molybdenum - 99	Ci				
Technetium - 99m	Ci				
Barium-Lanthanum - 140	Ci				
Cerium - 139	Ci	2.679E-4	2.847E-4		1.854E-5
Cesium - 136	Ci	1.450E-3	1.980E-3	6.460E-4	9.320E-5
Sodium - 24	Ci		3.643E-4		
Iodine - 133	Ci	1.217E-3	1.528E-3	3.473E-3	2.932E-3
Cobalt - 57	Ci	2.180E-4	1.850E-4		
Zirconium - 97	Ci	1.595E-4			
Silver - 110m	Ci	7.761E-3	1.501E-3		
Antimony - 124	Ci	1.110E-2	6.035E-3		
Iodine - 135	Ci				7.094E-4

* Sr-89 and Sr-90 will be reported later when the analysis by Eberline is complete.

FORM IV

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT - 1982

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	BATCH		CONTINUOUS		Est. To Error,
		1 st Quarter	2 nd Quarter	1 st Quarter	2 nd Quarter	
A. FISSION AND ACTIVATION PRODUCTS						
1. Total Release (Not including Tritium, Alpha, Gases)	Ci	5.069E-1	3.398E-1	6.606E-2	7.358E-2	2.54
2. Average diluted concentration during period	µCi/ml	2.765E-8	3.267E-8	1.189E-10	8.091E-11	
3. Percent of applicable limit	%	7.184E-1	1.460E 0	7.071E-3	2.718E-3	
B. TRITIUM						
1. Total Release	Ci	5.125E+2	1.721E+2	6.604E-1	6.923E 0	0.35
2. Average diluted concentration during period	µCi/ml	2.796E-5	1.655E-5	1.189E-9	7.613E-9	
3. Percent of applicable limit	%	9.320E-1	5.516E-1	3.962E-5	2.538E-4	
DISSOLVED AND ENTRAINED GASES						
1. Total Release	Ci	1.543E 0	5.609E-1	3.531E-2	6.095E-2	12.40
2. Average diluted concentration during period	µCi/ml	8.418E-8	5.393E-8	6.355E-11	6.702E-11	
3. Percent of applicable limit	%	*	*	*	*	-
D. GROSS ALPHA RADIOACTIVITY						
1. Total Release	ci	<1.164E-3	<1.182E-3			
E. VOLUME OF WASTE RELEASED						
	Liters	2.624E+6	1.641E+6	1.407E+8	1.882E+8	2.00
F. VOLUME OF DILUTION WATER USED DURING PERIOD						
	Liters	1.833E+10	1.040E+10	5.556E+11	9.094E+11	3.48

* No Applicable Limit

1st Half

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT - 1982

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. Solid waste shipped offsite for burial or disposal

1. Type of waste

- a. Spent resins, filter sludges, evaporator bottoms, etc.
- b. Dry compressible waste, contaminated equipment, etc.
- c. Irradiated components, control rods, etc.
- d. Other

Unit	1 st 6-month period	Est. Total Error, %
m ³	1.367E+2	1 E 0
Ci	5.997E+2	4 E 0
m ³	1.775E+2	1 E 0
Ci	2.598E+1	2 E 0
m ³		
Ci		
m ³		
Ci		

2. Estimate of major nuclide composition

- a. CS-137 30 %
- CS-134 15 %
- CO-58 35 %
- CO-60 20 %
- b. ~~Co~~.60 7 %
- ~~Co~~-58 75 %
- Cs-137 18 %

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
25	Truck	21-Barnwell, South Carolina
		4-Richland, Washington

Release No.	Stop Date	Stop Time	H ₂	I-131	I-133	Xe-133	Xe-133m	Xe-135	Xe-135m	Kr-85	Co-60	I-130	I-135	Kr-85m	Cs-137
G-82-1	01-01-82 01-01-82	1403 1448	1.179E-5	5.748E-6	2.673E-7	1.032E-1	3.316E-4	3.703E-4	1.818E-2	1.238E-1	1.788E-7				
G-82-2	01-01-82 01-01-82	1043 1132	3.181E-6	1.789E-6	1.839E-7	8.212E-3		2.366E-5	9.454E-3	1.024E-1	5.160E-7				
G-82-3	01-04-82 01-04-82	1920 2025	4.988E-6	1.187E-6		1.810E-2	1.227E-4		9.283E-3	9.806E-2	4.626E-7				
G-82-4	01-13-82 01-13-82	1009 1104	1.193E-4	2.058E-5		2.047E0	6.636E-3			1.039E-1					
G-82-5	02-02-82 03-02-82	1210 0349	1.099E-3	2.123E-6	1.317E-6	2.456E0	1.946E-2	4.433E-3							
G-82-6	02-01-82 02-01-82	0915 1017	1.240E-5	2.823E-6		1.394E-1				1.223E-2	9.752E-2				
G-82-7	02-02-82 03-02-82	1210 0349	2.347E-3	3.915E-6	1.391E-6	1.055E0		9.280E-3							
G-82-8	02-02-82 03-02-82	1210 0349	2.038E-5	1.257E-7	5.354E-8	5.649E-2	5.207E-4	4.406E-4							
G-82-9	02-01-82 02-01-82	2152 2304	2.372E-5	1.186E-5		2.715E-1			4.557E-2	1.519E-1					
G-82-10	02-03-82 02-03-82	0320 0442	1.799E-5	5.607E-6		2.197E-1	6.223E-4	2.973E-4	1.978E-2	1.193E-1					
G-82-11	02-03-82 02-03-82	1344 1456	2.997E-6	3.744E-6		9.246E-2			7.939E-3	4.923E-2	1.051E-7				
G-82-12	03-10-82 03-10-82	1937 2040	3.056E-5	8.360E-7		2.397E-2			1.354E-2	1.206E-1					
G-82-13	03-10-82 03-10-82	1706 1822	2.624E-5	5.815E-6		1.452E-1			2.967E-2	1.691E-1					
G-82-14	03-12-82 03-28-82	0457 2216	1.230E-2	2.185E-3	3.621E-4	6.804E+1	6.118E-1	6.097E-1							
G-82-15	03-12-82 03-28-82	0457 2216	6.223E-3	1.479E-3	5.128E-4	3.097E+1	4.665E-1	8.471E-1							
G-82-16	03-12-82 03-28-82	0504 2216	2.186E-4	3.895E-5	1.262E-5	1.321E0	1.365E-2	2.289E-2							
G-82-17	03-19-82 03-19-82	2208 2308	1.262E-5	9.629E-7		1.052E-1	1.060E-4		2.994E-2	2.395E-1					
G-82-18	03-31-82 03-31-82	1440 1610	4.295E-6	7.536E-7		2.336E-1			4.046E-2	3.072E-1	8.122E-8				
G-82-19	04-28-82 04-28-82	0537 0648	1.184E-5	2.636E-7		1.443E-2			1.840E-2	3.671E-1					
G-82-20	04-28-82 04-28-82	1838 1940	1.504E-5	1.478E-6		2.644E-1			8.501E-2	8.456E-1					
G-82-21	05-20-82 05-20-82	1729 1833	5.224E-6	4.338E-8		8.312E-4			4.633E-3	3.308E-1					
G-82-22	06-10-82 06-10-82	1959 2117	2.767E-5	4.934E-7		1.943E-2			1.770E-2	8.108E-1					
G-82-23	06-14-82 06-14-82	0850 1005	8.670E-5	5.774E-8		1.014E-3			1.361E-2	7.370E-1					
G-82-24	06-19-82 06-19-82	1648 1802	1.480E-5	9.017E-8		2.386E-2			1.748E-2	9.710E-1					
G-82-25	06-19-82 06-19-82	1921 2040	4.752E-5	9.653E-6		9.077E-1									
G-82-26	06-19-82 06-19-82	2156 2317	4.385E-5	3.450E-6		2.675E-1	3.912E-3			8.388E-1					2.987E-8
G-82-27	06-20-82 06-20-82	0033 0149	1.458E-4	6.024E-6		4.727E0			1.609E-1						
G-82-28	06-21-82 06-21-82	1655 1809	2.250E-4	4.422E-6		2.791E0			8.598E-2						

A-10

B-1 METEOROLOGICAL DATA FOR THE
FIRST QUARTER OF 1982

Cook Meteorological Tower
 Joint Frequency Table Wind Speed and Wind Direction 50 feet
 Versus Delta Temperature 180-30 feet
 First Quarter 1982 (1/1/82 - 3/31/81)

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 82010101-82033124
 STABILITY CLASS: A
 ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT180A

 WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						
	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	0	0	0
NNE	1	0	0	0	0	0	1
NE	0	1	3	0	0	0	4
ENE	1	0	0	0	0	0	1
E	0	3	1	1	0	0	5
ESE	1	1	0	2	0	0	4
SE	1	9	8	0	0	0	18
SSE	1	11	4	2	0	0	18
S	1	14	6	1	0	0	22
SSW	1	7	4	0	0	0	12
SW	1	1	1	0	0	0	3
WSW	1	4	14	11	0	0	30
W	2	2	1	0	0	0	5
WNW	0	6	5	2	0	0	13
NW	1	1	0	1	0	0	3
NNW	2	0	1	0	0	0	3
VARIABLE	5	0	0	0	0	0	5

TOTAL 142
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 82010101-82033124
 STABILITY CLASS: B
 ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT180A

 WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						
	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	2	1	0	0	0	4
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	1	2	2	3	0	0	8
ESE	1	2	1	1	0	0	5
SE	0	3	5	2	0	1	11
SSE	0	1	2	0	1	0	4
S	0	1	0	0	0	0	1
SSW	0	0	0	0	0	0	0
SW	0	2	6	0	0	0	8
WSW	1	4	5	5	0	3	18
W	0	3	1	0	0	0	4
WNW	0	0	2	2	1	0	11
NW	1	0	0	1	0	0	2
NNW	0	4	0	2	0	0	6
VARIABLE	1	0	0	0	0	0	1

TOTAL 89
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82010101-82033124

STABILITY CLASS: C

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	4	1	0	0	0	5
NNE	0	3	3	0	0	0	6
NE	1	1	3	0	0	0	5
ENE	0	0	3	0	0	0	3
E	0	1	5	2	0	0	8
ESE	0	1	1	3	0	0	5
SE	0	2	1	2	0	0	5
SSE	1	2	3	1	0	0	7
S	0	4	1	0	0	0	5
SSW	0	1	1	0	0	0	2
SW	0	1	3	3	0	0	7
WSW	1	5	3	0	1	3	13
W	1	0	1	1	0	2	5
WNW	0	4	0	2	1	8	15
NW	0	3	1	6	0	10	20
NNW	0	2	1	0	3	0	6
VARIABLE	0	0	0	0	0	0	0

TOTAL 117
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82010101-82033124

STABILITY CLASS: D

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	21	15	7	1	0	46
NNE	3	26	22	18	1	0	70
NE	5	22	22	5	0	0	54
ENE	7	20	23	3	0	0	53
E	0	31	45	37	3	0	116
ESE	3	16	19	52	27	6	123
SE	4	18	14	21	5	1	63
SSE	1	14	19	1	0	0	35
S	1	8	6	2	0	0	17
SSW	1	10	8	3	0	0	22
SW	2	11	27	5	3	0	48
WSW	1	11	20	15	3	13	63
W	0	7	21	31	21	35	115
WNW	2	11	23	41	35	45	157
NW	3	7	12	25	7	11	65
NNW	2	12	16	30	9	0	69
VARIABLE	11	0	0	0	0	0	11

TOTAL 1116
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82010101-82033124

STABILITY CLASS: E

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT180A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	2	2	0	0	0	0	4
NNE	4	4	5	1	0	0	14
NE	1	6	1	0	0	0	8
ENE	0	4	0	0	0	0	4
E	4	10	5	5	1	0	25
ESE	1	14	18	5	4	0	42
SE	2	15	11	10	0	0	38
SSE	2	12	26	5	0	0	46
S	1	18	21	0	0	0	40
SSW	1	16	17	6	0	0	40
SW	4	8	32	27	2	0	73
WSW	2	15	25	15	13	0	70
W	2	5	7	8	5	13	40
WNW	3	6	11	10	2	0	32
W	3	6	7	5	0	0	21
WNW	1	6	3	1	0	1	12
VARIABLE	7	0	0	0	0	0	7

TOTAL 500
 PERIODS OF CALM(HOURS): 1
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82010101-82033124

STABILITY CLASS: F

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT180A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	0	3	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	3	0	0	0	0	3
E	0	3	1	0	0	0	4
ESE	0	6	2	0	0	0	8
SE	1	3	0	0	0	0	4
SSE	1	8	2	0	0	0	11
S	0	13	0	0	0	0	13
SSW	0	7	0	0	0	0	7
SW	0	4	1	0	1	0	6
WSW	1	4	5	2	4	0	16
W	0	3	0	3	6	2	14
WNW	0	0	0	0	0	0	0
NW	0	0	1	0	0	0	1
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0

TOTAL 87
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82010101-82033124

STABILITY CLASS: G

ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT100A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	2	3	0	0	0	5
ESE	0	2	1	0	0	0	3
SE	0	4	0	0	0	0	4
SSE	1	11	2	0	0	0	14
S	1	13	6	0	0	0	20
SSW	0	6	5	0	0	0	11
SW	1	3	2	0	0	0	6
WSW	0	1	0	5	0	0	6
W	0	0	0	1	3	0	4
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0

TOTAL 73
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 27

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82010101-82033124

STABILITY CLASS: ALL

ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT100A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	5	29	17	7	1	0	59
NNE	8	33	30	19	1	0	91
NE	7	30	29	5	0	0	71
ENE	9	27	26	3	0	0	65
E	5	52	62	48	4	0	171
ESE	6	42	42	63	31	6	190
SE	8	54	39	35	5	2	143
SSE	7	59	58	9	1	0	135
S	4	71	40	3	0	0	118
SSW	3	47	35	9	0	0	94
SW	8	30	72	35	8	0	151
WSW	7	44	72	53	21	19	216
W	5	20	31	44	35	62	187
WNW	5	27	41	57	39	69	228
NW	8	17	21	38	7	27	118
NNW	5	24	21	33	18	1	98
VARIABLE	24	0	0	0	0	0	24

TOTAL 2133
 PERIODS OF CALM(HOURS): 1
 HOURS OF MISSING DATA: 27

Cook Meteorological Tower
 Joint Frequency Table Wind Speed and Wind Direction 150 feet
 Versus Delta Temperature 180-30 feet
 First Quarter (01/01/82-03/31/82)

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82010101-82033184

STABILITY CLASS: A

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	0	0	0
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	3	0	0	3
ESE	0	0	0	1	0	0	1
SE	1	8	2	2	0	0	13
SSE	0	7	4	5	1	1	18
S	0	6	21	9	2	1	39
SSW	0	5	4	3	0	0	12
SU	1	1	4	3	0	0	9
WSW	0	1	4	9	6	0	20
W	1	3	0	0	0	0	4
WNW	0	6	2	1	2	0	11
NW	0	3	2	0	0	0	5
NNW	3	1	0	1	1	0	6
VARIABLE	1	0	0	0	0	0	1

TOTAL 142
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82010101-82033184

STABILITY CLASS: B

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	3	2	0	0	0	5
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	1	2	3	2	1	0	9
ESE	0	0	0	2	0	0	2
SE	1	3	0	4	1	0	9
SSE	0	0	1	4	1	3	9
S	0	0	1	0	0	0	1
SSW	0	0	0	0	0	0	0
SU	0	2	7	5	0	0	14
WSW	1	0	3	2	2	2	10
W	0	1	0	1	0	0	2
WNW	0	3	2	0	1	4	10
NW	0	0	0	0	2	8	10
NNW	1	2	0	2	1	0	6
VARIABLE	1	0	0	0	0	0	1

TOTAL 89
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82010101-82033124

STABILITY CLASS: C

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	2	7	0	0	0	9
NNE	0	1	2	0	0	0	3
NE	1	3	3	0	0	0	7
ENE	0	0	0	2	0	0	2
E	0	1	3	4	1	0	9
ESE	0	0	1	2	0	0	3
SE	0	2	1	1	0	0	4
SSE	0	1	3	2	0	0	6
S	2	1	2	1	1	1	6
SSW	0	0	2	2	0	0	4
SW	1	0	3	2	2	0	8
WSW	0	4	1	2	0	4	11
W	0	2	0	2	0	2	6
WNW	0	1	0	0	1	10	12
NW	0	2	2	4	3	9	20
NNW	0	0	1	2	0	3	6
VARIABLE	0	0	0	0	0	0	0

TOTAL 118
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82010101-82033124

STABILITY CLASS: D

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	22	33	23	19	3	100
NNE	0	14	16	18	7	2	56
NE	4	23	21	7	0	0	55
ENE	2	10	26	16	0	0	54
E	0	19	23	62	19	3	116
ESE	3	10	11	19	34	20	97
SE	1	9	6	20	19	7	62
SSE	0	4	14	11	2	0	31
S	0	3	8	14	1	3	29
SSW	1	1	21	3	0	3	29
SW	0	2	11	24	8	3	48
WSW	0	12	4	17	9	20	62
W	1	4	5	30	21	0	61
WNW	0	7	8	24	42	56	137
NW	2	7	8	15	16	28	76
NNW	2	2	8	21	23	9	65
VARIABLE	2	0	0	0	0	0	2

TOTAL 1110
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82010101-82033124

STABILITY CLASS: E

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	2	5	0	1	1	9
NNE	2	4	6	2	0	0	14
NE	0	2	6	1	0	0	9
ENE	0	6	2	0	0	0	8
E	1	8	1	6	5	1	22
ESE	1	3	7	8	2	3	24
SE	1	3	16	11	3	2	36
SSE	1	3	5	14	13	5	41
S	1	4	11	25	11	1	53
SSW	2	1	12	26	9	4	54
SW	4	3	8	20	21	9	65
WSW	1	3	11	10	7	19	51
W	3	5	12	10	8	16	54
WNW	1	8	4	9	5	3	30
W	4	3	3	6	7	1	23
WNW	4	4	3	1	4	0	16
VARIABLE	2	0	0	0	0	0	2

TOTAL 509
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82010101-82033124

STABILITY CLASS: F

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	2	0	0	0	2
E	0	0	2	1	0	0	3
ESE	0	1	3	1	1	0	6
SE	0	1	3	0	0	0	4
SSE	1	1	2	3	0	0	7
S	1	5	5	5	0	0	16
SSW	0	3	2	0	0	0	5
SW	0	3	3	2	0	1	9
WSW	1	1	4	2	0	6	14
W	0	2	4	1	3	8	18
WNW	0	0	2	0	0	0	2
W	0	0	0	0	1	0	1
WNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0

TOTAL 87
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 820101-8203184

STABILITY CLASS: G

ELEVATION: SPEED:SP150M DIRECTION:WD150M LAPSE:DT100M

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	2	0	0
NNE	0	0	0	0	0	9	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	1	0	0	1
ESE	0	1	3	3	0	0	7
SE	0	1	1	0	0	0	2
SSE	1	1	1	1	0	0	4
S	0	3	5	5	0	0	13
SSW	0	4	8	2	0	0	14
SW	0	1	8	3	0	0	12
WSW	3	3	3	1	0	1	11
W	0	1	0	0	0	8	9
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0

TOTAL 73
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 820101-8203184

STABILITY CLASS: ALL

ELEVATION: SPEED:SP150M DIRECTION:WD150M LAPSE:DT100M

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	29	17	23	20	4	123
NNE	3	20	23	20	7	8	75
NE	5	23	30	8	9	0	71
ENE	3	16	30	18	0	0	67
E	2	30	32	69	26	4	163
ESE	4	15	25	36	37	23	140
SE	4	27	29	38	23	9	130
SSE	3	17	30	40	17	9	116
S	2	22	53	59	15	6	157
SSW	3	14	49	36	9	7	118
SW	6	12	44	59	31	13	165
WSW	6	24	30	43	24	52	179
W	5	18	21	44	32	66	186
WNW	1	25	18	34	51	73	202
NW	6	15	15	24	29	48	135
NNW	10	9	12	27	29	18	99
VARIABLE	6	0	0	0	0	0	6

TOTAL 2126
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 34

B-2 METEOROLOGICAL DATA FOR THE
SECOND QUARTER OF 1982

Cook Meteorological Tower
 Joint Frequency Table Wind Speed and Wind Direction 50 feet
 Versus Delta Temperature 180-30 feet
 Second Quarter (4/1/82 - 6/30/82)

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82040101-82063024
 STABILITY CLASS: A
 ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT180A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	5	9	1	0	0	0	15
NNE	4	9	2	0	0	0	15
NE	2	4	1	0	0	0	7
ENE	3	5	0	0	0	0	11
E	1	6	1	0	0	0	8
ESE	1	9	6	6	1	0	23
SE	2	10	7	6	0	0	25
SSE	4	15	7	1	0	0	27
S	0	10	3	0	0	0	13
SSW	0	8	9	0	0	0	17
SW	1	10	8	2	0	0	21
WSW	1	27	24	0	0	0	52
W	7	12	7	0	0	0	26
WNW	6	26	9	1	1	0	43
NW	8	29	7	1	0	0	43
NNW	3	14	6	0	0	0	24
VARIABLE	16	0	0	0	0	0	16

TOTAL 370
 PERIODS OF CALM(HOURS): 1
 HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82040101-82063024
 STABILITY CLASS: B
 ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT180A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	1	1	1	0	0	0	3
NNE	0	2	0	0	0	0	2
NE	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	2	1	0	0	0	3
ESE	0	1	6	0	0	0	7
SE	0	0	2	1	0	0	3
SSE	0	0	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	1	1	0	0	0	2
SW	0	2	2	1	0	0	5
WSW	1	6	7	3	0	0	17
W	0	1	2	0	0	0	3
WNW	0	3	0	1	0	1	5
NW	0	3	0	3	1	1	8
NNW	2	1	2	0	0	0	5
VARIABLE	3	0	0	0	0	0	3

TOTAL 65
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82040101-82063024

STABILITY CLASS: C

ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	1	4	0	0	0	0	5
NNE	0	3	6	0	0	0	9
NE	1	2	0	0	0	0	3
ENE	0	2	0	0	0	0	2
E	0	0	2	1	0	0	3
ESE	0	2	2	2	0	0	6
SE	0	1	0	3	2	0	6
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	1	1	0	0	2
SW	0	2	4	0	0	0	6
WSW	0	4	4	0	0	0	8
W	0	2	2	0	0	1	5
WNW	1	2	1	2	0	0	6
NW	1	1	0	2	1	8	13
NNW	1	3	3	3	0	0	10
VARIABLE	3	0	0	0	0	3	3

TOTAL 84
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 82040101-82063024

STABILITY CLASS: D

ELEVATION: SPEED:SP50A DIRECTION:WD50A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	3	20	12	0	0	0	35
NNE	3	26	50	29	4	0	112
NE	5	11	23	9	3	0	51
ENE	4	6	3	0	0	0	13
E	2	14	14	4	7	0	41
ESE	0	6	14	25	1	0	46
SE	1	6	12	5	4	0	28
SSE	2	2	2	0	0	0	6
S	3	2	1	0	0	0	7
SSW	0	4	2	0	0	0	6
SW	0	3	17	4	0	0	24
WSW	6	20	17	14	0	5	62
W	2	19	8	15	3	7	55
WNW	3	8	8	15	5	3	43
NW	5	11	5	7	4	0	33
NNW	3	25	20	9	1	0	58
VARIABLE	15	0	0	0	0	0	15

TOTAL 620
 PERIODS OF CALM(HOURS): 4
 HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82040101-82063024

STABILITY CLASS: E

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	6	7	1	0	0	0	14
NNE	4	9	10	4	0	0	28
NE	2	13	8	0	0	0	23
ENE	6	13	5	0	0	0	25
E	3	21	11	2	0	0	39
ESE	4	22	39	13	2	0	81
SE	3	17	30	11	1	0	62
SSE	2	10	9	3	0	0	25
S	2	32	7	1	0	0	42
SSW	2	18	15	1	0	0	36
SW	1	15	36	10	2	0	65
WSW	3	25	26	18	1	1	75
W	5	13	7	11	8	1	45
WNW	4	5	4	8	0	0	21
NW	0	11	4	1	0	0	16
NNW	5	12	3	0	0	0	20
VARIABLE	18	0	0	0	0	0	21

TOTAL 617
PERIODS OF CALM(HOURS): 8
HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82040101-82063024

STABILITY CLASS: F

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	3	0	0	0	0	3
NNE	4	2	2	0	0	0	9
NE	3	4	2	0	0	0	9
ENE	3	5	2	0	0	0	10
E	2	5	3	0	0	0	10
ESE	1	20	3	1	0	0	26
SE	4	21	8	0	0	0	33
SSE	1	18	4	0	0	0	23
S	1	13	4	0	0	0	18
SSW	3	26	1	0	0	0	30
SW	3	12	9	1	1	0	26
WSW	4	8	7	5	0	0	22
W	4	7	5	1	1	1	19
WNW	1	3	0	2	0	0	7
NW	4	1	1	0	0	0	6
NNW	3	6	0	0	0	0	9
VARIABLE	10	0	0	0	0	0	12

TOTAL 260
PERIODS OF CALM(HOURS): 3
HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD* 82040101-82063024

STABILITY CLASS: G

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT100A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	1	0	0	0	0	2
NNE	0	1	1	0	0	0	2
NE	0	6	1	0	0	0	7
ENE	1	6	1	0	0	0	8
E	2	3	4	0	0	0	9
ESE	0	8	7	1	0	0	16
SE	2	21	4	0	0	0	27
SSE	1	17	0	0	0	0	18
S	0	8	0	0	0	0	8
SSW	1	5	2	0	0	0	8
SW	1	0	0	0	0	0	2
WSW	1	2	3	6	0	1	13
W	1	0	1	0	0	0	2
WNW	0	2	0	0	0	0	2
NW	0	0	0	0	0	0	0
NNW	2	0	1	0	0	0	3
VARIABLE	2	0	0	0	0	0	2

TOTAL 127
 PERIODS OF CALM(HOURS): 1
 HOURS OF MISSING DATA: 41

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD* 82040101-82063024

STABILITY CLASS: ALL

ELEVATION: SPEED:SP50A DIRECTION:UD50A LAPSE:DT100A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	17	45	15	0	0	0	77
NNE	15	52	71	33	4	0	177
NE	14	40	35	9	3	0	101
ENE	17	40	11	0	0	0	69
E	10	51	36	7	7	0	113
ESE	6	68	77	48	4	0	205
SE	12	76	63	26	7	0	184
SSE	10	62	23	4	0	0	100
S	6	65	15	1	0	0	88
SSW	6	62	31	2	0	0	101
SW	6	44	76	18	3	0	149
WSW	16	90	88	46	1	7	249
W	19	54	32	27	12	10	155
WNW	15	49	22	29	6	4	127
NW	16	56	17	14	6	9	119
NNW	19	61	35	12	1	0	129
VARIABLE	67	0	0	0	0	0	73

TOTAL 2143
 PERIODS OF CALM(HOURS): 17
 HOURS OF MISSING DATA: 41

Cook Meteorological Tower
 Joint Frequency Table Wind Speed and Wind Direction 150 feet
 Versus Delta Temperature 180-30 Feet
 Second Quarter (4/1/82 - 6/30/82)

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82040101-82063024
 STABILITY CLASS: A
 ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	3	5	16	1	0	0	25
NNE	4	5	1	1	0	0	11
NE	1	6	2	0	0	0	9
ENE	2	1	4	0	0	0	7
E	1	7	3	0	1	0	12
ESE	0	3	5	7	2	0	17
SE	0	3	5	4	1	1	14
SSE	1	5	16	6	5	0	33
S	1	7	10	5	1	0	24
SSW	1	1	9	8	0	0	19
SW	0	10	14	8	1	0	33
WSW	2	13	18	3	0	0	36
W	3	6	4	1	1	0	15
WNW	2	22	13	2	0	0	39
NW	2	27	11	2	1	1	44
NNW	4	13	10	1	0	0	29
VARIABLE	8	0	0	0	0	0	8

TOTAL 367
 PERIODS OF CALM(HOURS): 1
 HOURS OF MISSING DATA: 50

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82040101-82063024
 STABILITY CLASS: B
 ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	2	3	3	0	0	0	8
NNE	0	0	1	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	1	1	0	0	0	0	2
E	0	1	2	0	0	0	3
ESE	0	1	3	2	0	0	6
SE	0	0	2	0	1	0	3
SSE	0	0	0	1	0	0	1
S	0	0	0	1	9	0	1
SSW	0	0	1	0	0	1	2
SW	1	3	8	3	0	0	9
WSW	1	3	3	3	8	0	12
W	0	2	2	0	0	0	4
WNW	0	2	0	0	0	1	3
NW	0	1	1	1	1	3	7
NNW	0	1	0	1	1	0	3
VARIABLE	1	0	0	0	0	0	1

TOTAL 85
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 50

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD* 82040101-82063024

STABILITY CLASS: C

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	3	2	4	0	0	9
NNE	1	2	2	2	0	0	7
NE	1	1	0	0	0	0	2
ENE	0	1	0	0	0	0	1
E	0	1	1	1	1	0	4
ESE	0	2	2	1	1	0	6
SE	0	0	0	1	2	2	5
SSE	0	0	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	0	1	1	1	0	3
SW	0	1	3	1	0	0	5
WSW	0	4	4	1	0	0	9
W	3	1	0	1	0	1	6
WNW	0	0	2	2	0	0	4
NW	1	1	0	0	1	0	3
NNW	0	2	3	1	2	1	9
VARIABLE	1	0	0	0	0	0	1

TOTAL	83						
PERIODS OF CALM(HOURS):		0					
HOURS OF MISSING DATA:		50					

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD* 82040101-82063024

STABILITY CLASS: D

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	19	27	31	9	0	86
NNE	4	13	25	46	12	4	104
NE	6	8	6	4	0	3	27
ENE	1	10	6	2	1	0	20
E	1	3	12	7	3	5	31
ESE	1	4	9	17	14	0	45
SE	0	4	4	7	3	5	23
SSE	0	0	3	5	2	0	10
S	0	1	0	2	0	0	3
SSW	1	1	7	4	2	0	15
SW	1	6	8	19	3	1	38
WSW	3	6	14	7	8	5	43
W	5	14	11	11	6	8	55
WNW	3	3	6	9	11	6	38
NW	4	7	1	7	5	1	25
NNW	3	17	13	11	8	4	54
VARIABLE	6	0	0	0	0	0	6

TOTAL	617						
PERIODS OF CALM(HOURS):		0					
HOURS OF MISSING DATA:		50					

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD* 82040101-82063024
 STABILITY CLASS: E
 ELEVATION: SPEED:SP150A DIRECTION:UD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	3	7	8	2	0	0	21
NNE	3	8	10	6	2	0	29
NE	3	10	11	4	0	0	28
ENE	3	9	6	5	0	0	24
E	1	8	15	7	3	0	34
ESE	0	10	15	24	8	1	58
SE	1	5	18	23	9	3	59
SSE	1	2	7	12	3	5	31
S	1	3	16	22	2	1	45
SSW	2	5	18	24	4	0	53
SW	2	6	12	29	11	3	63
WSW	2	12	14	13	15	4	60
W	2	17	8	5	5	8	44
WNW	0	5	2	4	13	1	25
NW	5	8	4	2	4	0	23
NNW	2	7	8	1	0	0	17
VARIABLE	10	0	0	0	0	0	11

TOTAL 614
 PERIODS OF CALM(HOURS): 5
 HOURS OF MISSING DATA: 50

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD* 82040101-82063024
 STABILITY CLASS: F
 ELEVATION: SPEED:SP150A DIRECTION:UD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	3	4	0	0	0	7
NNE	2	4	1	1	0	0	8
NE	2	8	9	1	0	0	20
ENE	0	3	2	1	0	0	6
E	4	3	1	2	0	0	10
ESE	0	6	7	4	1	0	18
SE	0	2	9	11	0	0	22
SSE	0	2	2	13	1	0	18
S	5	3	11	19	1	0	39
SSW	1	3	5	18	0	9	28
SW	1	4	5	4	1	0	15
WSW	1	7	11	4	8	1	32
W	3	4	2	3	2	1	15
WNW	2	3	0	1	2	0	8
NW	3	0	1	1	0	0	5
NNW	2	4	3	0	0	0	9
VARIABLE	4	0	0	0	0	0	4

TOTAL 260
 PERIODS OF CALM(HOURS): 1
 HOURS OF MISSING DATA: 50

B-15

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82040101-82063024

STABILITY CLASS: G

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	0	1	2	0	0	5
NNE	0	0	1	0	0	0	1
NE	0	1	5	2	0	0	8
ENE	1	5	1	4	0	0	11
E	1	0	4	1	0	0	6
ESE	1	0	5	7	2	0	15
SE	0	2	8	3	0	0	13
SSE	1	1	5	11	0	0	18
S	1	4	5	9	0	0	19
SSW	1	0	2	7	0	0	10
SW	0	1	2	1	0	0	4
WSW	1	0	0	1	1	3	6
W	0	1	0	0	1	2	4
WNW	2	2	0	0	0	0	4
NW	0	1	0	0	0	0	1
NNW	0	2	0	1	0	0	3
VARIABLE	4	0	0	0	0	0	4

TOTAL 128
 PERIODS OF CALM(HOURS): 0
 HOURS OF MISSING DATA: 50

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 82040101-82063024

STABILITY CLASS: ALL

ELEVATION: SPEED:SP150A DIRECTION:WD150A LAPSE:DT180A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	10	40	61	40	9	0	161
NNE	14	32	41	56	14	4	161
NE	13	34	33	11	0	3	94
ENE	8	30	19	12	1	0	71
E	8	23	38	18	8	5	100
ESE	2	26	46	62	28	1	165
SE	1	16	46	49	16	11	139
SSE	3	10	34	48	11	5	112
S	8	18	42	58	4	1	131
SSW	6	10	43	62	7	1	130
SW	5	31	46	65	16	4	167
WSW	10	45	64	32	34	13	198
W	16	45	27	21	15	18	143
WNW	9	37	23	18	26	8	121
NW	15	45	18	13	12	14	117
NNW	11	46	35	16	9	5	124
VARIABLE	34	0	0	0	0	0	35

TOTAL 2134
 PERIODS OF CALM(HOURS): 7
 HOURS OF MISSING DATA: 50

B-3 METEOROLOGICAL DATA
FOR BATCH RELEASES

HOUR	AMB. TEMP			WIND			WIND DIR			WIND DIR			WIND DIR			WIND DIR			S
	30 A	30 B	1800 S	SPD3	SPD4	SPD6	150A S	150A S	150B S	150B S	150B S	150B S	150B S	150B S	150B S	150B S	150B S		
100	283	0	320	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
200	281	0	320	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
300	279	0	320	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
400	186	0	148	0	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500	167	0	167	0	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0
600	176	0	178	0	171	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700	187	0	187	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800	187	0	187	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0
900	202	0	202	0	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	236	0	236	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	248	0	250	0	241	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200	263	0	265	0	256	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300	284	0	284	0	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400	295	0	295	0	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500	290	0	292	0	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600	288	0	288	0	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	297	0	297	0	290	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	306	0	308	0	301	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	321	0	321	0	313	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	327	0	327	0	323	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	332	0	332	0	327	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	343	0	343	0	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	354	0	354	0	352	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2400	354	0	354	0	352	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE - 1 DEGREE(S), SPEED - 1 MPH, DIRECTION 1 DEGREE, RAINFALL - .01 INCHES, NET RADIATION - 0.1 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6	
	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S
100	56	0	61	2	72	0	74	0	0	0	107	0	134	0	149	0	106	0	118	0	124	99
200	51	0	30	2	65	0	67	0	0	0	102	0	120	0	126	0	99	0	115	0	129	99
300	56	0	54	2	72	0	73	0	0	0	95	0	119	0	121	0	88	0	102	0	110	86
400	0	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500	49	0	70	2	61	0	62	0	0	0	83	0	100	0	107	0	83	0	96	0	109	80
600	48	0	33	2	64	0	64	0	0	0	85	0	101	0	109	0	84	0	91	0	102	86
700	45	0	0	4	61	0	62	0	0	0	89	0	101	0	118	0	84	0	91	0	103	78
800	41	0	0	2	56	0	58	0	0	0	86	0	117	0	111	0	85	0	95	0	103	85
900	42	0	70	2	59	0	62	0	0	0	82	0	102	0	103	0	79	0	93	0	103	72
1000	38	0	33	2	40	0	44	0	0	0	102	0	142	0	149	0	95	0	137	0	137	79
1100	27	0	0	2	22	0	24	0	0	0	108	0	149	0	158	0	131	0	170	0	179	92
1200	9	0	0	0	9	0	0	0	0	0	2	3	162	0	170	0	21	3	155	0	278	245
1300	44	0	43	0	48	0	49	0	0	0	334	0	16	274	3	276	0	350	0	21	320	355
1400	57	0	55	0	49	0	51	0	0	0	332	0	1	310	327	0	354	295	335	0	359	315
1500	39	0	38	0	35	0	37	0	0	0	330	0	11	278	325	0	354	280	332	0	349	310
1600	31	0	29	0	33	0	37	0	0	0	40	0	87	357	39	3	106	353	34	0	87	333
1700	29	0	28	0	30	0	35	0	0	0	50	3	93	25	46	3	91	17	53	3	82	25
1800	25	0	20	0	40	0	44	0	0	0	83	3	106	0	83	3	114	63	72	0	77	66
1900	34	0	38	2	52	0	53	0	0	0	92	0	128	0	95	0	134	28	97	0	111	85
2000	43	0	29	2	67	0	69	0	0	0	107	0	122	0	112	3	134	83	96	0	102	85
2100	36	0	28	2	54	0	57	0	0	0	120	0	142	0	128	0	148	91	109	0	122	102
2200	48	0	42	0	65	0	68	0	0	0	161	0	186	0	194	112	147	0	155	0	136	157
2300	31	0	28	0	40	0	45	0	0	0	149	0	185	0	195	127	138	0	159	0	112	145
2400	47	0	32	0	60	0	64	0	0	0	207	0	227	0	232	176	194	0	197	0	189	201

STATUS CODE(S) DEFINITIONS - 0 = INVALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPDZ		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIRZ		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6		MAX MIN DIRS	MAX MIN DIRS	MAX MIN DIRS	MAX MIN DIRS					
	50 A	50 B	150A	150B	150A	150B	150A	150B	150A	150B	50 B	50 B	150A	150B	150A	150B	150A	150B	150A	150B									
100	65	75	108	117	0	0	0	0	0	0	55	76	36	55	0	81	34	95	0	60	36	52	0	65	34	0	0	0	0
200	69	82	103	118	0	0	0	0	0	0	62	82	44	63	0	86	25	53	0	73	40	60	0	72	47	0	0	0	0
300	96	102	127	139	0	0	0	0	0	0	77	98	42	78	0	119	48	71	0	86	47	80	0	103	60	0	0	0	0
400	100	100	115	126	0	0	0	0	0	0	76	92	57	78	0	103	61	68	0	84	48	77	0	97	58	0	0	0	0
500	82	90	110	121	0	0	0	0	0	0	71	96	50	72	0	115	40	66	0	93	44	73	0	97	49	0	0	0	0
600	103	117	136	155	0	0	0	0	0	0	69	90	46	70	0	116	44	60	0	77	41	68	0	94	46	0	0	0	0
700	109	124	144	160	0	0	0	0	0	0	68	96	35	71	0	106	40	64	0	72	44	72	0	96	50	0	0	0	0
800	111	127	144	164	0	0	0	0	0	0	61	80	37	63	0	92	33	58	0	89	37	66	0	96	47	0	0	0	0
900	113	129	140	158	0	0	0	0	0	0	61	85	33	63	0	92	28	54	0	80	29	63	0	94	26	0	0	0	0
1000	120	132	157	166	0	0	0	0	0	0	50	79	18	49	0	85	9	46	0	78	2	53	0	93	25	0	0	0	0
1100	151	164	182	194	0	0	0	0	0	0	49	77	14	48	0	87	9	43	0	65	15	51	0	72	26	0	0	0	0
1200	139	144	172	175	0	0	0	0	0	0	43	73	35	40	0	92	9	39	0	61	18	46	0	71	15	0	0	0	0
1300	118	116	135	134	0	0	0	0	0	0	33	62	12	32	0	62	4	32	0	58	8	38	0	71	12	0	0	0	0
1400	153	154	187	180	0	0	0	0	0	0	29	50	34	27	0	69	35	18	0	45	34	24	0	43	35	0	0	0	0
1500	152	152	191	184	0	0	0	0	0	0	30	46	33	28	0	55	33	23	0	44	34	29	0	54	35	0	0	0	0
1600	139	139	179	175	0	0	0	0	0	0	33	55	35	31	0	58	1	24	0	44	35	30	0	54	35	0	0	0	0
1700	112	114	145	146	0	0	0	0	0	0	34	75	12	34	0	70	4	24	0	54	35	30	0	61	2	0	0	0	0
1800	141	141	192	184	0	0	0	0	0	0	25	51	1	23	0	51	35	14	0	37	35	20	0	44	34	0	0	0	0
1900	154	151	206	203	0	0	0	0	0	0	23	50	35	20	0	57	34	11	0	47	33	18	0	54	34	0	0	0	0
2000	163	161	220	214	0	0	0	0	0	0	25	48	2	23	0	50	14	17	0	51	1	23	0	61	4	0	0	0	0
2100	178	173	227	219	0	0	0	0	0	0	27	45	35	25	0	51	34	17	0	41	33	22	0	51	33	0	0	0	0
2200	142	142	173	170	0	0	0	0	0	0	35	64	12	33	0	75	2	28	0	53	1	34	0	62	13	0	0	0	0
2300	103	110	142	142	0	0	0	0	0	0	44	72	18	43	0	82	7	33	0	61	35	40	0	66	35	0	0	0	0
2400	73	80	81	92	0	0	0	0	0	0	69	97	46	64	0	109	36	62	0	84	39	70	0	98	51	0	0	0	0

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE -1 DEGREE, SPEED -1 MPH, DIRECTION 1 DEGREE, RAINFALL -01 INCHES, NET RADIATION -01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6		S
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	
100	181	180	223	228	0	0	0	0	298	318	285	294	321	270	302	316	282	305	319	287	0	0	0
200	200	200	236	242	0	0	0	0	293	324	252	292	337	261	296	313	275	299	324	267	0	0	0
300	153	151	183	195	0	0	0	0	288	311	261	286	320	225	286	319	241	292	321	253	0	0	0
400	173	179	205	213	0	0	0	0	292	321	254	292	351	245	290	320	243	295	328	261	0	0	0
500	161	162	189	199	0	0	0	0	290	327	252	289	323	255	290	312	246	294	328	256	0	0	0
600	147	153	177	182	0	0	0	0	285	318	249	282	319	243	284	323	255	289	336	250	0	0	0
700	175	179	191	198	0	0	0	0	288	311	253	287	318	240	289	319	256	293	323	261	0	0	0
800	168	172	189	195	0	0	0	0	270	304	244	271	332	227	276	306	239	281	313	254	0	0	0
900	138	141	167	175	0	0	0	0	278	309	246	277	311	237	282	327	245	287	319	237	0	0	0
1000	172	178	194	198	0	0	0	0	276	308	249	275	345	243	280	336	240	284	320	249	0	0	0
1100	172	178	194	198	0	0	0	0	268	304	244	266	302	238	272	298	255	278	312	248	0	0	0
1200	172	178	194	198	0	0	0	0	267	302	246	267	291	239	268	292	255	275	298	257	0	0	0
1300	157	163	215	223	0	0	0	0	251	278	214	253	286	211	251	287	280	257	272	245	0	0	0
1400	152	159	208	217	0	0	0	0	254	284	229	257	308	223	253	267	239	259	278	247	0	0	0
1500	158	161	210	219	0	0	0	0	252	278	231	254	284	218	251	265	235	258	275	241	0	0	0
1600	126	130	171	179	0	0	0	0	246	283	220	250	296	210	240	263	221	247	268	219	0	0	0
1700	106	112	151	156	0	0	0	0	242	273	209	246	290	200	240	267	220	247	272	225	0	0	0
1800	91	91	134	133	0	0	0	0	230	258	191	234	268	156	226	249	195	233	259	196	0	0	0
1900	87	79	136	124	0	0	0	0	215	250	150	220	259	154	211	239	141	220	252	192	0	0	0
2000	95	83	162	142	0	0	0	0	209	251	149	213	263	151	206	228	143	215	237	144	0	0	0
2100	116	108	175	163	0	0	0	0	221	256	149	225	264	177	215	238	148	224	244	197	0	0	0
2200	125	112	184	180	0	0	0	0	223	262	157	226	268	157	219	240	199	228	240	200	0	0	0
2300	136	127	197	191	0	0	0	0	225	253	166	230	268	178	221	253	200	228	241	200	0	0	0
2400	110	98	169	158	0	0	0	0	217	263	168	225	269	198	213	237	171	222	251	209	0	0	0

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION, REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6	
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B
100	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166
200	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148
300	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
400	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116
500	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
600	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133
700	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157
800	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
900	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
1000	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
1100	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
1200	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136
1300	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
1400	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
1500	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
1600	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
1700	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
1800	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
1900	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
2000	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
2100	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
2200	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
2300	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
2400	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE +.1 DEGREES, SPEED - 1 MPH, DIRECTION 1 DEGREE, RAINFALL -.01 INCHES, NET RADIATION -.01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6											
	SO A	S	SO B	S	SO A	S	SO B	S	SO A	S	SO A	S	SO A	S	SO B	S	SO A	S	SO A	S	SO A	S	SO A	S										
100	77	0	68	0	81	0	84	0	0	0	0	0	216	0	237	188	221	0	245	198	244	0	262	227	251	0	266	231	0	0	0	0	0	
200	43	0	58	0	74	0	76	0	0	0	0	0	215	0	240	146	218	0	256	161	245	0	257	226	251	0	264	214	0	0	0	0	0	
300	62	0	70	0	83	0	85	0	0	0	0	0	217	0	233	190	220	0	239	193	239	0	243	234	245	0	244	241	0	0	0	0	0	
400	64	0	63	0	90	0	99	0	0	0	0	0	226	0	240	207	230	0	252	210	249	0	258	240	254	0	263	244	0	0	0	0	0	
500	53	0	58	0	74	0	76	0	0	0	0	0	239	0	278	219	243	0	279	218	274	0	301	255	279	0	300	261	0	0	0	0	0	
600	53	0	44	0	57	0	59	0	0	0	0	0	202	0	224	175	205	0	229	155	253	0	262	250	259	0	268	251	0	0	0	0	0	
700	34	0	35	0	29	0	30	0	0	0	0	0	221	0	247	169	222	0	249	161	255	0	256	246	239	0	252	214	0	0	0	0	0	
800	53	0	54	0	39	0	35	0	0	0	0	0	165	0	210	130	167	0	217	135	205	0	205	204	204	0	237	183	0	0	0	0	0	
900	35	0	41	0	33	0	34	0	0	0	0	0	149	0	166	124	151	0	185	126	156	0	156	156	176	0	268	163	0	0	0	0	0	
1000	26	0	30	0	30	0	27	0	0	0	0	0	156	0	207	118	160	0	207	128	161	0	166	155	172	0	175	163	0	0	0	0	0	
1100	36	0	40	0	55	0	56	0	0	0	0	0	124	0	150	106	131	0	165	111	147	0	173	128	159	0	186	145	0	0	0	0	0	
1200	35	0	40	0	51	0	48	0	0	0	0	0	146	0	204	114	152	0	211	109	169	0	197	136	179	0	261	139	0	0	0	0	0	0
1300	41	0	47	0	44	0	46	0	0	0	0	0	126	0	163	99	134	0	162	101	140	0	172	114	151	0	182	127	0	0	0	0	0	0
1400	26	0	32	0	15	0	17	0	0	0	0	0	305	0	7	271	298	0	333	216	286	0	309	255	293	0	307	273	0	0	0	0	0	0
1500	20	0	22	0	24	0	25	0	0	0	0	0	263	0	356	180	145	0	3263	4	273	0	343	194	277	0	359	103	0	0	0	0	0	0
1600	49	0	53	0	54	0	56	0	0	0	0	0	276	0	310	236	275	0	305	232	263	0	286	231	268	0	300	228	0	0	0	0	0	0
1700	42	0	45	0	50	0	52	0	0	0	0	0	297	0	328	231	294	0	341	216	287	0	309	224	291	0	313	237	0	0	0	0	0	0
1800	36	0	40	0	49	0	51	0	0	0	0	0	310	0	329	285	307	0	341	273	288	0	312	260	291	0	317	257	0	0	0	0	0	0
1900	34	0	37	0	39	0	41	0	0	0	0	0	232	0	244	210	235	0	258	211	257	0	264	254	255	0	264	239	0	0	0	0	0	0
2000	47	0	58	0	49	0	51	0	0	0	0	0	215	0	225	199	218	0	229	200	229	0	233	224	237	0	242	231	0	0	0	0	0	0
2100	51	0	56	0	67	0	70	0	0	0	0	0	237	0	253	217	241	0	256	224	243	0	247	236	249	0	254	241	0	0	0	0	0	0
2200	61	0	65	0	84	0	87	0	0	0	0	0	242	0	257	222	247	0	267	229	254	0	258	248	260	0	265	255	0	0	0	0	0	0
2300	66	0	72	0	97	0	102	0	0	0	0	0	285	0	262	226	248	0	275	224	259	0	264	254	265	0	269	261	0	0	0	0	0	0
2400	88	0	94	0	124	0	130	0	0	0	0	0	250	0	269	223	254	0	275	219	265	0	273	260	271	0	278	264	0	0	0	0	0	0

STATUS CODES: 1 = INVALID, 2 = QUESTIONABLE, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		DIRI 50 A S		MAX MIN DIRZ		WIND DIRZ		1500 S		MAX MIN DIR4		WIND DIR4		MAX MIN DIR5		WIND DIR5	
	50 A S	1500 S	50 B S	1500 S	50 C S	1500 S	50 D S	1500 S	50 E S	1500 S	50 F S	1500 S	50 G S	1500 S	50 H S	1500 S	50 I S	1500 S	50 J S	1500 S	50 K S	1500 S	50 L S	1500 S	50 M S	1500 S	50 N S	1500 S
100	174	0	174	0	232	0	0	0	0	0	0	0	97	0	118	72	100	0	142	70	96	0	113	80	106	0	124	75
200	144	0	146	0	184	0	0	0	0	0	0	0	90	0	120	67	93	0	131	60	87	0	108	67	98	0	121	69
300	159	0	166	0	194	0	0	0	0	0	0	0	80	0	98	59	81	0	108	33	82	0	104	66	90	0	112	68
400	151	0	153	0	197	0	0	0	0	0	0	0	84	0	111	65	88	0	121	63	84	0	129	66	91	0	126	68
500	149	0	157	0	194	0	0	0	0	0	0	0	87	0	110	66	90	0	121	61	84	0	101	68	93	0	114	76
600	142	0	148	0	186	0	0	0	0	0	0	0	93	0	117	75	97	0	132	69	89	0	115	68	98	0	129	76
700	129	0	134	0	174	0	0	0	0	0	0	0	90	0	119	64	92	0	133	58	87	0	118	62	96	0	116	81
800	151	0	154	0	196	0	0	0	0	0	0	0	94	0	113	71	97	0	130	64	90	0	104	67	100	0	116	78
900	144	0	147	0	178	0	0	0	0	0	0	0	89	0	118	71	94	0	159	64	89	0	109	72	99	0	127	74
1000	155	0	156	0	204	0	0	0	0	0	0	0	93	0	117	66	95	0	127	53	91	0	126	69	101	0	141	60
1100	158	0	161	0	194	0	0	0	0	0	0	0	87	0	114	58	92	0	120	55	85	0	104	54	95	0	125	77
1200	168	0	172	0	217	0	0	0	0	0	0	0	90	0	119	68	95	0	126	57	90	0	111	60	100	0	127	83
1300	134	0	136	0	168	0	0	0	0	0	0	0	89	0	127	61	93	0	142	68	89	0	112	73	98	0	131	67
1400	121	0	134	0	161	0	0	0	0	0	0	0	85	0	114	62	90	0	125	61	87	0	116	61	96	0	127	80
1500	133	0	136	0	171	0	0	0	0	0	0	0	86	0	110	62	89	0	124	62	85	0	106	64	94	0	119	69
1600	109	0	114	0	134	0	0	0	0	0	0	0	84	0	115	56	87	0	139	53	85	0	111	64	94	0	127	75
1700	105	0	110	0	136	0	0	0	0	0	0	0	88	0	114	63	93	0	126	71	89	0	107	71	97	0	116	73
1800	102	0	104	0	147	0	0	0	0	0	0	0	95	0	127	74	100	0	132	71	92	0	119	69	101	0	119	83
1900	128	0	133	0	163	0	0	0	0	0	0	0	92	0	123	67	96	0	133	63	91	0	112	68	101	0	123	80
2000	110	0	110	0	141	0	0	0	0	0	0	0	91	0	124	62	96	0	133	68	91	0	122	65	102	0	134	66
2100	118	0	116	0	151	0	0	0	0	0	0	0	101	0	125	72	105	0	143	57	98	0	124	84	108	0	140	89
2200	121	0	124	0	161	0	0	0	0	0	0	0	95	0	124	75	100	0	135	78	92	0	115	68	101	0	121	77
2300	126	0	129	0	159	0	0	0	0	0	0	0	102	0	124	77	107	0	139	76	98	0	112	87	108	0	132	93
2400	133	0	132	0	174	0	0	0	0	0	0	0	100	0	121	74	105	0	143	71	95	0	119	74	105	0	124	92

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD4		WIND SPD6		WIND DIR1	WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5	WIND DIR6										
	50 A	50 B	150A	150B	50 A	150B	50 A	150B		50 B	150A	150A	150B	150B	150B		150B	150B	5	5							
100	112	0	111	0	152	0	150	0	0	101	0	118	69	107	0	139	63	98	0	116	81	109	0	136	84	0	0
200	117	0	116	0	157	0	155	0	0	97	0	124	78	103	0	143	72	98	0	112	87	107	0	121	92	0	0
300	97	0	98	0	135	0	135	0	0	101	0	125	73	106	0	140	75	98	0	119	70	108	0	126	91	0	0
400	89	0	90	0	122	0	120	0	0	98	0	123	67	103	0	139	62	97	0	117	78	107	0	136	91	0	0
500	68	0	67	0	81	0	81	0	0	106	0	129	73	110	0	143	69	99	0	122	64	111	0	145	85	0	0
600	39	0	45	0	52	0	52	0	0	79	0	106	52	83	0	125	48	84	0	98	66	84	0	120	73	0	0
700	48	0	52	0	61	0	61	0	0	85	0	118	65	90	0	137	63	87	0	111	68	96	0	121	78	0	0
800	40	0	49	0	51	0	59	0	0	56	0	82	13	57	0	92	10	55	0	73	42	62	0	88	42	0	0
900	53	0	58	0	66	0	66	0	0	79	0	105	46	81	0	114	52	80	0	101	53	89	0	111	61	0	0
1000	40	0	43	0	46	0	46	0	0	76	0	114	48	80	0	120	48	76	0	101	57	88	0	126	60	0	0
1100	44	0	47	0	51	0	54	0	0	78	0	102	55	82	0	116	57	72	0	91	57	80	0	95	64	0	0
1200	46	0	48	0	53	0	54	0	0	82	0	114	56	85	0	113	58	80	0	108	57	91	0	132	60	0	0
1300	38	0	44	0	47	0	49	0	0	78	0	124	55	81	0	138	52	83	0	112	57	93	0	135	65	0	0
1400	33	0	37	0	36	0	38	0	0	76	0	100	45	80	0	113	34	80	0	105	62	89	0	128	66	0	0
1500	17	0	22	0	21	0	24	0	0	66	0	84	37	67	0	88	30	59	0	59	59	66	0	83	49	0	0
1600	29	0	31	0	47	0	47	0	0	359	5	282	356	0	52	280	3	0	27	328	6	0	36	320	0	0	0
1700	43	0	47	0	63	0	60	0	0	19	0	66	338	18	0	62	340	8	0	33	341	13	0	39	345	0	0
1800	40	0	45	0	59	0	57	0	0	25	0	54	330	22	0	58	283	9	0	32	345	13	0	43	348	0	0
1900	31	0	35	0	64	0	62	0	0	15	0	105	313	14	0	108	311	4	0	36	329	8	0	38	326	0	0
2000	36	0	40	0	67	0	67	0	0	20	0	83	338	18	0	78	304	5	0	40	330	10	0	45	342	0	0
2100	39	0	42	0	67	0	66	0	0	11	0	60	315	10	0	59	310	4	0	39	330	7	0	40	328	0	0
2200	63	0	66	0	96	0	91	0	0	348	0	21	313	347	0	29	303	357	0	17	331	5	0	48	337	0	0
2300	69	0	73	0	104	0	99	0	0	347	0	7	326	345	0	23	318	350	0	4	340	355	0	22	342	0	0
2400	53	0	57	0	84	0	82	0	0	338	0	10	305	337	0	13	299	342	0	351	335	345	0	354	340	0	0

STATUS CODES: 1 - QUESTIONABLE 2 - INVALID 3 - UNSTEADY DIRECTION, 5 - FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

Table with multiple columns for time (HOUR, 30 A, 5, 30 B), wind speed/direction (SPD1-SPD6, DIR1-DIR2), temperature (AMB, 180A, 180B, 180S), and miscellaneous data (MISC, 1-7). Rows represent hourly intervals from 100 to 2400.

STATUS CODES: DEFINITIONS - 0 = INVALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION. REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6			
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B		
100	169	0	169	0	261	0	261	0	0	0	304	0	317	292	301	0	323	277	312	0	321	308	313	0	321	303
200	130	0	131	0	226	0	227	0	0	0	315	0	391	296	312	0	356	265	326	0	392	319	328	0	337	317
300	139	0	140	0	233	0	232	0	0	0	319	0	381	286	314	0	395	266	329	0	334	322	330	0	336	314
400	121	0	123	0	226	0	227	0	0	0	323	0	11	292	321	0	18	270	333	0	3	307	335	0	342	317
500	124	0	126	0	226	0	223	0	0	0	328	0	383	298	324	0	11	274	334	0	358	318	336	0	353	323
600	123	0	124	0	212	0	209	0	0	0	331	0	356	300	331	0	6	284	337	0	395	330	339	0	346	325
700	133	0	133	0	218	0	212	0	0	0	345	0	17	320	343	0	23	290	349	0	9	326	353	0	19	332
800	128	0	127	0	201	0	197	0	0	0	346	0	9	309	344	0	30	301	350	0	16	329	356	0	28	337
900	136	0	137	0	217	0	214	0	0	0	346	0	16	306	345	0	11	295	347	0	8	329	350	0	22	327
1000	82	0	84	0	144	0	143	0	0	0	13	0	77	334	13	0	88	317	1	0	50	302	0	0	0	0
1100	92	0	96	0	159	0	155	0	0	0	19	0	52	327	14	0	67	288	1	0	44	316	0	0	0	0
1200	90	0	92	0	135	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300	125	0	125	0	160	0	160	0	0	0	345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400	85	0	85	0	155	0	155	0	0	0	350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500	80	0	80	0	140	0	140	0	0	0	355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600	118	0	118	0	175	0	175	0	0	0	385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	125	0	125	0	170	0	170	0	0	0	385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	70	0	70	0	145	0	145	0	0	0	350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	85	0	85	0	140	0	140	0	0	0	345	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	75	0	75	0	110	0	110	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	78	0	78	0	105	0	105	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	80	0	80	0	100	0	100	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	90	0	90	0	85	0	85	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2400	38	0	38	0	70	0	70	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6	
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B
100	55	52	55	52	55	52	55	52	55	52	55	52	55	52	55	52	55	52	55	52	55	52	55	52
200	53	44	60	54	0	0	0	0	0	0	0	0	0	178	199	133	189	0	227	138	171	0	175	168
300	55	52	53	54	0	0	0	0	0	0	0	0	0	187	206	159	190	0	218	142	201	0	206	195
400	58	55	71	61	0	0	0	0	0	0	0	0	0	157	179	138	162	0	183	142	166	0	169	164
500	53	43	121	95	0	0	0	0	0	0	0	0	0	162	186	142	167	0	195	144	171	0	182	165
600	47	43	106	91	0	0	0	0	0	0	0	0	0	186	217	151	191	0	226	111	194	0	198	189
700	49	45	106	88	0	0	0	0	0	0	0	0	0	165	190	135	168	0	214	138	191	0	205	178
800	57	54	130	132	0	0	0	0	0	0	0	0	0	163	195	126	168	0	208	138	181	0	195	158
900	52	53	93	95	0	0	0	0	0	0	0	0	0	151	185	125	156	0	186	120	165	0	174	156
1000	102	101	154	149	0	0	0	0	0	0	0	0	0	148	181	108	158	0	199	123	159	0	183	120
1100	122	122	175	178	0	0	0	0	0	0	0	0	0	153	196	111	158	0	200	113	161	0	193	130
1200	113	111	173	178	0	0	0	0	0	0	0	0	0	137	168	108	145	0	183	121	142	0	163	124
1300	143	145	193	200	0	0	0	0	0	0	0	0	0	182	176	113	148	0	194	115	151	0	198	129
1400	116	119	177	184	0	0	0	0	0	0	0	0	0	130	154	113	139	0	174	88	136	0	152	116
1500	164	166	236	240	0	0	0	0	0	0	0	0	0	135	155	115	143	0	166	117	145	0	166	130
1600	152	159	238	240	0	0	0	0	0	0	0	0	0	131	160	112	139	0	160	118	137	0	152	124
1700	163	165	250	261	0	0	0	0	0	0	0	0	0	133	152	117	141	0	161	115	142	0	155	121
1800	147	147	229	238	0	0	0	0	0	0	0	0	0	135	158	119	141	0	162	116	142	0	163	127
1900	159	162	254	265	0	0	0	0	0	0	0	0	0	143	170	120	150	0	179	114	152	0	175	131
2000	161	162	281	277	0	0	0	0	0	0	0	0	0	145	167	126	152	0	186	130	152	0	171	133
2100	169	172	286	279	0	0	0	0	0	0	0	0	0	155	180	122	160	0	221	123	162	0	180	144
2200	164	153	305	269	0	0	0	0	0	0	0	0	0	155	193	129	163	0	206	127	160	0	193	141
2300	83	76	148	130	0	0	0	0	0	0	0	0	0	167	218	126	176	0	265	129	175	0	210	148
2400	123	107	236	197	0	0	0	0	0	0	0	0	0	172	218	127	178	0	238	109	178	0	199	155

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE +1 DEGREES, SPEED +1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6										
	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B	30 A	30 B									
100	298	0	253	0	324	0	0	0	0	0	0	0	266	0	279	252	266	0	280	437	269	0	279	265	275	0	281	270	0	0	0	0	
200	208	0	210	0	274	0	0	0	0	0	0	0	271	0	314	255	270	0	298	236	276	0	293	250	280	0	303	252	0	0	0	0	
300	212	0	209	0	289	0	0	0	0	0	0	0	292	0	310	269	289	0	325	272	296	0	307	271	299	0	309	271	0	0	0	0	
400	173	0	164	0	239	0	0	0	0	0	0	0	289	0	309	260	287	0	318	261	298	0	315	260	301	0	315	277	0	0	0	0	
500	133	0	135	0	211	0	0	0	0	0	0	0	260	0	277	242	262	0	288	238	265	0	270	260	271	0	276	264	0	0	0	0	
600	148	0	149	0	226	0	0	0	0	0	0	0	261	0	276	242	261	0	284	233	267	0	279	260	273	0	283	268	0	0	0	0	
700	150	0	150	0	204	0	0	0	0	0	0	0	270	0	296	246	271	0	298	231	277	0	294	244	280	0	300	252	0	0	0	0	
800	119	0	120	0	204	0	0	0	0	0	0	0	346	0	323	289	301	0	328	260	310	0	316	303	311	0	317	304	0	0	0	0	
900	111	0	109	0	170	0	0	0	0	0	0	0	356	0	350	301	354	0	350	285	356	0	349	307	359	0	362	305	0	0	0	0	
1000	59	0	54	0	84	0	0	0	0	0	0	0	55	0	69	301	55	0	99	285	6	0	72	332	51	0	88	324	0	0	0	0	
1100	59	0	56	0	75	0	0	0	0	0	0	0	55	0	69	301	55	0	113	8	45	0	86	1	51	0	99	3	0	0	0	0	
1200	42	0	40	0	62	0	0	0	0	0	0	0	351	0	59	274	350	0	60	284	6	0	58	329	7	0	61	330	0	0	0	0	0
1300	64	0	60	0	71	0	0	0	0	0	0	0	26	0	56	354	25	0	73	343	14	0	38	330	18	0	45	341	0	0	0	0	0
1400	67	0	63	0	64	0	0	0	0	0	0	0	9	0	65	315	6	0	52	283	4	0	74	312	5	0	69	296	0	0	0	0	0
1500	41	0	40	0	43	0	0	0	0	0	0	0	4	0	103	279	3	0	62	286	11	0	46	317	15	0	103	312	0	0	0	0	0
1600	41	0	39	0	47	0	0	0	0	0	0	0	21	0	45	340	19	0	62	340	16	0	42	343	19	0	54	339	0	0	0	0	0
1700	51	0	48	0	54	0	0	0	0	0	0	0	53	0	73	24	53	0	85	27	41	0	60	24	46	0	69	28	0	0	0	0	0
1800	47	0	50	0	66	0	0	0	0	0	0	0	84	0	114	64	86	0	123	61	78	0	88	66	85	0	97	73	0	0	0	0	0
1900	60	0	56	0	74	0	0	0	0	0	0	0	83	0	105	66	85	0	111	62	81	0	93	74	89	0	104	78	0	0	0	0	0
2000	93	0	90	0	133	0	0	0	0	0	0	0	88	0	105	72	88	0	113	62	85	0	94	73	93	0	102	82	0	0	0	0	0
2100	95	0	91	0	158	0	0	0	0	0	0	0	91	0	109	79	95	0	122	76	89	0	98	75	97	0	107	85	0	0	0	0	0
2200	111	0	104	0	161	0	0	0	0	0	0	0	103	0	120	87	107	0	134	88	100	0	112	87	110	0	125	94	0	0	0	0	0
2300	123	0	114	0	170	0	0	0	0	0	0	0	97	0	121	75	102	0	135	48	93	0	119	81	103	0	125	88	0	0	0	0	0
2400	116	0	110	0	156	0	0	0	0	0	0	0	97	0	121	75	102	0	135	48	93	0	119	81	103	0	125	88	0	0	0	0	0

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		DIR1		DIR2		DIR3		DIR4		DIR5		DIR6	
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B
100	122	0	113	0	159	0	163	0	0	0	0	0	107	0	122	91	112	0	140	92	103	0	111	94
200	147	0	143	0	197	0	198	0	0	0	0	0	97	0	115	76	100	0	124	76	94	0	107	77
300	149	0	144	0	185	0	189	0	0	0	0	0	110	0	125	91	114	0	140	84	106	0	122	84
400	136	0	130	0	169	0	174	0	0	0	0	0	114	0	130	93	119	0	151	85	112	0	126	100
500	88	0	85	0	116	0	121	0	0	0	0	0	119	0	132	102	125	0	144	98	120	0	135	102
600	122	0	118	0	160	0	165	0	0	0	0	0	114	0	128	99	118	0	141	87	112	0	125	98
700	123	0	115	0	156	0	161	0	0	0	0	0	112	0	129	94	117	0	151	96	111	0	123	100
800	138	0	132	0	161	0	165	0	0	0	0	0	119	0	136	97	125	0	145	72	121	0	138	105
900	148	0	143	0	178	0	183	0	0	0	0	0	113	0	131	93	118	0	142	85	112	0	124	85
1000	169	0	161	0	197	0	202	0	0	0	0	0	118	0	128	95	119	0	142	93	113	0	131	98
1100	198	0	194	0	234	0	237	0	0	0	0	0	110	0	132	82	115	0	143	85	109	0	126	96
1200	191	0	185	0	228	0	237	0	0	0	0	0	121	0	148	103	127	0	149	93	118	0	142	100
1300	208	0	205	0	261	0	267	0	0	0	0	0	122	0	138	97	128	0	149	107	122	0	141	105
1400	186	0	188	0	216	0	222	0	0	0	0	0	120	0	135	104	125	0	144	80	117	0	138	97
1500	175	0	173	0	207	0	209	0	0	0	0	0	118	0	137	104	123	0	157	87	121	0	138	98
1600	168	0	166	0	197	0	204	0	0	0	0	0	123	0	146	103	130	0	155	104	121	0	134	102
1700	183	0	176	0	216	0	221	0	0	0	0	0	117	0	135	100	124	0	143	97	117	0	132	100
1800	174	0	173	0	201	0	206	0	0	0	0	0	116	0	133	98	124	0	149	99	116	0	142	98
1900	125	0	122	0	154	0	159	0	0	0	0	0	118	0	136	90	126	0	164	84	118	0	134	98
2000	169	0	165	0	204	0	208	0	0	0	0	0	114	0	134	91	120	0	142	86	111	0	133	100
2100	169	0	165	0	208	0	215	0	0	0	0	0	120	0	135	107	127	0	152	108	122	0	139	105
2200	150	0	145	0	189	0	193	0	0	0	0	0	122	0	138	104	129	0	174	102	124	0	145	109
2300	132	0	131	0	171	0	174	0	0	0	0	0	126	0	148	109	132	0	160	109	130	0	158	107
2400	147	0	146	0	191	0	199	0	0	0	0	0	126	0	151	104	133	0	161	101	127	0	153	113

STATUS CODE(S) DEFINITIONS - 0 = INVALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

DIGITAL GRAPHICS INCORPORATED - REP COOK

METROLOGICAL DATA FOR MARCH

17, 1982

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Table with columns: HOUR, WIND SPD1, WIND SPD2, WIND SPD3, WIND DIR1, WIND DIR2, WIND DIR3, WIND DIR4, WIND DIR5, WIND DIR6, WIND DIR7, WIND DIR8, WIND DIR9, WIND DIR10, WIND DIR11, WIND DIR12, WIND DIR13, WIND DIR14, WIND DIR15, WIND DIR16, WIND DIR17, WIND DIR18, WIND DIR19, WIND DIR20, WIND DIR21, WIND DIR22, WIND DIR23, WIND DIR24, WIND DIR25, WIND DIR26, WIND DIR27, WIND DIR28, WIND DIR29, WIND DIR30, WIND DIR31, WIND DIR32, WIND DIR33, WIND DIR34, WIND DIR35, WIND DIR36, WIND DIR37, WIND DIR38, WIND DIR39, WIND DIR40, WIND DIR41, WIND DIR42, WIND DIR43, WIND DIR44, WIND DIR45, WIND DIR46, WIND DIR47, WIND DIR48, WIND DIR49, WIND DIR50, WIND DIR51, WIND DIR52, WIND DIR53, WIND DIR54, WIND DIR55, WIND DIR56, WIND DIR57, WIND DIR58, WIND DIR59, WIND DIR60, WIND DIR61, WIND DIR62, WIND DIR63, WIND DIR64, WIND DIR65, WIND DIR66, WIND DIR67, WIND DIR68, WIND DIR69, WIND DIR70, WIND DIR71, WIND DIR72, WIND DIR73, WIND DIR74, WIND DIR75, WIND DIR76, WIND DIR77, WIND DIR78, WIND DIR79, WIND DIR80, WIND DIR81, WIND DIR82, WIND DIR83, WIND DIR84, WIND DIR85, WIND DIR86, WIND DIR87, WIND DIR88, WIND DIR89, WIND DIR90, WIND DIR91, WIND DIR92, WIND DIR93, WIND DIR94, WIND DIR95, WIND DIR96, WIND DIR97, WIND DIR98, WIND DIR99, WIND DIR100.

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		DIR1		DIR2		DIR3		DIRN		DIRS		DIR6	
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B
100	40	36	53	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	69	67	92	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
300	84	81	115	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400	85	81	134	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500	42	40	73	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
600	76	76	116	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
700	72	73	111	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800	48	52	85	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
900	34	41	60	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	18	23	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	12	21	10	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200	22	20	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300	35	32	30	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400	48	41	50	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500	76	76	106	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600	57	55	90	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	62	58	83	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	47	43	67	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	34	30	66	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	59	54	98	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	87	81	134	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	97	96	124	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	86	89	109	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2400	72	75	89	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STATUS CODE(S) DEFINITIONS - 0 = INVALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6		
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	
100	191	180	0	242	0	0	0	108	0	128	93	111	0	137	82	105	0	122	82	116	0	133	93	0	0
200	217	203	0	278	0	0	0	107	0	125	80	111	0	141	83	105	0	133	84	117	0	134	98	0	0
300	210	202	0	266	0	0	0	111	0	125	95	118	0	145	87	109	0	125	99	120	0	135	102	0	0
400	152	145	0	185	0	0	0	115	0	132	95	122	0	144	92	110	0	132	89	121	0	155	93	0	0
500	178	176	0	210	0	0	0	119	0	144	96	126	0	153	102	119	0	145	103	131	0	144	116	0	0
600	189	188	0	226	0	0	0	119	0	133	103	126	0	146	107	122	0	138	110	135	0	148	123	0	0
700	176	174	0	220	0	0	0	123	0	139	108	129	0	146	106	125	0	145	110	138	0	153	123	0	0
800	103	102	0	129	0	0	0	122	0	153	95	129	0	164	88	126	0	145	111	139	0	156	126	0	0
900	155	156	0	184	0	0	0	122	0	139	108	129	0	153	112	126	0	144	109	138	0	155	126	0	0
1000	168	166	0	190	0	0	0	120	0	139	105	126	0	141	106	122	0	141	109	138	0	154	122	0	0
1100	147	150	0	185	0	0	0	128	0	146	101	136	0	175	107	131	0	151	108	144	0	164	125	0	0
1200	126	134	0	165	0	0	0	130	0	178	89	139	0	174	98	137	0	165	108	149	0	172	126	0	0
1300	36	32	0	48	0	0	0	170	0	243	110	175	0	258	118	167	0	212	120	179	0	231	143	0	0
1400	28	26	0	32	0	0	0	256	0	303	205	259	0	319	195	217	0	229	209	227	0	257	208	0	0
1500	29	29	0	34	0	0	0	94	0	150	53	99	0	154	51	97	0	135	63	107	0	152	74	0	0
1600	38	36	0	45	0	0	0	83	0	114	50	88	0	132	52	94	0	117	70	106	0	129	75	0	0
1700	60	57	0	69	0	0	0	103	0	131	80	109	0	138	75	96	0	130	69	107	0	125	87	0	0
1800	62	61	0	70	0	0	0	118	0	145	96	126	0	152	87	119	0	136	102	131	0	147	113	0	0
1900	66	62	0	82	0	0	0	97	0	131	78	103	0	132	79	92	0	110	76	103	0	126	68	0	0
2000	80	74	0	100	0	0	0	98	0	118	74	105	0	135	73	93	0	115	84	104	0	118	92	0	0
2100	87	81	0	98	0	0	0	114	0	132	100	121	0	144	88	112	0	129	93	124	0	141	106	0	0
2200	49	49	0	65	0	0	0	132	0	165	105	141	0	192	110	136	0	164	115	148	0	181	130	0	0
2300	19	16	0	30	0	0	0	229	0	250	195	233	0	263	199	213	0	226	209	223	0	243	194	0	0
2400	31	21	0	51	0	0	0	208	0	240	165	212	0	248	138	202	0	214	196	213	0	222	202	0	0

STATUS CODE(S) DEFINITIONS - 0 = VALTO, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION
 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6	
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B
100	74	0	74	0	91	0	98	0	0	0	0	0	263	0	289	237	278	0	288	267	282	0	298	269
200	60	0	56	0	89	0	94	0	0	0	0	0	294	0	329	250	291	0	328	242	300	0	330	260
300	48	0	46	0	86	0	92	0	0	0	0	0	277	0	351	221	277	0	343	221	282	0	320	255
400	50	0	55	0	93	0	100	0	0	0	0	0	234	0	259	206	237	0	267	207	251	0	258	232
500	77	0	74	0	124	0	132	0	0	0	0	0	237	0	273	208	241	0	278	206	241	0	250	219
600	76	0	79	0	118	0	127	0	0	0	0	0	265	0	290	231	267	0	296	228	258	0	264	246
700	150	0	150	0	224	0	237	0	0	0	0	0	261	0	289	240	283	0	289	220	262	0	271	240
800	177	0	177	0	214	0	222	0	0	0	0	0	268	0	294	243	287	0	297	237	274	0	300	250
900	173	0	165	0	201	0	209	0	0	0	0	0	273	0	303	243	274	0	318	243	281	0	326	248
1000	237	0	240	0	269	0	280	0	0	0	0	0	269	0	288	254	268	0	294	236	272	0	307	247
1100	225	0	226	0	255	0	266	0	0	0	0	0	268	0	288	242	269	0	318	250	272	0	289	251
1200	188	0	192	0	220	0	234	0	0	0	0	0	283	0	319	250	281	0	323	242	282	0	329	237
1300	259	0	261	0	273	0	286	0	0	0	0	0	268	0	287	243	267	0	294	247	269	0	294	249
1400	241	0	243	0	287	0	291	0	0	0	0	0	267	0	279	254	269	0	285	250	269	0	288	261
1500	216	0	217	0	227	0	238	0	0	0	0	0	267	0	281	251	268	0	288	241	268	0	279	258
1600	158	0	165	0	211	0	224	0	0	0	0	0	265	0	281	238	266	0	297	237	263	0	279	258
1700	151	0	148	0	179	0	186	0	0	0	0	0	272	0	302	243	272	0	301	244	277	0	309	252
1800	184	0	178	0	225	0	239	0	0	0	0	0	289	0	312	255	288	0	344	249	286	0	313	253
1900	161	0	160	0	200	0	220	0	0	0	0	0	288	0	315	252	285	0	325	255	286	0	321	253
2000	157	0	158	0	191	0	211	0	0	0	0	0	285	0	304	250	288	0	323	237	287	0	317	244
2100	184	0	177	0	223	0	234	0	0	0	0	0	290	0	317	265	294	0	302	251	297	0	312	256
2200	164	0	152	0	218	0	224	0	0	0	0	0	289	0	326	261	300	0	305	293	302	0	307	297
2300	153	0	157	0	197	0	202	0	0	0	0	0	290	0	310	260	299	0	305	292	301	0	307	297
2400	131	0	123	0	186	0	192	0	0	0	0	0	296	0	315	272	302	0	307	295	303	0	309	298

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION, REPORTING RESOLUTION - TEMPERATURE - 1 DEGREE, SPEED - 1 MPH, DIRECTION - 1 DEGREE, RAINFALL - .01 INCHES, NET RADIATION - 0.1 LANGLEY

Table with columns for Hour, Wind (S, 50 A, 1500 S, 5), Wind Dir (150A S, 5, 150B S, 5), Wind Dir 2, Wind Dir 3, Wind Dir 4, Wind Dir 5, Wind Dir 6, Wind Dir 7, Wind Dir 8, Wind Dir 9, Wind Dir 10, Wind Dir 11, Wind Dir 12, Wind Dir 13, Wind Dir 14, Wind Dir 15, Wind Dir 16, Wind Dir 17, Wind Dir 18, Wind Dir 19, Wind Dir 20. Rows for hours 100 to 2400.

STATUS CODE(S) DEFINITIONS - 0 = INVALID, 1 = QUESTIONABLE, 2 = UNSTEADY DIRECTION, 3 = FLAT DIRECTION, 4 = REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6		WIND DIR7			
	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S	50 A S	50 B S
100	94	0	94	0	156	0	150	0	0	0	0	0	100	0	107	94	103	0	115	92	88	0	94	84	97	0	103	94
200	104	0	103	0	159	0	159	0	0	0	0	0	118	0	122	114	122	0	129	115	111	0	113	107	121	0	125	118
300	108	0	109	0	176	0	177	0	0	0	0	0	110	0	113	106	114	0	129	108	110	0	111	107	120	0	121	118
400	106	0	106	0	167	0	167	0	0	0	0	0	110	0	114	107	115	0	123	106	109	0	110	107	119	0	121	118
500	113	0	109	0	166	0	187	0	0	0	0	0	105	0	112	91	108	0	120	90	108	0	111	105	118	0	121	116
600	127	0	127	0	196	0	196	0	0	0	0	0	111	0	116	105	114	0	132	94	111	0	111	104	122	0	124	119
700	118	0	116	0	178	0	179	0	0	0	0	0	113	0	122	100	114	0	131	86	114	0	123	105	125	0	138	112
800	113	0	113	0	138	0	140	0	0	0	0	0	112	0	136	83	117	0	145	77	112	0	134	92	123	0	144	102
900	104	0	107	0	125	0	124	0	0	0	0	0	116	0	143	85	121	0	154	90	111	0	136	55	122	0	149	99
1000	97	0	98	0	110	0	114	0	0	0	0	0	106	0	141	69	110	0	143	66	104	0	143	61	115	0	161	74
1100	109	0	111	0	128	0	130	0	0	0	0	0	124	0	170	100	131	0	172	98	120	0	156	71	133	0	170	98
1200	91	0	94	0	104	0	110	0	0	0	0	0	94	0	140	45	98	0	150	7	84	0	131	37	93	0	148	46
1300	75	0	82	0	88	0	93	0	0	0	0	0	52	0	101	298	57	0	115	3	56	0	105	1	61	0	117	5
1400	82	0	82	0	118	0	120	0	0	0	0	0	8	0	57	292	9	0	70	281	7	0	74	303	11	0	61	325
1500	85	0	82	0	130	0	124	0	0	0	0	0	8	0	63	250	9	0	73	277	7	0	78	318	12	0	42	323
1600	147	0	141	0	161	0	156	0	0	0	0	0	28	0	63	358	27	0	71	333	26	0	69	4	34	0	75	8
1700	170	0	166	0	195	0	191	0	0	0	0	0	29	0	48	10	27	0	59	3	29	0	47	11	33	0	54	352
1800	154	0	151	0	182	0	172	0	0	0	0	0	34	0	51	20	33	0	60	17	32	0	52	15	37	0	54	13
1900	95	0	98	0	124	0	126	0	0	0	0	0	44	0	67	19	41	0	77	18	42	0	68	28	49	0	76	30
2000	69	0	76	0	97	0	111	0	0	0	0	0	51	0	63	35	49	0	74	31	47	0	60	41	54	0	64	47
2100	73	0	76	0	110	0	121	0	0	0	0	0	69	0	80	60	69	0	88	56	56	0	64	50	65	0	71	58
2200	73	0	73	0	155	0	159	0	0	0	0	0	79	0	90	70	81	0	103	61	73	0	79	66	81	0	88	74
2300	81	0	77	0	142	0	143	0	0	0	0	0	96	0	104	89	98	0	114	76	103	0	109	98	114	0	120	108
2400	143	0	138	0	169	0	172	0	0	0	0	0	121	0	134	108	125	0	145	106	117	0	130	103	129	0	143	103

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTEADY DIRECTION, 5 = FLAT DIRECTION, REPORTING RESOLUTION - TEMPERATURE -1 DEGREES, SPEED -1 MPH, DIRECTION 1 DEGREE, RAINFALL -01 INCHES, NET RADIATION -01 LANGLEY

HOUR	WIND		WIND		WIND		WIND		WIND		WIND		WIND		WIND		WIND		
	SPD1	SPD2	SPD3	DIR1	SPD6	DIR1	DIR1	DIR2	DIR3	DIR4	DIR5	DIR6	DIR7	DIR8	DIR9	DIR10	DIR11	DIR12	
100	77	0	121	0	0	0	0	336	0	19	275	339	0	9	285	392	0	0	0
200	80	0	121	0	0	0	0	350	0	44	312	351	0	58	288	369	0	24	314
300	78	0	132	0	0	0	0	18	0	118	318	19	0	138	289	8	0	81	319
400	133	0	199	0	0	0	0	381	0	31	307	337	0	35	283	339	0	2	300
500	123	0	112	0	0	0	0	385	0	34	296	346	0	58	287	350	0	55	318
600	82	0	71	0	149	0	0	4	0	67	316	2	0	64	277	357	0	38	320
700	107	0	100	0	157	0	0	349	0	51	299	346	0	51	300	350	0	35	328
800	87	0	80	0	137	0	0	6	0	53	301	6	0	18	280	3	0	35	329
900	97	0	89	0	132	0	0	385	0	28	309	341	0	57	270	351	0	18	325
1000	94	0	94	0	126	0	0	342	0	21	302	336	0	17	294	344	0	21	309
1100	86	0	84	0	124	0	0	340	0	17	292	338	0	18	282	344	0	17	272
1200	63	0	54	0	94	0	0	335	0	74	274	339	0	167	270	343	0	24	292
1300	67	0	61	0	84	0	0	325	0	31	273	313	0	355	236	326	0	358	266
1400	63	0	61	0	85	0	0	330	0	45	278	320	0	359	227	327	0	23	272
1500	0	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1600	51	0	45	0	57	0	0	324	0	2	270	316	0	355	251	332	0	6	272
1700	35	0	31	0	36	0	0	315	0	356	220	328	0	163	277	338	0	19	285
1800	34	0	29	0	34	0	0	26	0	69	351	21	3	91	332	22	0	53	5
1900	0	4	7	0	0	4	0	115	0	174	13	112	3	166	10	63	3	160	5
2000	37	0	28	0	43	0	0	205	0	233	179	206	0	251	153	185	0	205	169
2100	42	0	36	0	46	0	0	178	0	211	136	174	0	237	142	182	0	186	179
2200	53	0	50	0	121	0	0	157	0	179	133	158	0	234	113	179	0	183	176
2300	50	0	42	0	156	0	0	179	0	217	111	178	0	260	112	185	0	189	180
2400	53	0	41	0	161	0	0	181	0	257	112	189	0	267	122	190	0	198	183

STATUS CODE(S) DEFINITIONS - 0 = VALID, 1 = QUESTIONABLE, 2 = INVALID, 3 = UNSTABLE DIRECTION, 5 = FLAT DIRECTION
REPORTING RESOLUTION - TEMPERATURE +1 DEGREES, SPEED -1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

HOUR	WIND SPD1		WIND SPD2		WIND SPD3		WIND SPD4		WIND SPD5		WIND SPD6		WIND DIR1		WIND DIR2		WIND DIR3		WIND DIR4		WIND DIR5		WIND DIR6	
	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B	50 A	50 B
1000	59	43	158	133	0	0	198	236	148	200	260	123	198	0	211	181	207	0	221	193	0	0	0	0
2000	68	52	143	124	0	0	199	239	147	203	265	135	201	0	214	186	211	0	226	198	0	0	0	0
3000	83	67	139	118	0	0	222	259	175	223	266	166	220	0	236	199	228	0	248	210	0	0	0	0
4000	92	81	139	117	0	0	233	277	208	235	289	205	231	0	254	206	236	0	261	217	0	0	0	0
5000	103	96	157	166	0	0	238	271	198	239	287	197	230	0	248	207	236	0	254	210	0	0	0	0
6000	95	81	141	144	0	0	228	261	198	231	266	194	225	0	246	200	232	0	252	210	0	0	0	0
7000	124	114	179	188	0	0	237	271	212	240	277	206	235	0	262	206	240	0	264	213	0	0	0	0
8000	119	111	181	190	0	0	241	285	191	244	289	205	236	0	265	207	241	0	260	219	0	0	0	0
9000	126	119	189	198	0	0	240	270	211	242	296	194	235	0	257	203	241	0	271	209	0	0	0	0
10000	126	120	192	200	0	0	240	273	202	244	289	212	236	0	259	214	241	0	263	216	0	0	0	0
11000	102	89	148	149	0	0	232	260	189	233	289	193	221	0	251	193	229	0	262	200	0	0	0	0
12000	91	74	145	127	0	0	218	265	144	220	258	157	207	0	238	165	215	0	241	169	0	0	0	0
13000	103	93	158	160	0	0	237	285	196	240	311	194	229	0	265	205	238	0	265	205	0	0	0	0
14000	181	177	275	288	0	0	248	0	271	233	250	0	282	193	249	0	271	238	254	0	268	241	0	0
15000	92	88	155	163	0	0	252	0	290	223	252	0	309	210	258	0	280	234	261	0	281	236	0	0
16000	109	110	187	199	0	0	259	0	291	228	257	0	295	183	259	0	296	232	261	0	281	220	0	0
17000	187	189	268	283	0	0	265	0	281	247	267	0	295	240	265	0	273	252	270	0	276	256	0	0
18000	208	206	285	298	0	0	266	0	292	241	265	0	291	236	270	0	294	250	275	0	298	260	0	0
19000	181	178	292	293	0	0	329	0	311	296	328	0	316	270	333	0	7	297	336	0	5	300	0	0
20000	119	117	168	170	0	0	314	0	341	278	312	0	346	270	322	0	356	297	324	0	350	305	0	0
21000	124	122	160	163	0	0	311	0	337	280	307	0	7	271	312	0	333	300	314	0	327	304	0	0
22000	100	95	149	160	0	0	285	0	326	246	281	0	327	238	291	0	318	262	293	0	318	270	0	0
23000	136	125	215	224	0	0	292	0	319	261	290	0	332	228	300	0	313	290	302	0	313	292	0	0
24000	135	127	185	194	0	0	290	0	323	260	284	0	315	281	296	0	315	278	298	0	313	277	0	0

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 REPORTING RESOLUTION - TEMPERATURE .1 DEGREES, SPEED .1 MPH, DIRECTION 1 DEGREE, RAINFALL .01 INCHES, NET RADIATION .01 LANGLEY

