NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION
SEMI-ANNUAL OPERATING REPORT
RADIOACTIVE EFFLUENTS
DOCKET NUMBER 50-298

July 1, 1982 — December 31, 1982

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Nebraska Public Power District

GENERAL OFFICE
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March 1, 1983

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Mr. John T. Collins
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011

Subject: Semi-Annual Operating Report - Radioactive Effluents
Cooper Nuclear Station
July 1, 1982 through December 31, 1982
NRC Docket No. 50-298, DPR-46

Dear Mr. Collins:

In accordance with Paragraph 5.4.1.b of the Cooper Nuclear Station Environmental Technical Specifications, the Nebraska Public Power District submits the Cooper Nuclear Station Semi-Annual Operating Report - Radioactive Effluents for the period July 1, 1982 through December 31, 1982.

In accordance with Reg Guide 10.1, Revision 4, we are enclosing one signed original of the report for your use and one copy to the Document Control Desk.

Should you have any questions or comments regarding this report, please contact me.

Sincerely,

Jay M. Pilant

Jay M. Pilant
Division Manager of Licensing
and Quality Assurance

JMP:KMK:cmk
Enclosure

cc: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

EA Report NPP11-9
Revision 0

COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA
SEMIANNUAL OPERATING REPORT
JULY THROUGH DECEMBER 1982

Prepared for
Nebraska Public Power District
P.O. Box 499
Columbus, Nebraska 68601

Prepared by
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G.L. Seegert, Regional Director

2 March 1983

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1. INTRODUCTION

Ecological Analysts, Inc. (EA) has prepared this semiannual operating report for the Nebraska Public Power District to comply with the Cooper Nuclear Station Environmental Technical Specifications to the NRC (Section 5.4.1.b).

This report estimates the radiological doses to the area surrounding the Cooper nuclear facility from routine radiation effluent releases. The dose estimates are based upon the atmosphere dispersion as monitored at the facility.

The report provides a summary of the meteorological data collected during the second six months of 1982. This is followed by estimates of the dispersion characteristics for the period based on the computer model XOQDOQ.

Section 4 reports on the effluent releases and waste disposal at the facility. Dose estimates of gamma radiation due to gaseous releases are presented in Section 5, and individual and population dosages from liquid effluents in Section 6.

Four appendixes are included in the report. The appendixes present in tabular form the data used in the report tables and figures. Additional tables of radiological doses not found in the body of the report also are presented.

2. METEOROLOGICAL DATA SUMMARY

The meteorological data collected at the Cooper Nuclear Station during the second half of 1982 are summarized in Tables 2-1 and 2-2. These tables were compiled from the monthly data tables presented in Appendix A. Table 2-1 summarizes the data recovery for each of the meteorological parameters. Table 2-2 summarizes the meteorological data. The annual statistics in Tables 2-1 and 2-2 are obtained using the data presented in Appendix A of this report and the Cooper Nuclear Station Semiannual Operating Report, January - June 1982 (NPPD 1982).

2.1 THIRD QUARTER (July - September 1982)

Data recovery for the third quarter was greater than 96 percent for each parameter except the 35-ft wind speed and direction. Data recovery for the 35-ft wind speed was 84.7 percent; the missing data was primarily due to malfunctions in the 35-ft wind speed system. Data recovery for the 35-ft wind direction was 87.3 percent; the missing data was primarily due to the recorder pen not inking. Charts running off accounted for the majority of the data lost by the other parameters.

METEOROLOGICAL SUMMARY--The prevailing wind direction for the third quarter of 1982 was from the southsoutheast - southsouthwest at the 318-ft level and from the southeast - south at the 35-ft level. The next most common direction was from the northnorthwest - northnortheast at the 318-ft level and from the north - northeast at the 35-ft level. The 318-ft wind speed was between 8-19 mph 56.3 percent of the time and less than 8 mph 39.6 percent of the time. The 35-ft wind speed was between 8-19 mph 28.3 percent of the time and less than 8 mph 71.1 percent of the time. The third quarter of 1982 was slightly cooler and drier than the climatological normal for Auburn, Nebraska, the closest National Weather Service Climatic Station (10 miles west of the plant site).

ATMOSPHERIC STABILITY--Differential temperature is measured between both the 318-35 ft and 318-155 ft levels. Atmospheric stability is derived from the 318-35 ft differential temperature data and is reduced to the seven Pasquill stability categories for use in the joint frequency of wind speed and wind direction analysis. The grand total joint frequency of occurrence given in the lower right-hand corner of the joint frequency of occurrence by atmospheric stability tables is used to determine the frequency of occurrence of each stability class. The grand total joint frequency of occurrence for the 318-ft wind speed versus 318-ft wind direction by stability class was used to determine the frequency of the atmospheric stability categories. Based on the 318 ft wind speed and direction joint frequency tables, the atmosphere was unstable 20.4 percent of the time, neutral 37.6 percent of the time, and stable 41.9 percent of the time for the third quarter of 1982.

2.2 FOURTH QUARTER (October - December 1982)

Data recovery for the fourth quarter was greater than 92 percent for each parameter except the 35 ft wind speed, which was 54 percent. The majority of lost data was caused by charts running off the spool and

recorder pens not inking. The missing 35 ft wind speed data were primarily caused by instrument malfunctions which were not satisfactorily repaired until December 1982.

METEOROLOGICAL SUMMARY--The prevailing wind direction for the fourth quarter was from the southsoutheast - southsouthwest at both the 35-ft and 318-ft heights. The next most common wind direction was from the northwest - north at both the 35-ft height and the 318-ft heights. The 35-ft wind speed was between 8-19 mph 35.1 percent of the time and less than 8 mph 62.5 percent of the time. The 318-ft wind speed was between 8-19 mph 59.1 percent of the time and less than 8 mph 26.1 percent of the time. The fourth quarter of 1982 was cooler and slightly wetter than the climatological normal for Auburn, Nebraska.

ATMOSPHERIC STABILITY--Based on the joint frequency tables, the atmosphere was unstable 18.2 percent of the time, neutral 36.3 percent of the time, and stable 45.5 percent of the time.

2.3 SEMIANNUAL PERIOD (July - December 1982)

Data recovery for the second half of the year was 89 percent or greater for each parameter except the 35-ft wind speed parameter. Data recovery for the 35-ft wind speed parameter was 69 percent. Reasons for data loss were given under the quarterly headings.

METEOROLOGICAL SUMMARY--The prevailing wind direction for the second half of the year was from the southsoutheast - southsouthwest at both the 35-ft and 318-ft heights. The next most common wind direction was from the northnorthwest - northnortheast at both the 35-ft and 318-ft heights. The 35-ft wind speed was between 8-19 mph 31.1 percent of the time and less than 8 mph 67.5 percent of the time. The 318-ft wind speed was between 8-19 mph 57.7 percent of the time and less than 8 mph 32.8 percent of the time. The second half of the year was cooler and drier than the climatological normal for Auburn, Nebraska.

ATMOSPHERIC STABILITY--Based on the joint frequency tables, the atmosphere was unstable 19.3 percent of the time, neutral 37.0 percent of the time, and stable 43.7 percent of the time.

2.4 ANNUAL PERIOD (January - December 1982)

Data recovery for the year was 93 percent or greater for each parameter except for the 35 ft wind speed data which was 81 percent. Reasons for data loss were given under the quarterly headings in this report and in the Cooper Nuclear Station Semiannual Operating Report, January - June 1982 (NPPD 1982).

METEOROLOGICAL SUMMARY--The prevailing wind direction for the year was southsoutheast - southsouthwest at both the 35-ft and the 318-ft heights. The next most common direction was at northnorthwest - northnortheast at the 35-ft height and northwest - north at the 318-ft height. The 35-ft wind speed was between 8-19 mph 37.4 percent of the time and less than 8 mph 57.4 percent of the time. The 318-ft wind speed was between 8-19

mph 56.3 percent of the time and less than 8 mph 31.0 percent of the time. The annual period was cooler and much drier than the climatological normal for Auburn, Nebraska.

ATMOSPHERIC STABILITY--Based on the joint frequency tables, the atmopshere was unstable 22.3 percent of the time, neutral 39.6 percent of the time, and stable 38.1 percent of the time.

TABLE 2-1 RECOVERY STATISTICS FOR METEOROLOGICAL DATA COLLECTED AT COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER 1982.

Parameter	JUL	AUG	SEP	JUL-SEP	OCT	NOV	DEC	OCT-DEC	JUL-DEC	JAN-DEC
Wind speed										
318-ft	99.6	96.9	96.5	97.7	98.1	99.7	98.8	98.9	98.3	97.5
35-ft	86.2	78.6	89.4	84.7	12.1	70.7	81.3	54.5	69.6	81.7
Wind direction										
318-ft	99.6	96.9	96.5	97.7	97.6	99.7	97.7	98.3	98.0	97.5
35-ft	89.5	79.4	93.2	87.3	96.0	90.7	89.5	92.1	89.7	93.8
35-ft ambient temperature	99.3	99.5	99.7	99.5	99.5	100.0	99.6	99.7	99.6	99.5
Differential temperature										
318-35 ft	97.4	99.5	91.8	96.3	97.3	99.3	98.9	98.5	97.4	95.3
318-155 ft	97.4	99.5	91.8	96.3	98.1	98.9	98.9	98.6	97.5	94.8
Precipitation	95.3	97.2	97.2	96.6	99.7	94.3	96.1	96.7	96.6	97.7

(a) Percent data recovery is defined as the number of valid data hours in the period divided by the maximum possible data hours in the period multiplied by 100.

TABLE 2-2 SUMMARY OF METEOROLOGICAL DATA MEASURED AT THE COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER 1982.

	JUL	AUG	SEP	JUL-SEP	OCT	NOV	DEC	OCT-DEC	JUL-DEC	JAN-DEC
318-ft Wind										
Mean speed (mph)	10	9	11	10	13	13	11	12	11	12
Maximum speed (mph)	28	24	29	29	33	40	28	40	40	45
Direction of maximum speed	ENE	WSW	S	S	NW	NNW	NW	NNW	NNW	NW
Date of maximum speed	20 JUL	4 AUG	28 SEP	28 SEP	19 OCT	12 NOV	18 DEC	12 NOV	12 NOV	2 APR
Prevailing direction(a)				SSE-SSW				SSE-SSW	SSE-SSW	SSE-SSW
35-ft Wind										
Mean speed (mph)	7	5	6	6	5	7	7	7	6	8
Maximum speed (mph)	22	19	19	22	16	33	24	33	33	36
Direction of maximum speed	SSW	WSW	S	SSW	W	NNW	SW	NNW	NNW	NW
Date of maximum speed	5 JUL	4 AUG	28 SEP	5 JUL	11 OCT	12 NOV	13 DEC	12 NOV	12 NOV	2 APR
Prevailing direction (a)				SE-S				SSE-SSW	SSE-SSW	SSE-SSW
35 ft Ambient Temperature (C)										
Mean	25.4	22.3	18.1	22.0	12.3	3.3	0.0	5.2	13.6	9.9
Departure from normal(b)	0.3	-2.0	-1.2	-0.9	-1.5	-2.0	1.1	-0.8	-0.8	-1.7
Maximum	36.3	35.5	29.7	36.3	29.5	18.8	16.3	29.5	36.3	36.3
Date of maximum	3 JUL	3 AUG	1 SEP	3 JUL	5 OCT	9 NOV	1 DEC	5 OCT	3 JUL	3 JUL
Minimum	14.8	12.2	2.8	2.8	-3.3	-11.1	-13.6	-13.6	-13.6	-28.1
Date of minimum	31 JUL	11 AUG	21 SEP	21 SEP	2[illegible] OCT	24 NOV	29 DEC	29 DEC	29 DEC	10 JAN
Precipitation (in.)										
Total	1.71	7.47	0.93	10.11	0.88	0.79	3.32	4.99	15.10	27.44
Departure from normal(b)	-2.40	2.99	-3.14	-2.55	-1.64	-0.37	2.27	0.26	-2.29	-7.86
Rain days(c)	8	15	4	27	6	4	8	18	45	97
Maximum in a single day	0.66	2.60	0.50	2.60	0.38	0.47	1.31	1.31	2.60	2.64
Date	6 JUL	12 AUG	6 SEP	12 AUG	28 OCT	11 NOV	27 DEC	27 DEC	12 AUG	20 MAY
Maximum in a single hour	0.45	1.19	0.25	1.19	0.16	0.13	0.51	0.51	1.19	1.19
Date	6 JUL	12 AUG	6 SEP	12 AUG	8 OCT	11 NOV	1 DEC	1 DEC	12 AUG	12 AUG

(a) Prevailing direction is derived from the quarterly joint frequency tables and is reported for the quarterly period only.
(b) The climatological normals were derived from NOAA climatological data for Auburn, Nebraska.
(c) Rain days are defined as a day in which 0.01 in. of rain or rain equivalent of frozen precipitation has fallen.

3. DISPERSION CHARACTERISTICS (X/Q) ISOPLETHS

Estimates of the atmospheric dispersion characteristics (X/Q) for the second half of 1982 were made using the NRC supplied model XOQDOQ (U.S. NRC 1977b). Key input to the model is the joint frequency distribution (JFT) of atmospheric stability, wind speed, and wind direction. The JFT was determined from the meteorological data and is presented in Appendix B. This section presents the model-calculated locations of equal dispersion for both the 5- and 50-mile radius circles from the Cooper Nuclear Station (Figures 3-3 to 3-18). The periods covered are July-September, October-December, July-December, and January-December. Separate figures are given for the vent stack and elevated release options.

The data tables from which the isopleth figures were derived are presented in Appendix C and the XOQDOQ computer model is discussed in Appendix D. The XOQDOQ computer model implements the models and assumptions of Regulatory Guide 1.111 (U.S. NRC 1976).

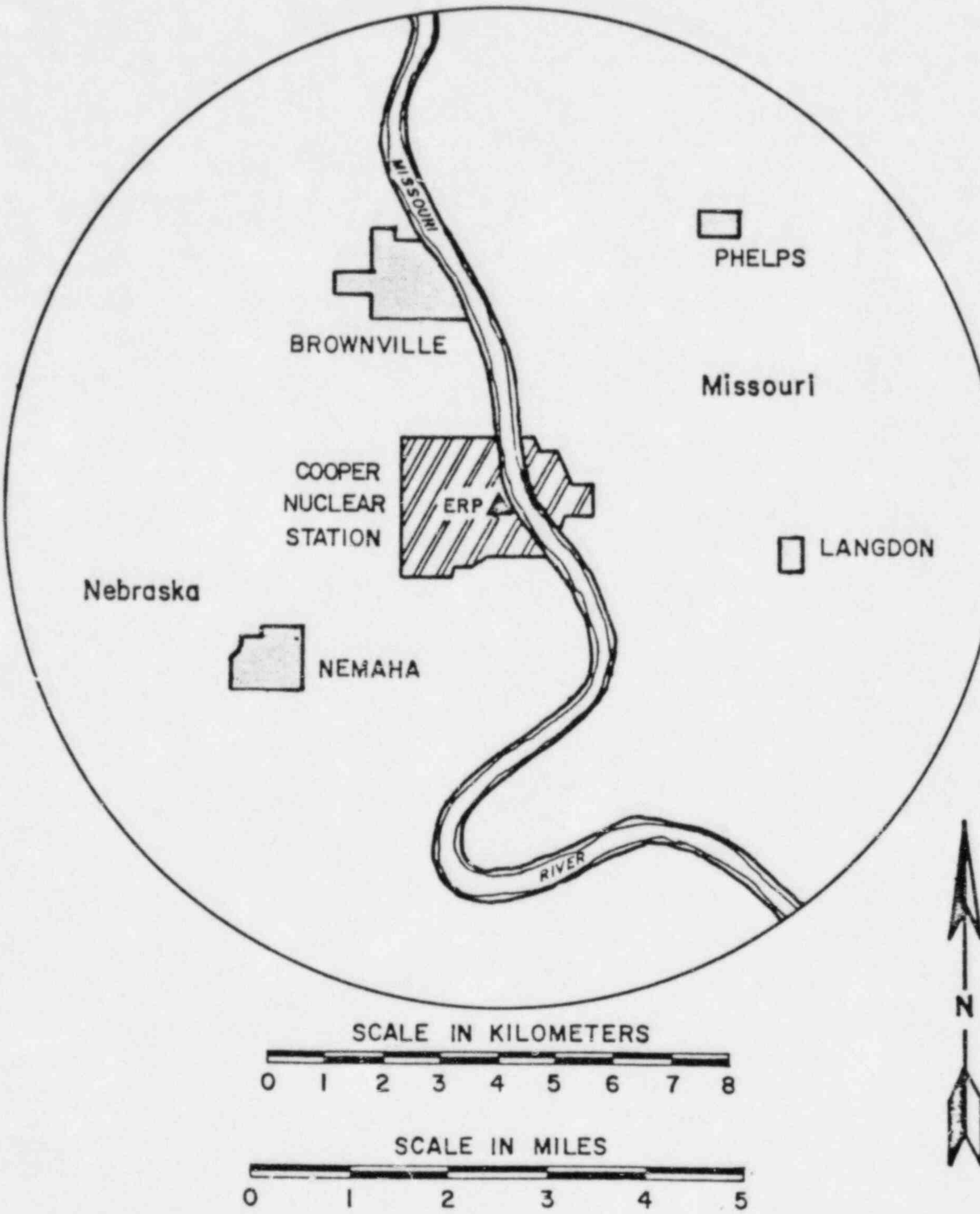

Figure 3-1 Cooper Nuclear Station, Brownville, Nebraska and surrounding area in the range of 0-5 miles.

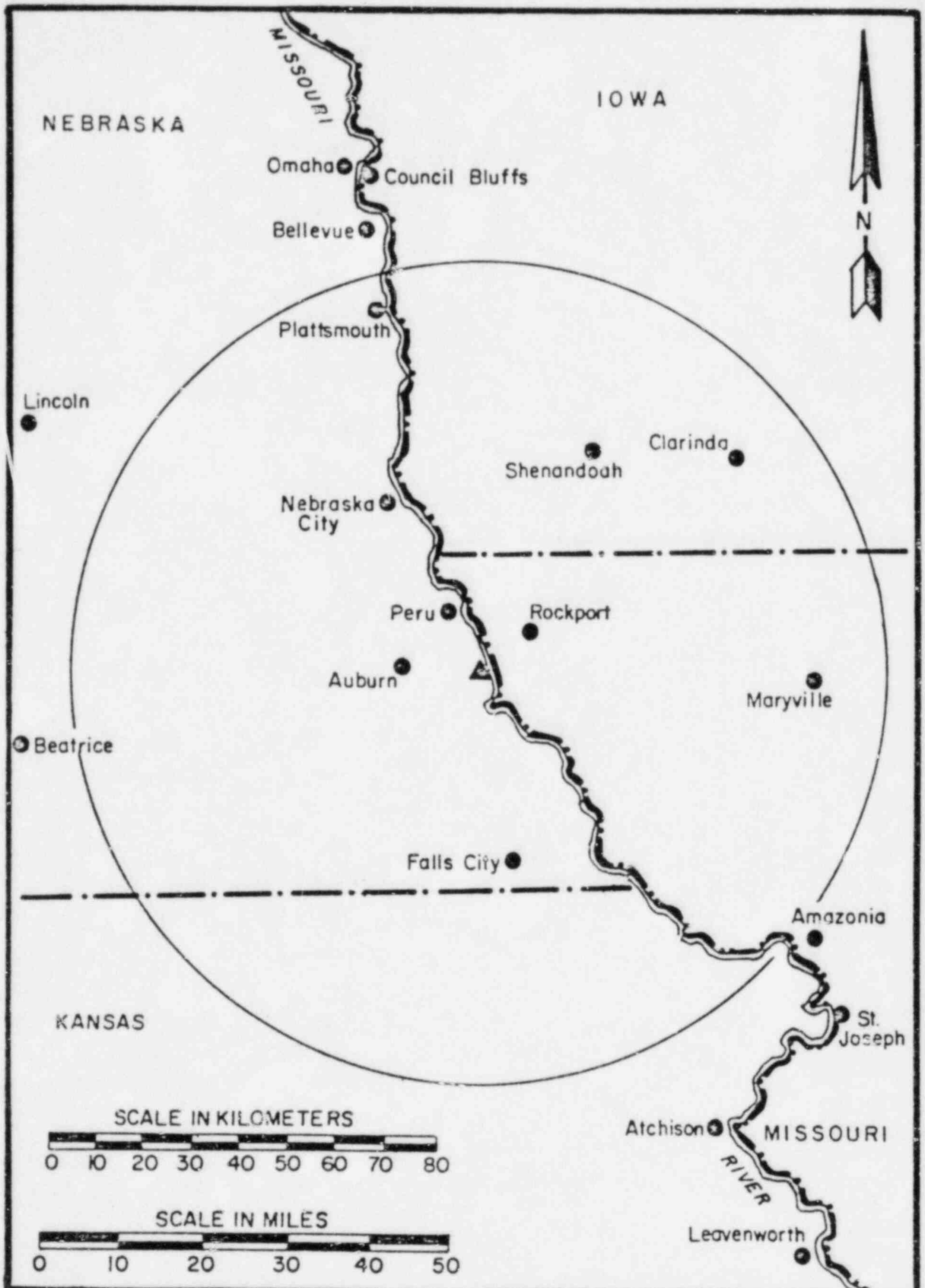

Figure 3-2 Cooper Nuclear Station, Brownville, Nebraska and surrounding area in the range of 0-50 miles.

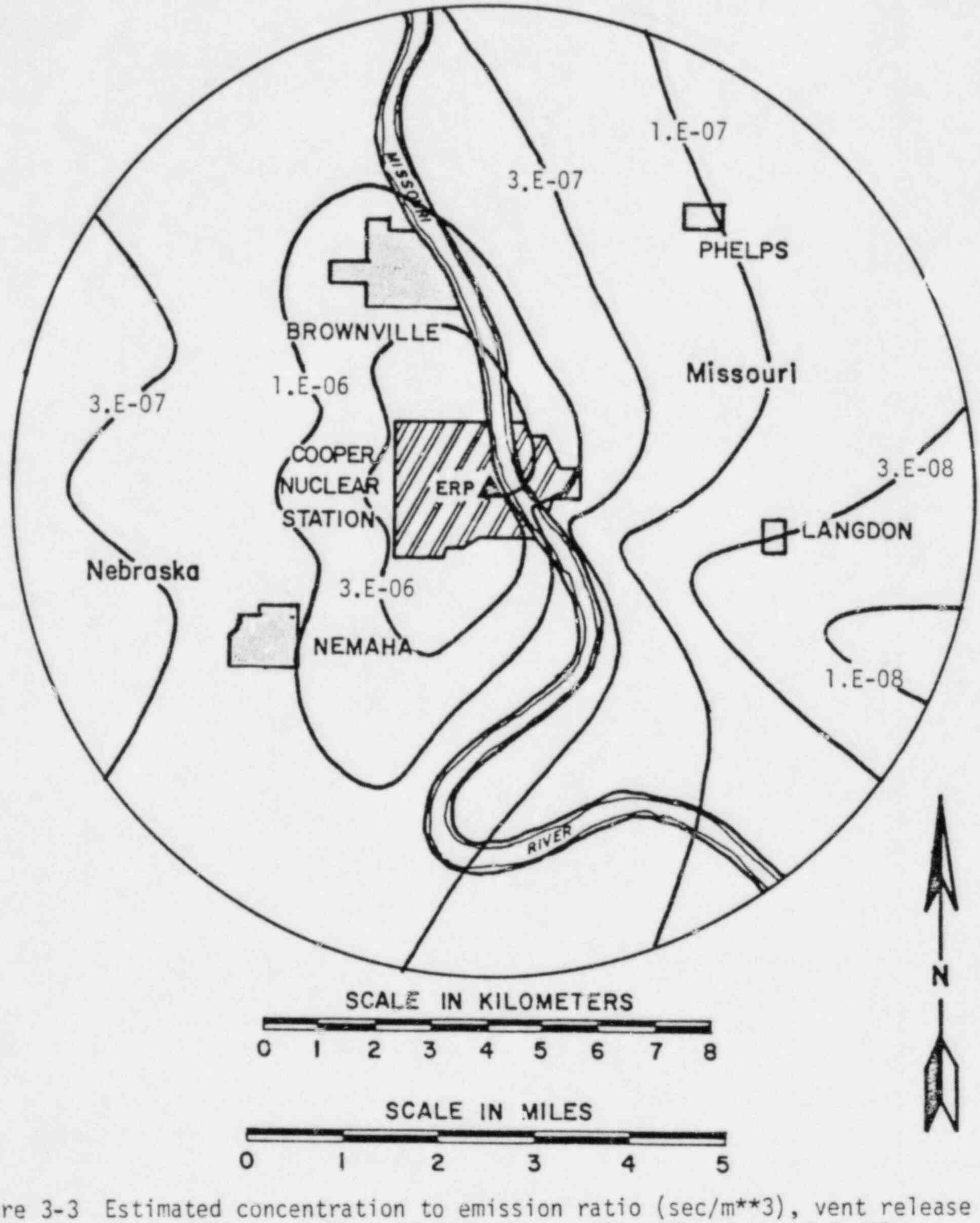

Figure 3-3 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, July-September 1982

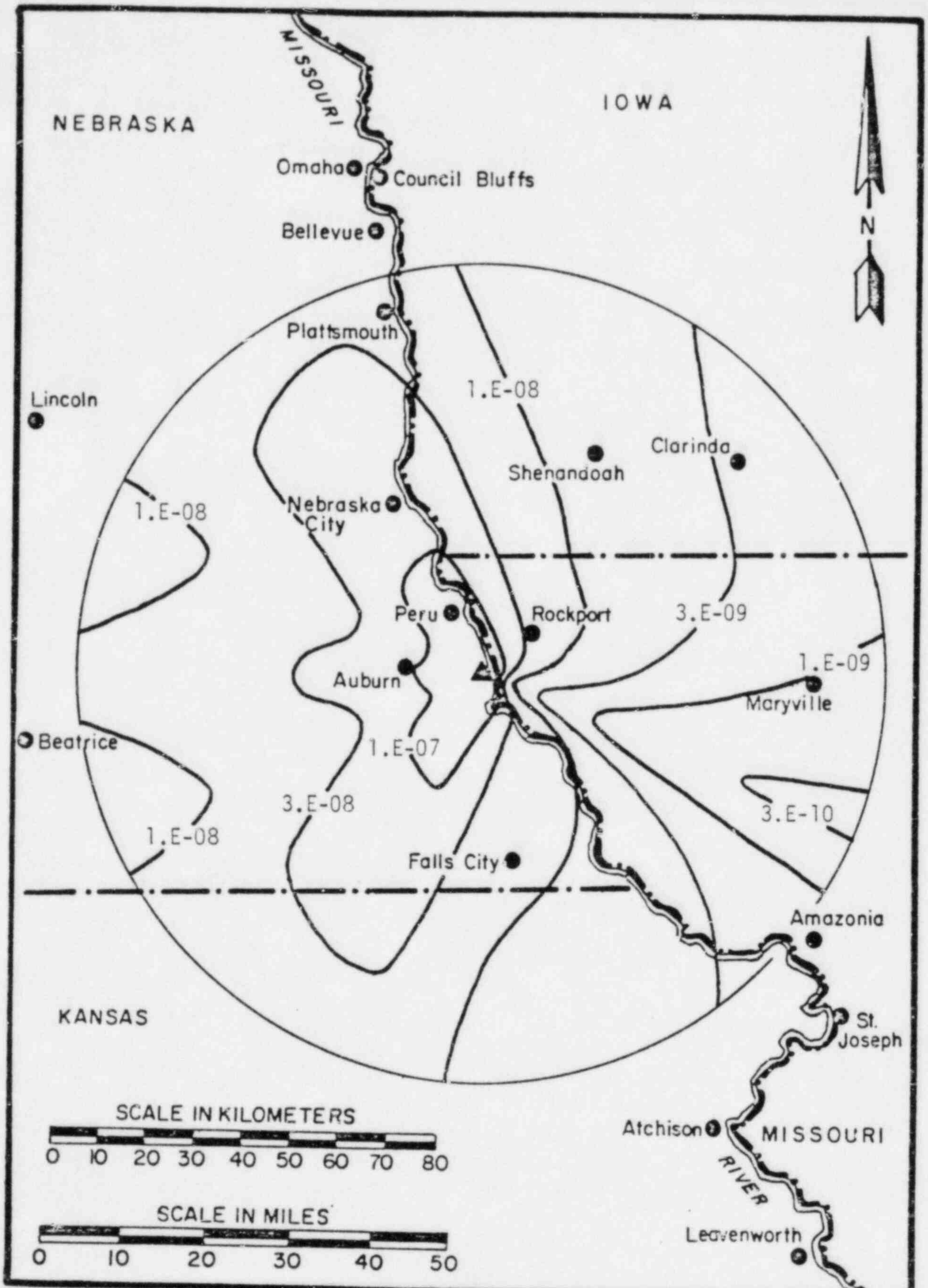

Figure 3-4 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, July-September 1982.

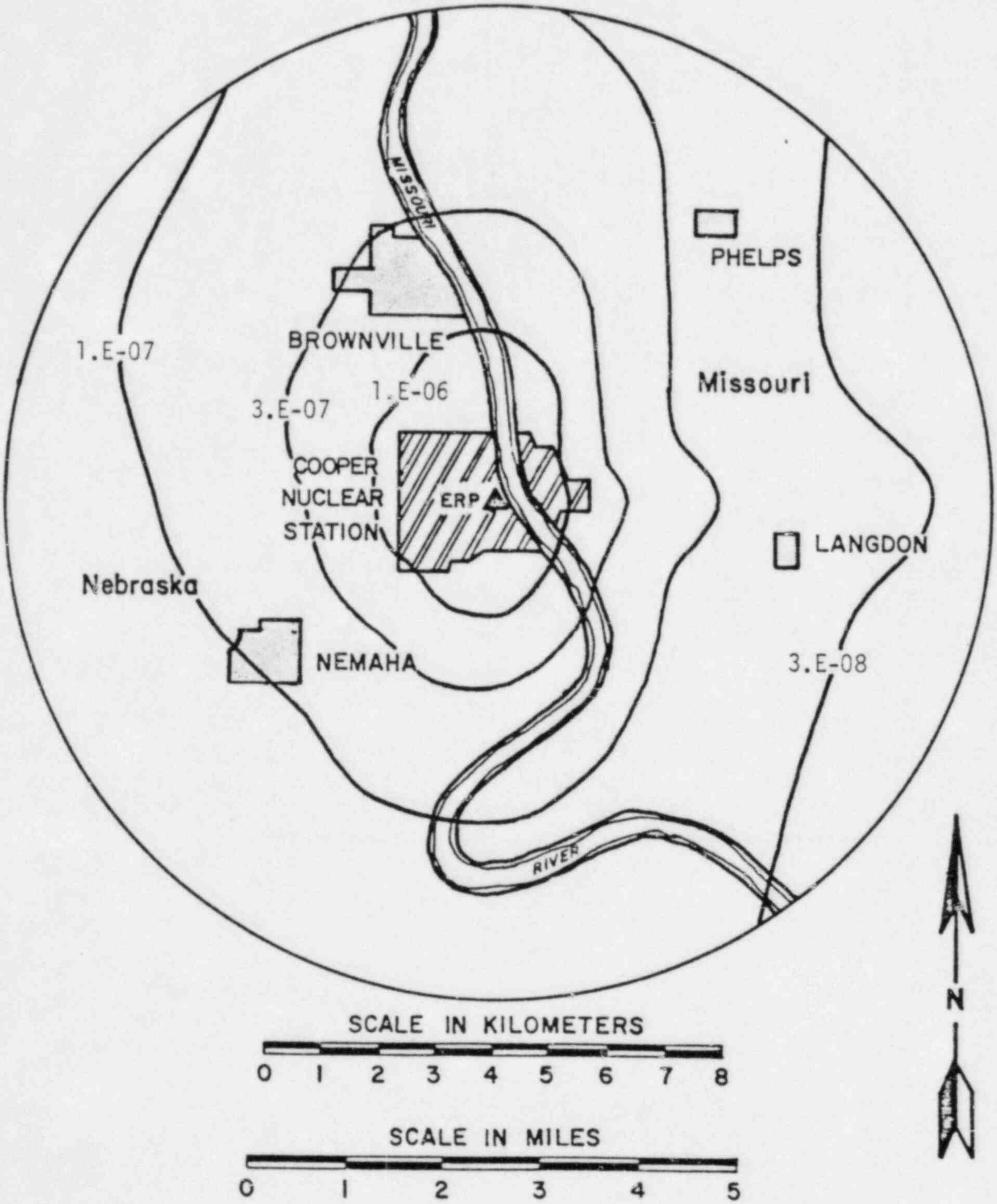

Figure 3-5 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, July-September 1982.

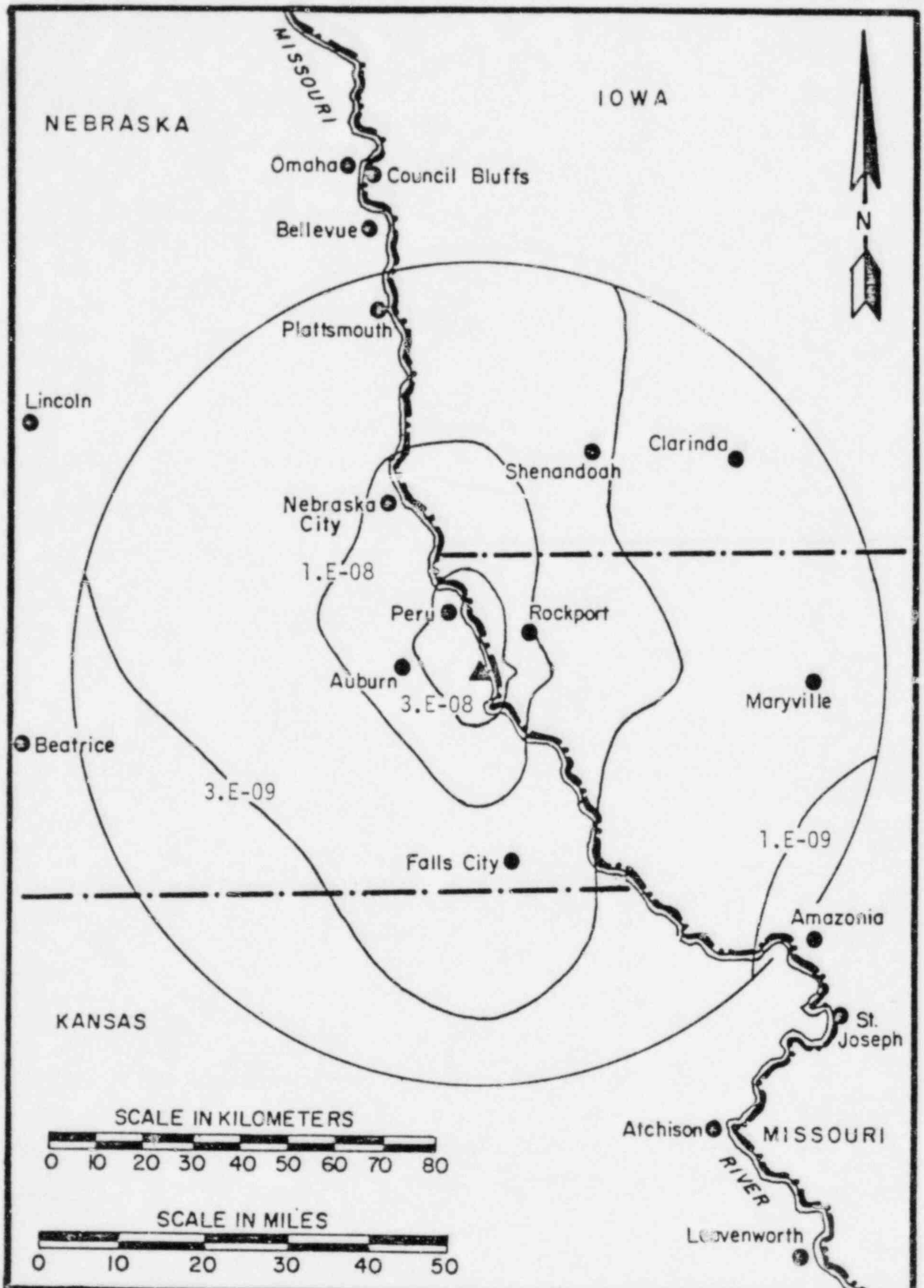

Figure 3-6 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, July-September 1982.

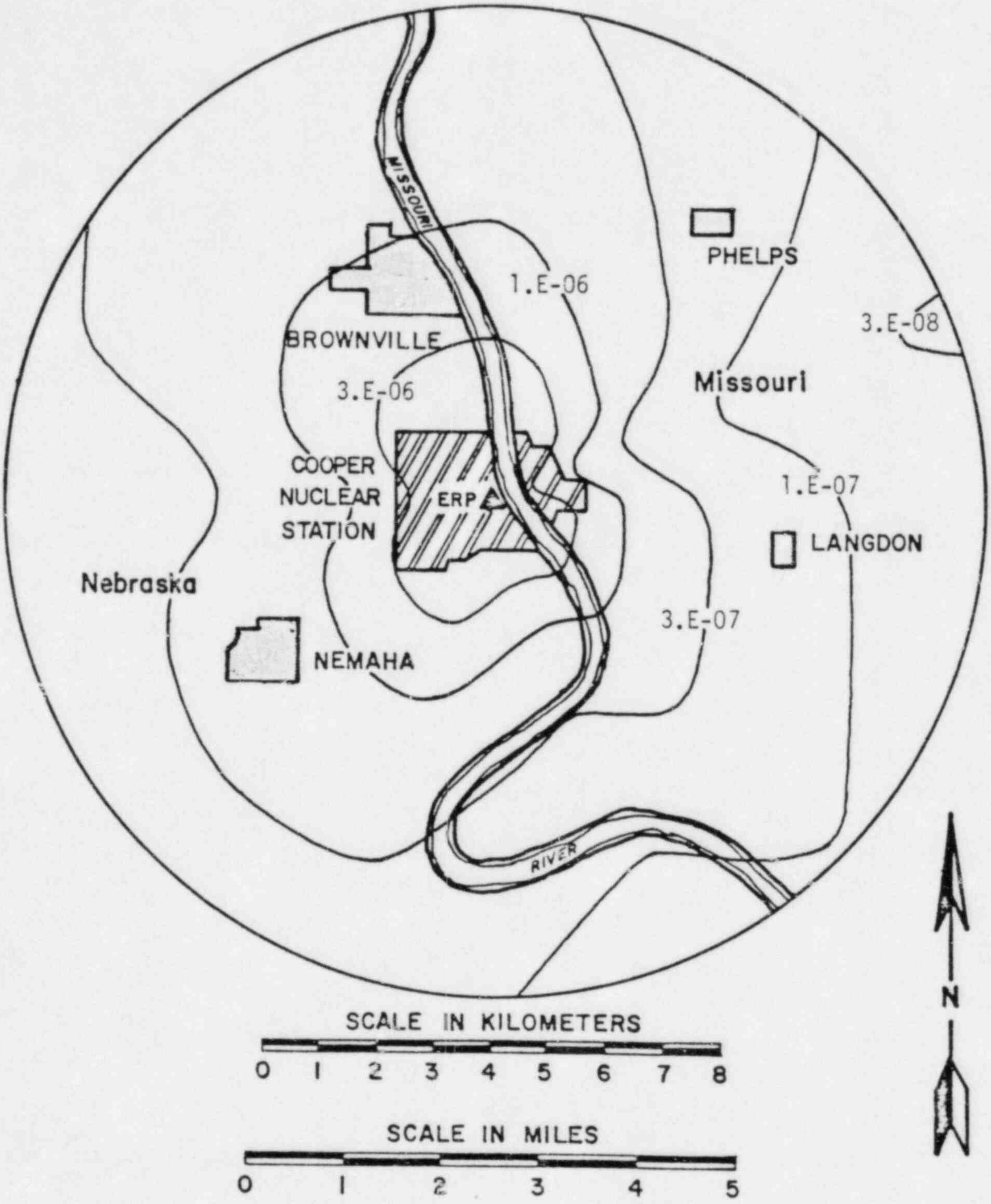

Figure 3-7 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, October-December 1982.

Figure 3-8 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska 0-50 miles, October-December 1982.

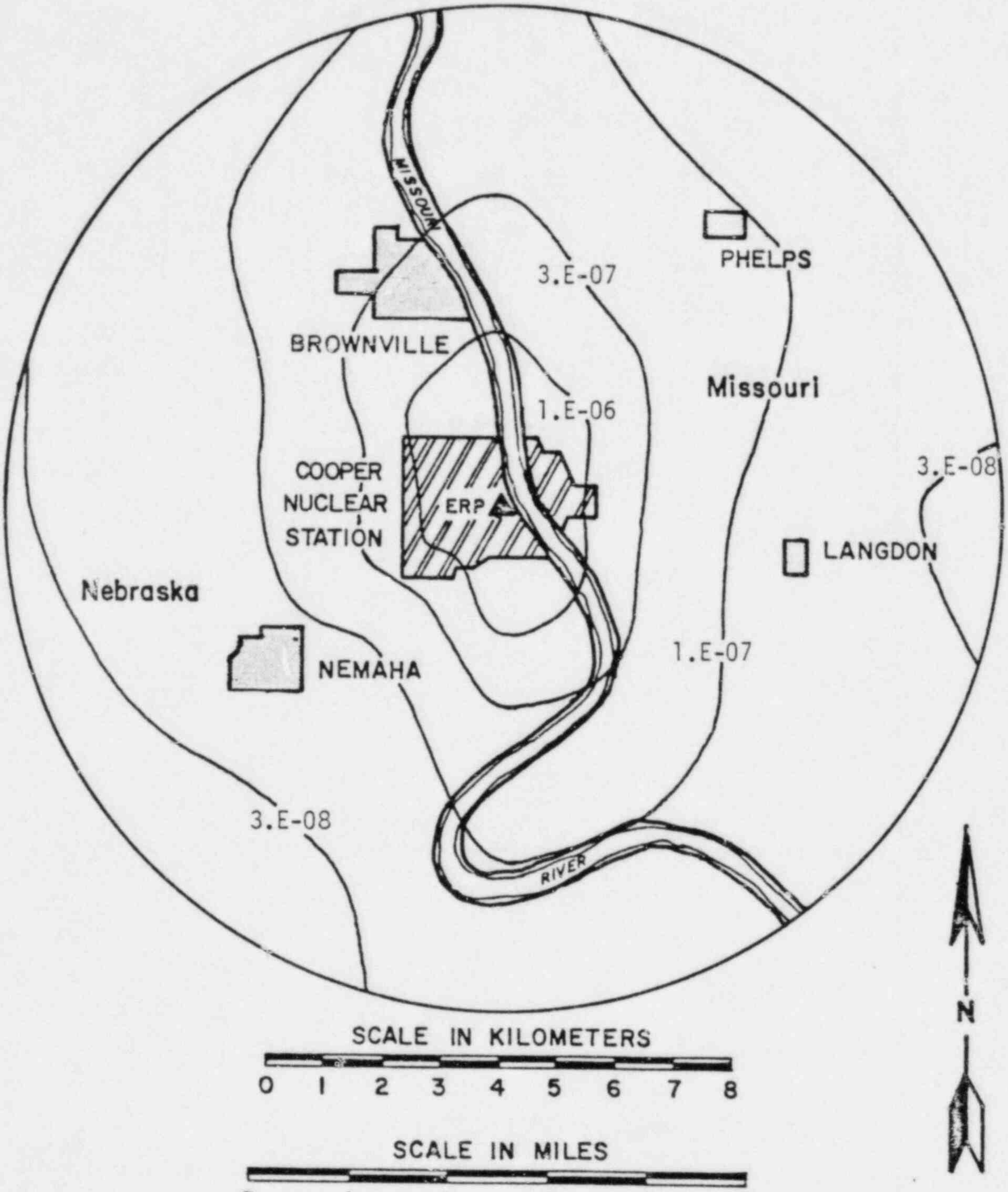

Figure 3-9 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska 0-5 miles, October-December 1982.

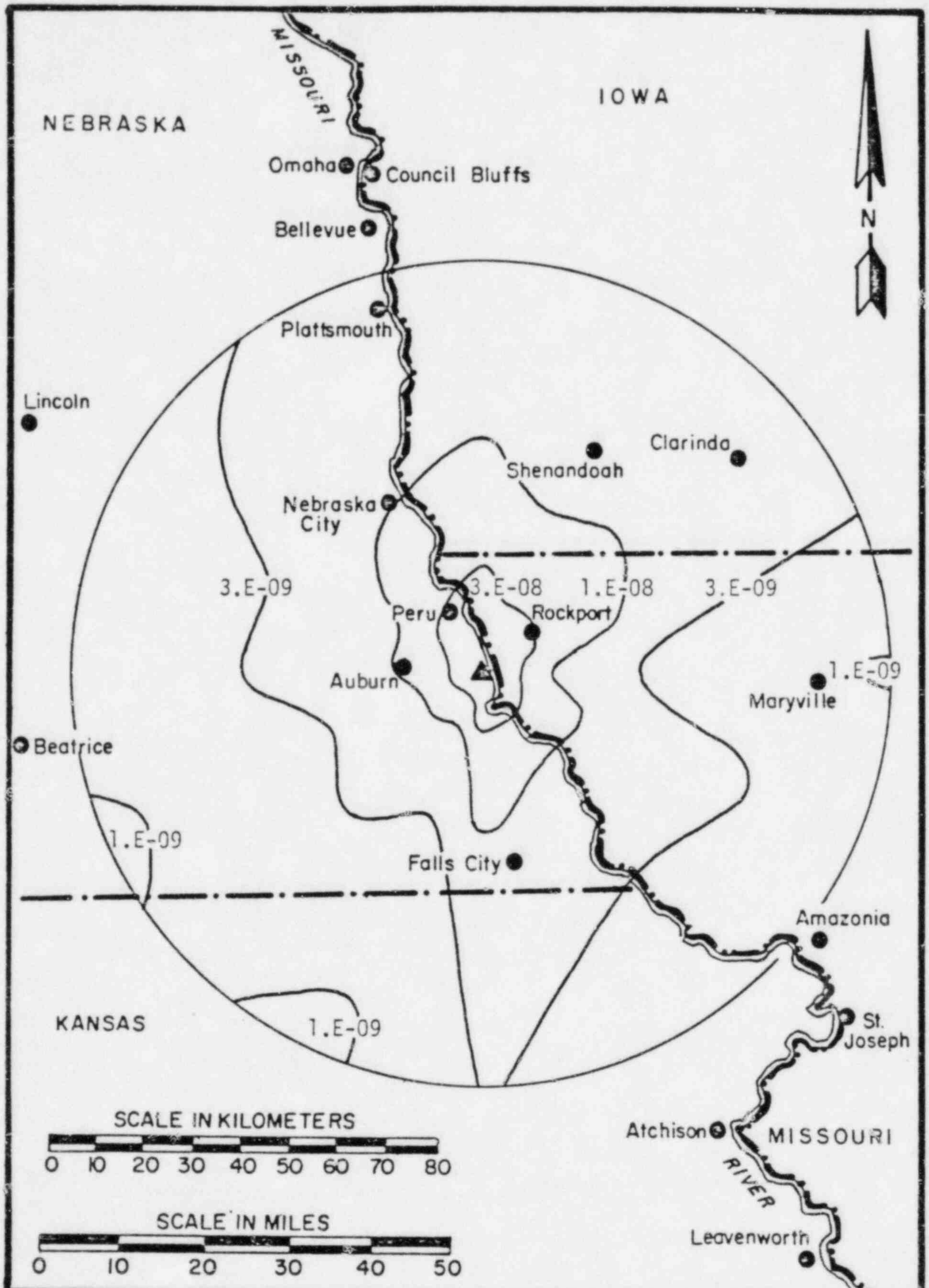

Figure 3-10 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, October-December 1982.

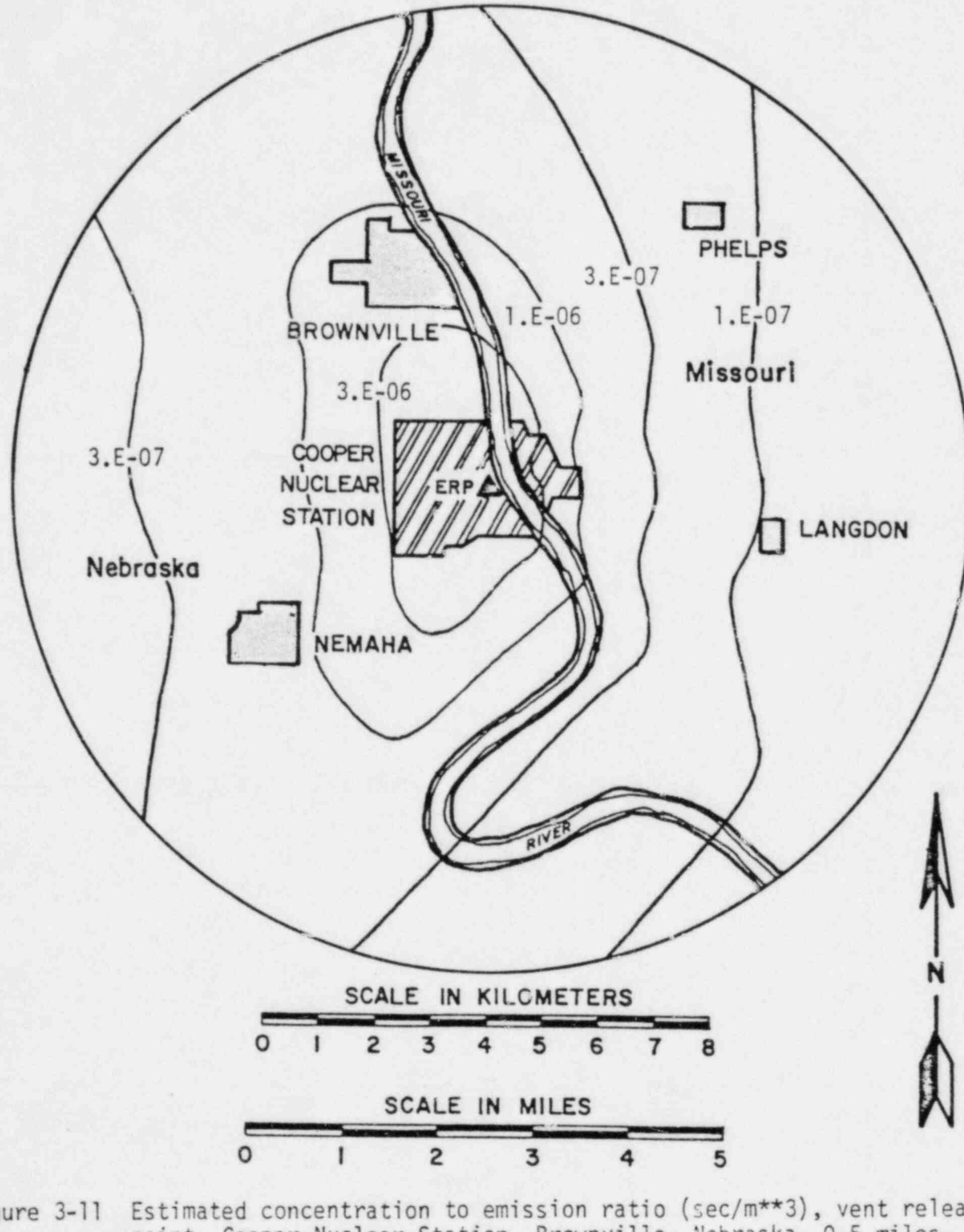

Figure 3-11 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, July-December 1982.

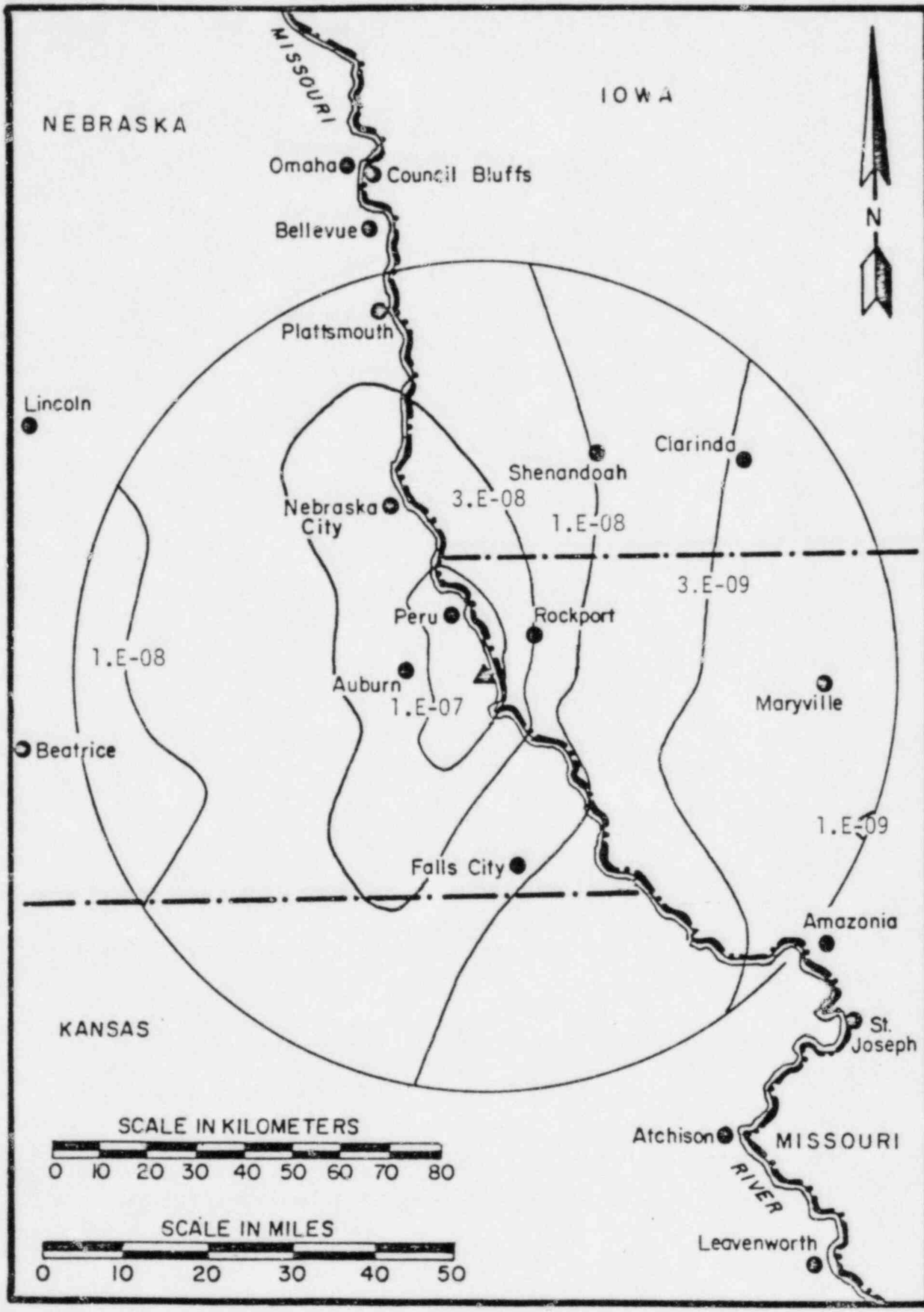

Figure 3-12 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska 0-50 miles, July-December 1982.

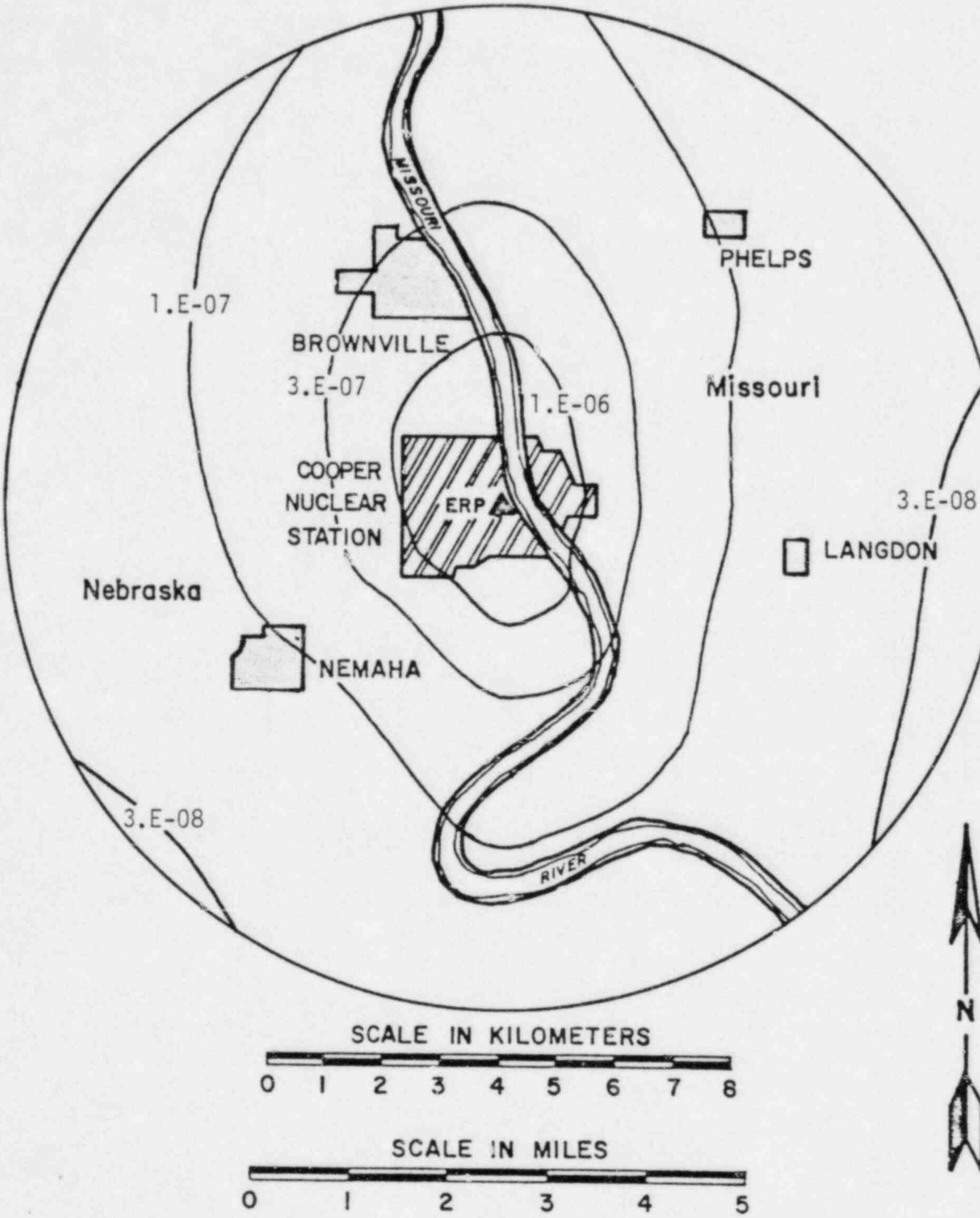

Figure 3-13 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, July-December 1982.

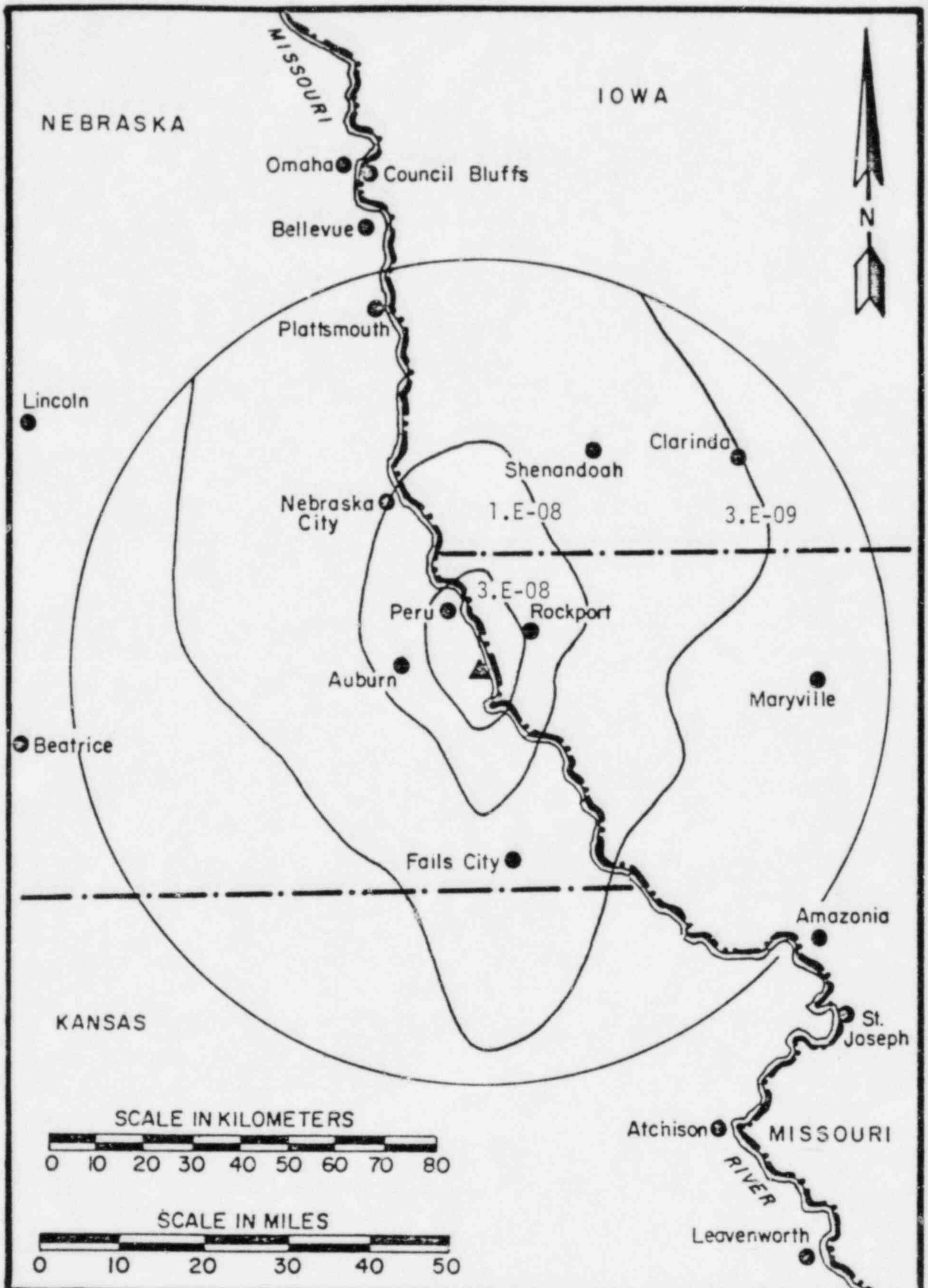

Figure 3-14 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska 0-50 miles, July-December 1982.

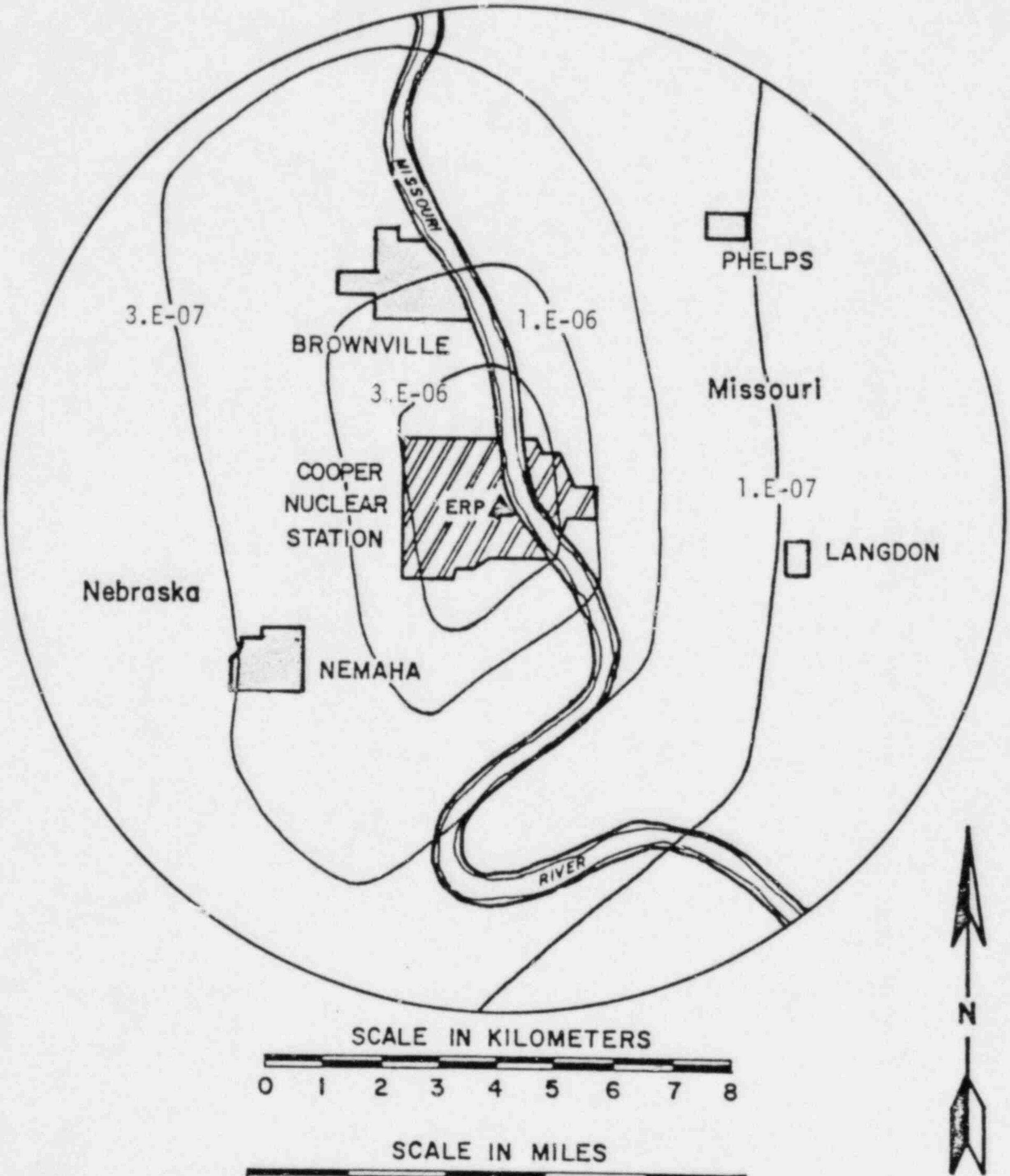

Figure 3-15 Estimated concentration to emission ratio (sec/m**3), vent release pcint, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, January-December 1982.

Figure 3-16 Estimated concentration to emission ratio (sec/m**3), vent release point, Cooper Nuclear Station, Brownville, Nebraska 0-50 miles, January-December 1982.

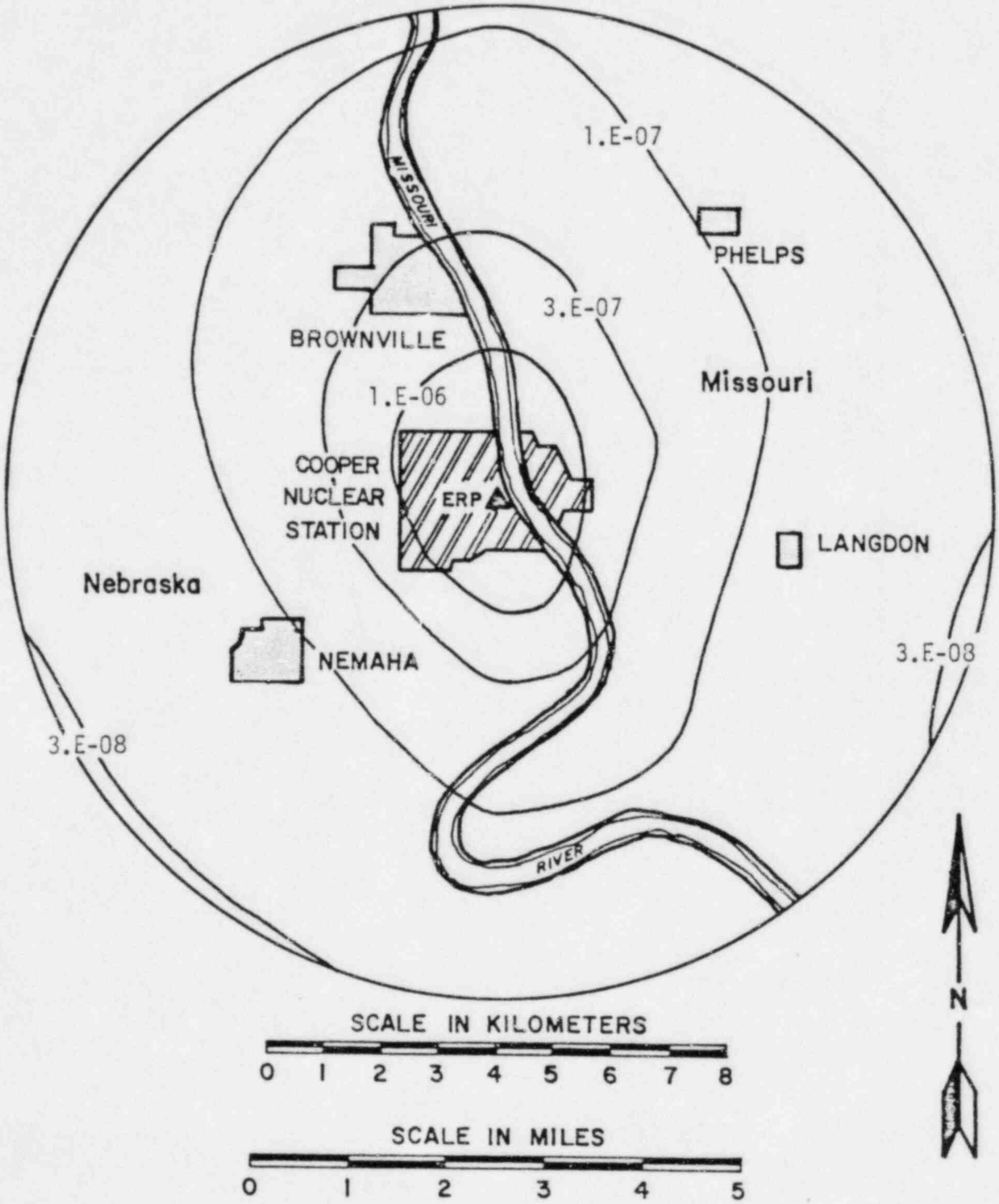

Figure 3-17 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, January-December 1982.

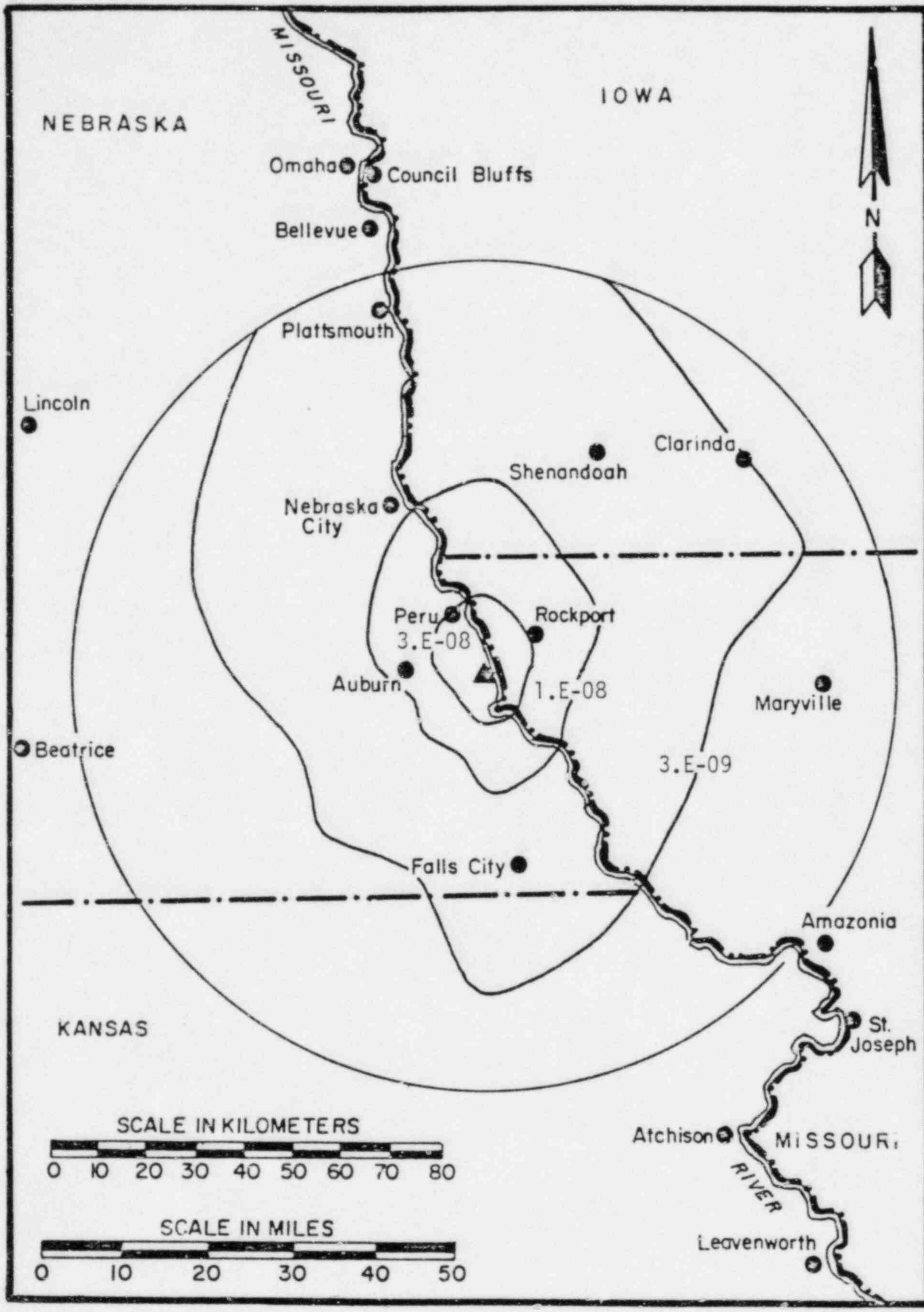

Figure 3-18 Estimated concentration to emission ratio (sec/m**3), elevated release point, Cooper Nuclear Station, Brownville, Nebraska 0-50 miles, January-December 1982.

4. EFFLUENT AND WASTE DISPOSAL (January - June 1982)

Cooper Nuclear Station effluent and waste disposal data are presented in the format prescribed by Regulatory Guide 1.21 (U.S. NRC 1974). Meteorological data required by Table 4A and B of Regulatory Guide 1.21 are in Appendix B.

Facility--Cooper Nuclear Station License--DPR-46

4.1 REGULATORY LIMITS

a. Fission and Activation Gases

Restrictions on gaseous activity release:

Maximum release rate of noble gases and tritium (except for halogens and particulates with half-lives >8 days):

$$Qs(2.5\bar{E}\gamma s + 1.25\bar{E}\beta s) + Qv(7.3\bar{E}\gamma v + 77\bar{E}\beta v) \leq 0.16$$

when averaged over a calendar quarter.

γ - gamma
β - beta

where

Qs and Qv = the quarterly release rates in curies/second of radioisotopes from the stack, reactor building, and turbine building vents
$\bar{E}\gamma s$ and $\bar{E}\gamma v$ = the average gamma energies per disintegration of stack and vent effluents
$\bar{E}\beta s$ and $\bar{E}\beta v$ = the average beta energies from stack and vent effluents.

b. and c. Iodines and Particulates with Half-Lives >8 Days

The release rates of I-131 and particulates with half-lives greater than eight days released to the environs as part of airborne effluents shall not exceed:

$$\frac{Qs}{7.7 \times 10^{-6}} + \frac{Qv}{2.1 \times 10^{-6}} \leq 0.08$$

when averaged over a calendar quarter.

Where

Qs and Qv = the quarterly release rates in curies/second of I-131 and particulates with half-lives longer than eight days from the stack, reactor building, and turbine building vents.

d. Liquid Effluents

Maximum calendar quarter release rate of radioactive liquid effluents (excluding tritium and noble gases): 25 curies.

Maximum activity of discharged liquid radwaste tank (sample tank only): 10 curies.

Maximum radioactivity release concentration of discharge channel liquid effluents shall not exceed the values specified in 10 CFR 20, Appendix B, Table II, Column 2, for unrestricted areas.

4.2 MAXIMUM PERMISSIBLE CONCENTRATIONS

No maximum permissible concentrations (MPC) values are required specifically in Cooper Nuclear Station Environmental Technical Specifications for:

a. Fission and activation gases,
b. Iodines, or
c. Particulates with half lives >8 days

The equation in 4.1a under Regulatory Limits provides a method to be used in summing the gaseous airborne effluents from the main stack and vents which will assure that the release rate does not exceed 10 CFR Part 20 for unrestricted areas.

The equation presented in 4.1b and 4.1c under Regulatory Limits provides a method to be used in summing airborne halogens and particulates with half-lives >8 days released from the stack and vents to ensure that the release rate does not exceed 10 CFR Part 20, Appendix B, Table II, Column 1, for unrestricted areas.

d. Liquid effluents

The MPC used to calculate permissible liquid release rates are from 10 CFR 20, Appendix B, Table II, Column 2, and applicable notes to 10 CFR 20, Appendix B.

4.3 AVERAGE ENERGY

The average energy ($\overline{E}$) of the radionuclide mixtures of fission and activation gases released is as follows:

Third Quarter:	Fourth Quarter:
$\overline{E}\beta s$ = 0.29 Mev/disintegration	$\overline{E}\beta s$ = 0.21 Mev/disintegration
$\overline{E}\gamma s$ = 0.37 Mev/disintegration	$\overline{E}\gamma s$ = 0.20 Mev/disintegration
$\overline{E}\beta v(Rx)$ = 0.45 Mev/disintegration	$\overline{E}\beta v(Rx)$ = 0.41 Mev/disintegration
$\overline{E}\gamma v(Rx)$ = 0.83 Mev/disintegration	$\overline{E}\gamma v(Rx)$ = 0.78 Mev/disintegration
$\overline{E}\beta v(TG)$ = 0.42 Mev/disintegration	$\overline{E}\beta v(TG)$ = 0.39 Mev/disintegration
$\overline{E}\gamma v(TG)$ = 0.81 Mev/disintegration	$\overline{E}\gamma v(TG)$ = 0.76 Mev/disintegration
$\overline{E}\beta v(ARW)$ = 0.51 Mev/disintegration	$\overline{E}\beta v(ARW)$ = 0.47 Mev/disintegration
$\overline{E}\gamma v(ARW)$ = 0.84 Mev/disintegration	$\overline{E}\gamma v(ARW)$ = 0.81 Mev/disintegration

4.4 MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY

The methods used to measure or approximate the total radioactivity in effluents and to determine radionuclide composition are as follows:

a. Fission and activation gases:

   Radioactivity and radionuclide composition is determined by laboratory GeLi detector analysis in correlation with continuous gross radioactivity monitoring by a gaseous channel detector in the release pathway.

b. Iodines:

   Charcoal cartridges provide continuous sample collection. These cartridges are analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Continuous radioactivity monitoring of the charcoal cartridge is also provided by a NaI detector in-line with the release pathway.

c. Particulates:

   Particulate filters provide continuous sample collection. These filters are analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Continuous gross radioactivity monitoring of the particulate filter is provided by a NaI detector in-line with the release pathway.

d. Liquid effluents:

Each batch of liquid effluent is analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Each batch is also analyzed for gross radioactivity by both gross beta and gamma. In addition, each batch is monitored for gross radioactivity by an NaI detector in-line with the release pathway.

4.5 BATCH RELEASES

The following information relates to batch releases of radioactive materials in liquid and gaseous effluents:

a. Liquid

1.	Number of batch releases	102
2.	Total time period for batch releases	2.45 E+04 minutes
3.	Maximum time period for a batch release	4.53 E+02 minutes
4.	Average time period for batch releases	2.40 E+02 minutes
5.	Minimum time period for a batch release	1.26 E+02 minutes
6.	Average stream flow during periods of release of effluent into a flowing stream	7.90 E+07 liters/minute

b. Gaseous

1.	Number of batch releases	None
2.	Total time period for batch releases	N/A
3.	Maximum time period for a batch release	N/A
4.	Average time period for batch releases	N/A
5.	Minimum time period for a batch release	N/A

4.6 ABNORMAL RELEASE

a. Liquid

1.	Number of releases	0
2.	Total activity released	None

b. Gaseous

1.	Number of releases	0
2.	Total activity released	None

TABLE 4-1A EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER 1982

	Unit	3rd Quarter	4th Quarter	Est. Total Error, %
A. Fission & activation gases				
1. Total release	Ci	1.10 E+04	1.38 E+03	2.0 E+01
2. Average release rate for period	µCi/sec	1.38 E+03	1.77 E+02	
3. Percent of Technical Specification limit	%	*	*	
B. Iodines				
1. Total iodine -131	Ci	≤8.68 E-02	≤1.53 E-02	3.0 E+01
2. Average release rate for period	µCi/sec	≤1.09 E-02	≤1.97 E-03	
3. Percent of Technical Specification limit	%	**	**	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	≤3.30 E-02	≤1.05 E-02	5.0 E+01
2. Average release rate for period	µCi/sec	≤4.15 E-03	≤1.34 E-03	
3. Percent of Technical Specification limit	%	**	**	
4. Gross alpha radioactivity	Ci	≤6.75 E-07	≤6.23 E-07	
D. Tritium				
1. Total release	Ci	8.33 E-01	2.90 E+00	3.0 E+01
2. Average release rate for period	µCi/sec	1.05 E-01	3.73 E-01	
3. Percent of Technical Specification limit	%	*	*	

* The noble gases and tritium are combined in the Technical Specification discharge limit. The third quarter releases were 4.73 E+00% of the allowable limit while the fourth quarter releases were 2.00 E+00% of the allowable limit.

** The iodine -131 and particulates with half-lives longer than 8 days are combined into one Technical Specification. The third quarter releases were 2.56 E+00% of the allowable limit while the fourth quarter releases were 1.14 E+00% of the allowable limit.

TABLE 4-1B EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, GASEOUS EFFLUENTS-ELEVATED RELEASE, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER-1982

Nuclides Released	Unit	Continuous Mode 3rd Quarter	Continuous Mode 4th Quarter	Batch Mode [(a)]
1. Fission gases				
krypton-85	Ci	3.18 E+00	1.03 E+01	
krypton-85m	Ci	8.81 E+02	2.85 E+02	
krypton-87	Ci	1.62 E+03	4.54 E+01	
krypton-88	Ci	2.24 E+03	1.35 E+02	
xenon-133	Ci	7.75 E+02	1.14 E+02	
xenon-135	Ci	2.55 E+03	9.36 E+01	
xenon-135m	Ci	2.76 E+02	4.62 E+00	
xenon-138	Ci	1.36 E+03	2.16 E+01	
krypton-89	Ci	4.55 E-01	1.14 E-03	
krypton-83m	Ci	3.52 E+02	1.14 E+01	
xenon-137	Ci	3.29 E+00	1.22 E-02	
xenon-133m	Ci	3.11 E+01	1.38 E+00	
xenon-131m	Ci	2.55 E+00	2.88 E+00	
Total for period	Ci	1.01 E+04	7.25 E+02	
2. Iodines				
iodine-131	Ci	8.58 E-02	1.47 E-02	
iodine-133	Ci	≤1.61 E-02	3.10 E-03	
iodine-135	Ci	≤1.12 E-02	2.35 E-03	
Total for period	Ci	≤1.13 E-01	2.02 E-02	
3. Particulates				
strontium-89	Ci	1.03 E-03	4.11 E-05	
strontium-90	Ci	1.59 E-04	7.44 E-07	
cesium-134	Ci	≤2.47 E-05	≤1.22 E-06	
cesium-137	Ci	≤6.86 E-04	≤6.50 E-06	
barium-lanthanum-140	Ci	≤2.94 E-02	2.81 E-04	
iodine-131	Ci	≤5.98 E-04	≤1.95 E-05	
cobalt-58	Ci	3.39 E-07	-	
cobalt-60	Ci	1.10 E-05	8.34 E-07	
manganese-54	Ci	4.15 E-06	3.16 E-07	
Total for period	Ci	≤3.19 E-02	≤3.51 E-04	

(a) No batch discharges were made.

TABLE 4-1C EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, GASEOUS EFFLUENTS-BUILDING VENT RELEASE, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER 1982

Nuclides Released	Unit	Continuous Mode 3rd Quarter	Continuous Mode 4th Quarter
1. Fission gases			
krypton-85	Ci	1.78 E-02	4.47 E-02
krypton-85m	Ci	4.85 E+01	4.40 E+01
krypton-87	Ci	1.27 E+02	9.60 E+01
krypton-88	Ci	1.58 E+02	1.35 E+02
xenon-133	Ci	5.07 E+01	6.56 E+01
xenon-135	Ci	1.79 E+02	1.76 E+02
xenon-135m	Ci	3.81 E+01	1.77 E+01
xenon-138	Ci	2.06 E+02	9.02 E+01
krypton-89	Ci	5.60 E+00	1.12 E+00
krypton-83m	Ci	2.63 E+01	2.12 E+01
xenon-137	Ci	1.44 E+01	2.92 E+00
xenon-133m	Ci	2.16 E+00	2.56 E+00
xenon-131m	Ci	8.33 E-02	1.71 E-01
Total for period	Ci	8.56 E+02	6.53 E+02
2. Iodines			
iodine-131	Ci	≤1.01 E-03	≤5.67 E-04
iodine-133	Ci	≤5.48 E-04	≤5.71 E-04
iodine-135	Ci	≤1.21 E-02	≤6.69 E-03
Total for period	Ci	≤1.37 E-02	≤7.83 E-03
3. Particulates			
strontium-89	Ci	1.73 E-05	2.07 E-05
strontium-90	Ci	3.73 E-05	1.42 E-06
cesium-134	Ci	≤3.71 E-05	≤1.14 E-03
cesium-137	Ci	≤5.34 E-05	≤1.34 E-03
barium-lanthanum-140	Ci	≤2.27 E-04	≤9.67 E-04
iodine-131	Ci	≤4.43 E-05	≤3.18 E-03
cobalt-58	Ci	2.50 E-05	2.95 E-04
cobalt-60	Ci	6.13 E-04	2.58 E-03
manganese-54	Ci	6.76 E-05	5.75 E-04
Total for period	Ci	≤1.12 E-03	≤1.01 E-02

TABLE 4-2A EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER 1982

	Unit	3RD QUARTER	4TH QUARTER	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	≤3.21 E-00	≤6.32 E-01	2.0 E+01
2. Average diluted concentration during period	μCi/ml	≤1.17 E-07	≤3.74 E-08	
3. Percent of applicable limit	%	1.28 E+01	2.53 E+00	
B. Tritium				
1. Total release	Ci	2.24 E+00	2.12 E+00	2.0 E+01
2. Average diluted concentration during period	μCi/ml	8.15 E-08	1.25 E-07	
3. Percent of applicable limit	%	2.72 E-03	4.17 E-03	
C. Dissolved and entrained gases				
1. Total release	Ci	≤2.54 E-02	≤7.19 E-03	5.0 E+01
2. Average diluted concentration during period	μCi/ml	≤9.24 E-10	≤4.25 E-10	
3 Percent of applicable limit	%	NA	NA	
D. Gross alpha radioactivity				
1. Total release	Ci	≤8.77 E-03	≤2.74 E-03	5.0 E+01
E. Volume of waste released (prior to dilution)	liters	3.95 E+06	2.65 E+06	1.0 E+01
F. Volume of dilution water used during period.	liters	2.75 E+10	1.69 E+10	1.0 E+01

NA-None applicable.

TABLE 4-2B EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, LIQUID EFFLUENTS, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY- DECEMBER 1982

Nuclides Released	Unit	Continuous Mode[a]	Batch Mode 3rd Quarter	Batch Mode 4th Quarter
strontium-89	Ci		≤1.34 E-01	≤2.29 E-02
strontium-90	Ci		≤4.62 E-03	≤3.74 E-04
cesium-134	Ci		≤4.76 E-01	8.72 E-02
cesium-136	Ci		2.85 E-03	-
cesium-137	Ci		≤5.63 E-01	1.33 E-01
iodine-131	Ci		≤5.03 E-02	≤8.76 E-03
cobalt-58	Ci		≤1.30 E-01	≤9.18 E-03
cobalt-60	Ci		≤1.16 E+00	1.70 E-01
iron-59	Ci		≤6.11 E-03	≤2.10 E-03
zinc-65	Ci		≤2.52 E-02	≤4.50 E-03
manganese-54	Ci		≤2.26 E-01	3.60 E-02
chromium-51	Ci		≤5.43 E-02	≤3.44 E-02
zirconium-niobium-95	Ci		≤1.97 E-02	≤5.76 E-03
molybdenum-99	Ci		≤3.77 E-02	4.51 E-04
technetium-99m	Ci		≤5.56 E-03	≤1.93 E-03
barium-lanthanum-140	Ci		≤2.22 E-02	≤6.89 E-03
cerium-141	Ci		≤1.02 E-02	≤3.44 E-03
silver-110m	Ci		4.83 E-02	1.39 E-02
sodium-24	Ci		1.95 E-03	6.40 E-03
unidentified	Ci		≤2.33 E-01	≤8.49 E-02
Total for period above	Ci		≤3.21 E+00	≤6.32 E-01
xenon-133	Ci		≤1.86 E-02	≤5.37 E-03
xenon-135	Ci		≤6.82 E-03	≤1.82 E-02

[a] No continuous mode discharges made.

TABLE 4-3 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, SOLID WASTE AND IRRADIATED FUEL SHIPMENTS, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JULY - DECEMBER 1982

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (not irradiated fuel)

	Unit	6-Month Period	Estimated Total Error (%)
1. Type of waste			
a. Spent resins, filter sludges,	m^3	9.08 E+01	15%
evaporator bottoms, etc.	Ci	1.54 E+02	
b. Dry compressible waste,	m^3	1.92 E+02	25%
contaminated equip., etc.	Ci	2.17 E+00	
c. Irradiated components, control	m^3		
rods, etc.	Ci	None	
d. Other	m^3		
	Ci	None	
2. Estimate of major nuclide composition (by type of waste), percent (%)			
a. chromium-51		1.57 E+00	
cobalt-60		5.09 E+01	
cobalt-58		4.96 E+00	
manganese-54		1.46 E+01	
zinc-65		1.09 E+00	
silver-110m		1.41 E+00	
iodine-131		1.35 E+00	
cesium-137		1.35 E+01	
cesium-134		9.69 E+00	
zirconium-niobium-95		1.42 E-01	
barium-lanthanum-140		7.09 E-01	
b. chromium-51		8.89 E+00	
cobalt-60		3.53 E+01	
cobalt-58		3.17 E+00	
manganese-54		1.41 E+01	
zinc-65		1.36 E+00	
silver-110m		2.47 E+00	
iodine-131		8.48 E-01	
cesium-137		1.87 E+01	
cesium-134		1.44 E+01	
zirconium-niobium-95		2.76 E-01	
iron-59		3.55 E-01	
barium-lanthanum-140		1.19 E-01	

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
41	Sole use vehicle	Beatty, Nevada

B. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments	Mode of Transportation	Destination
none	N/A	N/A

5. GAMMA DOSE ISOPLETHS

Estimated gamma radiation doses were calculated from the effluent releases presented in Section 4 and the dispersion characteristics presented in Section 3. The NRC supplied computer model GASPAR was used to calculate locations of equal dosage (isopleths). The isopleth figures (Figures 5-1 to 5-8) are presented for both a 5-mile and a 50-mile radius area centered on the Cooper Nuclear Power Station. The periods covered by the figures are July - September, October - December, July - December and January - December. Each figure is for a combined release with the vent stack and elevated release point data used together to estimate the gamma dose at each grid point.

The data tables from which the isopleth figures were derived are presented in Appendix C and the GASPAR computer model is discussed in Appendix D. The GASPAR computer model uses the air-released dose models of Regulatory Guide 1.109 (U.S. NRC 1977a).

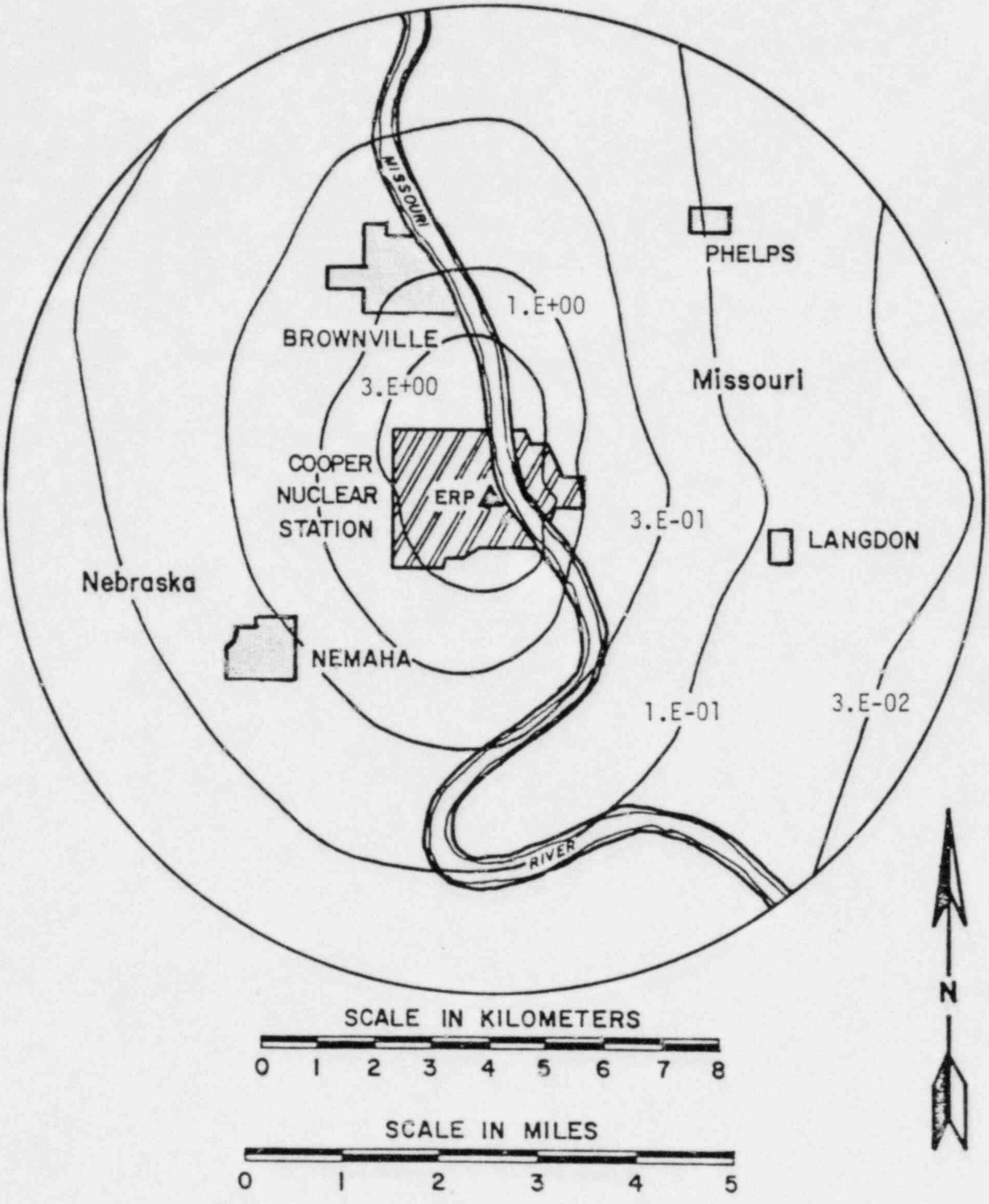

Figure 5-1 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, July-September 1982.

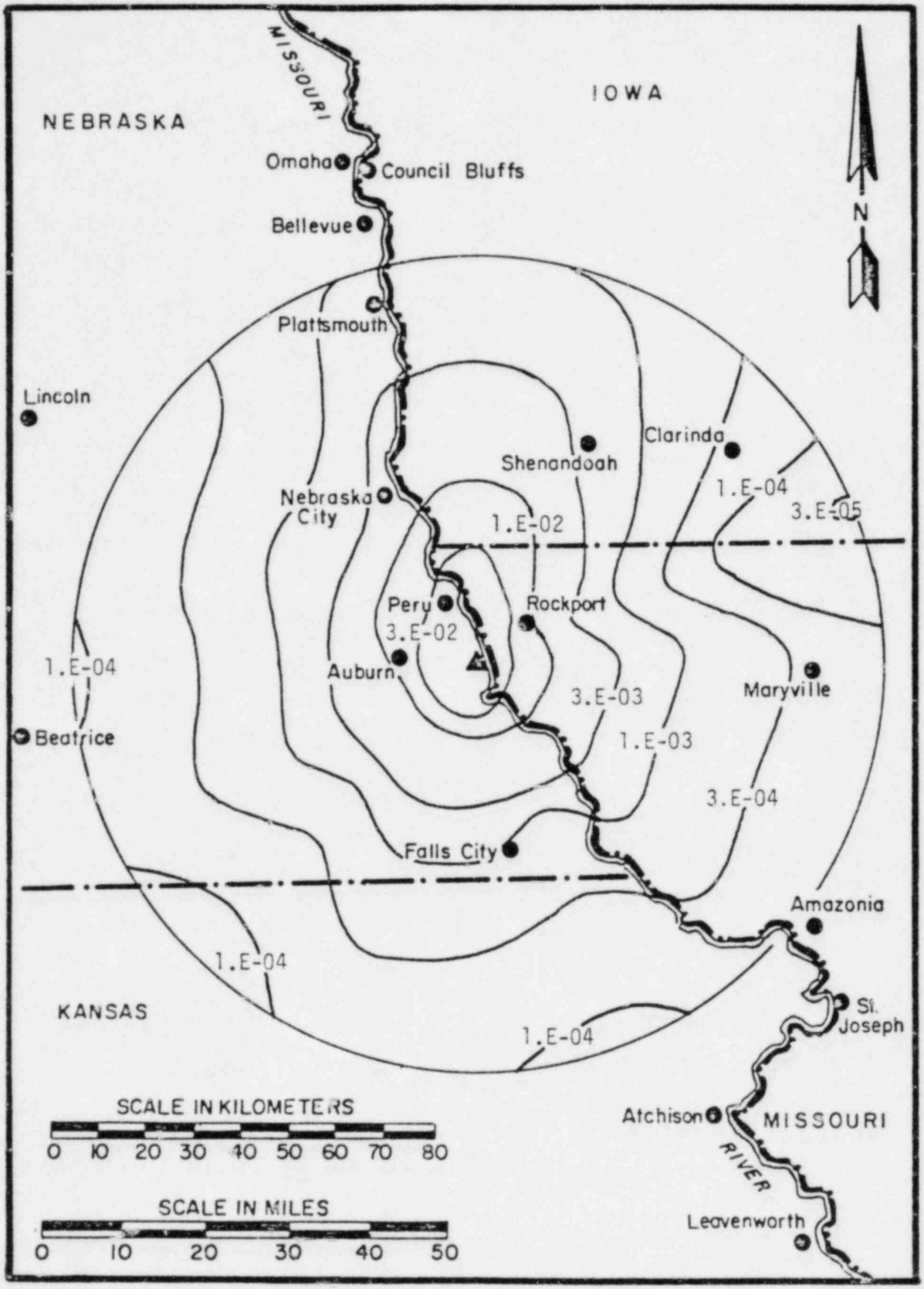

Figure 5-2 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, July-September 1982.

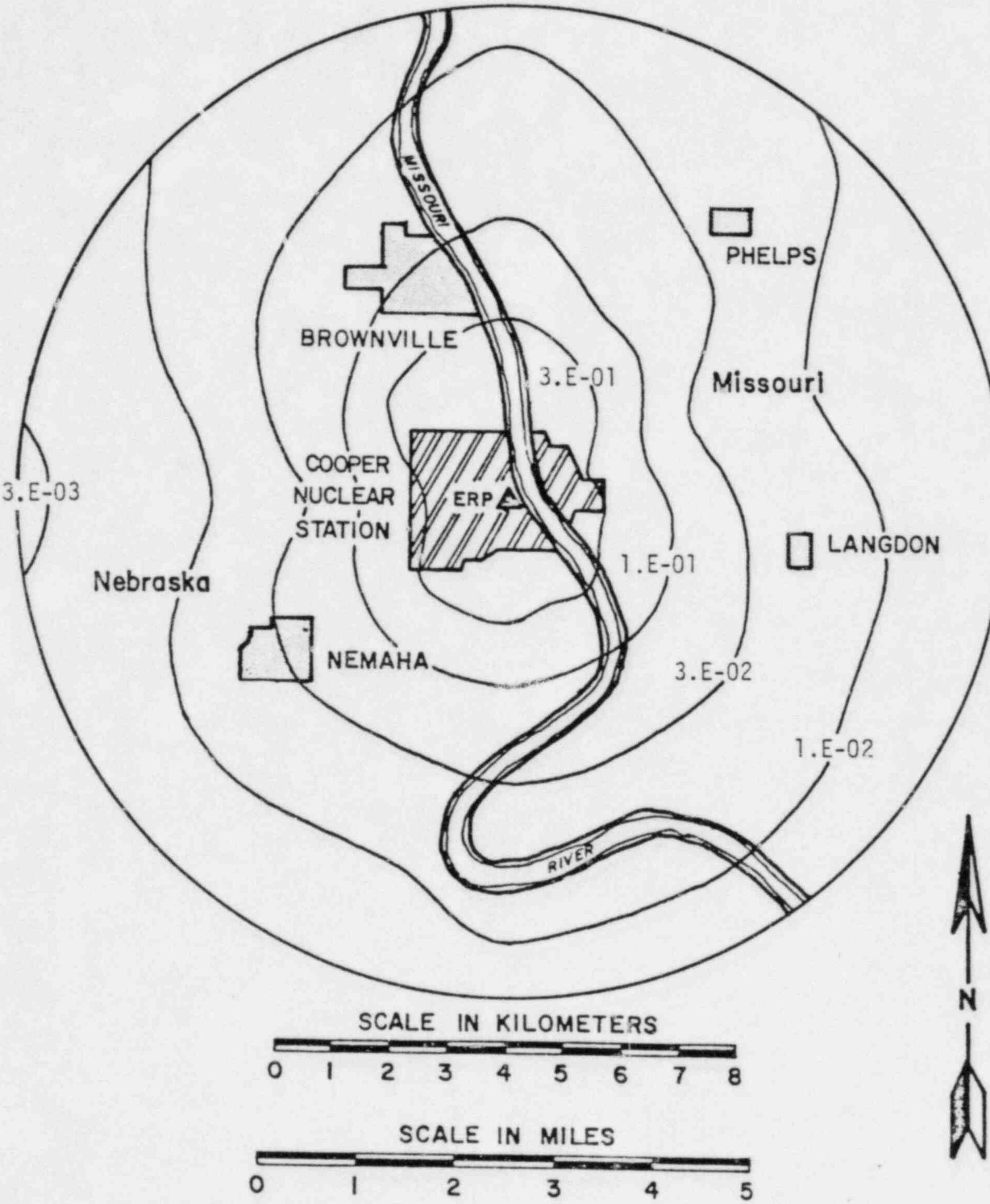

Figure 5-3 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, October-December 1982.

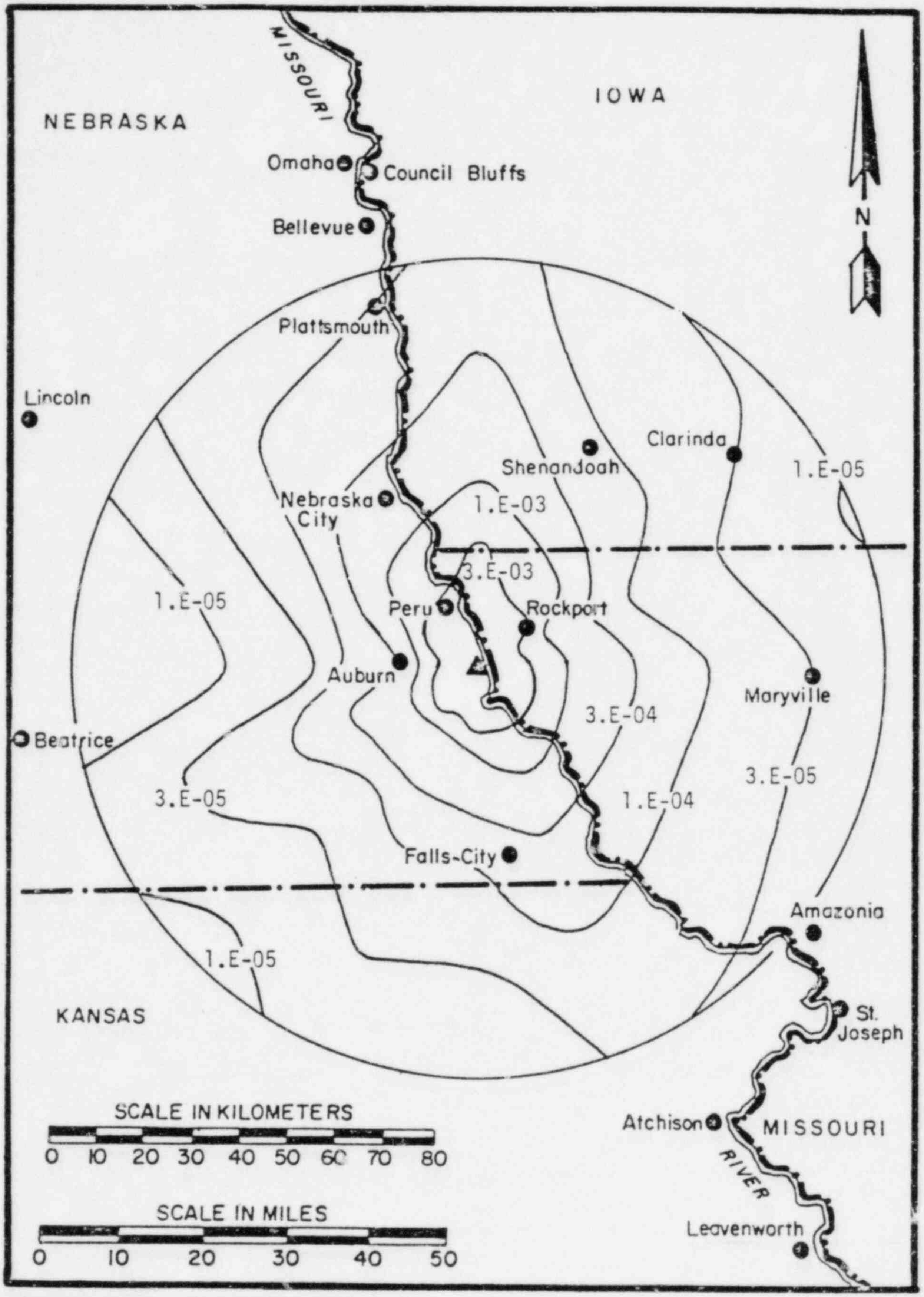

Figure 5-4 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, October-December 1982.

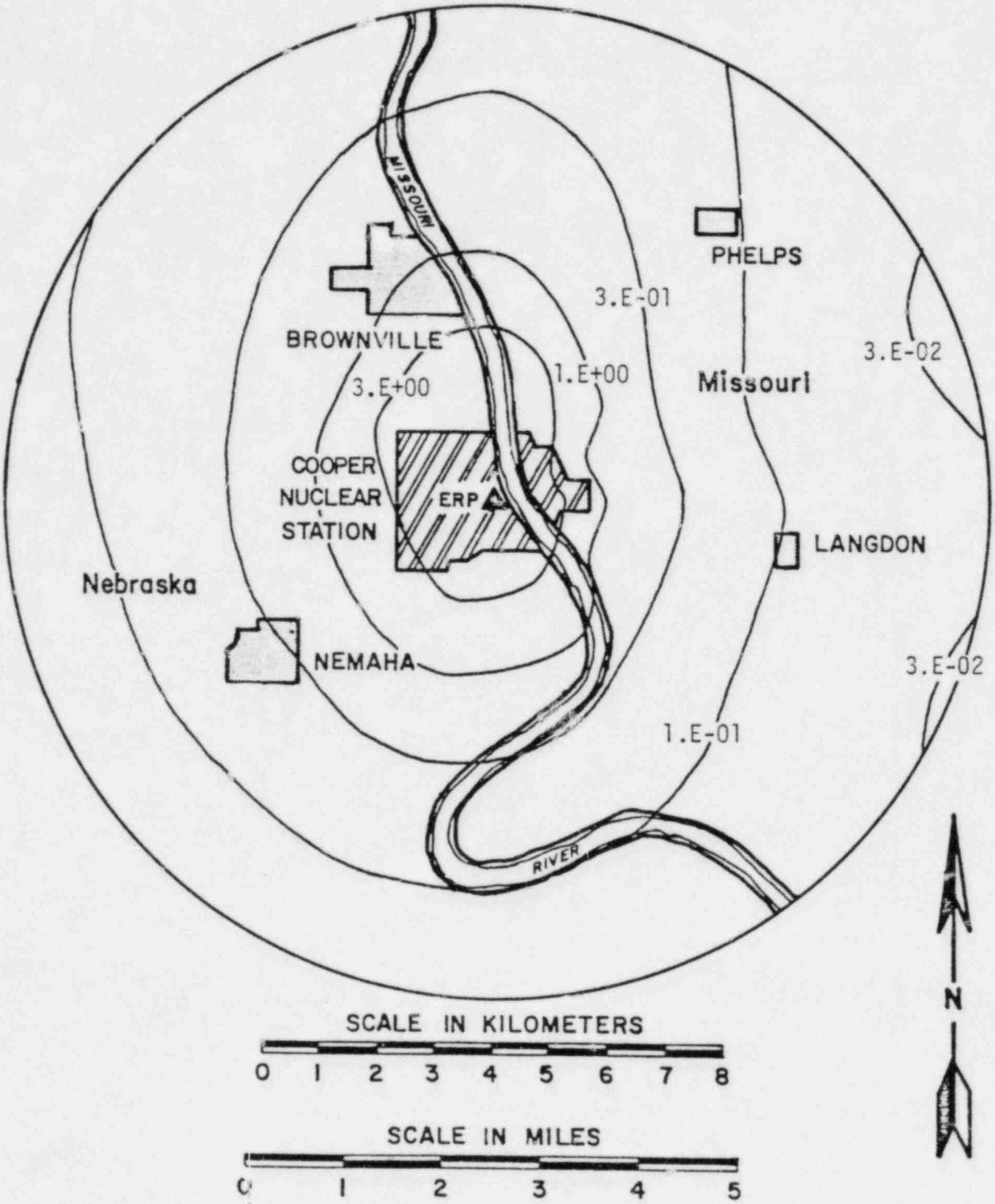

Figure 5-5 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, July-December 1982.

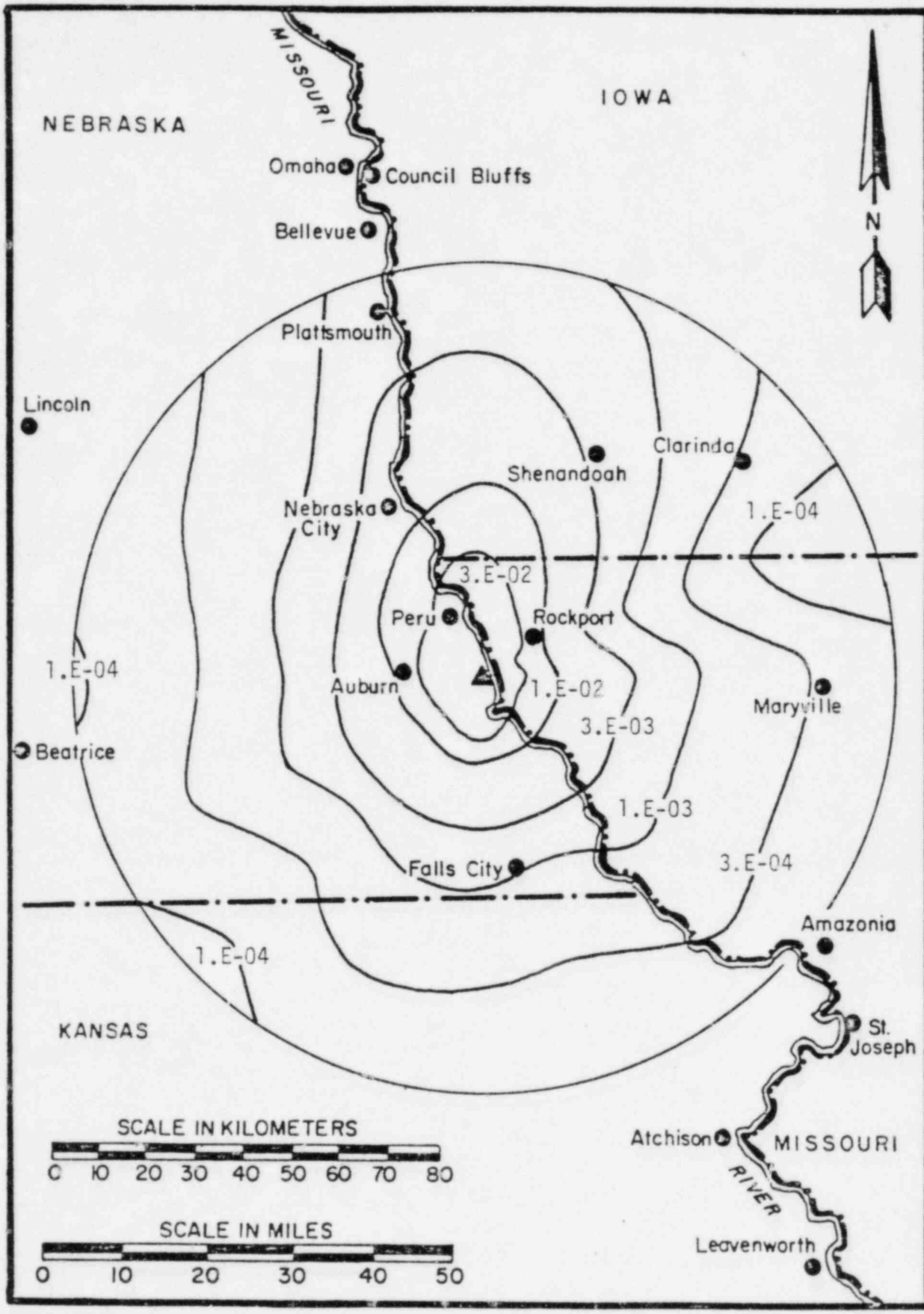

Figure 5-6 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska 0-50 miles, July-December 1982.

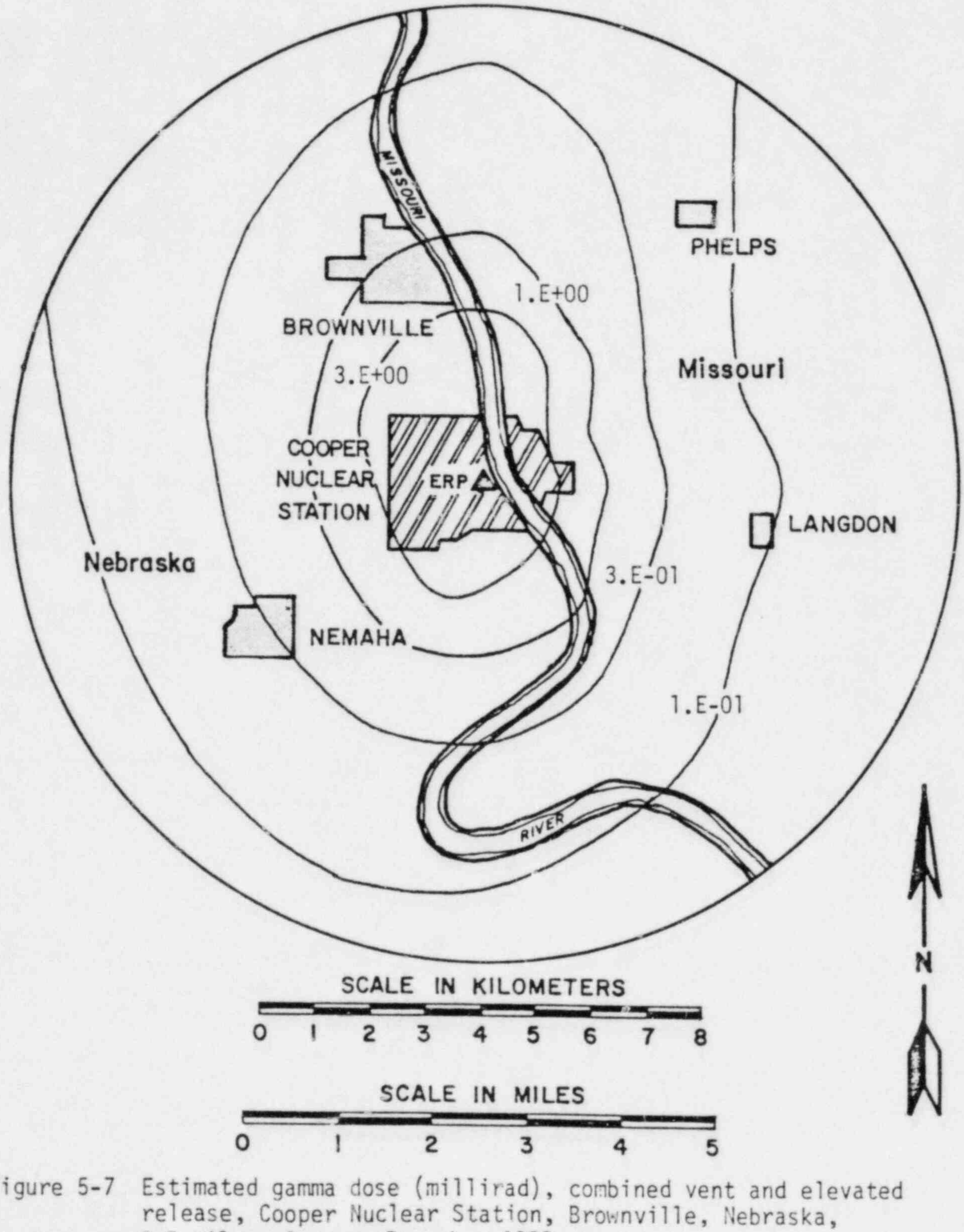

Figure 5-7 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, January-December 1982.

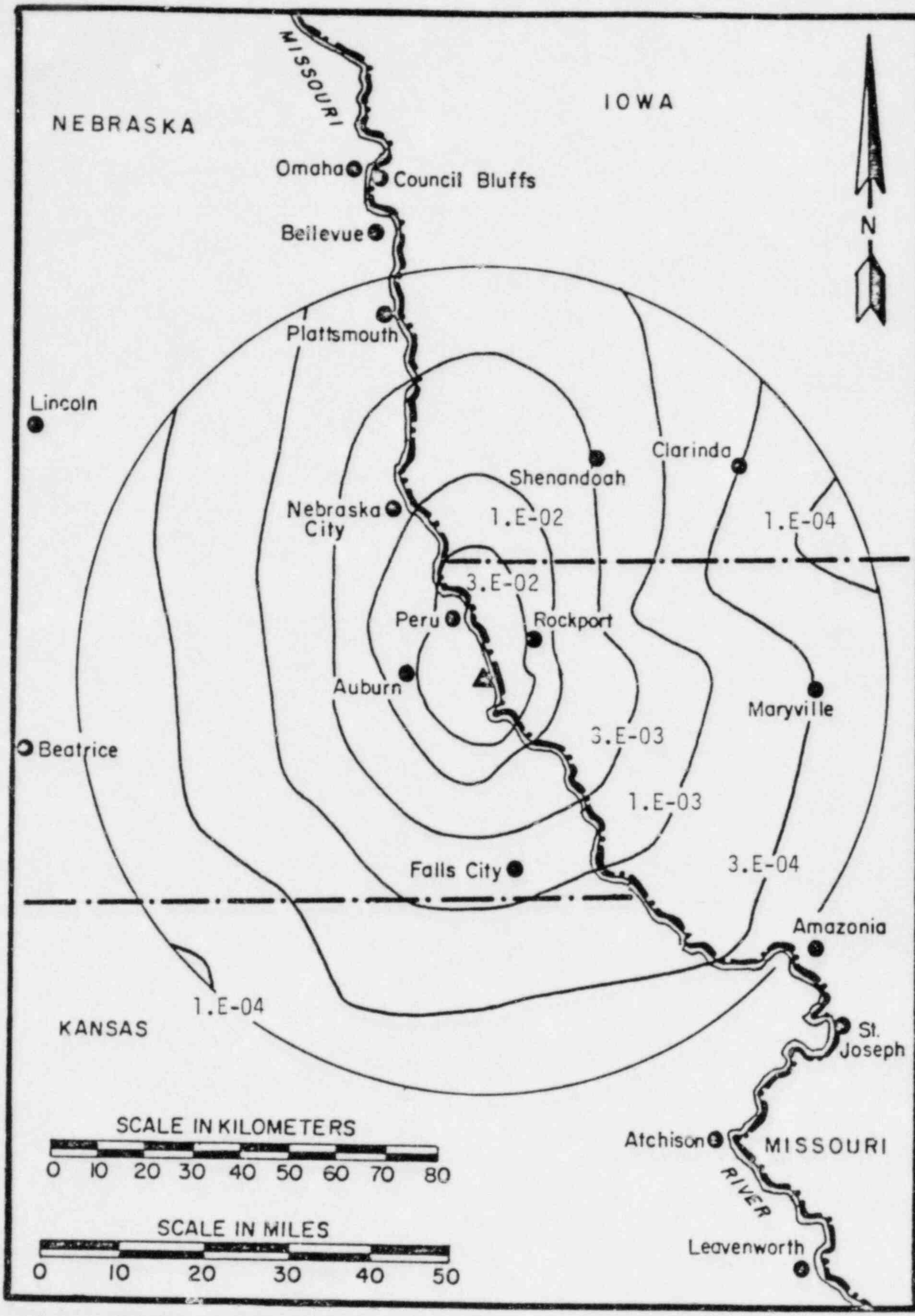

Figure 5-8 Estimated gamma dose (millirad), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-December 1982.

6. RADIOLOGICAL DOSE CALCULATIONS FROM WATERBORNE SOURCES

In calculating doses to an individual and population caused by the release of radioactive material via liquid effluent from Cooper Nuclear Power Station, the LADTAP II (ORNL 1980) computer program was used. The LADTAP II program uses the radiological impact models of Regulatory Guide 1.109 (U.S. NRC 1977a) for determining the radiation exposure to man from four principal exposure pathways in the aquatic environment--potable water, aquatic foods, shoreline deposits, and irrigated foods. Doses for both the "maximum individual" and the general population are calculated as a function of age group and pathway for appropriate body organs. The input data are obtained from the effluent release report presented in Section 4.

TABLE 1. DOSES TO INDIVIDUAL AT THE SITE BOUNDARY, RESULTING FROM EXPOSURE TO RADIOACTIVITY DISCHARGED IN LIQUID EFFLUENTS, JANUARY - DECEMBER, 1982, COOPER NUCLEAR POWER STATION.

Period and Pathway	Dose to individual, mrem[a]							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
1st Quarter								
Drinking Water		4.36E-03	1.06E-03	1.29E-03	6.37E-04	3.76E-04	1.50E-04	1.08E-03
Shoreline	1.47E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04
Total	1.47E-04	4.49E-03	1.18E-03	1.41E-03	7.62E-04	5.02E-04	2.75E-04	1.20E-03
2nd Quarter								
Eating Fish		4.27E-01	7.85E-01	5.90E-01	1.78E-02	2.60E-01	8.55E-02	6.35E-02
Drinking Water		9.68E-03	1.42E-02	1.12E-02	4.11E-02	4.86E-03	1.58E-03	6.94E-03
Shoreline	1.74E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03
Swimming	0.00E+00	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06
Boating	0.00E+00	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05
Total	1.74E-03	4.38E-01	8.00E-01	6.02E-01	6.04E-02	2.66E-01	8.86E-02	7.19E-02
Total for 1st and 2nd Quarters	1.89E-03	4.42E-01	8.01E-01	6.03E-01	6.10E-02	2.66E-01	8.89E-02	7.31E-02
3rd Quarter								
Eating Fish		7.08E-01	1.24E+00	9.22E-01	6.33E-03	4.13E-01	1.36E-01	1.01E-01
Drinking Water		2.17E-02	2.22E-02	1.79E-02	1.47E-02	7.36E-03	2.40E-03	1.13E-02
Shoreline	2.80E-03	2.38E-03	2.38E-03	2.38E-03	2.38E-03	2.38E-03	2.38E-03	2.38E-03
Swimming	0.00E+00	1.47E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05
Boating	0.00E+00	7.00E-05	7.00E-05	7.00E-05	7.00E-05	7.00E-05	7.00E-05	7.00E-05
Total	2.80E-03	7.32E-01	1.27E+00	9.42E-01	2.35E-02	4.22E-01	1.41E-01	1.15E-01
4th Quarter								
Eating Fish		1.17E-01	2.00E-01	1.46E-01	2.07E-06	6.64E-02	2.19E-02	1.91E-02
Drinking Water		4.64E-03	5.33E-03	4.10E-03	4.27E-05	1.78E-03	6.14E-04	2.16E-03
Shoreline	5.37E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04
Boating	0.00E+00	9.09E-06	9.09E-06	9.09E-06	9.09E-06	9.09E-06	9.09E-06	9.09E-06
Total	5.37E-04	1.22E-01	2.05E-01	1.51E-01	5.12E-04	6.87E-02	2.30E-02	2.18E-02
Total for 3rd and 4th Quarters	3.34E-03	8.54E-01	1.48E+00	1.09E+00	2.40E-02	4.91E-01	1.64E-01	1.37E-01
Total for 12 Months	5.23E-03	1.30E+00	2.28E+00	1.15E+00	8.50E-02	7.57E-01	2.53E-01	2.10E-01

[a] Calculated doses are based on the following periods of exposures:
Fishing and boating: from April through November
Drinking water and shoreline: from January through December
Swimming: from June through September
Other assumptions are listed in Table 6-3.

Table 6-2. DOSES TO POPULATION WITHIN A 50 MILE RADIUS, RESULTING FROM EXPOSURE TO RADIOACTIVITY DISCHARGED IN LIQUID EFFLUENTS, JANUARY - DECEMBER 1982, COOPER NUCLEAR POWER STATION.

Period and Pathway	Dose to population, man-rem[a]							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLi
1st Quarter								
Drinking Water[b]		3.53E-03	8.59E-04	1.05E-03	4.81E-04	3.06E-04	1.22E-04	9.16E-04
Shoreline	2.30E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04
Total	2.30E-04	3.73E-03	1.06E-03	1.91E-03	6.77E-04	5.02E-04	3.18E-04	1.11E-03
2nd Quarter								
Drinking Water[b]		4.03E-03	5.94E-03	4.68E-03	1.59E-02	2.02E-03	6.62E-04	2.87E-03
Shoreline	1.39E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03
Swimming	0.00E+00	2.85E-06	2.85E-06	2.85E-06	2.85E-06	2.85E-06	2.85E-06	2.85E-06
Boating	0.00E+00	3.13E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05
Total	1.39E-03	5.24E-03	7.15E-03	5.89E-03	1.71E-02	3.23E-03	1.88E-03	4.08E-03
Total for 1st and 2nd Quarters	1.62E-03	8.97E-03	8.21E-03	7.80E-03	1.78E-02	3.74E-03	2.19E-03	5.19E-03
3rd Quarter								
Drinking Water[b]		1.80E-02	1.84E-02	1.49E-02	1.12E-02	6.09E-03	1.99E-03	9.25E-03
Shoreline	4.45E-03	3.79E-03	3.79E-03	3.79E-03	3.79E-03	3.79E-03	3.79E-03	3.79E-03
Swimming	0.00E+00	2.54E-05	2.54E-05	2.54E-05	2.54E-05	2.54E-05	2.54E-05	2.54E-05
Boating	0.00E+00	9.30E-05	9.30E-05	9.30E-05	9.30E-05	9.30E-05	9.30E-05	9.30E-05
Total	4.45E-03	2.19E-02	2.23E-02	1.88E-02	1.51E-02	1.00E-02	5.90E-03	1.32E-02
4th Quarter								
Drinking Water[b]		2.93E-03	3.38E-03	2.61E-03	2.68E-05	1.13E-03	3.90E-04	1.35E-03
Shoreline	6.54E-04	5.58E-04	5.58E-04	5.58E-04	5.58E-04	5.58E-04	5.58E-04	5.58E-04
Boating	0.00E+00	9.02E-06	9.02E-06	9.02E-06	9.02E-06	9.02E-06	9.02E-06	9.02E-06
Total	6.54E-04	3.50E-03	3.95E-03	3.18E-03	5.94E-04	1.70E-03	9.57E-04	5.81E-04
Total for 3rd and 4th Quarters	5.10E-03	2.54E-02	2.63E-02	2.20E-02	1.57E-02	1.17E-02	6.86E-03	1.38E-02
Total for 12 Months	6.72E-03	3.44E-02	3.45E-02	2.98E-02	3.35E-02	1.54E-02	9.05E-03	1.90E-02

[a] Calculated doses are based on the following periods of exposures:
Fishing and boating: from April through November
Drinking water and shoreline: from January through December
Swimming: from June through September

[b] Exposure from drinking water is calculated for the city of St. Joseph, Missouri, nearest public water intake from the Missouri River, 84 river miles down the river, population 85,000.

Other assumptions are listed in Table 6-3.

TABLE 6-3. VALUES OF PARAMETERS USED TO MAKE DOSE ESTIMATES RESULTING FROM LIQUID DISCHARGES, JANUARY - DECEMBER 1982, COOPER NUCLEAR POWER STATION.

Parameter	Value Assigned: Individual	Value Assigned: Population	Source of Reference
Population at St. Joseph, Missouri		85,000[a]	
Cooling Flow Rate	773; 700 1252; 1079 CFS[b]	773; 700; 1252; 1079 CFS[b]	Station Data
Dilution Factor	1	37.64; 73.35 36.93; 48.29[b]	Station Data
Shorewidth Factor	0.2	0.2	U.S. NRC (1977), p. 15
Usage:			
(drinking water)	730 l/hr	370 l/yr/person	U.S. NRC (1977), p. 12,40,69
(fish)	21 Kg/yr	6.9 Kg/yr	U.S. NRC (1977), p. 12,40,69
(shoreline exposure)	12 hr/yr	8.3 hr/yr	U.S. NRC (1977), p. 40
(swimming)	8 hr/yr	6 hr/yr	Oak Ridge (1980), p. 144
(boating)	76 hr/yr	44 hr/yr	Oak Ridge (1980), p. 144
Holding time:			
(drinking water)	12 hr	22.4 hr[c]	U.S. NRC (1977), p. 40
(fish)	24 hr	168 hr	U.S. NRC (1977), p. 40
(shoreline exposure)	0 hr	22.4[c] hr	U.S. NRC (1977), p. 12,69
(swimming)	0 hr	22.4[c] hr	U.S. NRC (1977), p. 12,69
(boating)	0 hr	22.4[c] hr	U.S. NRC (1977), p. 12,69

[a] Assumed population for 1974. Last available population data is 69,673 persons for 1964
[b] First, second, third, and fourth quarters for 1982, respectively.
[c] Based on an average Missouri River water flow of 5.5 ft/sec. 84 river miles down the river.

For definitions of parameters, refer to Oak Ridge (1980) and U.S. NRC (1977).

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APPENDIX A

MONTHLY DATA TABLES

Data from the continuously monitored meteorological parameters collected at the Cooper Nuclear Station were reduced to hourly averages, reviewed for errors, scaled for calibration, and prepared for further analysis by computer. The hourly average values are presented in the monthly data tables in this section.

Data strip charts were reduced to hourly average values using an automatic digitizer. The averaging period was centered on the hour; that is, the hourly average for 1400 was obtained from the data trace between 13:30 and 14:30 on the strip chart. The hourly average values were computed from a minimum of 15 minutes of strip chart data trace. Precipitation data was reduced manually by totalling the number of tick marks (each tick mark equaling 0.01 inches of precipitation) within an hour centered on the hour as for the other parameters.

Each table contains one month of data for one parameter. The tables are captioned with the parameter name, unit of measurement, site name, month, and year. The mean hourly average for each hour of the day is shown in the last row of the main table. The mean hourly average, maximum hourly average, and minimum hourly average for the month are shown beneath the main table. The number of valid observations and the percentage of data recovered also are shown beneath the main table. Daily statistics are shown at the foot of the page. These statistics are the daily maximum, daily minimum, and daily mean hourly averages. Beneath the daily statistics table, the mean daily maximum and mean daily minimum hourly averages are shown. Totals, rather than means, are reported for precipitation data. Only the hourly average values, number of valid observations, and the percentage of data recovered are reported for wind direction data.

The notation "-M-" in the tables indicates a missing data value. The value may be missing because of any of several reasons: equipment failure, power failure, calibrations, recorder inking problems, or sensor icing.

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318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	10	10	10	13	9	12	10	9	6	4	10	7	7	10	12	11	11	10	9	11	10	12	12	11
2	9	8	11	12	6	4	1	5	11	11	15	12	11	10	12	17	18	17	18	17	16	16	16	11
3	9	8	5	5	5	4	4	2	1	1	1	3	3	3	3	2	4	5	4	2	7	10	10	9
4	9	8	9	7	7	9	8	8	9	7	8	9	12	13	17	18	20	20	20	20	17	17	15	16
5	20	20	18	18	16	14	15	16	19	18	21	24	24	26	26	27	24	25	27	22	22	22	26	15
6	18	22	11	10	10	7	12	12	19	21	21	20	22	22	23	17	17	-M-	16	11	13	18	21	13
7	13	9	8	12	10	11	2	3	5	7	8	4	2	3	2	4	3	3	5	6	6	10	10	10
8	6	6	5	3	3	6	4	2	3	6	9	12	12	11	11	12	12	11	11	13	15	14	14	14
9	12	15	15	14	10	9	9	8	8	9	9	10	6	6	8	10	13	16	14	14	10	9	5	8
10	9	10	7	5	6	7	8	13	13	15	11	12	13	10	13	15	13	11	15	15	15	14	13	12
11	14	16	16	17	14	13	10	4	5	6	8	9	9	10	11	11	11	10	9	6	3	1	1	3
12	9	12	10	11	8	9	11	9	6	5	5	6	6	4	20	18	15	13	12	10	11	9	4	2
13	2	2	4	3	5	9	7	6	3	3	1	0	7	7	7	8	9	8	10	12	14	15	11	7
14	9	12	12	10	9	10	8	11	11	8	7	8	9	10	11	12	13	14	13	13	12	10	11	12
15	13	14	18	18	17	17	16	13	14	13	16	11	11	16	16	10	10	12	14	15	15	14	18	20
16	18	15	17	20	20	18	16	16	15	17	17	18	20	20	21	22	23	22	23	19	17	20	24	24
17	22	22	22	21	19	16	16	9	7	11	16	15	18	17	18	14	13	12	11	12	13	15	5	11
18	21	23	17	11	12	13	9	4	1	3	5	6	5	3	4	7	6	1	1	2	5	5	8	9
19	8	8	8	6	5	4	16	10	9	7	11	13	10	11	10	13	13	12	9	4	3	6	8	10
20	8	5	4	4	4	7	6	3	2	3	2	6	7	8	9	8	8	9	8	7	6	10	14	28
21	21	6	12	15	15	5	14	8	14	12	4	4	3	1	2	5	6	5	5	6	9	12	11	10
22	11	9	6	8	5	7	10	9	2	1	4	4	4	2	2	2	5	4	-M-	-M-	11	13	10	7
23	3	0	3	8	8	6	4	3	5	5	6	7	8	7	6	6	8	7	6	6	9	10	10	9
24	9	9	11	12	12	10	7	8	7	8	8	9	9	10	7	8	9	10	11	11	11	12	12	11
25	11	13	11	10	9	9	8	8	8	7	6	7	8	8	9	11	9	10	11	11	14	13	10	12
26	10	10	10	9	12	9	6	6	4	3	3	3	4	2	2	4	7	7	6	3	6	10	9	7
27	11	14	11	7	6	3	4	5	8	6	8	9	11	9	9	10	11	11	9	8	8	8	8	8
28	8	9	11	10	11	10	10	6	2	2	2	7	6	7	8	7	6	6	8	10	13	12	11	10
29	8	8	6	6	1	0	0	0	1	2	2	3	3	3	2	4	5	6	5	3	5	6	12	14
30	12	15	14	10	9	7	4	3	3	2	5	5	4	4	4	5	9	6	6	5	5	5	5	5
31	5	6	7	6	6	6	7	7	6	8	9	8	8	9	8	7	6	9	9	11	14	15	18	17
HOURLY MEAN	11	11	11	10	9	9	8	7	7	7	8	9	9	9	10	11	11	10	11	10	11	12	12	11

MAXIMUM = 28 MINIMUM = 0 MEAN = 10 741 VALID OBSERVATIONS (99.6%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	13	18	10	20	27	23	13	15	16	15	17	20	15	14	20	24
MIN	4	1	1	7	14	7	2	2	5	5	1	2	0	7	10	15
MEAN	10	12	5	13	21	16	6	9	10	12	9	9	7	11	15	19

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	22	23	16	28	21	13	10	12	14	12	14	13	14	15	18
MIN	5	1	3	2	1	1	0	7	6	2	3	2	0	2	5
MEAN	15	7	9	7	9	6	6	10	10	6	8	8	4	7	9

MEAN MAXIMUM = 17 MEAN MINIMUM = 4

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	17	15	16	15	15	11	8	7	5	6	5	6	8	9	11	11	11	11	10	12	15	14	11	15
2	16	16	17	15	14	10	8	9	8	8	8	9	13	15	18	16	16	15	15	15	16	15	16	16
3	18	19	18	17	16	15	14	13	14	19	18	15	15	17	20	20	20	15	14	15	17	19	18	18
4	16	14	14	16	15	13	12	13	12	10	7	6	5	6	8	7	8	12	10	11	24	8	2	7
5	10	8	4	4	6	7	9	4	3	4	5	4	2	3	3	1	4	5	5	5	7	10	10	5
6	7	7	7	7	7	6	5	5	7	7	8	7	8	8	8	7	7	6	7	8	7	6	9	8
7	7	6	6	5	4	8	7	7	4	6	7	9	12	10	9	8	9	8	-M-	-M-	-M-	-M-	-M-	-M-
8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	11	10	11	8	9	10	11	11	10	9	10	11	10	8
9	6	4	6	9	8	6	5	6	3	3	2	4	2	6	7	7	8	9	12	15	16	15	13	10
10	10	9	9	11	11	10	11	10	10	10	9	7	6	6	7	6	6	4	4	3	4	4	5	7
11	4	2	3	5	6	8	8	8	8	8	11	12	11	9	9	9	8	10	9	11	11	12	12	13
12	15	15	10	10	8	12	12	13	15	16	16	15	18	14	11	14	13	14	13	15	16	12	16	13
13	15	9	4	7	10	8	5	4	4	5	6	6	5	4	5	4	5	5	9	11	11	9	8	7
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15	7	3	6	8	8	8	6	7	3	1	5	8	8	8	9	9	10	9	10	7	10	11	10	9
16	9	7	7	6	6	8	9	8	8	8	7	7	8	7	7	8	7	7	6	7	9	10	9	7
17	4	4	3	0	2	3	3	4	3	0	1	2	3	2	1	1	1	4	5	5	5	5	6	6
18	5	7	8	8	4	1	2	3	5	4	9	9	10	10	11	11	10	11	11	13	14	13	13	14
19	10	12	12	13	13	12	10	11	13	14	12	12	14	12	10	10	9	9	11	12	15	15	13	15
20	14	11	16	14	7	5	7	6	2	4	7	10	11	8	9	4	10	11	10	11	12	9	8	6
21	2	2	2	3	0	1	2	4	1	0	3	3	5	6	7	6	7	6	6	8	15	13	12	13
22	13	13	12	13	13	11	13	9	5	3	5	7	6	7	10	10	10	10	10	8	9	9	10	6
23	5	3	4	7	4	5	3	1	1	1	2	1	0	1	3	2	3	2	5	7	9	8	9	8
24	10	14	14	12	8	7	5	12	4	4	10	17	13	14	17	18	16	14	-M-	-M-	-M-	-M-	-M-	-M-
25	-M-	8	5	6	4	6	7	7	2	1	1	3	6	6	5	7	6	7	9	11	13	12	11	12
26	10	11	12	11	12	14	13	14	10	6	9	12	13	12	9	8	8	8	5	4	4	6	5	7
27	8	8	7	6	8	9	11	14	17	16	12	9	10	8	9	10	10	11	10	10	11	9	8	8
28	8	6	7	5	4	4	4	5	5	5	4	5	8	9	8	8	9	9	8	9	12	13	13	13
29	15	14	13	12	13	13	13	14	14	15	14	14	12	5	13	15	14	12	13	12	11	10	14	14
30	3	9	6	3	4	3	5	7	6	3	2	1	2	2	4	5	7	8	9	10	10	11	12	12
31	13	13	9	6	3	6	10	6	10	8	5	9	10	12	12	11	11	6	7	9	7	6	8	7
HOURLY MEAN	10	9	9	9	8	8	8	8	7	7	7	8	9	8	9	9	9	9	9	10	11	10	10	10

MAXIMUM = 24 MINIMUM = 0 MEAN = 9 721 VALID OBSERVATIONS (96.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	17	18	20	24	10	9	12	11	16	11	13	18	15	13	11	10
MIN	5	8	13	2	1	5	4	8	2	3	2	8	4	6	1	6
MEAN	11	13	17	11	5	7	7	10	8	7	9	14	7	9	8	8

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	6	14	15	16	15	13	9	18	13	14	17	13	15	12	13
MIN	0	1	9	2	0	3	0	4	1	4	6	4	5	1	3
MEAN	3	9	12	9	5	9	4	12	7	9	10	8	13	6	8

MEAN MAXIMUM = 14 MEAN MINIMUM = 4

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	7	9	5	5	5	6	4	1	8	4	3	0	5	9	10	11	8	8	9	10	8	6	7	9
2	4	5	6	5	15	14	15	14	9	5	6	6	7	8	10	10	9	8	8	8	6	5	6	6
3	4	2	5	5	5	5	4	3	2	3	7	6	5	5	4	3	4	4	5	9	10	11	8	7
4	7	8	9	9	12	11	10	9	7	6	7	10	9	9	11	12	12	11	12	14	20	21	20	19
5	20	19	18	17	15	15	16	14	12	15	17	17	18	15	11	8	9	10	11	9	9	4	7	10
6	12	14	8	6	9	8	7	6	5	4	4	1	5	3	4	3	2	1	4	5	6	4	3	5
7	6	7	7	5	7	7	7	7	8	9	6	6	5	5	7	9	8	8	10	12	10	10	11	9
8	10	8	8	9	9	8	10	9	8	9	7	7	8	11	9	11	14	12	13	11	12	14	14	13
9	13	14	14	14	14	14	9	10	10	10	10	12	12	19	19	17	15	15	14	15	18	15	17	16
10	14	15	17	17	16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	15	16	16	16	14	16	18	19	18	15
11	15	14	13	13	12	14	13	12	12	12	13	13	12	14	15	15	15	11	13	15	18	17	17	16
12	17	16	17	20	19	17	16	16	15	17	19	19	15	17	18	19	19	15	25	12	11	12	11	13
13	10	9	8	13	14	9	7	2	1	1	3	7	9	12	13	14	15	15	13	12	10	10	12	10
14	8	10	10	9	11	8	9	11	9	6	0	7	11	9	8	7	6	7	8	7	9	11	9	14
15	11	11	8	15	15	8	10	11	14	12	12	14	12	14	13	11	9	9	8	7	8	9	7	7
16	3	1	5	5	5	8	8	10	7	8	8	9	8	8	10	11	9	9	8	6	12	16	10	7
17	9	11	10	9	8	8	9	6	11	11	19	16	16	17	16	20	17	15	12	8	8	7	9	10
18	11	10	8	11	11	8	3	4	1	0	0	1	2	2	1	1	3	3	2	4	8	8	8	9
19	12	10	9	8	9	9	12	11	9	10	12	13	9	7	10	13	16	18	17	18	16	15	14	12
20	10	12	10	6	7	10	11	10	11	15	15	13	13	13	12	11	11	10	9	11	12	12	10	9
21	8	9	7	6	5	5	6	3	1	0	0	4	6	6	6	5	6	5	3	3	3	3	4	6
22	7	10	9	9	10	8	9	9	8	7	8	10	12	13	14	14	14	14	14	15	18	19	18	16
23	19	18	18	17	10	11	10	9	7	7	6	6	5	7	8	9	11	10	12	13	18	22	22	20
24	16	7	8	11	11	13	9	7	9	11	15	15	15	14	15	13	11	7	4	9	12	13	10	9
25	11	11	12	11	12	13	12	8	7	8	8	5	3	4	4	2	2	2	2	2	2	5	6	11
26	11	7	5	8	9	9	8	9	8	7	9	11	12	12	12	11	12	14	-M-	-M-	-M-	-M-	-M-	-M-
27	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	13	15	19	20	21	22	22	22	20	21	22	22	23	22
28	19	18	19	20	20	19	18	18	18	18	15	21	26	24	26	28	28	29	29	27	26	27	28	27
29	24	24	21	18	21	22	25	9	9	19	11	11	16	19	19	18	17	17	15	14	14	17	17	16
30	12	10	15	14	12	12	11	11	11	11	12	7	4	4	4	3	4	4	4	8	8	10	12	9
HOURLY MEAN	11	11	11	11	11	11	10	9	8	9	9	10	10	11	11	12	11	11	11	11	12	13	12	12

MAXIMUM = 29 MINIMUM = 0 MEAN = 11 695 VALID OBSERVATIONS (96.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	11	15	11	21	20	14	12	14	19	19	18	25	15	14	15
MIN	0	4	2	6	4	1	5	7	9	14	11	11	1	0	7
MEAN	7	8	5	12	13	5	8	10	14	16	14	16	10	8	11

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	16	20	11	18	15	9	19	22	16	13	14	23	29	25	15
MIN	1	6	0	7	6	0	7	5	4	2	5	13	15	9	3
MEAN	8	12	5	12	11	5	12	12	11	7	10	20	23	17	9

MEAN MAXIMUM = 17 MEAN MINIMUM = 5

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982

HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5	4	8	11	9	9	9	8	6	6	6	6	6	6	5	8	10	13	15	18	17	17	20	20
2	16	13	10	11	14	11	11	11	11	11	14	13	9	8	7	9	7	4	4	6	9	11	9	8
3	8	13	13	9	6	3	4	5	3	0	0	0	0	1	2	3	4	5	5	6	10	10	12	14
4	13	8	9	10	10	10	9	8	7	5	7	10	9	12	11	9	11	12	14	14	13	12	14	15
5	15	19	14	11	11	11	9	11	10	15	14	19	18	24	24	23	24	23	20	22	21	22	21	20
6	20	21	22	19	16	12	10	15	14	19	21	21	17	17	17	17	18	15	10	6	1	-M-	10	13
7	14	12	12	14	17	16	15	15	14	12	12	17	16	16	16	17	16	16	16	16	16	16	15	14
8	14	12	13	14	12	12	12	14	13	10	11	11	12	13	15	18	13	11	10	12	11	11	11	13
9	18	19	23	20	15	16	13	13	15	17	17	20	22	26	27	23	23	25	20	23	24	22	20	19
10	17	17	15	14	11	10	12	12	15	17	20	20	19	17	18	17	17	18	15	17	16	14	14	12
11	14	12	12	10	9	8	10	11	8	11	13	15	14	15	15	12	13	11	8	6	6	7	10	12
12	9	7	7	-M-	-M-	7	8	6	5	6	8	7	10	13	14	12	10	8	7	9	10	9	10	9
13	7	7	12	11	9	5	5	5	7	6	6	12	10	9	10	13	13	13	-M-	8	6	3	1	0
14	5	10	11	9	8	9	10	10	5	4	5	8	11	16	16	16	-M-	11	14	17	17	19	20	21
15	12	11	10	9	11	10	9	9	9	20	18	21	18	20	21	22	19	17	15	13	13	14	14	12
16	11	11	8	8	5	5	3	1	0	0	2	3	4	4	7	8	9	10	12	14	14	13	19	14
17	12	15	16	14	13	15	17	15	14	15	18	16	16	15	15	15	14	11	10	15	15	13	12	13
18	15	16	15	13	12	12	13	14	11	11	10	13	12	12	12	14	15	12	10	9	8	13	14	15
19	13	12	4	5	8	5	13	13	11	12	14	15	29	33	27	25	31	30	32	32	29	30	30	30
20	29	28	28	25	25	25	23	15	13	19	19	19	16	13	13	14	11	10	8	11	11	8	6	1
21	3	5	4	4	8	6	7	6	5	2	2	2	2	2	1	1	1	1	6	10	13	14	12	9
22	7	9	12	11	12	12	13	11	12	10	12	13	13	13	13	12	11	12	14	17	16	15	12	12
23	14	15	15	14	14	13	12	12	12	11	12	13	15	15	15	16	14	13	14	19	17	14	15	19
24	19	16	14	13	11	10	12	12	13	13	13	14	15	15	15	16	15	15	16	17	18	17	13	13
25	11	12	13	12	11	11	11	13	11	8	7	10	10	11	12	12	12	11	15	15	14	16	14	11
26	11	8	12	10	12	13	14	12	11	9	14	15	16	18	18	17	17	18	20	21	21	16	19	20
27	22	22	20	19	19	19	20	21	23	24	28	28	27	26	28	29	26	22	23	19	18	17	14	10
28	13	16	11	14	15	10	13	15	13	14	13	11	7	9	9	10	11	6	7	14	19	18	18	16
29	12	13	14	16	15	16	15	13	12	12	11	15	18	22	23	24	23	22	20	20	21	23	21	17
30	17	14	12	13	14	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	10	9	9	6	3	2	1	2	0	0
31	5	6	6	7	9	6	4	6	7	6	5	6	9	10	11	9	3	9	11	9	10	11	8	4
HOURLY MEAN	13	13	13	12	12	11	11	11	10	11	12	13	13	14	14	15	14	13	13	14	14	14	14	13

MAXIMUM = 33 MINIMUM = 0 MEAN = 13 730 VALID OBSERVATIONS (98.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	20	16	14	15	24	22	17	18	27	20	15	14	13	21	22	17
MIN	4	4	0	5	9	1	12	10	13	10	6	5	0	4	9	0
MEAN	10	10	6	10	17	15	15	12	20	16	11	9	8	12	14	8

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	18	16	33	29	14	17	19	19	16	21	29	19	24	17	11
MIN	10	8	4	1	1	7	11	10	7	8	10	6	11	0	3
MEAN	14	13	20	16	5	12	14	14	12	15	22	13	17	7	7

MEAN MAXIMUM = 19 MEAN MINIMUM = 6

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5	10	12	11	11	12	14	14	14	12	12	13	13	13	11	13	13	14	11	13	11	9	11	10
2	8	11	13	13	13	15	10	12	9	14	-M-	-M-	15	15	18	20	20	22	22	19	21	24	24	27
3	26	25	21	17	15	12	17	16	16	17	18	23	24	26	24	21	19	19	14	12	15	15	15	16
4	18	17	18	17	17	17	18	19	18	18	20	20	20	19	19	18	18	15	12	12	13	15	14	15
5	14	15	15	15	15	15	16	15	11	6	5	10	8	7	5	5	5	7	6	8	10	11	10	11
6	12	14	14	11	12	11	8	8	10	10	9	7	7	8	10	13	13	13	14	18	13	17	16	13
7	14	13	16	14	14	15	17	19	17	15	15	16	14	12	5	4	4	16	16	18	17	17	14	14
8	13	13	15	15	15	15	15	15	13	11	12	11	9	8	8	10	11	10	10	9	9	9	7	6
9	6	5	4	3	2	2	0	2	4	7	11	18	14	17	12	13	13	16	16	18	20	21	19	21
10	19	20	17	16	16	15	9	10	10	11	9	8	7	5	6	5	5	5	6	7	6	5	5	5
11	3	8	11	9	9	11	11	11	12	24	29	29	24	25	22	27	24	23	21	21	22	28	31	34
12	34	36	40	40	40	39	37	33	33	32	32	33	32	30	28	29	24	20	18	11	10	12	9	6
13	5	0	3	8	9	11	13	16	14	16	19	20	20	19	19	14	17	16	16	17	17	16	12	5
14	3	2	3	14	28	33	30	28	25	23	23	19	16	16	18	18	15	12	9	7	5	6	7	8
15	11	9	12	13	13	13	14	18	19	16	19	18	21	21	21	23	18	20	20	20	20	20	20	19
16	19	14	14	14	10	9	9	9	8	7	6	3	1	1	3	5	4	3	4	2	2	3	3	5
17	7	8	9	10	9	10	8	8	10	6	4	5	10	10	8	13	13	15	13	17	20	19	21	19
18	18	17	14	11	11	12	10	6	8	9	9	9	12	14	16	17	15	13	14	13	14	19	17	15
19	14	14	15	16	13	13	15	15	14	11	11	12	15	20	22	20	21	21	22	23	23	26	23	24
20	25	24	24	18	15	14	21	22	22	26	21	18	17	14	10	7	4	3	1	0	3	5	4	2
21	4	0	0	2	8	9	6	7	7	10	8	9	7	8	8	8	9	12	14	13	12	10	9	9
22	9	10	10	10	10	7	7	5	8	10	12	10	13	12	16	18	20	18	20	22	21	20	24	24
23	21	22	22	25	22	22	24	22	21	22	21	19	17	17	15	15	17	13	13	12	12	8	6	6
24	6	8	10	8	6	5	3	1	3	6	8	9	9	11	12	13	14	12	13	15	12	13	14	15
25	13	10	9	11	11	12	14	12	13	14	14	16	16	15	17	17	14	13	11	9	10	11	12	14
26	11	10	17	19	19	18	17	14	13	15	14	12	10	8	9	9	10	10	7	11	11	11	12	10
27	7	7	9	10	11	6	6	6	9	6	6	7	8	9	10	9	9	11	12	12	11	8	7	7
28	7	5	5	5	4	3	2	1	0	0	0	0	1	5	6	6	5	5	5	5	6	8	9	7
29	8	6	6	7	5	6	6	5	5	6	6	4	4	6	6	6	4	6	5	3	7	9	9	8
30	9	9	9	8	10	9	2	6	7	7	8	4	4	3	7	7	12	15	14	14	13	12	11	9
HOURLY MEAN	12	12	13	13	13	13	13	12	12	13	13	13	13	13	13	13	13	13	13	13	13	14	13	13

MAXIMUM = 40 MINIMUM = 0 MEAN = 13 718 VALID OBSERVATIONS (99.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	14	27	26	20	16	18	19	15	21	20	34	40	20	33	23
MIN	5	8	12	12	5	7	4	6	0	5	3	6	0	2	9
MEAN	12	17	19	17	10	12	14	11	11	10	20	27	13	15	17

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	19	21	19	26	26	14	24	25	15	17	19	12	9	9	15
MIN	1	4	6	11	0	0	5	6	1	9	7	6	0	3	2
MEAN	7	11	13	18	13	8	14	17	9	13	12	8	4	6	9

MEAN MAXIMUM = 21 MEAN MINIMUM = 5

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	12	15	20	22	22	21	20	17	16	-M-	16	19	21	19	20	16	18	22	22	20	21	24	19	16
2	22	19	14	17	17	17	-M-	15	11	13	16	25	22	13	15	17	12	14	13	16	23	26	26	15
3	15	21	13	13	12	12	11	9	5	0	0	2	7	6	3	3	4	5	6	9	11	9	8	8
4	5	5	9	8	6	6	6	5	8	8	9	10	5	5	5	3	9	9	8	6	5	7	5	7
5	6	7	8	14	11	6	6	13	17	23	23	25	-M-	-M-	-M-	-M-	25	22	21	19	19	20	20	17
6	11	12	10	10	10	4	3	6	1	0	2	7	8	7	7	8	10	13	15	14	13	9	8	11
7	14	15	13	14	8	11	13	17	18	22	23	24	24	24	23	21	18	17	17	16	16	17	17	17
8	16	18	17	16	16	16	14	12	12	14	16	14	13	14	13	15	13	12	14	13	11	12	11	10
9	8	5	7	9	8	7	8	10	9	10	9	11	13	15	16	20	18	17	14	15	14	11	13	15
10	15	13	12	8	7	5	2	3	7	11	11	13	10	9	15	14	13	18	22	22	19	23	17	16
11	19	19	20	18	16	17	18	17	16	15	12	11	12	12	11	12	8	8	7	6	4	4	3	1
12	0	3	4	4	6	7	7	7	8	6	7	8	12	15	15	15	17	15	16	18	19	21	23	24
13	21	20	20	19	19	18	20	19	20	21	20	24	27	24	22	23	20	23	21	21	22	20	18	16
14	15	20	17	14	16	14	12	10	9	8	6	5	8	10	12	13	13	14	14	12	11	12	10	6
15	9	13	19	18	16	17	17	15	12	11	11	12	13	14	14	13	9	7	13	12	11	11	9	8
16	9	11	16	6	7	5	1	1	2	3	5	4	4	5	3	4	7	8	9	11	9	12	12	15
17	14	15	15	16	15	14	16	17	17	19	19	17	17	18	17	16	17	20	22	19	17	17	22	22
18	20	21	16	13	8	10	-M-	-M-	-M-	6	11	13	13	14	15	18	16	19	18	21	28	25	25	23
19	18	20	23	21	18	20	19	18	18	15	11	7	11	10	8	7	6	11	14	10	12	11	10	9
20	8	12	9	6	9	14	15	13	8	10	9	7	4	2	5	4	1	0	4	8	10	10	11	13
21	13	17	18	18	15	17	15	13	13	13	12	13	12	13	12	14	13	14	15	17	18	11	12	10
22	10	10	10	11	9	7	8	10	11	9	8	8	8	7	8	8	6	3	3	7	9	8	13	13
23	12	11	11	12	6	5	7	8	6	4	4	3	3	4	5	8	6	8	11	9	11	13	10	11
24	12	11	13	12	12	12	14	15	13	12	12	7	11	8	6	12	13	12	15	18	21	26	16	14
25	14	12	10	6	14	16	20	20	20	21	19	22	21	22	23	21	17	14	14	11	9	8	8	10
26	11	11	10	11	9	4	0	5	7	6	3	2	2	3	4	6	7	6	5	4	6	10	9	10
27	8	7	6	7	8	8	6	7	8	10	11	8	10	11	9	7	8	7	6	6	6	5	5	6
28	7	8	7	6	6	6	6	6	6	6	6	5	5	5	5	4	4	2	2	3	3	2	3	3
29	3	3	1	1	3	3	1	0	0	2	1	2	0	1	0	0	0	0	1	2	3	3	3	2
30	2	3	3	3	3	2	2	2	2	2	2	1	1	1	2	3	3	3	3	4	4	6	6	6
31	4	4	4	4	3	3	1	1	2	3	3	2	2	2	3	4	4	5	4	4	6	6	5	3
HOURLY MEAN	12	12	12	12	11	11	10	10	10	10	10	11	11	10	10	11	11	11	12	12	13	13	12	11

MAXIMUM = 28 MINIMUM = 0 MEAN = 11 735 VALID OBSERVATIONS (98.8%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	24	26	21	10	25	15	24	18	20	23	20	24	27	20	19	16
MIN	12	11	0	3	6	0	8	10	5	2	1	0	16	5	7	1
MEAN	19	17	8	7	16	8	18	14	12	13	12	12	21	12	13	7

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	22	28	23	15	18	13	13	26	23	11	11	8	3	6	6
MIN	14	6	6	0	10	3	3	6	6	0	5	2	0	1	1
MEAN	17	17	14	8	14	8	8	13	16	6	8	5	1	3	3

MEAN MAXIMUM = 18 MEAN MINIMUM = 5

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	88	107	118	113	106	110	128	125	100	112	150	149	142	132	122	122	120	124	106	141	133	121	115	112
2	116	127	125	139	135	131	103	132	173	196	216	213	197	191	184	198	202	197	198	198	203	204	211	236
3	243	214	257	306	329	326	336	299	244	262	347	279	287	282	274	319	278	259	265	254	198	193	186	184
4	186	169	165	201	203	213	211	209	213	213	210	181	183	180	194	197	187	180	183	184	176	181	178	176
5	187	191	192	195	193	181	189	193	196	199	204	204	197	197	194	188	186	182	175	174	177	179	201	251
6	213	179	133	150	156	115	146	187	200	204	218	228	231	230	232	244	265	-M-	287	273	275	311	330	328
7	338	345	327	327	335	327	303	233	262	315	334	354	26	7	29	99	104	98	107	105	158	170	183	196
8	195	195	185	189	137	141	160	161	161	163	170	166	156	155	155	150	153	153	152	152	149	154	156	159
9	155	160	166	164	163	160	171	180	189	194	191	209	217	169	179	176	186	175	165	165	154	158	116	73
10	39	23	45	23	82	159	299	355	357	353	344	330	342	340	342	342	336	330	329	311	305	310	306	292
11	295	304	308	308	307	312	312	325	329	303	316	324	333	341	341	356	348	[illegible]	2	28	45	111	160	168
12	186	187	188	195	199	188	198	215	227	221	237	242	254	266	337	337	264	213	210	218	208	221	228	259
13	279	179	151	166	175	179	190	221	246	244	277	90	185	171	153	169	168	159	157	141	140	184	205	186
14	210	206	208	195	169	172	151	134	142	156	165	171	179	173	171	169	168	177	181	174	166	159	158	168
15	172	176	189	197	192	184	188	188	182	217	249	196	129	126	121	141	143	140	141	140	141	163	181	138
16	194	195	199	202	208	205	186	182	186	195	195	190	191	185	177	188	188	182	183	175	169	173	178	186
17	190	194	198	200	196	190	193	225	188	160	165	190	205	201	197	202	202	204	188	179	170	218	36	188
18	201	214	221	230	226	231	298	358	253	264	238	235	252	276	314	28	41	84	117	61	109	91	48	47
19	59	71	72	86	128	102	18	83	69	88	139	131	172	182	179	185	193	194	189	172	166	138	118	128
20	176	213	210	187	188	183	181	165	120	133	109	95	131	153	163	162	162	145	161	168	137	123	138	68
21	335	84	105	194	358	335	17	120	257	254	346	316	280	291	358	27	36	52	52	42	38	38	46	64
22	66	69	81	83	98	69	64	58	122	146	86	97	79	103	50	79	62	70	-M-	-M-	94	114	137	155
23	178	137	122	129	139	150	149	155	153	146	141	145	156	151	153	141	132	149	152	141	138	150	149	150
24	155	149	149	163	164	167	173	183	201	178	177	170	165	156	147	148	152	151	147	151	153	158	159	164
25	170	179	180	183	187	183	181	182	186	199	180	177	184	170	166	163	160	146	144	141	145	151	153	148
26	147	151	158	170	186	187	199	198	165	181	173	197	192	258	157	146	151	158	143	114	127	135	148	157
27	288	12	23	21	356	2	354	349	352	358	357	2	14	12	15	19	12	21	23	12	18	29	27	32
28	38	35	23	32	41	42	28	30	9	22	25	63	61	56	58	63	72	74	71	71	76	87	109	121
29	137	141	151	158	207	336	42	250	169	221	257	302	291	280	275	288	304	317	303	261	259	279	289	306
30	356	20	23	25	19	25	7	351	357	11	359	353	353	355	358	347	347	5	28	65	79	93	116	137
31	153	164	190	216	208	209	204	200	203	197	206	202	197	194	215	227	217	211	205	203	202	208	208	202

741 VALID OBSERVATIONS (99.6%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	204	216	220	218	213	216	215	208	208	211	221	207	229	222	214	218	217	211	192	188	184	174	169	187
2	203	210	217	221	216	200	185	187	183	176	174	176	183	191	185	185	184	182	176	165	163	159	162	160
3	175	184	186	193	202	198	198	201	205	211	209	204	185	184	189	188	188	182	176	167	169	181	184	185
4	190	194	197	201	203	202	198	200	202	224	229	194	178	140	147	143	124	131	141	183	241	236	249	67
5	75	78	122	146	172	175	218	178	151	147	98	79	114	141	141	118	84	91	96	97	89	80	95	71
6	57	58	60	58	66	72	64	50	40	33	40	41	53	89	77	91	89	79	66	62	67	53	36	44
7	38	32	34	52	11	11	15	31	30	19	14	11	360	7	18	9	4	7	-M-	-M-	-M-	-M-	-M-	-M-
8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	15	20	20	8	360	350	353	351	1	1	15	28	24	20
9	21	25	29	34	33	10	337	8	47	23	8	20	52	16	15	25	23	46	52	41	46	64	62	13
10	61	48	53	141	46	58	62	58	59	60	61	79	78	81	83	75	75	92	103	110	105	114	107	95
11	117	122	98	104	102	89	93	78	87	93	113	111	113	119	119	118	109	116	110	117	117	118	122	127
12	127	129	133	122	121	118	122	127	88	129	117	114	135	141	152	156	148	129	119	121	122	57	116	140
13	169	169	135	109	109	110	120	121	85	79	86	82	88	95	105	96	104	119	133	142	143	147	130	149
14	127	108	118	130	132	128	120	122	117	115	109	106	116	101	88	97	115	138	124	119	126	122	122	124
15	107	86	68	97	115	115	107	127	145	314	358	359	1	359	35	31	31	40	35	48	45	43	47	37
16	37	33	31	37	43	39	50	37	42	40	50	59	52	62	52	58	60	72	70	58	55	67	72	72
17	83	96	117	116	63	68	72	75	52	71	77	110	106	135	97	152	108	126	130	137	134	137	152	162
18	164	182	188	205	203	161	148	153	174	184	197	199	206	194	184	175	173	173	167	161	168	166	167	176
19	180	188	194	195	199	196	192	193	211	219	223	221	219	227	227	215	196	184	178	169	179	187	196	205
20	212	220	228	239	296	318	262	273	333	355	10	41	24	22	7	13	50	46	32	27	28	32	41	58
21	83	113	125	137	139	352	21	6	16	111	143	143	164	157	175	180	176	175	154	155	160	162	154	159
22	173	180	184	179	176	177	217	203	194	232	296	309	312	339	352	354	3	10	15	24	30	46	59	84
23	109	105	184	211	230	248	202	161	270	230	264	299	152	180	184	171	154	145	138	152	162	163	160	152
24	146	135	141	160	160	157	170	341	14	11	344	332	339	338	336	346	342	349	-M-	-M-	-M-	-M-	-M-	-M-
25	-M-	316	311	335	329	317	285	294	288	269	265	223	192	196	191	196	189	178	168	167	176	172	172	186
26	183	186	186	189	178	150	149	137	140	196	59	132	124	128	143	134	134	125	108	75	74	111	93	52
27	48	50	52	44	41	46	28	25	20	19	31	51	39	33	44	45	50	52	51	46	63	70	82	98
28	99	87	117	126	99	87	97	103	118	114	87	104	126	130	128	120	123	146	146	159	148	139	150	153
29	162	162	160	159	168	173	174	170	173	177	185	177	185	230	160	151	140	152	164	159	171	105	49	234
30	237	132	138	305	80	121	124	123	137	144	98	79	48	62	69	89	95	111	112	107	109	115	119	125
31	129	136	126	167	187	252	11	88	160	98	123	121	134	138	142	167	179	157	132	126	115	124	137	145

721 VALID OBSERVATIONS (96.9%)

318 WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	184	350	27	12	25	75	318	270	189	273	29	29	7	12	21	24	34	40	49	47	59	57	64	23
2	36	357	346	315	352	354	2	11	19	32	4	359	351	355	337	324	322	328	318	310	282	275	269	289
3	50	182	183	250	267	286	308	315	354	8	357	356	355	326	359	13	20	25	65	81	89	95	109	114
4	133	142	148	146	145	156	163	171	171	189	201	208	203	189	183	169	154	147	156	152	163	172	170	168
5	173	182	186	188	183	179	181	180	185	190	192	191	201	203	204	178	166	174	196	217	201	194	178	159
6	158	161	144	139	143	141	181	159	150	168	187	180	177	189	151	135	140	95	56	85	91	106	95	79
7	75	84	111	116	101	95	106	102	106	112	111	121	131	123	121	117	113	111	110	114	115	113	113	113
8	109	122	128	127	127	128	121	128	134	133	138	145	139	131	144	143	157	154	154	142	144	141	138	145
9	161	158	152	160	163	168	156	149	147	165	147	176	168	174	175	176	167	164	155	140	142	151	154	159
10	162	163	168	173	176	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	186	174	175	171	166	165	162	166	172	179
11	177	181	182	173	176	173	173	170	173	178	182	173	165	167	170	181	176	161	155	144	141	145	149	152
12	158	168	173	174	174	176	168	166	173	179	191	[illegible]	189	182	185	183	180	178	241	307	352	358	350	355
13	354	360	358	342	10	43	54	43	126	58	2	2	356	350	347	349	350	356	2	12	10	2	358	12
14	10	341	14	19	16	26	11	43	96	129	31	358	355	2	1	357	354	351	346	346	347	340	331	332
15	344	342	344	346	351	354	342	339	340	352	5	3	355	358	353	5	14	18	26	50	57	56	76	82
16	96	103	100	108	114	125	123	118	129	130	131	143	141	143	143	144	145	148	141	140	145	151	157	156
17	151	150	153	153	152	157	165	145	197	335	21	10	354	14	354	352	360	351	334	329	322	317	321	336
18	344	344	350	353	357	355	337	346	344	352	138	16	354	3	12	354	249	237	199	183	173	173	167	176
19	179	182	189	195	196	192	193	200	199	211	223	226	231	270	308	349	355	354	351	351	348	351	353	353
20	1	6	11	1	355	352	352	348	347	356	349	346	347	352	355	356	350	351	345	330	327	330	335	339
21	340	345	346	349	351	355	355	350	332	13	354	358	4	3	11	359	4	2	12	35	74	110	135	162
22	161	183	202	206	208	186	193	205	205	198	195	183	175	174	171	175	171	167	154	153	155	164	167	167
23	163	160	170	171	156	160	170	172	184	193	217	226	259	295	298	305	289	263	263	257	263	274	286	301
24	298	304	309	321	331	339	344	335	342	340	344	352	341	344	347	354	1	6	352	341	31	32	19	3
25	1	2	5	357	351	1	15	10	4	358	11	8	354	348	338	340	3	347	346	332	50	95	108	137
26	152	167	151	151	161	153	156	163	162	174	156	165	176	172	163	151	139	135	-M-	-M-	-M-	-M-	-M-	-M-
27	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	136	142	143	149	152	148	142	142	144	144	142	142	145	149
28	155	157	165	167	166	165	165	166	170	178	172	178	187	190	192	188	181	180	175	172	172	182	186	188
29	187	188	184	179	174	178	208	250	173	148	150	177	184	191	180	187	188	182	164	159	161	175	181	176
30	173	172	179	175	171	172	171	167	167	177	177	219	173	169	188	130	146	129	107	97	90	99	133	165

695 VALID OBSERVATIONS (96.5%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	174	181	177	180	186	176	180	165	169	181	199	215	205	185	194	183	170	165	160	153	152	162	174	178
2	181	165	157	169	173	186	195	193	193	238	301	296	298	306	309	316	304	273	253	229	220	223	240	262
3	319	351	14	9	3	358	349	338	329	289	208	163	91	93	119	126	173	156	161	141	125	128	133	138
4	148	158	165	160	170	163	172	172	169	156	161	165	169	173	171	155	134	142	140	131	119	122	126	134
5	131	137	152	170	178	179	170	166	175	190	192	198	194	197	187	185	181	174	170	165	167	169	168	172
6	168	165	167	167	181	180	165	172	208	297	300	304	301	306	308	303	307	306	322	317	305	248	211	191
7	192	192	199	203	211	211	215	219	208	203	193	208	198	200	204	200	186	182	178	164	156	154	158	156
8	147	150	149	145	150	160	152	159	166	168	147	147	136	130	136	123	117	123	116	106	136	155	142	167
9	174	200	230	241	244	242	243	241	230	229	233	236	226	230	231	230	230	226	227	235	235	238	242	249
10	248	251	253	261	265	262	266	276	293	292	298	304	305	305	308	304	305	307	306	310	316	312	308	299
11	292	295	284	280	274	272	272	273	286	294	295	292	281	284	282	284	281	277	276	268	230	225	228	237
12	265	322	358	348	341	342	343	340	337	337	324	309	296	312	304	317	311	328	344	343	338	347	358	358
13	4	357	354	353	350	340	333	321	337	342	5	355	334	349	329	335	334	329	-M-	345	1	358	16	276
14	251	250	244	248	242	246	247	254	255	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	260	255	254	260	265	277	283
15	293	310	313	312	329	331	317	319	339	359	9	11	10	7	353	351	354	357	2	355	357	355	358	356
16	356	3	359	6	355	5	349	9	7	224	192	218	229	217	218	218	210	196	178	172	167	172	175	188
17	188	188	185	188	188	182	178	173	172	182	186	197	195	189	189	187	173	188	187	176	182	181	188	192
18	199	201	201	199	191	186	186	186	186	190	192	194	188	179	182	179	186	181	168	139	137	141	140	133
19	132	123	57	93	129	54	359	7	17	5	350	331	312	323	338	315	308	308	308	310	314	313	315	315
20	314	322	325	329	340	339	340	334	323	327	344	345	349	335	321	320	333	347	1	10	22	25	36	76
21	101	100	132	169	182	178	190	209	214	227	197	173	157	155	221	206	158	158	137	142	142	145	149	156
22	167	182	184	188	193	198	205	194	191	206	201	200	175	181	191	198	183	172	163	164	161	164	164	167
23	176	178	183	186	181	178	180	175	173	185	175	171	177	182	174	177	172	161	152	151	155	160	166	165
24	165	164	168	173	170	174	178	171	170	173	180	180	187	184	180	175	171	163	160	154	158	160	168	169
25	169	170	173	174	174	173	174	182	176	172	173	189	199	197	173	166	168	161	156	153	157	162	162	160
26	165	167	169	168	169	161	160	161	160	157	164	163	170	170	158	154	152	141	139	141	147	150	156	157
27	161	162	163	160	160	163	160	159	160	167	173	178	183	187	186	184	179	175	180	175	176	180	175	185
28	182	188	214	205	183	260	356	359	344	335	338	332	308	306	303	303	292	264	255	246	279	294	282	275
29	271	256	256	263	266	261	251	243	238	228	229	230	225	229	220	221	216	212	200	199	195	189	192	195
30	194	191	186	184	183	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	197	201	207	233	197	207	32	168	99	143
31	125	118	93	64	106	92	108	105	138	151	125	145	177	175	174	181	133	82	61	52	25	19	20	342

726 VALID OBSERVATIONS (97.6%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	350	360	1	357	357	5	359	360	360	5	7	2	359	10	7	350	346	342	19	12	344	352	354	12
2	21	4	13	352	355	360	348	344	354	341	-M-	-M-	350	347	346	334	336	335	331	338	332	321	326	333
3	333	335	337	335	324	313	301	302	303	313	331	333	327	326	332	333	351	341	348	339	336	315	311	308
4	314	317	317	316	314	307	299	305	314	331	335	339	327	328	331	328	329	319	297	299	313	331	338	327
5	307	309	309	322	315	305	303	301	302	311	312	297	300	283	281	258	230	182	158	154	155	170	163	167
6	173	177	175	176	174	172	175	172	175	179	189	180	174	176	176	175	177	173	175	169	172	179	184	187
7	187	185	179	177	179	181	186	191	193	195	206	220	218	226	230	305	13	5	10	16	22	27	38	42
8	44	51	51	59	57	60	62	63	74	73	77	79	76	71	65	60	59	64	56	63	73	92	71	72
9	75	64	73	73	51	23	56	104	158	169	184	197	196	199	190	186	163	151	160	162	169	178	182	188
10	191	199	205	211	224	326	327	332	328	327	341	342	334	325	316	298	300	313	353	8	29	51	61	59
11	110	124	94	108	127	124	133	140	146	175	183	187	193	224	195	198	193	200	219	236	234	325	327	335
12	342	339	340	339	337	345	342	334	336	334	329	331	325	332	335	328	330	330	335	330	334	330	321	298
13	308	354	190	178	171	186	181	170	165	167	161	162	167	163	157	150	153	163	160	157	162	163	167	161
14	136	125	206	322	348	351	346	347	348	343	350	342	337	333	339	331	341	335	335	334	292	270	242	223
15	216	192	187	202	205	203	199	198	205	202	204	194	196	196	189	185	172	181	185	177	178	186	192	194
16	198	197	206	216	212	208	210	225	232	233	243	278	298	304	291	303	305	308	324	353	81	150	151	176
17	202	211	208	197	188	194	183	173	181	195	141	165	178	176	165	178	166	166	157	163	168	170	171	181
18	191	195	190	188	190	186	188	170	156	159	165	166	163	162	164	176	167	155	140	144	149	140	155	163
19	158	160	159	157	165	175	170	176	174	167	168	171	167	167	166	168	169	168	165	164	163	166	175	175
20	186	194	197	209	239	282	309	317	317	325	329	340	338	351	6	360	6	23	359	291	308	302	295	313
21	315	208	166	130	134	128	117	159	138	136	137	132	138	137	133	131	121	110	107	108	113	121	119	124
22	119	125	120	117	108	114	106	73	46	14	14	20	359	351	354	359	7	12	8	8	11	11	11	9
23	2	359	360	354	353	351	355	359	353	357	350	347	340	340	332	334	333	332	334	345	355	353	352	337
24	336	333	344	348	343	350	339	310	209	198	201	209	213	216	221	222	222	215	205	208	208	206	203	208
25	202	197	186	183	179	177	182	176	166	173	183	184	182	182	183	182	169	180	183	178	176	186	197	225
26	243	266	330	341	345	343	343	340	344	352	5	10	3	2	7	16	19	29	21	34	56	73	77	70
27	84	77	78	85	71	83	93	96	87	86	105	121	117	121	99	76	62	56	47	54	62	81	81	80
28	83	98	90	88	89	104	98	91	96	9	303	293	308	275	277	279	277	286	274	251	224	210	220	235
29	225	225	217	215	216	210	197	183	161	175	179	173	163	183	177	174	173	171	154	142	118	122	126	130
30	132	134	129	129	136	150	165	159	164	181	192	209	166	131	138	145	144	156	162	160	162	165	166	170

718 VALID OBSERVATIONS (99.7%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	169	177	182	184	177	180	183	179	170	-M-	164	167	168	165	167	145	140	138	141	148	149	172	165	145
2	144	152	198	217	204	210	-M-	199	165	175	182	176	179	212	228	226	211	192	195	203	227	241	249	262
3	267	307	330	333	346	340	336	345	6	255	87	353	354	4	356	354	351	354	358	3	358	8	16	26
4	41	72	58	133	106	89	88	52	30	14	19	19	22	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
5	-M-	4	2	357	7	1	326	320	334	349	347	344	346	339	338	342	345	346	336	327	330	338	342	347
6	332	332	325	336	338	334	333	282	301	51	186	195	188	182	178	175	161	156	156	156	157	162	149	144
7	142	140	135	129	60	57	47	40	32	31	33	39	30	32	36	38	37	35	30	28	26	23	21	19
8	17	18	18	20	14	13	19	19	10	12	12	17	9	12	19	16	18	20	25	28	32	37	32	41
9	22	23	63	77	102	135	122	122	117	142	158	175	175	176	175	181	185	190	193	196	197	206	218	222
10	216	219	233	234	230	245	306	298	327	350	354	358	359	356	357	358	360	356	358	357	359	6	6	12
11	24	16	13	10	12	9	7	5	4	7	8	360	354	353	357	357	350	347	359	355	352	353	354	35
12	102	216	248	254	240	217	209	199	183	182	194	196	187	188	186	178	181	176	171	174	175	185	191	193
13	187	184	180	176	177	179	185	189	187	190	187	202	209	198	193	190	181	184	183	177	179	178	181	186
14	191	203	195	179	185	182	189	183	184	193	208	268	315	331	332	334	329	325	334	338	330	324	343	326
15	313	308	307	304	306	310	324	321	317	308	312	320	317	299	311	313	324	326	325	328	324	337	357	1
16	10	14	26	10	32	52	53	32	98	106	100	107	130	130	142	146	139	140	135	148	156	156	160	162
17	164	165	167	173	166	162	166	171	176	180	186	188	201	203	198	193	186	176	189	196	200	211	225	232
18	244	248	256	260	247	275	-M-	-M-	-M-	312	310	287	291	296	302	308	302	291	276	312	313	312	323	332
19	321	325	329	322	305	306	308	304	310	303	308	302	283	274	265	267	257	228	218	207	213	226	234	250
20	275	312	327	329	329	325	336	338	344	346	352	350	342	292	280	301	333	100	133	137	148	153	150	149
21	138	141	142	138	158	168	165	165	161	165	165	170	167	173	174	173	166	158	166	171	173	173	176	182
22	175	174	177	178	177	177	173	171	178	171	170	156	156	157	160	168	181	145	136	132	187	195	197	207
23	184	215	245	274	277	292	315	355	15	37	46	53	66	104	84	95	97	60	62	72	89	103	106	105
24	115	124	120	127	137	130	136	131	129	134	134	121	130	227	123	77	89	94	128	136	130	164	196	212
25	205	198	223	224	309	329	329	323	324	323	319	324	323	325	332	331	328	335	339	351	343	330	329	331
26	336	343	347	351	350	286	216	344	360	7	36	71	89	120	133	142	142	135	130	146	129	129	139	138
27	123	124	110	98	75	76	80	75	39	38	28	23	22	39	39	29	33	29	14	2	6	6	356	331
28	333	335	333	333	330	325	325	330	329	330	331	320	322	324	319	317	318	319	329	310	316	330	302	291
29	288	292	289	277	286	290	263	252	239	237	237	238	226	250	253	242	234	233	236	242	234	227	228	226
30	221	220	220	213	214	229	222	206	189	183	196	205	214	216	215	222	216	197	204	205	205	207	216	223
31	227	224	232	246	253	248	250	255	273	254	234	233	228	219	222	223	221	221	219	225	231	239	244	239

727 VALID OBSERVATIONS (97.7%)

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	6	6	7	8	6	8	-M-	-M-	-M-	-M-	10	8	8	9	9	9	9	9	9	10	8	9	8	7
2	6	6	8	9	4	3	3	5	8	9	13	12	12	12	12	17	16	17	16	15	11	8	10	8
3	5	3	3	2	2	2	2	1	3	4	4	6	5	6	6	4	7	8	5	1	1	2	1	2
4	2	2	-M-	3	3	3	4	6	-M-	-M-	-M-	-M-	-M-	-M-	15	17	17	16	15	14	11	11	9	9
5	12	12	11	11	11	9	10	-M-	-M-	17	20	21	20	21	22	21	18	17	19	16	15	17	21	15
6	-M-	13	6	5	11	3	5	7	13	14	17	17	18	18	19	17	19	18	14	9	8	8	16	9
7	9	7	4	6	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	4	4	4	4	2	0	1	1
8	1	1	1	2	2	2	2	3	4	7	9	12	12	12	12	12	12	11	10	9	7	6	4	-M-
9	-M-	-M-	6	6	3	4	5	6	7	9	8	6	5	3	4	6	8	10	8	7	9	6	3	4
10	5	6	3	3	3	3	4	6	8	9	10	12	12	10	11	13	10	-M-	-M-	-M-	-M-	-M-	-M-	-M-
11	-M-	-M-	-M-	-M-	-M-	-M-	-M-	6	6	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
12	-M-	-M-	-M-	-M-	2	3	4	7	5	5	6	7	8	7	14	12	14	8	7	6	7	5	2	3
13	3	2	2	2	2	2	3	5	3	4	7	7	5	6	6	6	6	6	5	4	5	5	6	8
14	9	9	5	6	8	5	5	4	8	10	9	9	10	11	12	12	11	9	7	4	3	4	4	4
15	5	6	8	9	11	10	10	10	12	12	10	3	4	9	10	9	10	9	9	9	8	6	-M-	10
16	10	7	9	11	11	10	9	11	11	13	15	15	15	14	16	18	17	16	15	12	10	12	14	14
17	13	13	14	13	12	12	12	8	4	6	10	13	16	13	15	13	11	8	7	6	5	8	5	3
18	10	14	10	6	7	7	7	3	2	4	6	7	6	5	5	6	4	3	3	3	2	3	4	5
19	4	4	3	3	4	2	9	7	6	5	8	9	9	9	10	11	12	12	8	3	1	1	0	1
20	1	0	1	2	1	2	0	1	3	4	4	5	7	9	9	8	8	8	6	2	2	3	4	17
21	13	6	10	9	8	5	7	6	11	10	5	7	4	3	3	4	4	3	4	3	1	4	5	5
22	4	4	3	2	1	2	-M-	-M-	-M-	-M-	5	6	5	4	3	4	4	4	4	4	4	4	4	2
23	3	2	1	1	2	2	2	2	6	7	6	8	9	8	8	7	7	7	6	4	4	1	1	1
24	1	2	4	3	4	3	3	5	6	8	8	9	9	9	8	9	10	9	9	7	5	3	4	4
25	6	5	6	5	4	3	4	5	6	7	8	8	9	9	9	10	9	8	8	7	6	4	2	2
26	3	3	2	4	4	2	2	3	4	4	4	4	4	3	5	6	7	6	2	2	2	2	2	2
27	6	8	6	4	2	1	2	4	5	5	6	8	8	8	7	8	8	8	6	4	2	3	3	5
28	4	4	5	5	5	5	5	5	3	4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
29	-M-	-M-	-M-	-M-	-M-	2	2	1	-M-	-M-	-M-	-M-	2	3	3	3	5	6	4	3	2	1	4	5
30	5	6	5	3	3	2	1	-M-	4	5	5	5	5	5	6	6	3	2	3	3	2	0	0	0
31	0	0	0	0	0	0	0	1	4	4	1	2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
HOURLY MEAN	6	6	5	5	5	4	5	5	6	7	8	9	9	9	10	10	10	9	8	6	5	5	5	6

MAXIMUM = 22 MINIMUM = 0 MEAN = 7 641 VALID OBSERVATIONS (86.2%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	10	17	8	17	22	19	9	12	10	13	6	14	8	12	12	18
MIN	6	3	1	2	9	3	0	1	3	3	6	2	2	3	3	7
MEAN	8	10	4	9	16	12	4	7	6	7	6	7	4	7	9	13

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	16	14	12	17	13	6	9	10	10	7	8	5	6	6	4
MIN	3	2	0	0	1	1	1	1	2	2	1	3	1	0	0
MEAN	10	6	6	4	6	4	4	6	6	3	5	4	3	3	1

MEAN MAXIMUM = 11 MEAN MINIMUM = 2

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
3	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	6	4	4	6	8	7	7	9	4	5	19	5	3	4
5	2	-M-	-M-	-M-	-M-	-M-	-M-	0	2	5	5	-M-	-M-	4	4	2	3	3	3	3	2	3	2	1
6	2	1	2	2	3	3	2	2	4	4	4	5	6	6	4	6	6	4	5	4	3	2	4	4
7	4	4	3	3	3	5	5	5	3	5	6	7	8	7	6	5	5	4	4	2	0	1	0	0
8	0	0	0	0	0	0	0	1	3	7	8	8	8	6	6	8	7	7	5	2	2	2	1	0
9	0	0	1	1	1	2	2	3	2	-M-	2	3	2	5	6	6	6	6	6	8	7	8	7	5
10	5	5	5	9	-M-	-M-	5	-M-	-M-	5	5	7	-M-	5	5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
11	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	9	9	8	7	7	8	8	7	5	-M-	-M-	-M-	-M-
12	-M-	-M-	-M-	-M-	-M-	-M-	-M-	7	9	11	10	9	13	12	10	11	12	9	9	11	10	8	8	10
13	10	5	2	5	5	3	2	3	4	4	5	6	4	4	5	4	4	4	7	8	8	5	5	3
14	4	4	5	6	7	6	5	5	5	7	7	8	8	7	6	8	8	9	7	5	5	5	6	7
15	4	3	-M-	-M-	4	5	4	5	3	2	2	5	5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
16	3	4	3	2	4	4	5	5	3	4	4	4	6	5	6	5	4	4	3	3	2	2	2	0
17	0	0	0	1	1	2	0	2	2	1	2	4	4	4	3	3	2	3	2	0	1	2	0	0
18	0	0	1	1	1	1	1	2	2	3	7	8	9	9	9	9	8	8	7	6	7	6	5	5
19	4	5	4	4	5	5	3	6	8	11	11	11	12	11	9	9	7	7	5	5	5	6	5	6
20	6	3	8	9	5	1	3	4	1	2	4	6	7	4	5	3	6	6	5	4	4	3	2	0
21	0	0	0	1	1	1	1	0	0	1	4	4	6	7	7	6	6	6	4	2	3	5	5	5
22	7	5	5	6	6	4	7	-M-	3	3	6	7	7	7	8	8	7	6	4	1	2	0	3	2
23	1	2	2	2	2	2	3	2	1	2	3	-M-	2	3	5	4	4	4	5	3	1	1	1	1
24	2	3	5	3	3	3	3	9	3	5	8	13	11	13	13	14	13	11	10	7	4	2	1	1
25	-M-	-M-	-M-	-M-	1	1	1	0	0	1	2	4	6	6	6	7	7	6	6	2	0	1	0	4
26	3	3	3	4	4	4	5	7	6	5	5	-M-	-M-	-M-	-M-	6	7	6	4	3	2	2	2	3
27	4	4	4	4	5	4	7	11	13	12	10	8	7	7	7	8	8	8	6	5	2	3	3	4
28	3	2	3	2	2	-M-	3	4	5	4	4	4	-M-	8	9	-M-	-M-	8	6	6	9	10	10	10
29	12	11	9	10	10	9	9	-M-	-M-	-M-	-M-	11	8	3	10	9	10	10	10	9	7	6	9	11
30	4	4	1	2	2	0	2	3	5	4	3	3	3	3	4	4	5	5	5	5	5	5	4	5
31	7	8	5	4	2	3	6	3	4	-M-	6	8	9	11	11	9	7	4	4	4	2	0	0	0
HOURLY MEAN	4	3	3	4	3	3	3	4	4	5	5	7	7	7	7	7	7	6	5	5	4	4	3	4

MAXIMUM = 19 MINIMUM = 0 MEAN = 5 585 VALID OBSERVATIONS (78.6%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	-M-	-M-	-M-	19	5	6	8	8	8	9	9	13	10	9	5	6
MIN	-M-	-M-	-M-	3	0	1	0	0	0	5	5	7	2	4	2	0
MEAN	-M-	-M-	-M-	7	3	4	4	3	4	6	8	10	5	6	4	4

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	4	9	12	9	7	8	5	14	7	7	13	10	12	5	11
MIN	0	0	3	0	0	0	1	1	0	2	2	2	3	0	0
MEAN	2	5	7	4	3	5	2	7	3	4	6	6	9	4	5

MEAN MAXIMUM = 9 MEAN MINIMUM = 1

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3	4	2	2	3	3	4	1	6	3	4	2	3	6	8	9	6	4	4	4	2	2	3	3
2	2	3	1	0	7	6	8	8	7	5	6	5	5	6	8	10	8	7	3	0	1	0	2	2
3	1	1	1	1	0	0	0	0	1	3	5	5	5	5	3	4	3	2	2	2	-M-	-M-	0	1
4	0	0	1	1	3	3	2	3	4	6	7	9	9	9	10	9	9	7	6	7	11	12	11	10
5	5	10	10	9	9	8	8	8	8	12	13	14	15	12	9	7	5	4	4	6	-M-	2	4	4
6	5	5	4	4	6	6	5	3	4	4	3	2	4	3	4	5	3	2	2	3	2	2	1	2
7	2	3	3	2	2	4	4	4	5	6	5	6	6	6	7	8	6	5	5	5	3	2	3	4
8	5	5	5	6	4	4	4	6	6	6	7	7	8	9	10	10	11	11	8	5	6	7	8	7
9	6	8	8	8	7	7	4	4	5	6	6	7	9	13	15	12	11	11	10	8	9	9	11	9
10	8	9	10	10	10	10	10	10	11	12	15	16	13	14	12	13	13	12	9	7	8	9	9	9
11	6	6	7	7	8	8	8	7	10	10	11	13	11	12	12	10	10	7	6	7	8	8	9	10
12	12	10	10	11	11	11	9	11	12	13	13	14	13	14	15	13	13	9	18	8	7	6	8	9
13	6	6	6	9	9	5	3	1	1	2	3	6	7	8	10	12	11	10	9	8	6	6	7	7
14	5	8	6	6	7	5	5	8	6	5	2	7	8	7	6	5	5	5	5	6	7	8	7	9
15	6	7	6	11	10	4	6	7	11	10	9	10	8	10	10	9	8	7	5	3	3	2	2	2
16	1	0	3	0	2	4	5	4	5	6	7	10	10	9	10	10	9	6	4	2	4	9	4	3
17	4	5	4	4	4	3	4	4	6	6	13	10	11	12	11	12	10	11	8	4	4	2	1	4
18	4	3	0	3	3	0	2	2	1	0	1	3	3	3	3	2	3	2	1	-M-	-M-	-M-	-M-	-M-
19	-M-	-M-	-M-	-M-	-M-	-M-	2	2	3	6	8	12	9	8	9	10	12	11	-M-	-M-	-M-	-M-	-M-	-M-
20	-M-	-M-	-M-	-M-	2	3	5	4	-M-	9	12	9	9	10	9	9	9	8	5	-M-	-M-	-M-	-M-	-M-
21	-M-	0	0	0	1	0	1	2	0	0	0	3	5	5	5	5	5	4	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	1	5	8	9	11	11	12	11	10	10	-M-	-M-	-M-	5	5	-M-
23	-M-	-M-	-M-	-M-	5	-M-	4	3	2	4	4	5	6	8	8	7	9	8	7	-M-	-M-	9	11	-M-
24	-M-	-M-	-M-	4	3	-M-	-M-	-M-	10	11	11	12	11	11	11	8	6	3	0	3	6	5	3	4
25	4	4	4	4	4	5	4	3	4	5	5	5	4	5	5	4	3	2	0	0	0	0	0	0
26	0	0	0	1	1	2	1	1	3	3	6	10	10	10	11	11	9	8	6	5	6	6	7	8
27	8	8	7	6	7	7	6	7	8	10	9	12	13	16	17	18	16	15	-M-	-M-	-M-	-M-	-M-	-M-
28	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	19	17	18	19	18	19	19	16	14	15	13	11
29	8	-M-	12	-M-	-M-	-M-	12	7	-M-	-M-	-M-	-M-	11	15	12	9	9	8	7	6	4	3	6	6
30	3	3	2	4	4	5	5	-M-	7	7	8	4	0	2	2	2	3	0	0	1	1	0	0	1
HOURLY MEAN	4	5	4	4	5	5	5	5	5	6	7	8	9	9	9	9	8	7	6	5	5	5	5	5

MAXIMUM = 19 MINIMUM = 0 MEAN = 6 644 VALID OBSERVATIONS (89.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	9	10	5	12	15	6	8	11	15	16	13	18	12	9	11
MIN	1	0	0	0	2	1	2	4	4	7	6	6	1	2	2
MEAN	4	5	2	6	8	3	4	7	9	11	9	11	7	6	7

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	10	13	4	12	12	5	12	11	12	5	11	18	19	15	8
MIN	0	1	0	2	2	0	0	2	0	0	0	6	11	3	0
MEAN	5	7	2	8	7	2	5	6	7	3	5	11	16	8	3

MEAN MAXIMUM = 11 MEAN MINIMUM = 2

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	1	1	1	0	2	3	5	5	5	5	5	3	3	8	6	2	1	4	9	11	7
2	3	-M-	3	3	4	2	4	5	6	8	8	10	10	8	7	8	6	4	1	0	0	1	2	1
3	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	1	2	2	3	3	2	3	3	-M-	-M-	-M-	-M-	-M-	-M-
4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	4	5	8	9	10	10	7	7	6	-M-	-M-	-M-	-M-	-M-	-M-
5	-M-	-M-	-M-	-M-	-M-	2	4	4	-M-	-M-	7	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
6	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
7	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
9	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
10	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
11	-M-	-M-	-M-	-M-	8	11	14	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	16	-M-	-M-	-M-	-M-	-M-
12	-M-	9	-M-	-M-	13	12	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	8	8	-M-	-M-	-M-
13	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	10	-M-	-M-	-M-	1	-M-	-M-	-M-	0
14	0	-M-	-M-	-M-	-M-	1	2	-M-	-M-	4	4	-M-	-M-	-M-	13	13	12	8	4	-M-	-M-	-M-	-M-	-M-
15	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
18	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
19	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
20	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
21	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
22	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
23	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
24	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
25	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
26	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
27	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
28	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
29	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
31	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
HOURLY MEAN	1	5	1	2	7	5	5	4	4	5	5	6	6	6	7	7	7	6	6	2	4	5	7	3

MAXIMUM = 16 MINIMUM = 0 MEAN = 5 90 VALID OBSERVATIONS (12.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	11	10	3	10	7	-M-	-M-	-M-	-M-	-M-	16	13	10	13	-M-	-M-
MIN	0	0	1	4	2	-M-	-M-	-M-	-M-	-M-	8	8	0	0	-M-	-M-
MEAN	4	5	2	7	4	-M-	-M-	-M-	-M-	-M-	12	10	3	6	-M-	-M-

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
MIN	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
MEAN	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-

MEAN MAXIMUM = 10 MEAN MINIMUM = 3

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	10	10	12	15	15	14	16	13	13	17	17	18
3	15	-M-	-M-	-M-	5	4	7	8	9	13	13	17	19	20	18	16	14	8	4	0	6	7	5	5
4	8	8	9	8	9	8	8	10	12	13	13	15	15	15	14	10	7	6	2	4	4	4	3	4
5	3	4	4	5	6	5	5	5	6	4	-M-	8	6	6	5	4	3	2	-M-	-M-	-M-	-M-	0	1
6	1	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	4	5	5	7	9	9	5	2	-M-	-M-	-M-	5	3
7	4	3	4	-M-	-M-	-M-	-M-	7	-M-	-M-	-M-	11	6	9	5	2	0	-M-	-M-	-M-	-M-	-M-	4	4
8	5	4	6	7	7	7	7	7	6	4	4	5	4	4	4	5	5	4	5	3	1	0	2	2
9	1	2	1	0	0	0	-M-	-M-	-M-	-M-	-M-	12	9	8	9	7	7	6	7	10	11	11	9	9
10	9	9	7	6	7	10	7	7	9	10	9	8	7	5	4	5	4	3	3	4	3	1	1	2
11	1	3	3	4	4	4	3	5	4	-M-	18	19	16	16	12	18	14	13	11	11	6	-M-	-M-	24
12	26	30	31	32	33	24	-M-	28	-M-	26	28	29	26	28	24	25	16	15	9	6	4	6	3	2
13	0	2	2	2	3	4	6	9	10	12	15	16	17	16	17	-M-	14	13	11	12	12	10	7	3
14	1	2	3	8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	2	3	4
15	5	3	3	5	4	4	5	8	9	-M-	-M-	-M-	-M-	19	16	17	-M-	-M-	-M-	-M-	12	-M-	-M-	8
16	8	7	5	7	5	-M-	2	3	3	-M-	-M-	-M-	-M-	3	3	6	5	-M-	-M-	-M-	-M-	-M-	-M-	-M-
17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	10	10	11	7
18	-M-	-M-	-M-	3	-M-	2	-M-	-M-	-M-	3	4	5	7	6	11	12	11	11	8	6	7	10	10	9
19	9	9	10	11	10	9	10	10	9	7	7	7	-M-	16	19	19	16	15	14	15	15	17	15	16
20	14	16	13	9	10	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	3	2	2	-M-	-M-	-M-	2	-M-
21	-M-	3	3	2	-M-	-M-	2	3	1	-M-	4	7	7	7	8	7	5	4	5	4	4	3	1	2
22	2	3	3	3	2	2	2	3	4	7	10	9	-M-	10	11	13	15	15	16	16	15	16	15	-M-
23	-M-	-M-	-M-	13	16	18	12	13	15	16	18	18	-M-	-M-	-M-	-M-	14	11	7	4	5	3	2	2
24	3	4	3	3	3	2	2	1	3	4	7	-M-	-M-	-M-	-M-	14	13	-M-	-M-	-M-	-M-	-M-	-M-	4
25	6	4	5	5	7	6	7	7	8	9	11	12	-M-	12	11	18	11	8	6	4	4	5	3	8
26	8	7	13	11	-M-	-M-	-M-	-M-	10	11	11	10	9	7	-M-	8	7	-M-	-M-	4	3	4	-M-	-M-
27	-M-	2	2	2	4	2	3	2	2	3	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	6	5	5
28	5	3	3	2	2	1	1	1	0	0	1	2	3	6	7	6	4	4	3	3	3	3	6	6
29	5	3	3	4	6	-M-	-M-	-M-	-M-	4	4	3	3	5	4	4	3	3	1	0	2	1	0	0
30	0	0	0	0	0	0	0	0	0	1	2	3	2	0	4	3	5	5	4	4	3	3	0	0
HOURLY MEAN	6	6	6	6	7	6	5	7	6	8	10	11	10	10	10	11	9	8	7	6	7	7	5	6

MAXIMUM = 33 MINIMUM = 0 MEAN = 7 509 VALID OBSERVATIONS (70.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	-M-	18	20	15	8	9	11	7	12	10	24	33	17	8	19
MIN	-M-	10	0	2	0	1	0	0	0	1	1	2	0	1	3
MEAN	-M-	14	10	9	4	5	5	5	6	6	10	21	9	3	8

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	8	11	12	19	16	8	16	18	14	18	13	6	7	6	5
MIN	2	7	2	7	2	1	2	2	1	4	3	2	0	0	0
MEAN	5	10	7	12	8	4	9	11	5	8	8	3	3	3	2

MEAN MAXIMUM = 13 MEAN MINIMUM = 2

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	3	4	6	7	8	8	6	6	6	11	13	14	-M-	13	10	11	12	9	8	8	16	10	8
2	11	6	9	8	6	8	6	6	3	5	8	16	15	11	12	12	10	6	5	8	11	14	14	8
3	9	12	7	5	5	6	5	4	2	1	1	3	6	5	4	4	4	3	3	3	3	1	1	3
4	2	2	3	3	3	2	3	4	5	6	8	9	5	5	5	3	6	6	5	3	3	4	3	4
5	4	4	5	9	7	5	4	10	12	18	17	17	19	21	23	21	20	16	15	14	13	14	13	12
6	5	5	4	4	4	2	1	3	1	1	2	6	6	5	6	6	7	6	7	7	5	3	5	6
7	5	6	4	6	5	5	8	11	12	16	15	16	15	16	15	15	13	13	12	12	13	12	13	13
8	14	15	14	13	13	13	11	10	10	12	13	13	12	12	12	12	11	8	8	7	6	6	6	5
9	5	3	4	5	5	5	4	5	7	10	8	10	11	11	13	15	13	11	9	10	9	6	9	9
10	9	7	7	6	3	3	2	2	2	6	8	10	8	7	11	10	8	12	13	15	14	17	12	13
11	13	-M-	14	14	14	14	14	13	12	12	10	9	10	10	11	11	8	6	4	3	2	2	1	1
12	1	2	1	1	2	2	2	2	3	3	6	6	11	12	12	13	12	10	10	12	12	11	13	14
13	12	12	12	12	11	10	11	11	9	-M-	14	21	24	20	16	15	12	-M-	-M-	-M-	11	10	10	8
14	9	13	9	8	9	8	8	5	5	5	-M-	5	9	9	7	10	11	11	8	6	4	5	4	1
15	3	8	9	10	10	13	11	10	9	8	10	11	11	13	12	12	8	4	5	4	4	4	3	-M-
16	2	4	8	3	4	1	2	3	2	4	4	4	4	4	4	4	7	7	8	10	9	12	10	13
17	10	12	12	12	11	10	11	11	11	10	13	-M-	-M-	14	14	12	10	11	13	13	9	9	12	13
18	12	13	11	12	6	3	4	3	2	3	-M-	11	9	12	11	14	10	-M-	5	12	20	19	19	19
19	-M-	12	-M-	11	-M-	11	11	8	9	-M-	-M-	7	10	9	10	8	4	-M-	5	-M-	-M-	4	2	1
20	2	1	2	2	4	10	9	6	2	4	-M-	4	-M-	3	-M-	4	1	0	0	1	2	1	0	1
21	3	6	9	2	7	5	5	6	5	-M-	-M-	-M-	-M-	11	-M-	9	8	4	1	3	5	4	2	0
22	1	0	0	0	0	1	0	2	-M-	-M-	-M-	-M-	-M-	-M-	4	3	2	1	1	0	0	1	3	2
23	2	3	1	3	2	3	6	5	4	3	3	2	3	4	5	5	4	4	4	3	3	3	3	3
24	3	2	2	3	1	1	2	6	3	4	5	2	5	6	4	5	5	5	7	9	11	15	6	4
25	2	2	3	-M-	8	13	16	11	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
26	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	2	3	4	5	6	6	4	3	2	3	5	3	5
27	3	4	5	5	5	5	4	4	5	5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
28	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
29	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	4	3	3	2	2	2	3	3	3
31	2	2	2	2	3	2	1	1	0	2	2	3	3	3	4	4	4	4	2	3	4	5	4	2
HOURLY MEAN	6	6	6	7	6	6	6	6	6	6	8	9	10	9	10	9	8	7	6	7	7	8	7	7

MAXIMUM = 24 MINIMUM = 0 MEAN = 7 605 VALID OBSERVATIONS (81.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	16	16	12	9	23	7	16	15	15	17	14	14	24	13	13	13
MIN	0	3	1	2	4	1	4	5	3	2	1	1	8	1	3	1
MEAN	8	9	4	4	13	4	11	11	8	8	9	7	13	7	8	6

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	14	20	12	10	11	4	6	15	16	6	5	-M-	-M-	4	5
MIN	9	2	1	0	0	0	1	1	2	2	3	-M-	-M-	2	0
MEAN	12	10	8	3	5	1	3	5	8	4	4	-M-	-M-	3	3

MEAN MAXIMUM = 13 MEAN MINIMUM = 2

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	95	121	129	126	120	125	142	142	101	124	146	-M-	153	141	135	139	140	138	115	157	145	131	134	124
2	122	144	134	150	135	107	34	139	180	203	221	229	210	210	190	213	211	203	211	206	213	212	220	252
3	229	226	183	271	279	6	21	70	250	288	292	309	306	310	288	358	304	262	277	48	130	195	161	149
4	161	139	133	175	176	179	166	202	222	225	-M-	200	190	196	204	200	193	192	195	194	187	190	184	181
5	201	206	198	200	201	188	195	199	204	211	213	211	201	202	202	193	192	188	188	198	188	189	208	-M-
6	-M-	-M-	-M-	-M-	-M-	84	186	177	200	208	216	227	227	233	234	251	277	293	295	276	277	299	335	336
7	338	346	329	350	14	17	87	213	259	302	330	9	44	59	44	77	91	91	108	110	173	162	160	158
8	101	23	27	19	42	202	190	140	150	167	175	168	165	159	160	156	159	-M-	-M-	-M-	-M-	-M-	-M-	-M-
9	143	166	170	174	141	141	172	182	191	204	196	217	213	178	184	187	191	189	176	174	165	169	83	48
10	30	21	32	16	54	156	312	355	1	353	350	336	351	354	351	353	340	342	333	318	304	312	298	282
11	285	291	310	316	310	308	308	332	339	310	318	333	343	346	352	360	358	2	1	29	281	113	124	104
12	187	186	187	186	161	172	191	219	235	229	232	253	264	287	345	348	274	198	218	213	204	181	79	17
13	313	181	238	102	152	157	192	244	281	109	182	148	156	158	161	167	173	169	154	144	153	154	167	159
14	166	220	189	216	212	193	160	165	150	164	176	189	182	189	178	186	194	180	167	141	151	158	162	162
15	173	171	192	201	202	188	199	198	190	220	257	171	117	123	126	148	146	142	144	148	147	150	-M-	191
16	193	189	198	201	208	205	183	183	188	192	196	200	191	191	186	195	194	191	187	181	171	177	183	186
17	193	193	198	200	198	189	187	254	160	151	173	194	220	209	205	208	214	211	183	176	165	223	32	152
18	198	217	221	227	216	218	296	7	224	270	245	242	253	276	308	36	42	65	58	58	55	13	12	23
19	41	57	57	51	128	43	17	82	37	57	158	148	180	185	184	188	201	207	184	160	26	67	46	163
20	173	60	171	172	193	181	118	107	122	152	110	114	139	162	172	163	170	155	163	157	38	151	175	334
21	271	146	201	208	8	350	15	13	230	247	339	327	279	307	19	42	42	50	52	56	60	17	26	28
22	59	45	58	49	12	26	23	41	133	55	73	90	90	84	69	67	82	85	94	94	91	92	133	13
23	2	27	43	30	250	71	47	60	167	162	158	152	160	159	162	165	146	160	163	140	149	143	164	322
24	260	126	162	168	184	180	161	177	203	184	176	180	173	168	154	155	162	166	164	160	168	169	176	176
25	187	173	164	176	177	171	164	172	180	207	198	179	186	177	179	172	173	157	152	150	157	140	96	136
26	114	134	164	185	190	191	8	172	160	182	219	246	205	107	168	164	162	165	114	21	46	185	316	40
27	13	14	21	19	353	346	346	349	360	8	10	11	19	14	25	27	15	26	28	10	6	18	13	22
28	15	8	9	11	11	7	10	19	31	25	94	73	76	60	64	70	85	81	64	63	56	60	72	63
29	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	34	38	34	30	15	-M-	-M-	-M-	-M-	-M-	-M-	64	4	42	336	167
31	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-

666 VALID OBSERVATIONS (89.5%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-M-	206	208	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	185	185	183	188	192	187	187	187	185	179	-M-	-M-	-M-	160	163
3	183	192	198	200	208	201	202	204	212	215	212	209	186	183	186	190	189	186	180	172	174	181	182	185
4	193	197	199	201	205	197	195	199	199	225	230	208	193	148	154	147	135	143	140	251	243	303	106	131
5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	101	96	-M-	156	151	123	100	103	98	100	92	80	112	-M-
6	45	46	44	54	62	68	57	38	34	28	36	39	57	99	71	88	-M-	-M-	67	59	59	34	25	26
7	26	20	25	46	8	6	12	29	35	29	20	15	354	5	25	26	26	19	23	30	13	15	12	8
8	358	42	68	335	352	-M-	-M-	10	359	4	20	20	17	13	11	356	357	354	6	356	26	18	18	26
9	22	37	17	14	16	339	306	19	32	13	11	25	28	21	19	21	24	41	47	33	51	41	56	28
10	49	41	33	59	38	55	56	45	51	51	59	79	71	77	77	72	74	88	105	105	100	28	59	45
11	49	1	32	55	61	58	72	59	80	96	-M-	117	124	125	123	125	115	125	116	130	127	129	134	132
12	132	129	135	111	120	118	133	139	94	125	118	123	142	143	153	157	147	127	120	124	118	49	117	172
13	179	171	101	104	107	94	96	104	69	82	92	97	101	103	100	90	100	112	137	154	155	152	122	144
14	119	108	134	136	143	138	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	132	130	138	125	134
15	112	9	42	62	90	111	86	123	147	357	358	357	3	3	30	23	24	35	24	34	27	39	43	27
16	20	15	18	-M-	35	30	41	32	39	38	56	51	50	56	46	58	49	56	59	42	18	29	17	40
17	49	40	94	31	31	13	39	17	21	-M-	61	120	117	126	98	152	91	160	133	102	17	12	14	131
18	116	133	138	133	81	29	177	165	155	172	199	208	202	200	187	182	-M-	-M-	-M-	165	173	169	172	169
19	173	181	179	182	186	184	169	180	207	214	221	222	221	225	231	213	199	185	180	169	176	195	195	203
20	202	194	222	235	313	261	187	153	44	20	3	32	14	19	2	350	45	40	27	20	14	21	18	217
21	121	92	27	146	12	27	148	132	82	62	147	154	168	171	190	184	181	181	154	153	180	169	159	167
22	172	171	173	178	173	175	228	177	191	231	302	305	312	341	350	353	11	14	27	22	16	29	38	63
23	101	156	205	153	138	187	164	125	38	205	247	212	240	181	177	176	149	151	146	154	155	136	158	78
24	154	125	145	160	165	141	121	345	-M-	-M-	336	332	333	338	336	341	342	342	345	339	340	-M-	-M-	-M-
25	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
26	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	141	130	135	141	143	138	134	106	74	76	113	70	40
27	35	47	44	40	31	29	17	15	15	20	23	31	32	32	36	39	37	45	43	38	42	50	58	80
28	71	49	85	112	73	61	74	91	110	112	84	100	136	131	132	121	126	147	151	163	163	145	154	157
29	164	168	164	166	166	168	166	168	170	178	183	176	188	221	148	130	121	156	167	160	174	59	47	232
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
31	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	139	145	172	185	-M-	-M-	-M-	-M-	-M-	-M-	-M-

591 VALID OBSERVATIONS (79.4%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-M-	12	-M-	-M-	-M-	-M-	12	-M-	-M-	-M-	-M-	-M-	-M-	14	13	17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
2	-M-	-M-	-M-	-M-	354	356	357	5	12	20	354	356	1	6	332	318	314	325	307	12	137	130	154	143
3	11	146	156	130	76	135	128	153	78	27	18	19	27	323	352	30	33	34	54	61	53	40	73	17
4	168	89	140	120	155	147	161	144	152	185	204	210	208	197	191	175	156	147	149	151	167	174	179	178
5	184	187	183	186	181	182	182	181	180	184	190	196	202	207	208	180	163	170	190	215	169	95	163	149
6	162	156	127	100	137	139	176	155	156	172	181	148	169	177	154	134	151	92	61	87	89	187	74	37
7	44	52	52	82	82	91	88	90	105	114	107	130	144	127	136	128	115	106	106	117	124	114	114	120
8	117	133	133	148	142	143	132	137	142	134	139	140	144	130	142	145	163	162	160	148	145	136	132	143
9	170	166	160	166	172	174	139	136	144	172	149	183	175	182	185	184	177	173	160	141	144	149	160	171
10	162	165	174	175	176	177	172	173	189	203	206	209	204	210	197	184	182	180	170	165	163	166	179	179
11	182	182	171	167	166	174	165	162	173	180	185	178	169	173	177	189	181	161	149	135	135	138	143	148
12	161	171	172	174	174	175	165	165	170	180	168	190	190	185	190	184	182	179	246	312	350	351	339	348
13	357	351	349	337	360	37	43	48	137	80	355	4	350	351	345	344	347	348	348	359	353	348	353	13
14	7	336	10	11	11	21	3	38	95	133	9	354	341	359	5	360	360	350	346	335	329	329	322	327
15	334	336	335	341	347	355	331	324	325	339	350	348	349	352	353	357	17	9	27	45	32	36	347	10
16	88	69	25	32	70	123	132	117	132	140	136	153	155	150	150	147	157	153	149	126	141	150	141	141
17	132	145	135	124	142	94	161	65	204	345	18	12	352	8	348	345	351	345	327	340	327	43	38	336
18	343	354	101	341	360	47	255	332	100	112	140	75	45	62	289	233	236	225	171	77	81	29	80	142
19	152	157	135	149	127	141	167	162	153	196	216	230	228	279	307	348	351	347	351	353	349	351	352	355
20	1	360	4	342	323	357	349	344	341	352	352	351	345	349	351	350	346	348	345	359	3	344	332	356
21	14	158	54	162	144,	94	133	161	24	43	356	45	31	13	6	13	14	10	23	14	50	140	131	142
22	158	145	149	157	145	142	176	147	169	191	202	197	183	185	178	178	184	170	154	156	153	165	174	170
23	161	166	180	171	152	155	179	166	165	186	208	222	264	292	286	297	274	256	258	256	268	272	278	299
24	293	-M-	-M-	-M-	-M-	-M-	-M-	-M-	334	339	347	350	341	339	345	353	2	9	13	4	14	17	359	355
25	358	353	353	352	349	353	3	350	350	2	11	-M-	-M-	-M-	-M-	330	-M-	-M-	344	312	258	52	26	158
26	204	95	100	199	148	143	140	165	150	177	166	173	191	181	175	165	147	149	145	144	143	147	141	145
27	144	145	148	143	141	142	143	146	145	142	136	-M-	-M-	-M-	-M-	152	147	148	151	150	144	143	145	149
28	153	162	168	167	170	168	167	172	176	179	175	185	191	196	192	184	180	183	182	178	179	184	187	184
29	185	187	174	174	175	183	213	240	161	150	141	173	184	195	184	185	190	179	168	150	136	166	-M-	172
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	167	179	185	232	66	151	176	129	144	96	18	360	8	19	56	134

671 VALID OBSERVATIONS (93.2%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	62	42	68	148	132	145	126	145	145	179	196	211	206	190	206	206	178	173	159	143	157	169	177	181
2	188	157	124	152	174	188	197	188	193	237	302	298	294	304	305	311	305	273	2	128	162	169	175	124
3	191	298	34	132	139	132	163	99	103	125	128	148	70	132	134	136	189	154	52	26	19	354	53	330
4	83	61	33	93	115	127	35	43	128	142	170	172	178	184	181	171	144	148	140	130	123	125	148	151
5	136	138	124	162	175	171	160	158	164	188	200	206	198	199	193	189	184	183	179	175	169	173	177	178
6	177	169	174	179	184	181	165	171	205	291	294	300	297	303	307	306	306	300	322	319	148	171	196	187
7	177	189	178	191	199	193	199	203	200	201	195	218	205	194	202	210	199	188	176	164	171	145	136	122
8	131	133	134	140	136	137	126	148	168	171	146	152	139	142	145	136	135	134	134	103	145	164	136	156
9	179	197	233	243	243	237	239	243	237	240	234	235	225	227	233	232	230	227	231	236	236	239	242	246
10	249	256	256	268	265	261	269	277	293	295	300	309	306	305	309	307	306	309	305	310	313	310	305	301
11	288	287	279	273	268	261	268	274	278	287	294	296	282	291	286	285	282	280	276	124	167	150	162	179
12	336	342	233	205	55	342	324	179	152	328	319	304	290	311	295	311	305	321	335	341	355	336	355	358
13	1	348	357	359	354	350	343	320	337	341	357	349	318	347	323	332	334	334	339	330	12	139	163	180
14	200	166	168	164	162	161	163	227	251	260	256	261	270	284	282	277	273	261	239	240	253	264	266	272
15	347	332	332	315	21	217	260	360	350	355	2	6	10	3	353	350	351	356	357	3	-M-	-M-	-M-	-M-
16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	183	187	183
17	185	182	185	176	181	174	177	175	175	181	188	197	202	199	204	200	186	191	173	184	192	186	185	187
18	192	200	200	189	177	175	176	180	181	196	196	201	194	177	186	176	190	180	138	7	358	161	119	165
19	202	145	12	18	5	6	356	1	9	358	347	355	-M-	-M-	-M-	313	308	310	311	313	311	309	311	-M-
20	-M-	319	317	326	335	335	336	329	312	323	337	343	347	331	319	316	334	350	360	11	11	7	185	146
21	77	37	184	152	160	162	302	144	146	180	194	165	188	198	251	191	171	139	113	115	138	160	144	72
22	85	143	177	178	172	172	168	163	159	197	209	201	189	185	194	179	191	176	164	170	178	183	192	185
23	175	175	178	176	174	175	170	163	169	193	185	179	182	186	185	183	174	164	151	158	162	140	131	165
24	169	146	185	189	166	126	140	141	145	174	183	187	191	193	188	176	174	167	163	158	159	161	189	176
25	172	167	153	136	154	144	143	171	163	167	184	195	203	197	183	175	172	159	152	146	100	134	137	19
26	121	119	138	110	125	139	149	144	141	129	169	177	181	179	167	172	166	149	143	144	146	150	169	165
27	163	168	169	167	164	169	167	169	167	172	177	187	188	186	193	191	187	178	180	176	178	181	175	180
28	163	187	232	197	181	272	351	353	341	328	327	327	306	302	297	299	289	237	229	234	273	293	280	277
29	256	239	243	252	257	255	246	239	234	226	226	227	222	222	219	218	213	212	199	200	199	193	198	201
30	194	189	171	172	174	189	40	57	139	160	177	191	193	205	200	204	216	193	49	359	28	140	118	114
31	12	37	14	15	145	358	64	25	30	21	115	136	177	177	179	185	135	59	32	13	7	4	7	28

714 VALID OBSERVATIONS (96.0%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	339	6	358	345	345	351	349	347	350	352	350	349	352	354	1	340	335	328	1	5	331	335	341	355
2	17	357	4	336	337	352	337	327	357	327	-M-	-M-	337	338	342	331	327	-M-	325	330	324	309	316	327
3	328	327	329	-M-	-M-	305	296	294	293	301	323	325	326	318	329	330	346	339	338	331	334	310	299	296
4	304	308	310	307	303	300	290	298	308	325	327	336	321	320	329	322	325	313	292	289	293	309	308	301
5	285	292	294	306	297	287	287	286	284	294	301	293	297	278	275	249	233	181	182	168	116	163	119	146
6	160	-M-	-M-	-M-	-M-	-M-	-M-	135	146	169	189	181	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
7	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	54	63	62	74	63	52	49	48	48	41	41	39	26	9	8
9	9	9	12	8	14	17	55	85	12	60	169	196	204	204	199	192	172	146	157	159	168	178	182	188
10	198	202	202	205	219	304	324	321	320	315	334	331	329	331	305	296	295	311	355	5	26	31	58	38
11	80	96	87	126	122	133	148	142	147	180	184	191	196	223	190	197	193	202	211	221	222	316	315	325
12	332	334	334	333	331	338	334	330	330	326	324	326	321	330	331	322	323	326	332	323	339	315	286	260
13	312	184	191	183	177	188	178	179	171	178	174	172	171	173	168	156	159	168	162	161	164	170	158	109
14	13	4	232	313	345	344	343	340	341	343	345	342	332	335	335	326	338	328	305	214	171	197	183	180
15	187	172	179	196	198	190	185	196	215	205	207	201	198	200	194	189	179	185	186	177	178	192	196	198
16	191	186	185	205	186	182	167	176	173	192	240	265	291	288	290	291	296	288	333	60	107	102	93	172
17	112	152	164	144	133	113	104	132	145	130	127	156	183	174	163	181	171	174	165	165	172	178	180	194
18	191	197	190	155	144	134	8	131	124	146	144	146	171	171	172	182	173	159	143	150	149	142	158	177
19	170	172	163	159	163	170	168	175	173	161	160	169	168	172	172	175	173	166	169	165	164	167	175	176
20	185	192	195	204	232	266	300	305	306	316	324	337	333	345	3	11	15	41	359	69	115	54	144	41
21	57	138	38	147	158	-M-	352	172	48	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	131	109	153	49	107
22	71	133	121	105	40	92	18	8	17	1	5	13	359	343	349	350	360	3	358	358	359	1	3	5
23	360	354	353	348	350	347	352	350	347	354	353	347	348	345	341	338	337	330	319	319	342	317	303	330
24	338	333	349	332	295	32	318	181	197	194	211	220	221	222	224	229	228	219	207	208	198	200	191	198
25	197	167	166	173	171	176	188	183	173	182	192	193	194	193	198	253	179	185	186	168	176	175	186	221
26	239	264	331	340	343	342	341	338	340	349	360	7	359	5	359	10	15	28	13	21	38	44	52	28
27	43	42	44	45	40	42	56	5	51	57	97	130	115	128	106	80	67	41	33	38	48	60	53	53
28	61	73	60	61	53	62	45	43	43	23	310	301	322	281	277	278	276	282	263	223	202	192	218	229
29	217	199	193	190	218	208	206	188	172	181	184	175	183	189	175	179	168	181	135	59	129	139	124	133
30	117	111	28	39	164	148	70	113	174	178	208	200	159	122	127	133	147	153	154	158	141	143	95	26

653 VALID OBSERVATIONS (90.7%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	121	150	179	191	192	188	191	186	175	171	169	174	175	168	-M-	138	141	141	139	143	151	192	154	129
2	141	143	220	219	202	216	215	188	162	165	185	183	194	226	230	232	213	188	203	214	234	253	256	271
3	270	306	328	325	341	326	325	328	31	158	207	17	13	7	18	33	13	19	350	9	360	66	169	260
4	159	164	37	170	30	15	29	6	13	4	11	14	26	30	17	19	10	12	50	67	51	55	25	5
5	354	3	3	356	1	355	319	318	332	347	340	338	344	339	340	337	339	343	337	324	323	334	338	344
6	315	312	306	325	327	270	314	226	30	163	195	205	205	188	181	183	166	158	162	160	145	142	129	141
7	148	141	130	116	19	34	34	29	20	21	23	27	26	28	30	32	27	28	27	28	24	19	15	16
8	12	15	14	13	14	10	13	15	3	6	8	6	10	14	23	27	20	18	27	31	30	40	33	38
9	18	23	53	66	93	148	113	125	127	152	160	188	190	189	191	197	200	198	198	202	197	190	209	216
10	219	219	227	217	193	193	32	194	7	344	353	359	1	356	359	2	4	356	359	357	359	3	1	12
11	31	15	15	14	11	9	10	4	5	5	9	4	1	355	355	360	350	343	336	335	328	350	13	154
12	158	179	150	149	213	184	181	168	174	178	205	213	198	197	196	195	189	184	182	188	183	188	199	198
13	193	192	191	188	183	185	186	188	192	196	197	208	217	208	199	199	187	190	188	186	185	182	179	184
14	194	208	195	183	185	185	195	182	188	191	-M-	276	315	328	335	326	326	328	335	335	313	318	320	182
15	272	298	297	296	299	306	319	318	313	312	313	325	320	303	313	316	327	321	316	303	312	317	349	17
16	30	9	18	357	14	49	351	344	86	108	114	124	137	155	147	162	159	158	152	159	168	165	170	171
17	176	176	172	179	174	170	173	179	186	183	190	188	201	211	206	199	186	189	195	205	198	201	221	237
18	250	244	256	260	203	211	185	44	271	325	310	287	291	297	303	311	297	288	271	308	314	316	325	330
19	318	320	323	315	296	295	297	294	298	296	304	299	284	278	264	262	258	232	218	170	177	210	169	119
20	155	74	35	152	349	324	334	342	276	341	13	354	26	218	281	298	2	85	142	146	167	144	127	126
21	152	154	145	147	177	195	186	162	154	159	167	185	184	189	189	190	175	155	169	187	190	193	178	146
22	104	147	114	113	91	121	124	156	169	143	137	158	156	149	142	152	119	351	52	63	38	60	183	156
23	161	267	181	246	265	302	318	352	17	47	42	45	72	112	95	88	87	46	36	53	54	86	61	75
24	80	125	63	108	53	72	143	131	106	125	125	72	160	220	89	83	89	91	142	147	135	171	206	210
25	191	181	206	203	309	328	328	317	321	318	315	321	320	323	328	329	329	336	337	348	335	324	322	320
26	332	340	338	341	340	271	195	331	355	4	28	54	66	130	157	153	152	148	137	138	108	124	155	143
27	111	131	118	108	79	77	67	66	35	28	20	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
28	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
29	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	218	212	188	190	199	204	207	214	220
31	224	207	229	238	237	270	230	160	162	189	217	230	239	220	225	228	222	215	188	204	224	237	228	178

666 VALID OBSERVATIONS (89.5%)

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	19.2	19.3	19.1	18.3	18.1	17.6	18.0	18.6	19.2	20.6	21.1	22.3	23.7	24.2	23.9	23.8	24.1	24.5	24.3	23.5	22.7	22.3	21.6	20.6
2	20.2	20.6	20.5	20.3	20.2	20.2	20.3	20.8	22.2	24.0	26.2	28.4	29.4	30.5	30.9	31.7	31.9	31.9	31.9	31.0	29.7	28.4	27.6	27.0
3	26.0	24.5	24.8	23.7	22.1	21.9	22.1	23.1	25.8	28.0	29.7	31.6	32.7	34.2	35.1	35.9	36.3	36.0	35.7	31.6	30.9	30.0	28.8	27.3
4	26.7	26.9	25.7	25.3	24.5	24.1	24.5	26.7	28.5	30.0	31.6	33.1	34.4	34.7	34.9	34.8	34.6	34.0	33.5	32.4	30.8	29.7	28.7	27.6
5	27.2	26.5	25.8	25.6	25.2	23.9	23.9	25.2	26.8	28.3	29.7	30.7	31.8	32.3	32.6	32.2	31.2	30.7	30.5	29.7	28.7	28.3	28.0	23.6
6	21.2	19.9	19.8	20.1	19.6	19.5	21.5	23.3	24.4	24.3	27.2	28.7	29.9	30.7	30.9	30.7	30.3	29.4	28.7	27.8	26.2	24.7	23.0	21.4
7	20.2	19.8	18.8	18.0	18.3	17.6	17.5	18.5	20.7	23.5	25.9	26.9	28.0	29.1	30.1	29.6	29.8	29.8	28.9	27.6	25.4	24.3	23.6	22.8
8	21.5	20.8	20.7	20.2	20.3	19.7	19.8	21.0	-M-	-M-	-M-	27.5	27.9	28.7	28.9	28.8	28.9	28.7	28.4	27.5	26.5	25.8	24.7	24.0
9	22.8	22.8	23.4	23.0	22.1	21.4	21.7	23.1	24.8	26.3	27.2	28.0	28.7	28.9	29.4	29.6	29.5	28.9	28.0	26.8	24.9	23.6	22.9	22.7
10	22.6	22.6	21.7	21.3	20.7	20.4	19.8	20.2	19.8	19.4	21.0	22.7	24.3	25.0	25.7	26.3	23.6	25.3	25.2	23.9	22.7	21.5	20.3	19.4
11	19.0	19.1	18.7	18.6	18.2	17.9	18.2	19.7	21.0	22.4	24.1	26.1	27.3	28.3	28.8	28.5	28.9	28.5	27.6	26.0	23.7	22.0	20.9	20.0
12	19.6	19.6	19.2	19.1	19.8	19.3	19.3	21.7	23.7	25.6	27.8	30.1	30.9	31.7	27.7	24.2	24.8	23.3	22.5	21.6	21.5	21.0	20.7	19.8
13	19.0	18.2	18.6	18.2	17.9	17.7	18.3	19.9	22.7	24.9	26.7	28.3	28.7	28.8	28.7	29.3	29.4	29.3	28.3	27.6	26.8	25.5	24.3	23.3
14	22.7	21.8	21.2	20.4	20.4	20.9	21.1	21.8	22.9	24.3	25.4	25.5	26.9	28.1	28.9	29.3	29.6	29.3	29.2	28.4	26.8	25.7	25.1	24.6
15	24.3	24.1	23.9	23.7	23.1	23.0	23.6	24.0	25.7	26.8	23.4	18.6	20.3	20.1	20.2	21.9	24.1	25.1	26.1	25.5	24.7	24.3	26.0	26.0
16	25.7	25.2	25.4	25.2	24.5	24.1	24.2	25.2	26.3	27.8	29.0	29.9	30.9	31.6	32.1	32.5	32.7	32.5	31.8	30.8	29.6	29.1	28.8	28.0
17	27.5	27.1	26.9	26.4	25.8	25.1	25.2	25.4	25.0	24.9	25.3	29.2	31.2	32.1	32.6	33.1	33.2	33.4	32.8	31.5	30.5	29.3	26.2	25.1
18	27.9	28.3	27.9	27.1	26.7	25.7	24.1	23.3	23.9	23.9	26.4	28.8	29.2	30.4	31.2	29.3	29.4	31.5	31.2	29.5	28.1	27.8	27.1	26.2
19	25.2	24.5	23.9	23.5	23.5	23.3	23.0	23.2	23.9	24.5	24.7	24.8	26.1	26.8	28.6	29.7	30.4	30.7	30.6	29.6	28.0	27.0	26.5	25.8
20	25.6	24.9	24.2	23.8	23.2	22.9	22.9	24.0	25.9	27.8	30.0	31.3	32.6	33.6	33.9	33.8	34.2	33.9	33.1	31.4	29.9	28.9	28.6	26.2
21	21.0	21.3	21.3	21.8	22.6	21.6	22.6	21.5	22.9	25.4	26.6	28.3	29.5	30.8	32.1	31.3	31.5	31.6	30.8	29.4	28.2	27.4	26.2	25.1
22	24.3	23.7	22.9	22.2	21.7	21.6	21.6	22.6	24.1	25.4	26.8	27.4	28.3	29.0	29.8	30.2	30.2	30.5	29.6	28.1	26.6	25.7	24.3	23.8
23	23.0	22.6	21.8	21.1	21.4	21.3	21.3	22.2	23.3	25.0	26.1	26.8	27.4	27.9	28.5	28.5	28.5	28.5	27.7	26.6	25.3	24.4	24.0	23.1
24	22.4	22.1	21.4	21.2	21.1	20.4	20.5	21.1	22.8	24.6	26.0	27.2	28.5	28.9	29.4	29.5	29.4	29.3	28.2	27.1	25.6	24.9	24.0	23.4
25	22.2	21.9	22.0	21.7	20.7	20.3	20.7	21.6	23.4	25.6	27.5	29.0	30.1	30.7	31.0	30.9	31.3	30.7	29.7	28.2	26.9	26.2	24.7	23.8
26	23.5	22.9	22.4	22.5	22.1	21.7	22.0	22.8	24.6	26.7	28.5	29.9	31.0	31.7	32.6	32.1	31.8	31.1	29.5	28.5	26.7	26.2	26.1	25.0
27	24.8	23.8	23.0	23.1	23.0	22.7	22.3	23.0	23.6	24.2	25.7	26.6	27.7	28.5	28.1	28.0	28.1	27.1	26.7	25.7	24.9	24.2	-M-	-M-
28	22.5	22.2	21.7	20.8	20.2	20.0	19.7	20.2	22.0	23.4	25.3	26.2	27.4	27.9	28.3	28.2	28.4	28.4	27.5	25.9	24.4	23.6	22.6	21.0
29	20.7	20.7	19.2	18.0	18.8	17.3	17.0	18.3	21.8	24.1	25.9	27.0	27.4	27.7	27.2	26.6	26.8	26.6	26.0	25.2	23.8	22.8	21.6	22.6
30	22.7	22.2	21.1	20.3	19.6	18.7	16.3	18.8	20.8	22.3	23.3	25.4	26.8	27.2	27.8	28.1	28.3	27.7	26.6	24.7	22.4	20.9	19.4	18.3
31	17.2	16.2	15.8	15.7	14.8	15.0	15.4	16.8	20.6	23.7	25.6	27.4	28.9	29.8	30.8	31.3	31.8	31.6	30.3	28.1	25.8	25.0	24.1	23.0
HOURLY MEAN	22.9	22.4	22.0	21.6	21.3	20.9	20.9	21.9	23.4	24.9	26.3	27.5	28.6	29.4	29.7	29.7	29.8	29.7	29.1	27.8	26.4	25.5	24.7	23.7

MAXIMUM = 36.3 MINIMUM = 14.8 MEAN = 25.4 739 VALID OBSERVATIONS (99.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	24.5	31.9	36.3	34.9	32.6	30.9	30.1	28.9	29.6	26.3	28.9	31.7	29.4	29.6	26.8	32.7
MIN	17.6	20.2	21.9	24.1	23.6	19.5	17.5	19.7	21.4	19.4	17.9	19.1	17.7	20.4	18.6	24.1
MEAN	21.3	26.1	29.1	29.9	28.3	25.1	23.9	24.8	25.4	22.3	23.1	23.1	24.2	25.0	23.7	28.5

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	33.4	31.5	30.7	34.2	32.1	30.5	28.5	29.5	31.3	32.6	28.5	28.4	27.7	28.3	31.8
MIN	24.9	23.3	23.0	22.9	21.0	21.6	21.1	20.4	20.3	21.7	22.3	19.7	17.0	16.3	14.8
MEAN	28.5	27.7	26.2	28.6	26.3	25.8	24.8	25.0	25.9	26.7	25.2	24.1	23.1	22.9	23.5

MEAN MAXIMUM = 30.5 MEAN MINIMUM = 20.4

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	22.2	21.3	20.5	20.3	20.3	20.2	20.5	21.4	24.0	26.2	28.6	30.8	32.2	32.9	33.1	33.3	33.3	33.1	31.2	28.9	26.8	25.6	25.0	24.7
2	23.9	23.1	23.5	23.3	22.5	22.2	22.2	23.3	25.2	27.4	29.2	30.9	32.4	33.4	33.6	33.9	33.5	33.2	32.4	30.9	29.3	28.4	28.2	27.2
3	27.1	26.9	26.7	26.2	25.8	25.2	25.3	25.9	27.7	29.5	30.6	32.7	34.0	35.1	35.4	35.3	35.5	35.1	33.7	32.3	31.3	30.3	29.6	29.4
4	28.7	28.6	27.9	27.4	27.0	26.5	26.4	26.6	27.7	29.7	31.1	32.9	33.9	34.4	34.7	34.7	33.5	33.7	32.4	30.9	25.5	23.7	23.0	23.1
5	22.8	22.7	22.7	22.4	21.8	22.0	22.1	22.2	23.1	24.6	25.7	26.7	27.0	28.0	27.8	28.6	29.2	28.7	28.2	27.3	26.5	25.4	25.2	24.7
6	24.3	24.2	23.8	23.2	23.0	23.1	22.8	23.3	23.6	24.1	25.1	26.0	26.6	26.5	26.1	25.8	26.4	26.1	26.1	25.6	24.9	23.9	-M-	-M-
7	-M-	22.5	22.2	22.2	22.3	21.9	21.8	22.3	22.6	23.8	25.2	26.3	26.8	27.4	27.7	28.5	28.9	28.5	27.9	26.7	25.8	25.1	24.9	24.0
8	21.3	20.6	20.2	20.8	20.7	18.9	18.6	21.2	24.7	25.3	26.3	27.6	27.9	28.8	29.2	29.7	29.6	29.0	27.5	25.9	24.2	23.4	22.3	19.5
9	18.0	17.5	18.3	16.8	17.2	17.1	17.9	17.6	17.2	17.9	18.7	18.2	19.0	20.3	20.5	20.8	20.3	19.2	18.5	17.5	15.2	14.2	13.7	13.7
10	13.3	13.4	13.9	14.0	13.5	13.2	12.9	12.9	12.9	13.0	13.1	13.5	14.2	14.9	15.4	15.8	15.9	16.3	16.6	16.4	15.9	15.2	14.9	14.4
11	13.9	13.5	13.5	13.1	12.7	12.2	12.3	12.8	14.2	16.7	17.8	18.9	19.6	20.3	20.9	21.2	21.5	21.5	21.2	20.2	18.7	17.8	17.2	16.7
12	16.2	16.1	15.8	15.2	15.6	15.9	16.4	16.5	16.1	15.9	15.6	15.6	17.1	17.9	20.1	21.8	22.2	21.2	20.9	20.3	19.8	19.1	18.5	18.3
13	18.4	18.6	18.6	18.6	18.4	18.2	18.5	19.0	19.5	19.8	20.1	20.2	20.7	21.5	22.3	23.3	24.1	24.3	23.4	21.8	21.0	20.9	20.8	20.8
14	20.7	20.5	20.4	20.5	20.4	20.1	20.1	20.2	20.2	19.9	20.0	19.9	19.9	20.2	19.9	19.6	19.8	20.0	20.8	21.0	21.2	21.5	21.7	21.4
15	21.2	20.8	20.4	20.3	20.7	21.0	21.3	21.6	21.6	21.7	21.7	22.3	23.6	23.7	23.7	23.6	23.7	23.3	23.0	22.9	22.3	21.7	21.5	20.9
16	20.8	20.8	20.9	20.9	21.0	20.9	20.9	20.6	20.5	21.2	22.4	22.8	23.7	24.5	25.0	25.5	25.7	25.5	25.1	24.0	23.2	22.2	21.9	20.6
17	20.3	19.5	18.6	18.6	18.0	18.8	18.3	19.1	19.8	21.7	23.9	25.1	25.9	26.6	27.0	27.4	27.8	26.7	25.7	24.6	23.5	22.6	21.6	20.9
18	20.2	19.8	19.7	19.4	19.0	18.4	18.1	18.2	19.3	21.1	23.9	24.9	25.6	26.0	26.3	26.7	27.0	26.7	25.9	24.7	23.6	22.9	22.1	22.0
19	21.2	21.0	21.1	20.7	20.8	20.2	19.7	20.4	22.5	24.7	26.4	28.0	28.9	29.8	30.8	31.0	30.8	30.4	29.3	27.7	26.4	26.3	25.5	24.6
20	24.3	23.2	23.6	24.2	24.2	23.1	21.4	22.6	23.7	24.2	25.2	25.2	24.0	23.0	22.5	22.7	23.6	23.8	23.2	22.8	22.7	22.1	21.3	19.0
21	17.2	16.6	16.0	14.8	15.6	14.3	13.9	15.2	18.3	21.3	22.8	24.3	25.1	25.6	25.7	25.8	26.0	25.8	25.0	24.0	21.9	22.4	22.1	21.1
22	20.3	20.0	20.0	20.2	19.7	19.5	18.8	19.1	20.7	22.6	25.2	27.1	28.6	29.8	30.2	30.3	29.9	28.8	27.0	25.7	24.7	23.5	22.7	21.8
23	21.3	20.8	20.4	20.4	20.1	19.6	19.0	19.3	20.1	21.4	22.0	23.0	24.0	24.7	25.0	25.5	25.3	25.8	25.4	24.3	22.9	22.1	21.2	20.7
24	20.0	19.9	19.9	20.2	20.6	20.2	20.1	20.3	19.8	21.3	22.8	23.1	21.5	22.9	24.3	24.4	24.1	23.8	22.9	21.4	20.1	19.4	17.8	15.0
25	15.1	16.0	15.1	14.2	12.6	12.9	12.8	14.3	16.7	19.5	21.8	22.9	23.6	23.8	24.1	24.3	24.0	24.0	22.9	21.3	20.0	19.7	18.8	18.2
26	17.8	17.3	17.0	17.1	17.1	-M-	17.6	17.7	18.3	18.5	18.0	18.3	18.5	19.3	20.0	20.4	20.9	20.8	21.0	20.8	20.6	20.6	20.1	19.6
27	19.3	19.5	19.2	19.4	19.1	19.2	19.1	19.0	18.1	17.1	17.0	18.1	19.4	19.4	20.0	20.8	21.0	20.7	19.9	18.7	17.8	16.8	16.6	16.3
28	16.0	15.9	15.9	16.0	16.0	15.7	15.8	16.0	16.8	17.4	18.3	19.2	20.1	21.1	22.1	22.7	22.4	22.0	21.5	21.3	20.9	20.7	20.4	20.4
29	20.3	20.1	19.9	19.8	19.5	19.4	19.9	20.1	20.5	21.3	22.3	22.7	23.0	22.5	21.8	21.7	22.5	23.8	24.1	24.1	24.0	23.7	22.6	21.1
30	20.0	19.8	19.7	19.9	19.8	20.0	20.1	20.3	20.8	21.1	22.8	23.8	24.0	25.0	25.7	26.0	26.1	25.9	25.2	24.3	23.6	23.0	22.3	22.2
31	22.2	22.3	22.2	22.1	22.1	22.0	22.3	22.1	21.8	22.0	23.3	24.9	25.8	26.7	27.2	27.6	26.8	26.3	25.7	25.1	24.6	23.9	23.4	23.0
HOURLY MEAN	20.3	20.1	19.9	19.8	19.6	19.4	19.2	19.7	20.6	21.7	22.8	23.7	24.4	25.0	25.4	25.8	25.8	25.6	24.9	24.0	22.9	22.2	21.6	20.8

MAXIMUM = 35.5 MINIMUM = 12.2 MEAN = 22.3 740 VALID OBSERVATIONS (99.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	33.3	33.9	35.5	34.7	29.2	26.6	28.9	29.7	20.8	16.6	21.5	22.2	24.3	21.7	23.7	25.7
MIN	20.2	22.2	25.2	23.0	21.8	22.8	21.8	18.6	13.7	12.9	12.2	15.2	18.2	19.6	20.3	20.5
MEAN	26.5	28.0	30.3	29.3	25.2	24.8	25.0	24.3	17.7	14.4	17.0	17.8	20.5	20.4	22.0	22.5

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	27.8	27.0	31.0	25.2	26.0	30.3	25.8	24.4	24.3	21.0	21.0	22.7	24.1	26.1	27.6
MIN	18.0	18.1	19.7	19.0	13.9	18.8	19.0	15.0	12.6	17.0	16.3	15.7	19.4	19.7	21.8
MEAN	22.6	22.6	25.3	23.1	20.9	24.0	22.3	21.1	19.1	19.0	18.8	18.9	21.7	22.6	24.0

MEAN MAXIMUM = 26.2 MEAN MINIMUM = 18.5

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	22.7	23.2	22.8	22.8	22.6	21.8	22.1	22.2	23.6	25.6	26.9	28.2	29.7	29.7	28.9	28.4	27.9	27.6	26.5	25.2	24.7	24.1	23.7	23.3
2	22.2	21.3	19.8	19.1	21.0	20.9	20.8	20.2	20.1	20.8	22.4	23.2	24.0	24.5	25.9	26.0	25.7	25.6	24.1	21.4	19.9	18.8	17.8	17.3
3	16.8	15.9	15.2	15.4	15.2	15.4	13.8	14.6	18.0	19.7	21.5	23.3	24.6	26.3	26.7	26.7	26.7	25.7	25.0	23.5	22.1	21.0	19.8	19.3
4	18.7	18.1	17.8	17.7	17.2	16.9	16.6	17.6	19.4	22.0	24.2	26.0	27.1	28.1	29.0	28.9	28.6	27.5	26.8	25.5	25.4	-M-	-M-	22.2
5	21.6	21.2	20.9	20.8	20.1	19.6	19.6	19.8	20.9	23.0	24.0	25.7	26.8	27.3	27.4	27.4	26.3	25.1	23.7	22.5	21.7	21.4	20.6	20.8
6	20.8	20.6	20.7	20.3	19.3	19.0	18.2	18.5	18.5	18.6	18.6	18.8	18.7	18.7	18.9	18.7	19.0	19.2	19.4	19.1	18.7	18.4	18.3	18.2
7	17.6	17.5	17.8	18.0	17.9	17.9	17.7	17.8	18.2	18.1	18.3	18.8	19.4	20.2	20.8	21.8	22.2	22.3	21.4	20.4	19.5	18.9	18.4	18.3
8	18.1	18.0	17.9	17.8	17.6	17.8	17.7	18.1	18.5	19.4	20.3	22.0	23.6	24.7	25.3	25.9	26.2	25.5	24.2	23.0	22.0	21.5	21.3	21.1
9	21.5	21.4	21.2	21.2	21.0	20.5	20.1	20.2	20.3	21.4	21.3	21.4	22.3	23.7	24.4	24.7	24.5	24.8	23.8	22.7	22.0	22.2	22.4	22.1
10	22.0	21.8	21.5	21.1	20.9	20.7	20.3	20.6	21.9	23.3	25.0	26.0	27.4	28.2	28.7	28.6	28.3	27.7	26.3	25.4	24.7	24.2	23.3	22.3
11	22.0	21.9	21.5	21.2	20.8	20.4	19.9	20.0	21.4	23.1	24.8	25.9	26.4	27.6	28.3	28.5	28.2	27.5	26.0	24.4	23.8	23.5	23.1	22.9
12	23.1	22.7	22.2	22.5	22.5	22.2	21.8	21.6	22.3	22.9	24.5	25.4	26.1	26.8	27.9	27.9	27.5	26.8	23.5	19.9	20.5	19.7	19.0	18.2
13	17.1	16.5	16.2	15.5	14.7	14.2	14.4	14.9	15.5	16.7	18.0	18.2	17.7	16.4	16.1	16.2	16.0	15.9	16.0	15.7	15.9	15.9	15.4	14.9
14	14.8	14.8	14.4	14.0	14.1	13.7	14.0	13.7	14.3	15.0	15.7	16.2	15.9	16.2	16.9	17.4	17.1	16.5	16.5	16.4	16.3	16.4	16.2	15.6
15	15.5	15.3	15.2	14.6	14.0	13.2	12.3	12.1	12.9	13.4	14.0	14.5	15.0	16.2	16.4	16.6	16.0	15.5	14.3	13.8	13.4	12.9	12.3	12.2
16	11.0	10.9	11.7	11.8	11.6	11.4	11.2	11.1	11.6	12.3	13.2	14.5	15.6	16.6	18.0	18.5	18.3	18.4	18.1	17.9	17.9	17.7	17.7	17.3
17	17.3	17.1	16.8	16.7	16.5	16.9	17.2	17.2	18.0	18.5	17.2	17.3	17.0	17.4	17.2	15.5	15.1	14.9	14.9	14.3	14.3	13.7	13.3	12.9
18	12.7	11.8	9.1	10.3	10.7	8.4	7.4	8.5	10.8	13.4	15.4	16.8	17.8	18.7	19.0	19.5	19.4	19.1	17.2	14.9	13.7	13.1	12.2	11.6
19	11.5	11.5	11.7	11.9	11.5	11.0	11.0	11.3	12.7	14.3	16.6	18.7	19.9	21.3	22.5	22.7	22.2	21.1	19.0	17.0	15.9	14.7	13.7	12.5
20	11.1	11.5	11.2	8.2	7.9	8.8	8.7	8.7	10.3	11.4	12.0	12.2	12.3	12.7	12.9	12.9	12.6	12.6	11.8	10.4	10.0	9.5	9.1	8.6
21	6.6	5.2	4.9	3.9	3.5	3.1	2.8	3.4	6.7	9.8	12.1	14.0	15.0	15.8	16.1	16.6	16.8	16.4	14.5	12.3	10.8	9.8	8.7	7.6
22	6.7	7.1	7.0	6.7	6.9	6.9	6.3	6.5	9.2	12.9	15.2	17.0	18.2	19.0	19.7	20.2	20.7	20.1	18.5	17.0	15.9	16.0	16.0	14.9
23	14.2	13.9	14.1	13.7	13.6	12.9	12.5	12.9	13.6	14.8	15.4	16.0	18.3	21.3	21.5	21.0	20.2	19.9	19.5	18.3	17.7	17.2	17.1	16.6
24	14.5	13.9	13.2	13.7	13.1	12.5	10.0	10.0	13.7	15.6	16.4	15.7	15.1	15.0	15.6	16.7	17.7	17.7	16.2	15.8	14.4	12.6	12.1	11.5
25	11.1	10.6	10.3	9.7	9.3	9.3	9.0	9.0	10.0	11.6	12.6	13.9	15.2	16.1	16.9	17.0	16.9	16.6	14.0	12.4	11.1	10.4	10.1	9.1
26	9.4	8.1	7.5	7.2	8.1	7.9	7.5	7.8	9.5	11.3	13.0	15.1	16.6	17.2	18.1	18.9	18.4	17.8	16.3	15.2	14.4	13.3	12.7	12.2
27	11.7	11.2	10.8	10.3	9.8	9.7	9.3	9.4	10.8	12.9	15.7	18.2	20.3	21.7	21.8	21.9	21.6	20.8	19.3	18.1	16.9	16.6	16.7	16.7
28	17.4	17.7	17.7	17.3	17.2	17.2	17.1	17.5	18.3	19.3	20.7	23.7	25.4	25.8	26.8	27.3	27.3	26.8	25.6	25.0	24.6	24.3	23.8	23.3
29	23.2	22.3	21.4	20.8	19.8	18.4	19.1	18.2	17.1	17.2	18.4	20.1	22.0	23.8	25.1	25.4	26.1	25.5	24.5	23.2	21.0	22.2	22.0	21.6
30	21.0	20.0	20.3	20.2	19.3	19.3	19.8	19.4	19.9	20.8	22.1	22.2	21.8	22.5	22.7	23.3	23.5	22.9	22.4	22.0	22.1	21.6	21.2	20.7
HOURLY MEAN	16.5	16.1	15.8	15.5	15.3	14.9	14.6	14.8	15.9	17.3	18.5	19.6	20.5	21.3	21.9	22.0	21.9	21.5	20.3	19.1	18.4	17.6	17.2	16.9

MAXIMUM = 29.7 MINIMUM = 2.8 MEAN = 18.1 718 VALID OBSERVATIONS (99.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	29.7	26.0	26.7	29.0	27.4	20.8	22.3	26.2	24.8	28.7	28.5	27.9	18.2	17.4	16.6
MIN	21.8	17.3	13.8	16.6	19.6	18.2	17.5	17.6	20.1	20.3	19.9	18.2	14.2	13.7	12.1
MEAN	25.2	21.8	20.5	22.8	22.8	19.0	19.1	21.1	22.1	24.2	23.9	23.2	16.0	15.5	14.2

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	18.5	18.5	19.5	22.7	12.9	16.8	20.7	21.5	17.7	17.0	18.9	21.9	27.3	26.1	23.5
MIN	10.9	12.9	7.4	11.0	7.9	2.8	6.3	12.5	10.0	9.0	7.2	9.3	17.1	17.1	19.3
MEAN	14.8	16.1	13.8	15.7	10.7	9.8	13.5	16.5	14.3	12.2	12.7	15.5	22.0	21.6	21.3

MEAN MAXIMUM = 22.5 MEAN MINIMUM = 14.1

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	20.1	19.5	18.5	18.6	18.4	18.0	17.3	17.2	17.7	19.3	21.0	23.0	24.7	25.3	25.7	26.2	26.4	25.2	23.5	21.8	22.0	21.5	21.3	20.5
2	19.3	17.7	17.3	17.5	17.9	16.9	16.7	16.9	16.7	16.6	14.7	14.5	15.7	17.8	19.8	21.1	21.4	20.9	18.3	16.3	15.2	14.5	14.0	14.1
3	11.9	11.7	10.2	8.4	8.5	8.7	7.6	7.5	10.8	14.5	17.7	20.0	21.7	22.3	22.6	22.7	22.9	21.8	19.2	16.3	15.5	15.1	13.8	13.6
4	13.5	11.7	11.5	11.5	11.3	11.4	11.3	11.4	13.3	15.9	18.4	21.0	22.6	23.5	-M-	24.6	24.1	23.0	21.8	20.5	19.7	19.3	18.9	18.5
5	17.9	17.7	17.7	19.3	18.8	18.8	18.8	18.7	-M-	-M-	21.8	25.3	27.1	28.6	28.8	29.5	29.3	27.9	26.5	25.3	24.3	23.2	22.3	21.5
6	21.4	21.0	20.6	20.3	20.4	19.6	18.6	15.1	15.9	11.8	10.8	10.5	11.2	12.1	12.9	13.8	14.3	13.9	12.7	10.8	8.8	7.8	6.7	6.9
7	6.8	6.6	7.0	6.9	6.6	6.6	7.2	8.0	10.3	14.4	18.1	20.0	20.8	21.9	22.7	23.4	23.4	22.7	20.0	18.7	17.5	15.8	14.4	14.3
8	14.5	15.2	15.0	15.2	15.5	14.5	12.1	13.4	16.2	16.4	17.8	20.2	20.8	20.8	19.9	18.6	18.0	18.1	17.4	17.3	17.5	17.7	16.8	17.2
9	17.7	17.9	14.4	12.0	10.4	9.5	9.1	9.0	8.8	9.1	10.0	10.8	11.5	13.3	13.9	14.3	14.6	14.3	13.3	12.4	11.5	10.8	10.3	10.0
10	9.7	9.2	9.2	9.2	9.0	8.9	9.1	9.4	10.2	11.0	11.2	11.6	11.7	12.4	12.5	12.2	11.9	11.3	10.8	10.5	10.1	9.9	9.6	9.4
11	9.0	8.9	8.4	8.5	8.4	8.3	8.2	7.0	6.6	9.1	10.3	11.5	12.6	13.7	14.2	14.8	15.3	14.7	12.7	9.9	8.5	7.7	6.8	6.5
12	7.0	6.3	3.4	2.9	3.0	3.5	3.4	1.0	5.3	9.4	10.7	11.6	12.5	13.8	13.4	13.2	13.3	12.9	11.4	10.2	10.3	10.3	10.4	9.2
13	8.2	7.6	7.1	7.6	7.5	7.5	7.6	7.6	8.3	8.7	9.5	9.8	9.4	9.8	10.1	9.5	9.2	8.6	8.2	7.0	6.0	3.2	2.2	1.2
14	0.7	1.5	2.6	2.1	1.9	1.3	1.2	2.1	5.3	8.7	12.1	15.4	18.0	19.5	20.6	21.2	21.0	20.2	17.7	15.6	15.2	14.5	14.1	13.7
15	12.8	12.4	11.7	9.2	7.7	6.0	6.7	10.1	12.1	14.2	16.1	17.5	18.5	19.1	19.7	19.7	19.1	17.9	15.7	14.1	12.8	11.9	11.3	10.1
16	6.9	4.2	3.7	3.0	1.7	1.0	0.9	0.3	2.8	7.4	10.0	11.6	13.0	14.1	14.9	15.7	16.0	15.2	13.1	11.5	11.2	10.4	10.7	9.7
17	9.2	9.5	9.6	10.0	10.0	9.5	9.6	9.5	10.2	12.1	14.7	17.2	18.9	20.1	20.9	21.8	22.1	21.1	18.8	17.6	17.1	15.8	14.9	14.3
18	13.7	13.5	12.7	11.7	11.3	10.8	10.6	10.6	11.8	13.4	14.8	16.7	18.3	19.5	20.5	21.1	21.2	20.4	19.2	17.0	16.1	16.1	15.9	15.2
19	14.6	14.4	13.7	12.6	12.3	11.8	11.3	10.9	10.8	10.8	10.5	9.9	7.2	5.0	4.7	4.8	3.6	2.8	2.3	2.0	2.3	2.1	2.4	2.5
20	2.1	2.0	1.8	1.6	1.5	1.3	1.1	0.6	1.2	2.8	4.0	4.9	6.0	6.9	7.4	7.6	7.6	6.9	5.4	4.4	3.4	2.5	-1.1	-1.2
21	-0.7	-1.7	-2.4	-3.0	-2.1	-2.2	-2.4	-3.3	-1.9	1.5	4.4	6.5	8.1	9.2	10.2	10.8	10.8	10.4	8.5	7.1	6.2	5.7	4.8	3.9
22	2.7	2.7	1.8	1.6	1.5	0.6	0.5	0.5	1.3	5.3	8.1	10.4	11.8	12.8	13.6	14.0	14.1	12.9	11.4	10.2	9.5	8.3	6.8	6.3
23	5.3	4.7	4.2	4.1	3.7	3.5	3.0	2.6	4.7	6.9	9.3	12.0	14.0	15.3	15.8	16.0	15.7	14.7	13.2	12.2	11.3	8.2	7.1	9.0
24	7.8	5.4	5.9	5.4	4.5	3.7	3.0	2.9	5.1	8.7	11.5	14.2	16.1	17.3	18.0	18.1	17.7	16.5	14.8	13.5	12.4	11.3	10.3	9.4
25	8.2	8.2	7.0	6.1	5.7	5.1	4.5	4.6	6.5	9.8	13.0	15.3	17.4	18.6	19.0	18.9	18.3	17.3	16.0	13.4	11.6	10.8	10.3	9.3
26	8.1	7.2	6.3	5.9	5.8	5.7	5.5	5.0	6.9	8.9	12.6	13.8	15.4	16.6	16.3	16.9	16.5	15.5	14.1	12.5	11.8	12.1	13.0	12.4
27	12.5	12.8	12.8	12.6	12.5	13.0	13.0	13.0	13.0	13.7	14.4	15.5	17.3	18.4	20.3	20.7	20.8	20.3	19.5	19.1	18.2	17.9	17.8	17.6
28	17.2	17.2	16.8	14.3	13.6	13.5	9.9	8.9	8.8	9.0	9.4	9.9	10.3	11.0	11.6	12.7	13.2	12.6	11.4	11.0	11.5	10.8	9.5	9.0
29	8.3	7.8	8.3	7.7	7.1	6.4	5.6	4.6	5.3	7.6	10.7	13.5	15.9	17.3	18.5	18.3	17.5	16.2	14.4	14.2	13.8	13.3	12.7	12.3
30	11.9	11.8	11.8	11.4	11.3	11.3	10.1	9.1	9.9	11.7	13.2	14.4	15.3	16.0	16.6	16.9	17.0	15.9	-M-	14.0	11.7	10.8	10.4	9.4
31	9.6	9.6	10.5	10.0	8.2	9.2	8.1	9.3	9.8	11.4	13.8	16.2	18.2	19.1	19.8	20.1	20.2	19.7	18.7	18.1	17.3	16.3	15.8	14.6
HOURLY MEAN	10.6	10.1	9.6	9.2	8.8	8.5	8.0	7.9	8.8	10.7	12.7	14.4	15.5	16.5	16.8	17.4	17.3	16.5	15.0	13.7	12.9	12.1	11.4	11.0

MAXIMUM = 29.5 MINIMUM = -3.3 MEAN = 12.3 740 VALID OBSERVATIONS (99.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	26.4	21.4	22.9	24.6	29.5	21.4	23.4	20.8	17.9	12.5	15.3	13.8	10.1	21.2	19.7	16.0
MIN	17.2	14.0	7.5	11.3	17.7	6.7	6.6	12.1	8.8	8.9	6.5	1.0	1.2	0.7	6.0	0.3
MEAN	21.4	17.2	15.2	17.3	23.1	14.1	14.8	16.9	12.0	10.4	10.1	8.7	7.6	11.1	13.6	8.7

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	22.1	21.2	14.6	7.6	10.8	14.1	16.0	18.1	19.0	16.9	20.8	17.2	18.5	17.0	20.2
MIN	9.2	10.6	2.0	-1.2	-3.3	0.5	2.6	2.9	4.5	5.0	12.5	8.8	4.6	9.1	8.1
MEAN	14.8	15.5	7.7	3.4	3.7	7.0	9.0	10.6	11.5	11.0	16.1	11.8	11.5	12.7	14.3

MEAN MAXIMUM = 18.4 MEAN MINIMUM = 6.5

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	14.6	14.3	14.3	14.1	13.5	12.6	12.1	9.3	8.6	9.2	10.3	10.3	11.0	11.6	9.9	10.5	10.3	10.5	10.5	10.5	10.7	11.4	11.6	11.5
2	11.1	11.1	10.2	9.1	8.9	8.8	7.8	7.4	8.8	9.6	9.9	10.7	12.1	12.2	12.5	12.8	12.0	10.6	9.0	8.2	7.6	6.8	6.3	5.4
3	4.4	3.3	2.4	1.6	0.6	-0.4	-0.8	-1.0	-0.2	1.1	3.0	4.3	4.4	4.4	4.1	4.1	3.4	2.1	1.2	0.7	0.9	-0.3	-1.5	-2.3
4	-2.5	-3.1	-3.6	-4.0	-4.4	-4.9	-5.6	-5.2	-4.5	-3.1	-2.5	-2.2	-2.3	-1.9	-1.7	-0.6	-0.3	-0.7	-1.3	-1.9	-2.9	-3.1	-3.7	-4.6
5	-5.8	-5.7	-5.8	-5.6	-6.2	-6.9	-7.0	-6.8	-5.9	-4.1	-2.1	-0.6	0.8	1.8	2.6	3.4	3.8	3.1	2.4	1.4	0.8	0.9	0.7	0.9
6	0.7	0.8	0.9	0.5	0.1	-0.9	-1.2	-1.1	-0.4	2.0	4.9	7.3	9.2	10.8	12.1	13.0	12.7	11.6	10.3	9.4	8.0	7.8	7.5	7.5
7	7.3	7.1	6.6	5.5	5.6	6.0	6.5	8.6	9.4	10.8	13.5	15.2	16.1	16.8	17.3	17.3	17.1	15.0	13.5	12.4	11.5	11.0	10.6	10.6
8	10.0	9.5	9.4	9.3	8.9	8.3	7.8	7.0	6.8	6.4	6.6	7.4	7.7	8.0	8.3	8.4	8.0	7.9	7.4	7.4	7.7	8.2	8.4	7.9
9	7.8	7.9	8.0	8.0	7.9	7.8	7.8	7.9	8.2	9.4	13.4	16.2	16.7	17.7	18.0	18.7	18.8	17.8	18.1	18.2	17.7	17.5	16.9	16.6
10	16.3	15.9	15.4	15.8	15.7	12.5	10.6	9.7	8.9	8.4	9.0	10.0	10.2	10.2	10.1	10.1	9.7	9.1	8.5	8.1	7.6	7.3	7.2	6.9
11	6.5	6.1	1.8	4.4	4.6	4.6	6.0	6.7	7.4	10.3	11.8	13.3	14.0	15.6	16.6	18.4	18.0	17.1	16.5	15.9	14.0	7.4	4.4	3.4
12	3.2	3.5	3.5	3.3	3.1	1.6	0.1	-1.0	-2.2	-2.7	-2.7	-2.5	-1.9	-1.9	-2.4	-2.8	-3.3	-4.3	-5.2	-5.7	-6.2	-6.5	-7.3	-8.0
13	-8.5	-8.7	-9.2	-9.3	-9.0	-9.1	-8.6	-7.7	-7.1	-6.1	-4.8	-3.4	-2.0	-0.8	-0.3	0.3	0.9	0.9	1.0	1.0	0.7	0.5	0.2	-0.4
14	-0.6	-0.6	-1.3	-0.8	-1.2	-2.2	-3.3	-4.0	-3.9	-3.9	-3.5	-3.3	-2.3	-1.0	-0.4	-0.6	-0.8	-1.5	-2.7	-3.9	-4.7	-6.2	-6.5	-6.2
15	-7.0	-6.5	-6.8	-6.4	-7.0	-6.8	-6.5	-5.6	-4.7	-2.1	-0.0	2.1	3.7	4.8	5.2	5.2	4.7	3.7	2.7	1.9	1.7	1.2	0.6	0.4
16	0.2	0.4	-0.1	0.6	-0.1	-0.7	-1.4	-2.0	-2.7	-0.7	1.6	3.6	5.5	7.6	8.7	9.6	9.6	8.4	6.4	2.6	1.5	-0.1	-1.0	-2.6
17	-2.1	-2.8	-2.9	-2.7	-2.6	-2.7	-3.1	-3.3	-2.9	-0.7	1.8	5.1	8.3	9.2	9.9	11.0	10.3	9.5	8.9	7.7	7.4	7.1	6.4	4.2
18	3.3	2.8	2.6	2.7	2.0	1.2	1.2	1.6	2.5	3.8	5.7	7.1	8.8	9.3	9.4	9.5	9.5	9.1	8.7	8.4	8.7	7.3	7.5	8.3
19	8.6	8.6	8.5	8.7	9.4	9.6	10.1	10.1	10.2	10.3	10.7	11.4	12.7	14.4	16.1	17.1	17.4	16.7	16.2	16.0	15.7	15.8	15.6	15.3
20	15.4	15.7	15.6	15.3	15.0	13.4	10.1	8.6	7.8	7.8	7.6	8.7	10.2	11.1	11.2	11.3	10.5	9.6	8.9	7.5	6.4	5.9	5.3	4.6
21	4.1	2.2	1.9	0.6	1.7	2.3	3.4	1.9	3.0	3.9	5.8	8.4	10.3	11.5	12.1	12.1	11.8	10.8	9.2	7.6	7.1	6.5	6.1	5.7
22	5.6	5.5	5.1	5.1	5.3	5.0	5.0	5.1	4.7	4.9	5.5	5.6	5.7	4.3	3.8	4.2	3.7	2.3	1.8	0.5	-0.8	-1.1	-1.5	-1.7
23	-2.0	-2.6	-3.1	-4.0	-4.5	-5.0	-5.2	-5.5	-5.9	-6.1	-5.9	-5.6	-4.1	-3.0	-2.3	-1.9	-2.2	-3.0	-3.8	-4.3	-4.3	-5.4	-6.2	-6.7
24	-7.0	-7.2	-7.0	-7.9	-9.3	-10.5	-9.8	-11.1	-10.2	-8.1	-5.5	-3.7	-1.5	-0.4	0.5	1.1	0.9	-0.6	-2.2	-3.2	-3.5	-4.1	-4.6	-4.8
25	-4.2	-4.7	-4.7	-4.6	-4.2	-4.1	-4.0	-4.0	-3.8	-2.2	-0.8	0.4	1.6	1.9	1.7	1.7	2.0	1.9	1.7	1.7	1.5	1.4	1.6	1.9
26	2.6	2.2	0.9	-0.8	-2.1	-2.6	-3.0	-3.4	-3.4	-3.3	-3.9	-3.9	-3.3	-2.3	-0.9	-0.5	-0.6	-1.5	-2.1	-2.7	-3.5	-3.9	-4.6	-4.9
27	-5.2	-5.6	-6.0	-6.4	-6.5	-6.5	-6.3	-6.3	-6.4	-5.5	-3.6	-2.3	-0.6	0.5	0.7	1.0	1.1	1.1	-0.3	-1.6	-0.9	-1.0	-1.1	-1.0
28	-1.0	-0.9	-0.9	-0.9	-0.8	-0.7	-0.9	-0.8	-0.8	-0.4	-0.2	0.0	0.5	0.9	0.8	0.9	1.1	0.9	0.6	0.6	0.4	0.4	0.5	0.5
29	0.4	0.2	-0.4	-0.8	-1.4	-1.8	-1.5	-1.4	-1.6	-1.1	-1.0	-0.5	0.3	0.6	1.1	1.6	2.0	1.9	1.9	1.7	0.9	0.5	0.4	0.5
30	0.5	0.4	0.3	0.1	0.1	0.3	0.1	-1.6	-1.7	-1.4	-0.4	1.3	2.5	4.2	5.2	6.9	6.7	7.1	7.2	7.3	6.7	6.4	5.6	5.4
HOURLY MEAN	2.6	2.3	1.9	1.7	1.4	0.9	0.7	0.4	0.6	1.6	2.8	4.0	5.1	5.9	6.3	6.8	6.6	5.9	5.2	4.4	4.0	3.3	2.8	2.5

MAXIMUM = 18.8 MINIMUM =-11.1 MEAN = 3.3 720 VALID OBSERVATIONS (100.0%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	14.6	12.8	4.4	-0.3	3.8	13.0	17.3	10.0	18.8	16.3	18.4	3.5	1.0	-0.4	5.2
MIN	8.6	5.4	-2.3	-5.6	-7.0	-1.2	5.5	6.4	7.8	6.9	1.8	-8.0	-9.3	-6.5	-7.0
MEAN	11.4	9.5	1.6	-2.9	-1.7	5.6	11.3	8.0	13.5	10.6	10.2	-2.0	-3.7	-2.7	-0.9
DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	9.6	11.0	9.5	17.4	15.7	12.1	5.7	-1.9	1.1	2.0	2.6	1.1	1.1	2.0	7.3
MIN	-2.7	-3.3	1.2	8.5	4.6	0.6	-1.7	-6.7	-11.1	-4.7	-4.9	-6.5	-1.0	-1.8	-1.7
MEAN	2.3	3.4	5.9	12.7	10.1	6.2	3.5	-4.3	-5.0	-0.8	-2.1	-2.9	-0.0	0.1	2.9

MEAN MAXIMUM = 7.8 MEAN MINIMUM = -1.2

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5.5	6.5	7.5	7.6	7.6	8.6	9.0	10.2	12.1	13.3	14.3	15.2	15.8	15.8	16.3	15.5	15.4	15.0	14.2	14.3	15.1	13.7	13.9	12.1
2	11.9	12.3	12.4	11.9	11.4	10.8	9.8	10.3	10.1	10.6	12.1	12.4	12.7	13.6	14.0	13.9	13.4	11.8	10.5	9.7	8.5	9.0	8.6	7.9
3	7.0	6.2	5.0	4.0	3.6	3.4	3.0	2.7	2.5	1.7	2.7	4.0	5.0	5.3	5.8	6.2	6.4	5.8	4.9	4.9	4.3	2.0	1.4	2.1
4	-0.2	0.6	1.6	1.0	1.8	1.9	1.8	2.0	2.0	2.5	3.0	4.0	4.2	4.2	4.6	3.6	3.5	3.6	3.3	3.2	3.2	2.9	3.1	3.2
5	3.2	3.1	3.2	3.4	3.6	3.5	3.2	3.4	3.3	3.2	3.1	3.3	4.2	4.2	3.9	3.4	3.2	3.1	3.2	2.9	1.8	1.6	1.3	1.0
6	0.1	-0.5	-1.0	-1.0	-1.2	-1.6	-1.8	-1.8	-1.7	-1.4	-0.3	1.0	2.2	3.3	5.1	6.2	6.2	5.7	5.4	4.8	4.6	4.5	4.1	3.9
7	3.7	3.5	3.5	3.8	3.8	3.4	2.9	1.9	1.3	-0.3	-1.3	-1.4	-1.6	-2.0	-2.2	-2.5	-2.6	-2.8	-3.2	-3.6	-3.9	-4.1	-4.4	-4.8
8	-5.3	-5.3	-5.4	-5.3	-5.3	-5.6	-5.9	-5.7	-5.2	-5.2	-4.5	-4.0	-3.6	-3.0	-2.4	-2.0	-1.9	-2.7	-3.5	-4.7	-5.6	-6.4	-7.2	-8.1
9	-8.7	-9.2	-9.9	-10.5	-10.7	-10.8	-10.9	-11.0	-10.6	-10.2	-9.4	-7.7	-6.4	-5.3	-4.5	-3.9	-3.2	-3.0	-2.5	-2.1	-M-	-M-	-M-	0.1
10	-0.2	-0.2	-0.1	0.1	0.1	0.1	0.2	0.0	0.3	0.7	0.8	1.6	2.4	3.7	4.0	3.7	3.1	2.1	1.0	0.1	-0.6	-1.6	-2.4	-2.9
11	-4.6	-6.3	-8.1	-9.2	-10.2	-11.1	-11.7	-12.0	-12.3	-12.1	-11.4	-10.2	-8.9	-7.8	-7.3	-6.9	-7.0	-7.7	-8.5	-8.9	-9.2	-9.5	-10.5	-11.4
12	-11.8	-12.1	-12.1	-12.1	-12.4	-12.3	-11.8	-11.6	-11.1	-9.6	-7.2	-5.3	-3.7	-2.8	-2.1	-1.5	-1.4	-2.0	-2.6	-3.0	-3.3	-4.0	-4.2	-4.3
13	-4.3	-4.6	-4.7	-4.5	-4.4	-4.0	-3.3	-3.1	-2.6	-1.3	0.7	2.8	4.3	5.4	6.3	6.8	6.3	5.0	3.9	2.8	2.3	1.7	1.3	1.2
14	1.4	1.2	0.7	0.6	0.7	0.9	0.9	0.9	0.9	1.2	1.3	1.8	2.0	1.7	1.2	1.1	0.8	0.2	-0.5	-0.8	-1.1	-1.8	-1.6	-2.9
15	-2.9	-3.0	-3.0	-3.3	-3.8	-3.6	-3.7	-3.0	-3.1	-3.0	-2.5	-1.7	-1.6	-1.6	-1.2	-0.8	-0.7	-1.2	-1.8	-2.6	-3.3	-3.6	-4.2	-5.6
16	-5.2	-5.0	-5.9	-6.5	-6.8	-7.4	-7.0	-6.5	-5.8	-5.5	-4.9	-4.6	-4.4	-4.1	-4.0	-3.9	-3.8	-3.9	-4.0	-4.1	-4.4	-4.4	-4.3	-4.4
17	-4.4	-4.3	-4.3	-4.3	-4.2	-4.1	-3.8	-3.5	-3.0	-1.8	-0.3	2.2	5.9	8.7	10.0	10.8	10.1	8.9	7.9	6.7	5.5	6.2	5.6	5.8
18	6.0	5.3	5.5	4.9	3.9	3.6	2.9	3.4	2.4	3.6	6.1	6.1	7.4	9.2	10.6	11.1	10.5	8.5	7.2	7.3	5.9	4.2	4.0	3.7
19	3.3	3.0	2.5	1.8	1.4	1.2	0.8	0.4	0.4	1.0	2.0	2.9	3.5	4.5	5.6	6.4	7.1	5.4	4.4	3.1	2.3	1.7	0.7	-1.7
20	-2.5	-1.0	0.1	-1.1	1.0	1.2	0.9	0.6	-0.3	0.9	2.5	3.6	4.7	5.6	6.2	6.7	6.7	5.1	3.5	2.6	2.2	0.9	0.8	0.2
21	0.1	-0.2	-0.7	-0.6	-0.9	-0.4	-0.2	-0.7	-1.7	-0.3	2.1	4.0	5.9	6.8	8.4	9.1	9.1	7.4	5.9	5.8	6.0	4.3	3.2	2.5
22	1.6	1.0	1.2	0.9	0.6	0.3	0.1	0.2	0.0	1.5	2.3	3.3	4.3	5.1	5.5	6.7	6.8	6.9	6.7	6.2	5.0	3.6	2.5	3.7
23	2.8	4.2	2.2	2.2	2.9	2.3	1.7	1.0	1.1	1.2	1.4	1.9	2.2	2.7	2.9	3.1	3.1	3.3	3.4	3.8	4.6	5.2	6.0	6.8
24	7.0	7.3	7.6	8.2	8.9	9.3	9.1	9.3	9.5	9.8	10.5	10.9	10.7	10.6	10.0	10.3	10.5	10.5	10.2	10.4	9.9	10.4	9.1	8.2
25	6.9	5.9	5.0	4.3	1.8	2.2	1.5	-0.4	-1.7	-2.5	-2.7	-2.8	-2.9	-2.6	-2.8	-3.2	-3.3	-3.2	-3.5	-3.8	-4.3	-4.6	-5.0	-5.3
26	-5.4	-5.3	-5.6	-5.7	-5.7	-6.1	-7.0	-6.8	-6.4	-5.5	-4.4	-3.1	-1.8	-0.8	-0.2	0.4	0.2	-0.2	-0.5	-0.9	-1.4	-1.8	-2.3	-2.5
27	-2.5	-2.5	-2.6	-2.4	-2.2	-1.9	-1.6	-1.3	-1.3	-1.1	-0.8	-0.7	-0.6	-0.5	-0.5	-0.2	-0.1	-0.3	-0.1	0.0	-0.0	-0.0	-0.1	-2.1
28	-3.7	-4.8	-5.3	-5.7	-5.8	-5.9	-6.6	-7.3	-7.9	-7.8	-7.3	-7.0	-6.6	-6.4	-6.8	-7.4	-8.2	-9.0	-8.7	-8.8	-9.3	-9.9	-10.9	-11.9
29	-12.7	-12.8	-12.9	-13.3	-13.1	-13.0	-13.4	-13.6	-12.9	-11.7	-10.1	-8.8	-7.7	-6.6	-6.0	-5.3	-5.3	-6.1	-6.7	-7.2	-7.9	-8.3	-8.7	-8.9
30	-9.6	-9.5	-9.6	-9.5	-9.5	-9.6	-9.8	-10.2	-10.4	-9.2	-8.2	-6.2	-4.3	-2.8	-2.0	-1.2	-1.6	-2.7	-2.9	-3.1	-3.6	-3.8	-4.1	-4.2
31	-4.0	-3.9	-4.1	-4.5	-5.0	-6.1	-5.6	-6.6	-7.0	-7.0	-6.1	-4.5	-3.8	-3.2	-3.0	-3.2	-3.2	-3.8	-4.7	-5.3	-5.9	-5.4	-6.2	-5.8
HOURLY MEAN	-0.9	-1.0	-1.2	-1.4	-1.6	-1.6	-1.8	-1.9	-1.9	-1.4	-0.5	0.4	1.3	2.0	2.4	2.7	2.6	1.9	1.3	0.9	0.6	0.1	-0.3	-0.8

MAXIMUM = 16.3 MINIMUM =-13.6 MEAN = -0.0 741 VALID OBSERVATIONS (99.6%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	16.3	14.0	7.0	4.6	4.2	6.2	3.8	-1.9	0.1	4.0	-4.6	-1.4	6.8	2.0	-0.7	-3.8
MIN	5.5	7.9	1.4	-0.2	1.0	-1.8	-4.8	-8.1	-11.0	-2.9	-12.3	-12.4	-4.7	-2.9	-5.6	-7.4
MEAN	12.3	11.2	4.2	2.7	3.0	1.9	-0.5	-4.7	-7.2	0.7	-9.3	-6.8	0.6	0.5	-2.7	-5.0

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	10.8	11.1	7.1	6.7	9.1	6.9	6.8	10.9	6.9	0.4	0.0	-3.7	-5.3	-1.2	-3.0
MIN	-4.4	2.4	-1.7	-2.5	-1.7	0.0	1.0	7.0	-5.3	-7.0	-2.6	-11.9	-13.6	-10.4	-7.0
MEAN	2.3	6.0	2.7	2.1	3.1	3.2	3.0	9.5	-1.1	-3.3	-1.1	-7.4	-9.7	-6.1	-4.9

MEAN MAXIMUM = 3.9 MEAN MINIMUM = -3.7

318-35 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-1.1	-1.0	-1.0	-0.9	-1.0	-1.1	-1.1	-0.9	-0.9	-0.9	-1.2	-1.1	-1.2	-1.9	-1.1	-1.1	-1.2	-1.1	-1.2	-0.9	-0.9	-1.0	-1.0	-0.8
2	-0.8	-0.8	-1.0	-0.6	-0.7	-0.3	-0.6	-0.6	-0.8	-1.2	-1.4	-1.8	-2.0	-2.1	-1.9	-1.7	-1.6	-1.4	-1.2	-0.8	-0.5	-0.4	-0.3	-0.3
3	0.5	1.6	-0.1	0.5	1.8	2.0	1.3	0.2	-1.0	-1.3	-1.7	-2.3	-2.2	-2.4	-2.3	-2.4	-2.1	-1.9	-1.6	2.7	0.9	0.5	1.0	1.9
4	2.2	1.5	2.5	2.4	2.4	2.3	1.1	-1.0	-1.3	-1.5	-1.6	-1.9	-2.2	-2.3	-2.1	-2.1	-1.9	-1.6	-1.3	-0.8	-0.1	0.1	0.0	-0.0
5	-0.3	-0.5	-0.4	-0.3	-0.3	-0.1	-0.5	-1.2	-1.3	-1.6	-1.7	-1.9	-2.1	-2.1	-2.1	-1.8	-0.9	-1.0	-0.9	-0.8	-0.5	-0.6	-0.7	-1.1
6	-0.8	-0.9	-0.6	-0.4	0.4	2.1	0.5	0.1	-0.2	-0.1	-1.3	-1.2	-1.3	-1.4	-1.3	-1.4	-1.6	-1.5	-1.2	-0.6	0.3	0.4	-0.7	-0.6
7	-0.5	-0.4	0.0	0.8	-0.2	1.1	0.5	-0.5	-0.5	-1.2	-2.0	-1.2	0.3	-0.0	0.5	-0.3	-0.5	-0.4	-0.8	-0.1	1.3	1.8	2.1	2.0
8	2.3	3.1	2.5	2.2	1.9	2.1	1.7	0.5	0.2	-0.9	-1.2	-1.4	-1.6	-1.6	-1.6	-1.3	-1.4	-M-	-M-	-M-	-M-	-M-	-M-	-M-
9	2.0	1.5	0.2	-0.1	0.4	0.6	-0.1	-0.9	-0.9	-1.2	-1.1	-1.2	-0.9	-1.1	-1.4	-1.4	-1.5	-1.6	-1.3	-0.7	-0.6	-0.4	-0.5	-0.2
10	-0.9	-1.0	-0.7	-0.8	-0.1	-0.4	-0.9	-1.4	-1.5	-1.6	-2.3	-3.1	-3.1	-2.6	-2.6	-3.0	-1.8	-2.4	-1.8	-1.0	-0.7	-0.6	0.3	0.9
11	0.9	0.7	0.2	0.3	0.0	0.3	-0.6	-1.2	-0.9	-1.0	-1.6	-2.6	-2.7	-3.1	-3.2	-2.8	-2.9	-2.4	-1.7	-0.4	0.7	1.9	3.4	4.6
12	4.9	5.3	3.0	2.0	0.9	1.3	1.8	-0.3	-0.5	-0.5	-0.6	-0.8	-1.0	-1.2	-1.2	1.2	1.8	0.8	0.6	-0.1	0.5	1.1	1.6	2.7
13	2.9	2.7	2.0	3.1	3.2	2.6	1.5	0.5	-0.1	-0.2	0.8	1.6	-0.6	-1.1	-1.2	-1.3	-1.3	-1.0	-0.4	-0.4	-0.4	-0.2	-0.4	-0.3
14	-0.5	-0.5	-0.2	0.5	0.2	0.0	-0.1	-0.8	-1.2	-1.3	-1.2	-1.2	-1.4	-1.8	-1.8	-1.9	-1.6	-1.6	-1.1	-0.6	-0.5	-0.4	-0.3	-0.4
15	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	-0.6	-0.9	-1.2	-1.1	-0.9	-0.4	-0.1	-0.3	-0.4	-1.0	-2.1	-1.5	-1.1	-0.7	-0.3	1.0	0.4	-0.1
16	-0.1	0.3	0.3	-0.1	-0.2	-0.2	-0.2	-0.8	-0.9	-1.2	-1.3	-1.4	-1.5	-1.6	-1.5	-1.3	-1.1	-1.1	-0.7	-0.3	-0.1	-0.1	-0.2	-0.3
17	-0.3	-0.2	-0.4	-0.5	-0.5	-0.4	-0.6	-0.5	0.1	0.1	-0.1	-1.4	-1.6	-1.6	-1.6	-1.5	-1.1	-1.0	-0.6	0.4	0.7	-0.2	0.8	3.7
18	0.5	-0.3	-0.4	-0.1	-0.0	0.2	-0.7	-0.9	-0.0	-0.4	-0.4	-0.5	-1.0	-0.5	-0.8	-1.4	-1.0	-0.4	-0.2	0.5	0.7	0.6	0.4	-M-
19	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-1.6	-1.1	-1.0	-1.3	-1.4	-1.6	-1.8	-1.9	-1.8	-1.5	-1.1	-0.1	0.9	1.5	1.0	1.1
20	1.3	1.1	1.3	0.9	1.0	1.5	1.1	0.4	0.2	-0.3	0.3	-1.2	-1.7	-2.1	-2.0	-1.8	-1.9	-1.6	-1.1	0.8	1.8	2.0	1.7	-1.0
21	0.1	0.7	1.1	2.0	0.8	1.1	-1.0	0.3	5.8	0.0	-0.8	-1.2	0.2	0.5	-0.2	-0.7	-0.9	-1.0	-0.7	0.1	0.5	0.2	-0.1	-0.1
22	-0.0	0.1	0.3	1.2	1.5	0.7	1.1	0.2	0.1	0.5	-0.3	-0.7	-0.7	-0.0	0.1	-0.2	-1.0	-1.5	-1.5	-0.6	0.6	0.9	1.0	0.6
23	0.8	0.8	1.2	1.6	1.0	0.3	0.3	-0.1	-0.8	-1.1	-1.0	-1.4	-1.8	-1.8	-1.6	-1.7	-1.7	-1.7	-1.2	-0.4	0.5	1.2	1.1	1.1
24	1.3	0.7	0.3	0.4	0.4	0.3	-0.1	-0.6	-0.8	-1.4	-1.4	-1.8	-1.9	-2.0	-1.7	-1.8	-1.8	-1.7	-1.2	-0.5	0.4	0.7	0.4	0.4
25	0.9	0.8	0.5	0.7	0.9	0.6	0.3	-0.4	-0.9	-1.1	-1.3	-1.5	-1.6	-1.8	-1.9	-1.9	-1.8	-1.5	-1.0	-0.3	0.5	0.7	1.6	1.9
26	1.3	1.8	1.9	1.5	1.0	1.1	0.5	0.2	-0.7	-0.6	-0.4	-0.4	-1.2	-0.9	-0.6	-1.3	-1.6	-1.5	-0.1	0.4	2.0	2.5	2.2	2.3
27	1.2	-1.6	-0.9	-1.0	-1.1	-1.1	-0.8	-1.6	-1.9	-1.8	-2.5	-2.6	-2.5	-2.7	-2.3	-2.2	-2.7	-1.8	-1.5	-1.2	-0.7	-0.6	-1.0	-0.8
28	-0.7	-0.8	-1.0	-1.1	-0.6	-0.5	-0.6	-0.8	-0.2	-0.5	-0.0	-1.0	-1.2	-1.5	-1.5	-1.5	-1.7	-1.7	-1.3	-0.6	0.4	1.1	1.9	2.6
29	1.6	1.0	2.6	3.1	1.8	1.4	2.1	2.0	1.3	-0.1	0.0	-0.7	-0.9	-0.9	-0.7	-0.8	-1.3	-1.9	-1.4	-0.4	0.8	1.8	3.1	1.2
30	-0.5	-1.0	-1.0	-0.6	-0.5	0.6	2.7	0.4	-0.9	-0.6	-M-	-M-	-M-	-2.3	-2.7	-2.6	-3.3	-2.3	-1.2	-0.1	1.9	3.4	4.0	4.8
31	5.5	6.4	6.0	4.5	5.2	4.1	3.9	2.5	-0.6	-1.4	-1.5	-1.6	-2.0	-2.1	-2.1	-1.6	-1.6	-1.5	-0.7	1.3	3.6	2.9	2.3	2.5
HOURLY MEAN	0.8	0.7	0.6	0.7	0.6	0.7	0.4	-0.3	-0.5	-0.9	-1.0	-1.3	-1.4	-1.5	-1.5	-1.5	-1.5	-1.4	-1.0	-0.2	0.5	0.7	0.8	1.0

MAXIMUM = 6.4 MINIMUM = -3.3 MEAN = -0.3 725 VALID OBSERVATIONS (97.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	-0.8	-0.3	2.7	2.5	-0.1	2.1	2.1	3.1	2.0	0.9	4.6	5.3	3.2	0.5	1.0	0.3
MIN	-1.9	-2.1	-2.4	-2.3	-2.1	-1.6	-2.0	-1.6	-1.6	-3.1	-3.2	-1.2	-1.3	-1.9	-2.1	-1.6
MEAN	-1.1	-1.0	-0.3	-0.3	-1.0	-0.6	0.1	0.3	-0.5	-1.4	-0.6	1.0	0.5	-0.8	-0.6	-0.6

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	3.7	0.7	1.5	2.0	5.8	1.5	1.6	1.3	1.9	2.5	1.2	2.6	3.1	4.8	6.4
MIN	-1.6	-1.4	-1.9	-2.1	-1.2	-1.5	-1.8	-2.0	-1.9	-1.6	-2.7	-1.7	-1.9	-3.3	-2.1
MEAN	-0.3	-0.3	-0.7	0.0	0.3	0.1	-0.3	-0.6	-0.3	0.4	-1.5	-0.5	0.6	-0.1	1.4

MEAN MAXIMUM = 2.2 MEAN MINIMUM = -2.0

318-35 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.1	2.4	2.8	2.4	2.2	1.9	1.6	0.7	-0.9	-1.2	-1.2	-1.5	-1.8	-2.1	-1.9	-1.9	-1.7	-1.5	-0.1	1.6	3.1	3.2	1.8	[illegible]
2	1.9	2.2	1.7	1.1	1.2	0.8	0.5	-0.4	-1.2	-1.6	-1.6	-2.0	-2.2	-2.3	-2.0	-1.8	-1.4	-1.1	-0.6	0.1	0.8	0.7	0.5	0.3
3	-0.1	0.0	-0.1	-0.3	-0.0	0.2	-0.1	-0.6	-1.2	-1.4	-1.5	-1.9	-2.0	-2.2	-1.8	-0.9	-0.6	-0.2	0.5	1.0	0.9	1.1	0.5	0.1
4	0.1	-0.0	0.1	0.0	-0.2	-0.1	0.1	-0.3	-0.7	-1.0	-1.5	-3.2	-3.7	-3.3	-3.7	-3.3	-1.2	-0.9	0.4	0.2	-0.5	0.4	1.0	0.4
5	-0.4	-0.8	-0.8	-0.3	0.4	0.1	-0.3	-0.6	-1.2	-1.5	-1.7	-1.6	-1.5	-1.8	-1.4	-1.8	-1.8	-1.6	-1.2	-0.7	-0.3	-0.4	0.3	-0.5
6	-0.5	-0.7	-0.8	-0.9	-1.1	-1.1	-1.2	-1.2	-1.2	-1.2	-1.4	-1.7	-1.7	-1.6	-1.1	-1.5	-1.8	-1.5	-1.2	-1.1	-1.0	-0.7	-0.8	-1.0
7	-1.1	-1.2	-1.2	-1.1	-1.2	-1.3	-1.2	-1.5	-1.4	-1.8	-1.9	-2.2	-2.8	-2.7	-2.3	-2.5	-2.7	-2.0	-1.3	-0.5	0.4	1.1	0.8	0.9
8	3.6	4.1	4.0	2.2	2.0	3.5	3.2	1.4	-1.6	-2.5	-2.1	-2.5	-2.3	-2.8	-2.9	-3.0	-2.7	-2.4	-1.4	-0.8	0.0	0.3	1.2	3.4
9	[illegible]	5.1	4.1	5.0	4.0	1.3	-0.2	-0.9	-0.9	-1.4	-1.4	-1.7	-1.6	-2.4	-2.5	-2.1	-2.0	-1.6	-1.2	-1.3	-1.1	-1.4	-1.3	-1.4
10	[illegible]	-1.1	-1.2	-1.3	-1.1	-1.0	-1.1	-1.1	-1.0	-1.0	-1.0	-1.1	-1.3	-1.7	-1.4	-1.0	-1.4	-1.7	-1.6	-1.4	-0.7	-0.0	0.3	0.7
11	0.1	[illegible]	0.3	0.4	0.2	0.5	0.4	-0.0	-1.0	-1.6	-1.6	-1.6	-1.7	-1.7	-1.8	-1.6	-1.6	-1.5	-1.3	-0.7	0.3	0.4	0.3	0.4
12	0.1	-0.2	-0.7	-0.4	-0.9	-1.1	-1.3	-1.2	-1.1	-1.4	-1.1	-1.1	-1.9	-2.1	-2.6	-1.7	-1.1	-1.1	-1.3	-1.2	-1.1	-0.8	-0.8	-0.6
13	-0.8	-0.7	-0.7	-0.7	-0.8	-0.8	-0.8	-0.9	-1.2	-1.2	-1.1	-1.0	-1.1	-1.3	-1.9	-1.6	-1.6	-1.5	-1.2	-1.0	-0.8	-0.6	-0.8	-0.5
14	-0.7	-0.6	-0.7	-0.8	-0.9	-0.9	-1.1	-1.1	-1.3	-1.3	-1.4	-1.4	-1.3	-1.3	-1.2	-1.1	-1.1	-1.1	-1.3	-1.1	-1.0	-0.9	-0.8	-0.9
15	-0.9	-0.5	-0.7	-0.4	-0.6	-1.0	-1.0	-1.0	-1.1	-1.1	-1.1	-1.4	-1.8	-1.5	-0.9	-1.0	-1.5	-1.2	-1.2	-0.9	-1.0	-1.0	-1.0	-0.9
16	-0.8	-0.8	-0.8	-0.8	-0.8	-0.9	-0.9	-0.9	-0.8	-0.9	-1.4	-1.1	-1.5	-1.7	-1.7	-1.5	-1.5	-1.2	-1.0	-0.3	0.1	1.4	1.6	1.8
17	2.0	2.5	3.1	2.6	3.0	1.7	1.7	0.7	-0.2	-0.5	-1.3	-1.5	-1.6	-1.6	-1.6	-1.5	-1.8	-1.1	-0.1	0.7	1.5	2.3	3.1	3.6
18	3.6	3.6	3.7	3.5	2.4	2.6	3.0	2.6	1.2	0.2	-0.8	-1.5	-1.5	-1.4	-1.2	-1.4	-1.4	-1.1	-0.5	0.4	1.1	1.0	1.3	0.7
19	0.6	0.6	0.3	0.9	0.5	0.6	0.6	-0.2	-0.7	-1.2	-1.4	-1.5	-1.6	-1.6	-1.7	-1.4	-1.0	-0.7	-0.1	0.6	1.1	0.6	0.6	1.1
20	0.9	1.6	1.2	0.4	-0.4	0.8	3.5	1.3	-0.5	-0.5	-1.5	-1.2	-1.5	-1.2	-1.2	-1.3	-1.3	-1.2	-0.9	-0.3	0.0	0.5	0.7	2.2
21	3.5	4.4	5.1	6.6	5.3	5.2	5.7	3.8	0.8	-1.2	-1.5	-1.6	-1.7	-1.7	-1.5	-1.6	-1.5	-1.2	-0.6	0.3	2.0	0.7	0.1	0.5
22	0.5	0.3	-0.0	0.1	0.3	0.0	0.5	0.1	-1.0	-1.4	-1.7	-2.0	-2.1	-2.4	-2.6	-2.5	-2.2	-1.8	-0.5	-0.3	-0.2	0.2	0.8	0.8
23	0.4	0.7	0.5	0.2	-0.6	-0.4	-0.4	-0.9	-1.0	-1.2	-1.1	-1.1	-1.5	-1.5	-1.5	-1.5	-1.1	-1.3	-1.0	-0.0	1.1	1.9	1.8	1.6
24	2.0	2.0	1.1	0.5	-0.3	-0.2	-0.3	-0.9	-0.9	-0.7	-1.5	-2.0	-1.9	-2.2	-2.6	-2.6	-2.2	-2.1	-1.8	-1.4	-0.9	0.1	1.3	3.8
25	3.7	3.0	1.5	2.2	4.1	3.5	2.8	2.3	-0.1	-0.9	-1.2	-1.4	-1.6	-1.5	-1.5	-1.5	-1.3	-1.1	-0.1	1.4	2.5	2.0	1.5	1.7
26	1.4	1.3	1.2	0.7	0.6	1.1	1.2	0.1	-0.6	-0.8	-0.9	-1.3	-1.5	-1.6	-1.4	-M-	-M-	-M-	-M-	-1.0	-1.1	-1.1	-0.8	-0.4
27	-0.7	-0.9	-1.0	-1.1	-0.9	-0.6	-1.1	-1.3	-1.6	-1.6	-1.5	-1.8	-1.8	-1.8	-1.6	-1.7	-1.8	-1.5	-1.1	-0.2	0.1	-0.1	-0.3	-0.5
28	-0.5	-0.9	-0.9	-1.0	-0.9	-1.0	-1.0	-1.2	-1.5	-1.5	-1.5	-1.6	-1.6	-1.6	-1.7	-1.5	-1.2	-1.1	-0.9	-0.7	-0.9	-0.9	-0.9	-0.8
29	-0.8	-0.9	-0.9	-0.9	-1.0	-0.8	-0.8	-1.0	-1.1	-1.1	-1.1	-1.1	-0.9	-0.4	-0.3	-0.6	-1.0	-1.2	-0.8	-0.6	-0.4	-0.3	-0.6	-0.5
30	-0.3	0.2	0.2	-0.1	-0.6	-0.5	-0.9	-1.0	-1.4	-1.8	-2.7	-2.3	-1.6	-1.5	-1.7	-1.5	-1.6	-1.3	-1.1	-0.9	-0.8	-0.9	-0.7	-0.7
31	-0.9	-0.9	-1.0	-0.5	-0.2	0.6	0.2	-0.8	-0.3	-0.1	-1.3	-1.3	-1.5	-1.5	-1.3	-1.1	-0.9	-1.0	-0.5	0.0	0.2	0.7	1.4	1.1
HOURLY MEAN	0.7	0.8	0.6	0.6	0.4	0.4	0.4	-0.2	-0.9	-1.2	-1.4	-1.6	-1.7	-1.8	-1.8	-1.7	-1.5	-1.3	-0.8	-0.3	0.1	0.3	0.4	0.6

MAXIMUM = 6.6 MINIMUM = -3.7 MEAN = -0.5 740 VALID OBSERVATIONS (99.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	3.2	2.2	1.1	1.0	0.4	-0.5	1.1	4.1	5.1	0.7	0.5	0.1	-0.5	-0.6	-0.4	1.8
MIN	-2.1	-2.3	-2.2	-3.7	-1.8	-1.8	-2.8	-3.0	-2.5	-1.7	-1.8	-2.6	-1.9	-1.4	-1.8	-1.7
MEAN	0.5	-0.3	-0.4	-0.9	-0.9	-1.2	-1.3	0.1	-0.1	-1.0	-0.6	-1.1	-1.0	-1.1	-1.0	-0.7

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	3.6	3.7	1.1	3.5	6.6	0.8	1.9	3.8	4.1	1.4	0.1	-0.5	-0.3	0.2	1.4
MIN	-1.8	-1.5	-1.7	-1.5	-1.7	-2.6	-1.5	-2.6	-1.6	-1.6	-1.8	-1.7	-1.2	-2.7	-1.5
MEAN	0.7	0.8	-0.2	0.0	1.2	-0.7	-0.3	-0.6	0.8	-0.2	-1.1	-1.1	-0.8	-1.1	-0.4

MEAN MAXIMUM = 1.6 MEAN MINIMUM = -2.0

318-35 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.3	0.8	0.9	0.8	-0.2	1.3	1.3	0.5	-0.6	-1.1	-1.5	-1.5	-2.2	-2.4	-2.1	-2.0	-1.5	-1.2	-0.7	-0.2	-0.4	0.0	0.1	-0.2
2	2.0	1.8	2.3	2.9	-0.5	-1.1	-1.3	-1.5	-1.6	-1.5	-2.4	-2.4	-2.4	-2.2	-2.8	-2.7	-2.3	-1.9	-0.7	2.4	3.9	5.6	5.8	6.6
3	2.9	4.0	6.1	4.7	2.4	1.4	3.1	2.3	-0.5	-1.4	-1.7	-2.0	-2.0	-2.2	-2.0	-2.0	-1.9	-1.0	-0.3	0.7	2.0	2.8	2.8	2.5
4	1.9	2.3	2.2	2.2	2.3	2.4	1.9	0.2	-0.8	-1.3	-1.5	-1.6	-1.6	-1.6	-1.5	-1.4	-0.9	-0.3	0.2	0.4	0.4	0.5	0.4	-0.1
5	-0.0	0.1	0.0	0.1	0.0	0.1	0.0	-0.5	-0.9	-1.1	-1.3	-1.4	-1.5	-1.4	-1.4	-1.5	-0.2	0.2	0.0	0.7	1.5	1.1	1.6	1.2
6	0.3	0.9	-0.2	-0.5	-0.5	-0.8	-0.6	-0.7	-1.0	-1.1	-1.0	-1.0	-1.1	-1.1	-1.2	-1.3	-1.2	-1.3	-1.2	-1.1	-0.9	-0.2	-0.2	0.1
7	-0.2	-0.3	-0.3	-0.7	-0.6	-0.8	-1.0	-1.1	-1.4	-1.4	-1.5	-1.4	-1.3	-1.4	-1.5	-1.6	-1.4	-1.3	-0.9	-0.1	-0.1	-0.2	-0.3	-0.7
8	-1.0	-1.1	-1.0	-1.0	-1.1	-1.1	-1.2	-1.2	-1.2	-1.5	-1.4	-1.4	-1.6	-1.6	-1.6	-1.4	-1.2	-1.0	-0.7	-0.4	-0.2	-0.2	-0.2	-0.3
9	-0.3	-0.6	-0.6	-0.3	-0.5	-0.2	-0.2	-0.3	-0.6	-0.9	-0.6	-0.6	-1.1	-1.3	-1.1	-1.1	-0.9	-0.9	-0.4	0.1	0.3	0.1	-0.3	-0.2
10	-0.2	-0.2	-0.3	-0.2	-0.1	-0.2	-0.2	-0.4	-0.9	-1.1	-1.3	-1.4	-1.4	-1.4	-1.4	-1.4	-1.2	-0.8	-0.2	0.3	0.3	0.2	-0.1	0.1
11	0.3	0.4	0.3	0.0	0.2	0.1	0.1	-0.1	-1.0	-1.3	-1.4	-1.5	-1.6	-1.6	-1.5	-1.3	-0.8	-0.5	0.5	1.3	0.8	-0.1	-0.2	-0.2
12	-0.6	-0.7	-0.5	-0.4	-0.5	-0.6	-0.5	-0.5	-1.0	-1.0	-1.4	-1.2	-1.2	-1.3	-1.5	-1.1	-0.6	-0.2	0.3	0.5	-1.1	-1.5	-1.6	-1.7
13	-1.6	-1.6	-1.5	-1.4	-1.7	-1.2	-1.1	-1.2	-1.3	-1.5	-1.8	-2.3	-2.2	-2.3	-2.3	-2.1	-2.1	-2.0	-1.9	-1.7	-1.7	-1.8	-1.9	-1.7
14	-1.5	-1.6	-1.5	-1.2	-1.2	-1.1	-1.3	-1.1	-1.2	-1.2	-0.8	-1.4	-1.7	-1.7	-1.7	-1.6	-1.5	-1.6	-1.6	-1.5	-1.4	-1.5	-1.7	-1.5
15	-1.3	-1.4	-1.4	-1.5	-1.5	-1.1	-1.0	-1.2	-1.6	-1.7	-2.1	-2.2	-2.3	-2.5	-2.5	-2.6	-1.8	-1.6	-0.9	-0.5	-0.0	0.3	0.6	0.7
16	1.2	1.0	0.1	-0.3	-0.6	-0.8	-1.2	-1.2	-1.3	-1.3	-1.5	-1.5	-1.5	-1.5	-1.5	-1.2	-1.0	-0.8	-0.6	-0.1	0.3	0.3	0.2	0.2
17	0.4	0.3	0.1	0.1	-0.0	-0.1	-0.5	-0.5	-0.8	-1.4	-1.2	-1.7	-2.0	-1.8	-1.8	-1.8	-1.8	-1.6	-1.3	-0.9	-0.7	-0.3	-0.1	0.2
18	0.0	0.2	[illegible]	1.1	-0.3	1.6	2.3	1.4	-0.6	-1.2	-1.6	-1.8	-1.9	-1.9	-1.7	-1.7	-1.5	-1.2	0.6	3.1	4.2	4.6	4.8	4.0
19	3.7	2.8	[illegible]	1.3	1.3	1.4	2.0	1.9	0.8	-0.5	-1.2	-1.5	-1.5	-1.6	-2.1	-2.5	-2.0	-1.7	-1.3	-0.8	-0.5	-0.5	-0.7	-0.1
20	1.0	0.2	-0.5	1.8	1.7	-0.1	-0.7	-1.0	-2.0	-2.3	-2.3	-2.3	-2.0	-2.1	-2.1	-2.1	-1.9	-1.8	-1.3	0.1	1.1	1.0	0.5	0.4
21	2.1	3.2	2.8	3.5	3.5	3.4	3.4	2.5	-0.3	-1.5	-1.4	-1.9	-2.4	-2.6	-2.3	-2.3	-2.2	-1.6	0.4	2.7	3.7	5.1	5.7	6.7
22	6.7	5.7	4.8	4.4	3.7	3.4	3.7	3.2	0.4	-1.2	-1.6	-1.7	-1.8	-1.8	-1.8	-1.6	-1.5	-0.9	0.0	0.7	1.1	0.8	0.2	0.4
23	0.7	0.4	-0.3	-0.3	-0.0	0.1	0.7	0.5	-0.1	-0.9	-1.1	-1.2	-1.6	-1.9	-1.5	-1.2	-0.9	-0.7	0.9	2.5	2.6	2.6	1.7	0.9
24	1.9	1.2	1.3	0.2	-0.1	0.0	1.7	1.4	-1.5	-2.2	-2.5	-2.2	-M-	-M-	-M-	-2.3	-2.1	-1.5	0.3	0.8	-0.7	-0.8	-0.9	-0.7
25	-1.0	-0.9	-1.1	-0.7	-0.6	-1.1	-0.6	-0.8	-1.5	-2.3	-2.1	-2.1	-2.2	-2.3	-2.4	-1.9	-1.7	-1.5	1.3	2.7	3.8	4.1	4.4	5.0
26	4.2	4.6	4.0	3.7	1.8	1.5	1.0	0.8	-0.2	-0.9	-1.2	-1.5	-1.7	-1.6	-1.5	-1.6	-1.1	-0.6	0.4	1.2	0.8	1.4	1.2	0.1
27	-0.4	-0.7	-0.8	-0.1	-0.3	-0.5	-0.4	-0.8	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.4	-1.3	-1.1	-0.8	-0.4	0.2	0.3	0.2	-0.1	0.1
28	-0.2	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.6	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
29	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.9	-0.5	0.5	1.4	1.7	1.7	1.5	1.3	-M-
HOURLY MEAN	0.8	0.7	0.7	0.6	0.2	0.2	0.3	-0.0	-0.9	-1.3	-1.5	-1.6	-1.8	-1.8	-1.8	-1.7	-1.4	-1.1	-0.3	0.5	0.8	0.9	0.8	0.8

MAXIMUM = 6.7 MINIMUM = -2.8 MEAN = -0.3 661 VALID OBSERVATIONS (91.8%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	2.3	6.6	6.1	2.4	1.6	0.9	-0.1	-0.2	0.3	0.3	1.3	0.5	-1.1	-0.8	0.7
MIN	-2.4	-2.8	-2.2	-1.6	-1.5	-1.3	-1.6	-1.6	-1.3	-1.4	-1.6	-1.7	-2.3	-1.7	-2.6
MEAN	-0.4	0.3	0.9	0.2	-0.2	-0.7	-0.9	-1.0	-0.5	-0.6	-0.4	-0.8	-1.7	-1.4	-1.3

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	1.2	0.4	4.8	3.7	1.8	6.7	6.7	2.6	1.9	5.0	4.6	0.3	-0.2	-M-	1.7
MIN	-1.5	-2.0	-1.9	-2.5	-2.3	-2.6	-1.8	-1.9	-2.5	-2.4	-1.7	-1.5	-0.6	-M-	-0.9
MEAN	-0.6	-0.8	0.6	-0.1	-0.7	1.2	1.0	0.1	-0.4	-0.2	0.6	-0.7	-0.4	-M-	0.8

MEAN MAXIMUM = 2.1 MEAN MINIMUM = -1.9

318-35 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.9	0.8	1.8	1.0	0.8	0.8	1.0	0.8	-0.3	-1.1	-1.1	-1.3	-1.4	-1.3	-1.3	-1.3	-1.1	-0.2	0.9	1.7	0.6	-0.1	-0.4	-0.5
2	-0.3	-0.2	0.2	0.2	-0.5	-0.6	-0.6	-0.6	-0.9	-1.2	-1.6	-1.6	-1.8	-2.2	-2.2	-2.3	-1.7	-1.1	1.6	3.6	4.7	4.3	4.2	1.5
3	2.7	2.8	6.0	7.8	6.6	5.0	6.7	7.1	2.1	-0.9	-1.3	-1.7	-1.9	-1.8	-1.6	-1.4	-1.3	-0.2	2.3	5.4	4.9	4.4	4.9	4.5
4	4.0	5.6	5.0	3.9	3.2	2.5	1.9	1.8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-1.2	-0.9	-0.1	0.7	1.0	0.8	0.8	0.7	0.6
5	0.5	1.1	1.0	0.1	0.1	0.1	-0.2	-0.3	-0.6	-0.1	-0.9	-1.3	-1.4	-1.5	-1.5	-1.3	-1.0	-0.5	-0.1	-0.1	-0.1	0.1	0.1	0.1
6	-0.1	-0.1	-0.2	-0.3	-0.3	-0.4	-0.3	-0.2	-0.3	-1.5	-1.5	-1.7	-1.8	-1.8	-1.9	-2.0	-1.9	-1.4	-0.9	1.2	3.1	4.0	5.2	4.8
7	4.5	3.5	2.3	2.1	2.9	3.0	2.9	2.4	0.4	-0.9	-1.4	-1.8	-1.8	-1.9	-1.8	-1.7	-1.4	-0.6	1.4	1.8	1.7	2.3	2.5	3.2
8	2.7	1.5	1.8	0.6	0.7	1.0	1.2	0.5	-0.9	-0.9	-0.8	-1.4	-1.1	-1.0	-0.8	-1.4	-1.5	-1.3	-0.6	-0.6	-0.7	-0.7	-0.4	-0.5
9	-0.5	-0.6	-1.2	-1.1	-1.1	-1.1	-1.0	-1.0	-1.2	-1.3	-1.4	-1.2	-1.2	-1.6	-1.2	-1.0	-0.9	-0.8	-0.6	-0.7	-0.9	-0.9	-0.9	-1.0
10	-1.0	-1.0	-1.0	-1.1	-1.1	-1.0	-1.0	-1.0	-1.2	-1.4	-1.5	-1.6	-1.7	-1.7	-1.5	-1.4	-1.3	-1.2	-1.2	-1.2	-1.3	-1.2	-1.2	-1.2
11	-1.1	-1.1	-0.9	-0.8	-0.9	-0.8	-0.9	-1.0	-1.5	-1.7	-2.0	-2.1	-2.1	-2.2	-2.0	-1.9	-1.6	-1.1	0.5	4.0	5.7	5.7	5.9	5.1
12	2.5	0.2	3.3	4.0	4.2	3.6	2.1	4.5	1.0	-1.9	-2.2	-2.0	-2.1	-2.6	-2.0	-1.9	-1.8	-1.7	-1.1	0.1	0.0	-0.8	-1.2	-1.1
13	-0.1	0.1	-0.2	-0.7	-0.9	-0.8	-0.8	-0.8	-1.2	-1.5	-1.7	-2.2	-2.1	-2.1	-1.8	-1.8	-1.7	-1.6	-1.4	-0.7	0.2	3.3	4.4	5.4
14	5.7	4.6	3.6	2.4	2.5	2.0	3.2	2.8	-0.2	-1.3	-1.5	-1.6	-1.8	-1.8	-1.9	-1.6	-1.4	-0.7	1.3	2.9	3.1	2.5	2.8	2.6
15	0.9	0.2	0.0	1.9	3.8	6.2	4.7	0.2	-0.8	-1.8	-1.9	-2.0	-2.1	-2.2	-2.5	-2.2	-1.9	-1.5	-0.9	-0.3	0.0	0.5	0.4	0.4
16	2.8	6.0	5.4	5.9	6.4	7.3	5.7	6.7	3.7	-0.4	-1.6	-1.5	-1.7	-1.6	-1.6	-1.6	-1.3	-0.7	1.2	1.7	1.3	1.1	1.2	0.6
17	0.4	0.0	-0.0	0.1	-0.1	0.0	-0.3	-0.5	-0.8	-1.1	-1.3	-1.7	-1.8	-1.9	-1.7	-1.6	-1.3	0.0	1.5	0.6	0.0	0.1	0.3	0.3
18	0.3	0.0	0.2	0.8	0.6	0.5	0.6	0.2	-1.0	-1.2	-1.4	-1.7	-1.9	-1.8	-1.9	-1.6	-1.3	-0.6	0.6	2.6	2.7	2.4	2.7	3.1
19	2.4	1.9	1.6	2.1	1.9	0.8	-1.4	-1.7	-1.6	-1.6	-1.8	-1.6	-M-	-1.8	-1.8	-1.6	-1.5	-1.4	-1.4	-1.3	-1.3	-1.2	-1.3	-1.1
20	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-1.6	-2.0	-2.5	-2.7	-2.9	-2.9	-2.6	-2.3	-2.2	-1.8	-0.7	-0.5	-0.1	0.4	4.0	3.3
21	3.0	4.1	4.5	4.9	3.8	3.8	3.9	4.2	3.1	-0.6	-1.4	-1.5	-1.8	-1.7	-1.7	-1.6	-1.3	-1.0	0.7	1.7	1.9	1.6	1.8	2.3
22	2.8	2.1	3.2	2.4	2.3	3.0	3.7	2.7	1.2	-1.1	-1.6	-1.7	-2.0	-1.9	-1.9	-1.6	-1.4	-0.6	0.4	0.9	0.7	1.2	1.6	1.0
23	1.0	1.1	1.3	1.1	1.0	0.9	1.0	0.6	-0.5	-1.3	-1.6	-1.7	-1.9	-2.0	-1.8	-1.4	-1.2	-0.5	0.2	0.1	0.2	2.4	3.2	0.8
24	0.8	2.2	1.3	0.9	1.1	1.6	2.0	2.0	0.5	-1.2	-1.6	-1.8	-2.0	-1.9	-1.8	-1.6	-1.2	-0.5	0.4	1.0	0.9	1.1	0.8	0.6
25	1.2	1.0	1.7	1.8	1.7	1.6	2.2	2.2	0.1	-1.1	-1.6	-1.7	-1.8	-1.8	-1.9	-1.5	-1.1	-0.6	0.4	1.9	3.0	3.0	2.3	2.2
26	2.6	2.5	3.3	3.4	3.2	3.1	2.9	2.6	1.2	0.3	-1.2	-1.5	-1.6	-1.6	-1.2	-1.4	-1.2	-0.7	-0.1	0.9	1.7	0.6	-0.0	-0.2
27	-0.2	-0.4	-0.6	-0.6	-0.7	-0.7	-0.7	-0.8	-0.7	-0.8	-0.9	-1.3	-1.6	-1.3	-1.5	-1.3	-0.9	-0.5	0.1	0.1	-0.1	0.0	-0.2	-0.1
28	-0.1	-0.1	-0.3	-0.4	-0.4	-0.7	-1.2	-1.3	-1.5	-1.6	-1.8	-2.1	-1.6	-1.8	-1.4	-1.6	-1.2	-0.3	1.4	1.7	-0.3	-0.7	-0.6	-0.5
29	-0.1	0.8	0.1	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.7	-0.4	0.5	1.4	1.3	1.1	0.6	0.3	0.2
30	0.3	0.5	0.3	0.5	0.6	0.2	1.6	2.3	0.7	-1.0	-1.4	-1.6	-1.7	-1.7	-1.6	-1.4	-1.0	0.0	2.1	1.6	3.5	4.4	4.6	5.7
31	4.4	4.3	2.2	2.0	3.1	1.4	2.7	1.0	1.2	1.4	-0.9	-1.2	-1.4	-1.9	-1.7	-1.3	-0.9	-0.4	-0.2	-0.2	-0.2	-0.1	0.3	0.4
HOURLY MEAN	1.3	1.4	1.4	1.5	1.4	1.4	1.3	1.1	-0.1	-1.1	-1.5	-1.7	-1.8	-1.8	-1.7	-1.6	-1.3	-0.7	0.3	1.0	1.2	1.3	1.6	1.4

MAXIMUM = 7.8   MINIMUM = -2.9   MEAN = 0.2   724 VALID OBSERVATIONS (97.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	1.8	4.7	7.8	5.6	1.1	5.2	4.5	2.7	-0.5	-1.0	5.9	4.5	5.4	5.7	6.2	7.3
MIN	-1.4	-2.3	-1.9	-1.2	-1.5	-2.0	-1.9	-1.5	-1.6	-1.7	-2.2	-2.6	-2.2	-1.9	-2.5	-1.7
MEAN	-0.0	0.0	2.5	1.8	-0.3	-0.0	1.0	-0.2	-1.0	-1.2	0.0	0.1	-0.4	1.2	-0.0	1.9

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	1.5	3.1	2.4	4.0	4.9	3.7	3.2	2.2	3.0	3.4	0.1	1.7	1.4	5.7	4.4
MIN	-1.9	-1.9	-1.8	-2.9	-1.8	-2.0	-2.0	-2.0	-1.9	-1.6	-1.6	-2.1	-0.7	-1.7	-1.9
MEAN	-0.5	0.1	-0.6	-1.0	1.4	0.7	0.0	0.1	0.6	0.7	-0.7	-0.8	0.4	0.7	0.6

MEAN MAXIMUM = 3.6   MEAN MINIMUM = -1.9

318-35 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-0.6	-1.0	-1.3	-1.4	-1.6	-1.7	-1.7	-1.4	-1.3	-1.6	-1.6	-1.7	-1.9	-1.7	-1.6	-1.6	-1.7	-1.9	-1.7	-1.6	-1.6	-1.3	-1.4	-1.4
2	-0.9	-1.2	-0.9	-0.6	-0.3	-1.0	-0.6	-0.5	-1.2	-1.6	-M-	-M-	-2.7	-2.2	-2.1	-2.1	-1.8	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
3	-1.4	-1.2	-1.1	-1.0	-0.8	-0.8	-0.6	-0.8	-1.2	-1.7	-2.3	-2.4	-2.5	-2.2	-2.4	-2.2	-2.2	-1.7	-1.2	-0.9	-1.4	-0.9	-0.2	-0.1
4	-0.7	-1.0	-1.0	-1.0	-1.0	-1.0	-0.7	-0.9	-1.5	-2.0	-2.2	-2.2	-2.1	-2.2	-2.1	-2.3	-2.0	-1.5	-1.0	-0.9	-0.2	0.1	0.1	0.4
5	0.7	0.1	-0.2	-0.3	-0.4	0.1	0.6	0.4	-1.1	-1.5	-1.5	-1.9	-2.1	-1.9	-1.6	-1.5	-1.3	-0.8	-0.3	0.9	1.4	1.4	1.3	0.9
6	0.7	0.6	0.3	0.5	0.5	1.3	1.2	0.9	0.1	-1.0	-1.6	-1.7	-1.8	-1.8	-1.7	-1.6	-1.1	-0.2	1.1	2.5	3.3	2.6	2.0	1.7
7	1.4	1.6	2.1	3.1	2.4	2.4	2.7	0.8	0.0	-1.0	-1.6	-1.6	-1.8	-1.7	-1.3	-1.1	-0.8	-1.3	-1.2	-1.1	-1.2	-1.1	-0.8	-0.8
8	-0.6	-0.6	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-1.2	-1.2	-1.2	-1.1	-1.2	-1.1	-1.0	-1.1	-0.9	-0.7	-0.4	-0.2	0.3
9	0.4	0.3	0.5	0.4	0.4	0.2	0.4	0.8	1.1	0.8	-0.5	-1.5	-1.4	-1.5	-1.4	-1.1	-0.9	-0.0	-0.2	-0.5	-0.6	-0.5	-0.5	-0.4
10	-0.5	-0.3	0.0	-0.2	-0.3	-1.2	-1.5	-1.6	-1.6	-1.8	-2.3	-2.6	-2.6	-2.3	-1.8	-1.7	-1.4	-1.2	-1.3	-1.3	-1.0	-0.7	-0.7	-0.9
11	-1.0	-1.0	-1.1	-1.0	-0.8	-0.6	-0.6	-0.2	0.8	-0.5	-1.6	-1.9	-1.0	-2.0	-1.5	-0.8	-0.6	-0.2	0.0	1.2	2.0	-1.5	-1.6	-1.4
12	-1.4	-1.3	-1.3	-1.2	-1.3	-1.3	-1.5	-1.5	-1.6	-1.9	-2.2	-2.3	-2.4	-2.5	-2.5	-2.2	-1.9	-1.5	-1.4	-1.2	-1.0	-1.1	-0.3	0.3
13	0.9	0.8	1.6	1.7	0.4	0.3	-0.2	-0.7	-0.9	-1.1	-1.4	-1.4	-1.4	-1.4	-1.3	-1.1	-1.0	-0.7	-0.5	-0.4	-0.4	-0.5	-0.4	-0.1
14	0.1	0.4	1.3	-0.0	-1.3	-1.5	-1.6	-1.6	-1.7	-1.8	-2.1	-2.2	-2.7	-2.8	-2.7	-2.4	-2.1	-1.3	-0.3	0.9	1.6	3.5	4.5	3.4
15	3.5	2.0	2.5	1.8	2.2	1.9	1.8	1.0	0.3	-1.1	-1.5	-1.7	-1.8	-1.6	-1.5	-1.2	-0.8	-0.2	0.1	-0.1	-0.4	-0.2	-0.1	-0.2
16	0.1	-0.2	0.7	0.3	0.5	0.5	0.4	0.7	1.2	-0.7	-1.4	-1.5	-1.3	-1.5	-1.3	-1.5	-1.1	-0.2	1.3	5.3	5.6	7.2	8.3	9.1
17	7.3	7.7	7.0	6.6	6.4	5.8	5.8	4.5	3.8	2.1	-0.5	-M-	-M-	-M-	-1.0	-0.9	-0.5	-0.0	-0.0	0.6	0.4	0.2	0.5	1.7
18	2.2	2.4	2.0	1.1	1.1	2.0	3.0	1.9	1.4	0.9	0.0	-0.8	-1.2	-1.1	-1.1	-1.0	-0.9	-0.8	-0.6	-0.4	-0.3	-0.2	-0.6	-1.0
19	-0.9	-0.6	-0.4	-0.2	-1.1	-0.7	-0.6	-0.7	-0.7	-0.7	-0.8	-0.9	-1.3	-1.3	-1.2	-1.2	-0.8	-0.3	-0.2	-0.2	-0.1	-0.2	-0.3	-0.3
20	-0.3	-0.2	-0.2	-0.0	-0.2	-0.5	-0.9	-0.9	-1.0	-1.3	-1.9	-2.0	-2.5	-2.6	-2.2	-1.9	[illegible]	-0.2	0.6	2.2	3.7	4.6	4.8	4.8
21	4.8	5.8	6.3	8.1	5.9	4.8	3.4	4.7	2.8	2.0	-0.3	-1.3	-1.4	-1.4	-1.3	-1.1	-0.8	-0.0	0.8	1.2	0.9	1.1	1.1	1.0
22	0.7	0.4	0.3	-0.1	0.3	-0.2	-0.3	-0.6	-0.5	-1.2	-1.7	-1.5	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8	-1.8	-1.7	-1.7	-1.7	-1.7	-1.6
23	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.9	-1.8	-1.9	-2.1	-2.4	-2.8	-2.8	-2.6	-2.3	-1.9	-1.3	-0.8	-0.3	-0.7	-0.2	0.5	0.8
24	0.2	0.8	0.3	0.3	1.3	2.5	1.4	2.8	1.8	-0.5	-1.5	-1.6	-1.8	-1.7	-1.7	-1.5	-1.1	-0.0	0.8	0.9	0.4	0.6	1.5	1.8
25	1.2	1.0	0.5	0.7	-0.2	-0.3	-0.1	-0.3	-0.5	-1.1	-1.2	-1.4	-1.7	-1.4	-1.2	-1.1	-1.0	-0.8	-0.4	-0.5	-0.1	-0.1	0.0	0.2
26	-0.5	-0.4	-1.5	-1.6	-1.7	-1.7	-1.7	-1.8	-1.8	-1.9	-1.9	-1.8	-2.0	-2.1	-2.3	-1.8	-1.5	-0.9	-0.6	-0.2	0.2	-0.0	0.1	0.0
27	-0.1	0.2	0.1	0.3	0.1	-0.5	-0.5	-0.6	-0.4	-1.0	-1.5	-1.4	-1.3	-1.3	-1.3	-1.1	-0.9	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9	-0.8
28	-0.9	-1.0	-0.9	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	-0.8	-0.8	-0.9	-1.2	-1.2	-0.9	-0.9	-0.8	-0.8	-0.8	-0.6	-0.4	-0.4	-0.6	-0.6
29	-0.6	-0.6	-0.5	-0.4	-0.4	-0.4	-0.5	-0.4	-0.4	-0.4	-0.5	-0.7	-0.6	-0.5	-0.6	-0.5	-0.6	-0.6	-0.7	-0.7	0.0	0.7	0.9	0.9
30	0.7	1.3	1.5	1.3	1.4	1.9	1.7	2.7	3.1	1.2	0.2	0.3	1.1	1.5	0.4	-0.4	-0.1	0.5	0.5	0.9	1.9	2.4	3.4	2.9
HOURLY MEAN	0.4	0.4	0.5	0.5	0.3	0.2	0.2	0.1	-0.1	-0.8	-1.4	-1.6	-1.7	-1.7	-1.6	-1.4	-1.2	-0.8	-0.4	0.0	0.2	0.4	0.6	0.6

MAXIMUM = 9.1 MINIMUM = -2.8 MEAN = -0.3 715 VALID OBSERVATIONS (99.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	-0.6	-0.3	-0.1	0.4	1.4	3.3	3.1	0.3	1.1	0.0	2.0	0.3	1.7	4.5	3.5
MIN	-1.9	-2.7	-2.5	-2.3	-2.1	-1.8	-1.8	-1.2	-1.5	-2.6	-2.0	-2.5	-1.4	-2.8	-1.8
MEAN	-1.5	-1.3	-1.4	-1.2	-0.4	0.3	-0.1	-0.9	-0.2	-1.3	-0.7	-1.5	-0.4	-0.5	0.2

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	9.1	7.7	3.0	-0.1	4.8	8.1	0.7	0.8	2.8	1.2	0.2	0.3	-0.4	0.9	3.4
MIN	-1.5	-1.0	-1.2	-1.3	-2.6	-1.4	-1.9	-2.8	-1.8	-1.7	-2.3	-1.5	-1.2	-0.7	-0.4
MEAN	1.3	2.7	0.3	-0.7	0.0	2.0	-1.1	-1.6	0.3	-0.4	-1.2	-0.7	-0.8	-0.3	1.3

MEAN MAXIMUM = 2.1 MEAN MINIMUM = -1.8

318-35 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.2	2.0	1.7	1.7	1.7	0.9	0.6	0.6	-0.1	-0.6	-1.1	-0.9	-1.0	-0.9	-0.9	-0.5	-0.3	0.[illegible]	1.5	2.1	0.9	0.0	-0.5	1.2
2	1.8	0.9	0.2	0.7	1.4	1.4	2.1	1.7	1.1	-M-	-M-	-M-	-M-	-M-	-1.1	-1.1	-0.7	0.6	1.2	1.6	3.2	2.9	2.4	1.1
3	0.8	-0.0	-0.8	-0.4	-0.5	-0.7	-0.8	-0.8	-0.5	-0.2	-1.0	-1.3	-2.0	-1.8	-1.6	-1.5	-1.4	-0.8	0.1	0.1	0.6	2.2	2.8	1.3
4	3.3	2.3	1.0	0.8	-0.1	-0.2	-0.6	-0.7	-0.9	-1.7	-1.6	-1.6	-1.4	-1.3	-1.4	-1.0	-1.2	-1.2	-0.9	-0.8	-0.7	-0.7	-0.9	-1.2
5	-1.0	-0.8	-0.9	-1.2	-1.3	-1.1	-0.9	-1.1	-1.2	-1.7	-2.0	-2.1	-1.8	-1.4	-1.5	-1.4	-1.4	-1.3	-1.3	-1.1	-0.8	-0.9	-1.0	-1.0
6	-0.6	-0.4	-0.3	-0.7	-0.7	-0.3	-0.0	-0.0	0.3	-0.5	-1.0	-1.3	-1.4	-1.4	-1.5	-1.3	-0.9	-0.3	-0.2	0.2	0.3	-0.1	0.4	0.3
7	0.3	0.5	0.3	0.2	-0.5	-0.5	-1.0	-1.3	-1.5	-1.6	-1.4	-1.3	-1.4	-1.5	-1.5	-1.4	-1.4	-1.4	-1.6	-1.5	-1.5	-1.6	-1.7	-1.7
8	-1.8	-1.8	-1.7	-1.7	-1.8	-1.8	-1.7	-1.7	-1.8	-1.9	-1.9	-2.2	-2.2	-2.2	-2.1	-2.0	-1.9	-1.4	-1.5	-1.3	-1.1	-1.2	-1.1	-1.0
9	-1.2	-1.0	-1.0	-1.1	-1.3	-1.2	-1.3	-1.2	-1.5	-1.4	-1.2	-1.4	-1.4	-1.4	-1.4	-1.3	-1.1	-0.9	-0.9	-0.9	-0.8	-0.6	-0.5	-0.6
10	-0.7	-0.7	-0.5	-0.4	-0.5	-0.4	-0.5	-0.1	-0.3	-1.0	-1.7	-2.3	-2.4	-2.4	-2.2	-1.9	-1.6	-1.4	-1.5	-1.5	-1.6	-1.6	-1.7	-1.7
11	-1.5	-1.7	-1.7	-1.8	-1.7	-1.7	-1.8	-1.9	-1.9	-2.2	-2.3	-2.5	-2.7	-2.7	-2.6	-2.4	-1.8	-1.4	-0.8	-0.5	-0.1	-0.0	0.8	1.2
12	1.3	1.6	1.9	2.4	2.8	2.0	1.2	1.1	0.4	-0.8	-1.3	-1.5	-1.7	-1.6	-1.6	-1.3	-1.0	-0.7	-0.6	-0.5	-0.6	-0.4	-0.4	-0.4
13	-0.4	-0.4	-0.4	-0.5	-0.4	-0.1	-0.2	-0.1	-0.2	-0.7	-1.1	-1.2	-1.3	-1.2	-1.1	-0.7	-0.3	0.3	0.3	-0.0	0.0	-0.2	-0.2	-0.3
14	-0.4	-0.3	0.2	-0.2	-0.3	-0.6	-0.6	-0.6	-0.5	-0.6	-0.8	-0.9	-1.5	-1.6	-1.5	-1.5	-1.4	-1.4	-1.4	-1.1	-0.6	-0.1	-0.2	0.8
15	0.3	0.0	0.5	-0.1	-0.4	-0.9	-0.6	-0.8	-1.2	-1.4	-1.7	-1.9	-2.0	-1.8	-1.8	-1.6	-1.4	-0.8	-0.1	0.2	0.3	0.3	0.1	1.0
16	-M-	-M-	-M-	-1.0	-0.7	-1.0	-1.0	-0.7	-1.2	-1.2	-1.4	-1.4	-1.3	-1.3	-1.2	-1.2	-1.2	-1.1	-1.2	-1.1	-1.1	-1.0	-1.0	-1.0
17	-1.0	-1.0	-1.0	-0.9	-1.0	-0.7	-0.6	-0.6	-0.6	-0.9	-1.0	-1.3	-1.3	-1.2	-1.1	-0.2	0.7	0.5	0.6	0.8	1.3	0.7	1.7	1.2
18	0.5	0.9	0.5	0.6	0.4	1.2	1.7	1.2	1.2	-0.2	-1.2	-0.7	-1.2	-1.3	-1.2	-1.3	-0.7	1.0	1.6	-0.3	-1.0	-1.1	-1.2	-1.2
19	-1.2	-1.1	-0.9	-0.7	-0.5	-0.5	-0.5	-0.4	-0.4	-0.9	-1.4	-1.4	-1.2	-1.2	-1.3	-1.2	-0.8	1.3	2.8	2.6	4.0	4.4	5.3	7.0
20	6.5	3.6	0.8	2.2	0.4	-0.3	-0.2	-0.5	0.3	-0.5	-1.6	-1.8	-1.6	-1.2	-1.5	-1.2	-0.7	0.4	1.9	2.5	2.5	3.2	3.0	3.2
21	2.2	1.2	1.4	-0.2	0.5	0.5	-0.1	0.1	0.9	0.1	-0.8	-1.2	-1.5	-1.5	-1.4	-1.1	-0.7	0.9	1.9	2.0	1.4	1.8	2.0	2.7
22	3.4	3.7	3.1	3.0	2.5	2.2	2.1	1.7	1.7	2.1	2.0	1.5	0.5	0.3	0.6	0.0	0.4	0.6	0.7	1.1	2.7	4.1	6.2	4.7
23	5.3	2.9	5.3	2.6	0.5	-0.1	-0.6	-0.8	-0.7	-0.5	-0.5	-0.2	0.1	-0.3	-0.3	-0.5	-0.7	-0.4	-0.2	-0.1	-0.0	0.2	0.3	0.1
24	0.1	0.5	1.3	1.4	1.7	1.2	1.7	1.1	1.0	0.7	0.1	-0.1	-0.3	-0.6	-0.5	-0.4	-0.4	-0.4	-0.2	-0.4	-0.1	-0.8	-0.2	0.4
25	1.3	1.6	1.7	1.3	-0.3	-1.1	-1.3	-1.3	-1.5	-1.5	-1.5	-1.4	-1.4	-1.5	-1.4	-1.5	-1.5	-1.4	-1.5	-1.8	-1.5	-1.3	-1.3	-1.2
26	-1.3	-1.3	-1.2	-1.2	-1.2	-0.7	-0.1	-0.3	-0.9	-1.5	-1.5	-1.5	-1.6	-1.6	-1.5	-1.5	-1.3	-0.8	-0.8	-0.7	-0.5	-0.4	-0.5	-0.6
27	-1.0	-1.2	-1.2	-1.2	-1.1	-1.1	-1.2	-1.1	-1.0	-1.0	-1.2	-1.2	-1.3	-1.2	-1.2	-1.4	-1.1	-1.1	-1.3	-1.3	-1.2	-1.2	-1.2	-1.3
28	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.5	-1.7	-1.7	-2.0	-2.0	-1.9	-1.9	-1.8	-1.5	-1.6	-1.5	-1.6	-1.4	-1.0	-0.7
29	-0.3	0.1	-0.6	-0.1	0.2	0.4	-0.1	0.5	-0.2	-0.7	-1.1	-1.3	-1.3	-1.4	-1.3	-1.2	-1.1	-0.5	-0.2	0.4	1.3	1.0	1.1	0.8
30	1.1	1.1	1.0	1.1	1.1	1.4	1.0	1.4	1.5	-0.2	-0.3	-0.9	-1.1	-1.2	-1.2	-1.1	-0.8	-0.5	-0.3	-0.3	-0.1	0.1	0.5	0.5
31	-0.1	-0.2	0.2	0.2	0.8	1.8	-0.0	0.7	0.5	0.4	-0.7	-1.2	-1.4	-1.4	-1.4	-1.3	-1.1	-0.6	-0.0	0.3	1.1	1.1	1.8	0.1
HOURLY MEAN	0.6	0.3	0.3	0.1	-0.0	-0.1	-0.2	-0.2	-0.3	-0.8	-1.1	-1.3	-1.4	-1.4	-1.3	-1.2	-1.0	-0.5	-0.2	-0.1	0.2	0.2	0.5	0.4

MAXIMUM = 7.0 MINIMUM = -2.7 MEAN = -0.4 736 VALID OBSERVATIONS (98.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	3.2	3.2	2.8	3.3	-0.8	0.4	0.5	-1.0	-0.5	-0.1	1.2	2.8	0.3	0.8	1.0	-0.7
MIN	-1.1	-1.1	-2.0	-1.7	-2.1	-1.5	-1.7	-2.2	-1.5	-2.4	-2.7	-1.7	-1.3	-1.6	-2.0	-1.4
MEAN	0.5	1.1	-0.3	-0.5	-1.3	-0.5	-1.1	-1.7	-1.1	-1.3	-1.5	0.0	-0.4	-0.7	-0.7	-1.1

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	1.7	1.7	7.0	6.5	2.7	6.2	5.3	1.7	1.7	-0.1	-1.0	-0.7	1.3	1.5	1.8
MIN	-1.3	-1.3	-1.4	-1.8	-1.5	0.0	-0.8	-0.8	-1.8	-1.6	-1.4	-2.0	-1.4	-1.2	-1.4
MEAN	-0.3	-0.1	0.5	0.8	0.5	2.1	0.5	0.3	-0.9	-1.0	-1.2	-1.5	-0.2	0.2	-0.0

MEAN MAXIMUM = 1.7 MEAN MINIMUM = -1.5

318-155 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-0.6	-0.6	-0.6	-0.5	-0.6	-0.7	-0.6	-0.4	-0.1	-0.0	-0.7	0.1	-0.6	-1.7	-0.8	-0.7	-0.8	-0.7	-0.8	-0.7	-0.7	-0.7	-0.7	-0.5
2	-0.3	-0.5	-0.5	-0.3	-0.3	0.5	-0.1	0.1	-0.3	-0.8	-1.0	-1.1	-1.2	-1.2	-1.2	-1.0	-1.1	-1.0	-0.8	-0.6	-0.3	-0.2	-0.1	-0.2
3	0.3	1.1	0.4	1.2	2.1	2.2	1.8	0.6	-0.7	-1.0	-1.1	-1.8	-1.6	-1.6	-1.7	-1.6	-1.5	-1.1	-0.9	-0.1	0.0	0.5	0.8	1.6
4	2.0	1.6	2.9	2.0	0.8	0.6	0.3	-0.6	-0.8	-0.9	-0.9	-1.1	-1.2	-1.3	-1.1	-1.2	-1.1	-0.9	-0.7	-0.5	-0.2	-0.0	-0.1	-0.0
5	-0.2	-0.3	-0.3	-0.2	-0.3	-0.2	-0.4	-0.8	-0.8	-1.0	-1.1	-1.1	-1.3	-1.3	-1.2	-1.0	-0.6	-0.7	-0.6	-0.5	-0.4	-0.5	-0.5	-0.9
6	-0.6	-0.6	-0.3	0.4	0.9	2.4	0.8	0.4	0.2	-0.5	-0.7	-0.6	-0.7	-0.7	-0.7	-0.5	-0.8	-0.8	-0.6	-0.2	0.6	0.7	-0.4	-0.3
7	-0.3	-0.4	0.2	1.5	0.0	1.9	0.5	0.3	0.4	-0.7	-1.2	0.2	3.2	2.5	3.5	2.4	2.1	1.7	0.3	0.3	0.9	1.6	2.6	2.2
8	2.2	2.5	2.0	1.6	2.6	3.5	2.4	1.5	1.5	0.0	-0.4	-0.5	-0.7	-0.6	-0.6	-0.5	-0.5	-M-	-M-	-M-	-M-	-M-	-M-	-M-
9	2.7	1.8	0.3	0.1	0.8	0.8	0.1	-0.4	-0.2	-0.3	-0.3	-0.3	0.6	-0.0	-0.5	-0.4	-0.3	-0.8	-0.6	-0.4	-0.4	-0.3	-0.4	-0.0
10	-0.2	-0.4	-0.0	-0.4	0.4	0.1	-0.5	-0.6	-0.8	-1.1	-2.8	-3.8	-3.9	-1.1	-1.6	-1.8	-1.1	-1.5	-0.9	-0.6	-0.4	-0.3	0.7	1.4
11	1.6	1.5	1.0	1.1	0.7	1.1	-0.5	-0.8	-0.4	-0.5	-1.1	-1.7	-1.7	-1.9	-1.9	-1.4	-1.6	-1.2	-0.8	-0.4	-0.2	-1.1	0.7	2.7
12	5.1	5.9	2.6	1.6	0.9	1.4	1.9	0.3	0.4	0.6	0.7	0.6	0.2	-0.1	0.4	1.9	1.0	0.8	0.7	0.3	0.4	1.1	1.3	1.5
13	2.1	2.3	2.7	5.2	4.7	2.9	2.0	1.2	0.9	1.1	3.0	5.4	0.3	-0.2	-0.4	-0.4	-0.5	-0.3	-0.3	-0.2	-0.3	-0.2	-0.2	-0.3
14	-0.4	-0.3	-0.1	-0.1	0.2	0.4	0.6	-0.2	-0.6	-0.5	-0.4	-0.5	-0.4	-0.7	-0.7	-0.8	-0.7	-0.7	-0.5	-0.4	-0.4	-0.3	-0.1	-0.3
15	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.4	-0.5	-0.6	-0.6	-0.6	0.1	0.6	0.8	0.1	-2.1	-3.4	-1.8	-0.0	-0.3	0.2	1.7	0.0	-0.1
16	-0.1	0.1	0.0	0.1	0.1	0.0	-0.2	-0.4	-0.5	-0.6	-0.6	-0.7	-0.8	-0.9	-0.8	-0.8	-0.7	-0.6	-0.4	-0.1	-0.0	-0.1	-0.1	-0.2
17	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.1	0.5	0.3	-0.8	-0.9	-0.8	-0.8	-0.7	-0.5	-0.4	-0.0	0.3	0.5	-0.1	2.3	3.1
18	0.2	-0.2	-0.2	-0.2	-0.1	0.2	-0.3	-0.2	1.3	0.8	1.2	1.1	0.1	1.3	0.9	0.1	0.6	3.1	2.3	0.4	0.1	1.1	1.6	-M-
19	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-1.3	-0.2	-0.4	-0.5	-0.6	-0.5	-0.7	-0.7	-0.7	-0.5	-0.3	-0.1	-0.2	1.2	1.9	1.8
20	1.9	1.3	1.2	0.5	1.2	2.2	1.9	1.8	1.9	1.4	3.2	1.2	-0.3	-0.6	-0.7	-0.7	-0.6	-0.4	-0.1	-0.1	1.2	2.6	2.0	-0.5
21	0.9	1.5	1.7	2.0	0.8	0.1	-0.3	1.3	5.1	1.0	0.3	-0.4	2.5	2.7	2.8	1.4	1.3	1.3	1.0	0.7	0.8	1.0	0.4	0.5
22	0.2	0.4	0.3	1.8	1.5	0.4	2.4	1.5	1.9	2.9	2.5	1.7	2.7	3.4	3.9	3.6	1.8	1.2	0.6	0.4	1.2	1.8	1.8	0.9
23	0.4	0.6	1.3	2.5	1.4	0.8	1.2	0.8	0.2	0.2	0.5	-0.1	-0.4	-0.2	0.2	-0.1	-0.4	-0.3	-0.2	0.0	1.0	1.8	1.9	1.9
24	1.5	1.5	0.9	0.6	0.4	0.4	0.2	-0.1	0.1	-0.3	-0.1	-0.5	-0.4	-0.6	-0.1	-0.5	-0.6	-0.4	-0.4	-0.1	0.5	0.7	0.6	0.6
25	0.7	0.6	0.4	0.4	0.4	0.2	0.4	0.3	-0.1	-0.1	0.1	-0.2	-0.1	-0.3	-0.3	-0.6	-0.5	-0.3	-0.2	0.2	0.8	1.0	2.3	2.9
26	2.1	3.5	3.0	1.3	1.1	1.1	0.6	1.2	0.3	1.0	1.6	1.9	0.7	1.4	2.5	0.6	0.0	-0.3	0.0	-0.0	1.1	3.0	2.3	2.2
27	1.0	-0.9	-0.3	-0.9	-1.0	-0.9	-0.6	-1.4	-2.0	-1.5	-1.8	-1.7	-0.4	-0.9	-0.7	-0.2	-1.2	-0.3	-0.2	-1.1	-0.9	-0.4	-0.9	-0.4
28	-0.4	-0.4	-0.7	-0.7	0.1	0.1	-0.3	-0.2	1.5	0.9	2.4	1.4	1.7	1.5	1.1	1.1	0.9	0.9	0.4	0.2	1.0	1.9	3.1	3.1
29	1.5	1.1	1.6	1.9	1.5	0.3	1.0	3.1	3.3	1.8	2.4	0.9	0.7	0.6	0.5	-0.1	-0.8	-1.5	-1.3	-0.2	0.3	1.4	2.3	1.7
30	-0.3	-0.3	-0.4	-0.4	-0.3	0.4	1.0	0.0	-1.0	0.1	-M-	-M-	-M-	-0.5	-1.1	-1.1	-2.1	-1.1	0.1	-0.4	0.7	2.3	2.7	3.6
31	3.1	4.9	4.7	2.7	3.6	3.7	3.6	3.0	0.2	-0.4	-0.6	-0.4	-0.6	-0.8	-0.6	-0.2	-0.3	-0.5	-0.4	1.2	2.9	2.9	2.2	2.5
HOURLY MEAN	0.9	0.9	0.8	0.8	0.8	0.8	0.6	0.3	0.3	0.0	0.1	-0.1	-0.2	-0.1	-0.1	-0.3	-0.5	-0.3	-0.2	-0.1	0.3	0.8	1.0	1.0

MAXIMUM = 5.9 MINIMUM = -3.9 MEAN = 0.3 725 VALID OBSERVATIONS (97.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0.1	0.5	2.2	2.9	-0.2	2.4	3.5	3.5	2.7	1.4	2.7	5.9	5.4	0.6	1.7	0.1
MIN	-1.7	-1.2	-1.8	-1.3	-1.3	-0.8	-1.2	-0.7	-0.8	-3.9	-1.9	-0.1	-0.5	-0.8	-3.4	-0.9
MEAN	-0.6	-0.6	-0.1	-0.1	-0.7	-0.1	1.1	0.9	0.0	-0.9	-0.3	1.3	1.3	-0.3	-0.4	-0.4

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	3.1	3.1	1.9	3.2	5.1	3.9	2.5	1.5	2.9	3.5	1.0	3.1	3.3	3.6	4.9
MIN	-0.9	-0.3	-1.3	-0.7	-0.4	0.2	-0.4	-0.6	-0.6	-0.3	-2.0	-0.7	-1.5	-2.1	-0.8
MEAN	-0.0	0.7	-0.1	0.9	1.3	1.7	0.6	0.2	0.3	1.4	-0.8	0.9	1.0	0.1	1.5

MEAN MAXIMUM = 2.6 MEAN MINIMUM = -1.1

318-155 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.9	1.8	2.0	1.6	1.5	1.2	1.4	1.0	0.0	-0.1	-0.0	-0.1	-0.4	-0.7	-0.7	-0.6	-0.7	-0.6	-0.1	1.1	2.5	2.9	1.8	1.5
2	2.1	2.1	1.1	0.7	1.1	1.0	0.5	-0.0	-0.5	-0.6	-0.6	-0.8	-1.0	-1.1	-1.0	-0.9	-0.8	-0.6	-0.5	0.0	0.6	0.6	0.6	0.5
3	-0.0	0.1	-0.1	-0.3	0.0	0.1	-0.1	-0.4	-0.7	-0.9	-0.9	-1.0	-1.2	-1.7	-1.5	-0.8	-0.7	-0.4	-0.0	0.5	0.5	0.6	0.3	-0.1
4	-0.1	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.5	-0.1	-0.3	-1.0	-1.2	-1.4	-1.1	-1.0	-0.7	-0.3	0.4	-0.1	-0.2	1.2	0.8	0.9
5	-0.1	-0.4	-0.5	-0.3	0.1	-0.1	-0.1	-0.2	-0.7	-1.0	-0.8	-0.7	-0.9	-1.1	-0.9	-1.1	-0.7	-0.7	-0.4	-0.2	0.1	0.4	1.2	0.0
6	-0.1	-0.3	-0.4	-0.5	-0.7	-0.8	-0.8	-0.8	-0.9	-0.8	-1.0	-1.0	-1.0	-0.8	-0.7	-0.8	-0.9	-0.8	-0.7	-0.7	-0.6	-0.3	-0.4	-0.5
7	-0.7	-1.0	-1.0	-0.7	-1.4	-0.9	-0.9	-1.1	-1.3	-1.5	-1.4	-1.7	-2.0	-1.9	-1.6	-1.9	-2.1	-1.5	-0.8	-0.0	1.0	1.8	0.8	0.2
8	1.0	2.0	1.9	1.2	1.1	2.5	2.3	0.7	-1.6	-1.9	-1.2	-1.3	-1.3	-2.0	-2.3	-2.2	-2.0	-1.9	-1.7	-1.0	0.2	0.9	1.3	1.3
9	2.1	2.7	2.8	5.5	4.4	0.4	-0.2	-0.7	-0.8	-1.2	-1.3	-1.5	-1.1	-1.9	-1.9	-1.5	-1.5	-1.1	-0.8	-0.9	-0.6	-1.2	-0.8	-0.8
10	-0.6	-0.5	-0.7	-0.7	-0.6	-0.8	-0.7	-0.6	-0.7	-0.7	-0.8	-1.3	-1.9	-2.6	-2.3	-2.1	-2.4	-2.7	-2.7	-1.0	0.7	1.5	2.1	1.7
11	1.7	2.1	2.0	1.1	0.8	1.3	1.3	0.8	-0.3	-0.9	-1.0	-1.0	-1.1	-1.1	-1.1	-1.0	-1.0	-1.0	-0.8	0.1	1.3	1.4	1.2	1.5
12	0.9	0.7	-0.1	0.3	-0.3	-0.6	-0.9	-0.9	-0.7	-0.7	-0.8	-0.9	-1.9	-2.1	-1.2	-1.4	-0.8	-0.7	-0.9	-0.8	-0.7	-0.3	-0.2	-0.0
13	-0.3	-0.2	-0.3	-0.2	-0.3	-0.3	-0.5	-1.0	-1.6	-1.7	-1.6	-1.6	-1.8	-2.9	-3.7	-1.5	-0.7	-0.7	-0.8	-0.7	-0.6	-0.4	-0.3	-0.2
14	-0.0	0.1	-0.1	-0.4	-0.6	-0.5	-0.6	-0.7	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.9	-0.6	-0.5	-0.6	-0.7	-0.6	-0.4	-0.3	-0.4	-0.6
15	-0.6	-0.1	-0.2	0.2	-0.2	-0.6	-0.6	-0.6	-0.8	-1.0	-1.4	-1.5	-1.6	-1.6	-0.1	-0.5	-1.3	-0.9	-0.8	-0.6	-0.6	-0.8	-0.7	-0.6
16	-0.4	-0.5	-0.5	-0.5	-0.4	-0.5	-0.4	-0.3	-0.4	-0.4	-0.9	-0.2	-1.1	-1.2	-1.0	-0.9	-0.9	-0.6	-0.5	0.1	0.7	2.3	2.3	1.3
17	0.7	0.8	0.7	0.8	1.1	1.6	1.6	1.0	-0.1	-0.4	-0.8	-0.9	-0.8	-1.0	-0.9	-1.0	-0.8	-0.7	-0.4	-0.3	0.8	2.2	2.5	3.7
18	3.6	3.5	4.5	3.9	2.9	3.5	4.9	4.1	2.6	0.7	-0.8	-0.8	-0.9	-0.8	-0.8	-0.9	-0.9	-0.6	-0.3	0.2	0.6	0.7	0.5	0.5
19	0.4	0.3	0.0	0.2	0.0	0.1	0.2	0.0	-0.3	-0.7	-0.9	-0.8	-0.9	-1.0	-1.0	-0.8	-0.6	-0.4	-0.1	0.3	0.9	0.6	0.7	1.0
20	0.7	0.8	0.6	0.4	-0.3	0.6	3.3	1.9	-0.1	-0.7	-1.5	-0.8	-1.0	-1.0	-0.9	-1.3	-0.9	-0.6	-0.3	0.4	0.6	1.2	1.2	1.1
21	2.1	1.8	2.9	5.0	5.2	4.7	6.1	3.5	0.7	-0.4	-0.8	-1.0	-1.1	-1.0	-0.9	-0.9	-0.9	-0.9	-0.5	0.1	1.2	0.4	0.2	0.3
22	-0.0	0.0	0.0	-0.1	0.1	-0.2	0.4	0.5	-0.6	-0.8	-1.5	-1.9	-2.1	-2.4	-2.1	-1.9	-1.4	-1.2	-0.2	-0.5	-0.1	0.5	1.5	0.9
23	0.3	0.6	0.4	0.0	-0.5	-0.3	-0.5	-0.6	-0.6	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9	-1.0	-0.8	-0.7	-0.7	0.0	0.9	2.4	2.4	2.1
24	3.2	3.2	2.0	0.6	-0.1	0.2	0.3	-0.7	-0.5	0.2	-0.6	-1.4	-1.6	-1.9	-2.0	-1.9	-1.6	-1.5	-1.3	-1.1	-0.5	0.7	0.9	2.5
25	3.1	3.6	0.6	2.1	3.4	3.1	2.7	2.4	0.3	-0.4	-0.8	-1.0	-1.0	-1.0	-1.0	-1.0	-0.8	-0.7	-0.3	0.9	2.5	2.7	1.7	1.9
26	1.4	1.3	1.3	0.9	0.7	2.1	2.7	0.7	-0.2	-0.4	-0.5	-0.8	-1.0	-1.2	-1.1	-M-	-M-	-M-	-M-	-0.7	-0.7	-0.5	-0.4	-0.0
27	-0.3	-0.5	-0.6	-0.7	-0.4	-0.2	-0.7	-0.9	-1.2	-0.9	-0.9	-1.5	-1.2	-1.1	-1.1	-1.2	-1.2	-1.0	-0.6	0.5	0.8	0.3	0.2	-0.0
28	-0.0	-0.4	-0.3	-0.5	-0.5	-0.6	-0.6	-0.9	-1.0	-0.9	-0.9	-0.9	-1.1	-1.1	-1.1	-0.9	-0.9	-0.8	-0.7	-0.6	-0.7	-0.6	-0.7	-0.6
29	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.7	-0.7	-0.8	-0.9	-0.9	-0.8	-0.7	-0.4	-0.0	-0.4	-0.7	-0.8	-0.5	-0.4	-0.2	0.0	0.0	-0.4
30	-0.3	1.6	1.1	0.9	0.1	0.3	0.0	0.2	-0.4	-0.7	-0.6	-0.7	-0.9	-0.8	-0.8	-0.7	-0.8	-0.8	-0.5	-0.4	-0.4	-0.5	-0.2	-0.2
31	-0.5	-0.5	-0.4	-0.1	0.1	0.2	0.5	-0.4	-0.1	0.5	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8	-0.7	-0.6	-0.0	0.5	0.5	1.2	2.2	1.8
HOURLY MEAN	0.7	0.8	0.6	0.6	0.5	0.5	0.6	0.1	-0.5	-0.7	-0.9	-1.0	-1.2	-1.3	-1.2	-1.1	-1.0	-0.9	-0.6	-0.2	0.3	0.7	0.7	0.7

MAXIMUM = 6.1 MINIMUM = -3.7 MEAN = -0.2 740 VALID OBSERVATIONS (99.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	2.9	2.1	0.6	1.2	1.2	-0.1	1.8	2.5	5.5	2.1	2.1	0.9	-0.2	0.1	0.2	2.3
MIN	-0.7	-1.1	-1.7	-1.4	-1.1	-1.0	-2.1	-2.3	-1.9	-2.7	-1.1	-2.1	-3.7	-0.9	-1.6	-1.2
MEAN	0.8	0.1	-0.4	-0.3	-0.4	-0.7	-0.9	-0.2	-0.1	-0.8	0.3	-0.6	-1.0	-0.6	-0.7	-0.2

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	3.7	4.9	1.0	3.3	6.1	1.5	2.4	3.2	3.6	2.7	0.8	-0.0	0.0	1.6	2.2
MIN	-1.0	-0.9	-1.0	-1.5	-1.1	-2.4	-1.0	-2.0	-1.0	-1.2	-1.5	-1.1	-0.9	-0.9	-1.0
MEAN	0.4	1.2	-0.1	0.1	1.1	0.6	-0.1	-0.1	1.0	0.2	-0.6	-0.7	-0.6	-0.2	-0.1

MEAN MAXIMUM = 2.0 MEAN MINIMUM = -1.5

318-155 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.2	2.1	1.7	1.2	0.2	1.7	1.1	1.0	0.1	-0.9	-1.8	-1.4	-2.7	-1.8	-1.3	-1.2	-0.9	-0.7	-0.2	0.3	0.0	0.0	0.4	0.3
2	2.6	1.4	1.6	1.8	-0.7	-1.2	-1.1	-1.1	-1.3	-1.2	-2.7	-2.9	-2.7	-2.4	-2.6	-2.4	-2.3	-1.8	-0.8	1.0	2.9	3.8	4.3	6.2
3	3.5	2.9	3.5	4.4	1.5	1.6	2.1	1.8	-0.1	-1.6	-1.9	-2.4	-2.1	-2.4	-1.9	-2.1	-1.5	-0.7	-0.2	1.0	2.7	3.8	3.7	2.7
4	1.8	2.9	3.5	4.3	4.2	4.8	3.3	0.6	-0.2	-0.7	-0.9	-0.9	-1.0	-1.0	-1.0	-0.9	-0.5	0.1	0.2	0.3	0.1	0.4	0.2	-0.0
5	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.4	-0.7	-0.8	-0.9	-1.0	-1.0	-0.9	-0.9	-0.9	-0.2	0.1	-0.1	0.4	1.5	1.4	1.6	1.8
6	0.4	1.4	0.2	0.0	-0.1	-0.5	-0.5	-0.4	-0.8	-0.8	-0.8	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.7	-0.4	0.4	0.2	0.7
7	0.2	0.2	0.3	-0.1	-0.1	-0.3	-0.4	-0.6	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-1.0	-1.0	-0.8	-0.7	-0.3	0.7	0.6	0.5	0.4	-0.1
8	-0.5	-0.7	-0.7	-0.7	-0.7	-0.8	-0.8	-0.9	-0.9	-1.1	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-0.8	-0.6	-0.5	-0.1	0.0	0.4	0.4	0.2
9	-0.3	-0.5	-0.3	-0.3	-0.4	-0.3	-0.1	-0.2	-0.3	-0.6	-0.4	-0.5	-0.8	-0.9	-0.8	-0.9	-0.8	-0.7	-0.4	0.8	0.8	0.3	-0.3	-0.2
10	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.3	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9	-1.0	-1.0	-0.9	-0.6	-0.2	0.2	0.3	0.2	-0.2	-0.2
11	0.0	0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.0	-0.6	-0.8	-0.9	-0.9	-1.0	-1.1	-1.0	-0.9	-0.7	-0.3	0.5	1.6	1.7	0.4	0.1	-0.0
12	-0.5	-0.5	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.8	-0.9	-1.0	-0.9	-0.9	-1.0	-1.0	-0.8	-0.6	-0.2	1.1	1.6	-0.7	-1.3	-1.5	-1.3
13	-1.5	-1.6	-1.5	-1.4	-1.3	-0.8	-0.7	-1.0	-0.9	-1.2	-1.8	-2.1	-2.1	-1.9	-2.0	-1.8	-1.8	-1.7	-1.7	-1.2	-1.5	-1.8	-1.9	-1.3
14	-1.4	-1.5	-1.3	-0.8	-0.8	-0.7	-1.2	-0.7	-1.1	-1.4	-2.0	-2.7	-2.4	-2.3	-2.7	-2.7	-1.9	-1.3	-1.5	-1.4	-1.1	-1.2	-1.8	-1.0
15	-1.1	-1.2	-1.2	-1.3	-1.3	-1.1	-0.8	-1.1	-1.3	-1.4	-1.8	-1.8	-1.8	-1.9	-2.0	-1.6	-1.5	-1.3	-0.6	-0.1	0.2	1.0	1.1	1.2
16	1.0	0.5	0.5	0.3	-0.0	-0.3	-0.7	-0.8	-0.9	-0.9	-1.0	-1.1	-1.0	-1.1	-1.1	-0.9	-0.7	-0.5	-0.4	0.2	1.1	0.8	0.9	1.3
17	1.4	1.2	0.9	1.1	0.7	0.4	-0.3	-0.0	-0.5	-1.4	-1.1	-1.4	-1.7	-1.2	-1.5	-1.4	-1.4	-1.3	-1.0	-0.8	-0.6	-0.2	0.1	0.7
18	0.1	0.2	0.7	0.3	-0.3	0.2	1.2	1.3	-0.4	-0.8	0.7	-1.3	-1.7	-1.4	-1.4	-1.4	-1.0	-0.9	-0.3	0.6	3.8	4.4	4.5	3.6
19	3.3	2.9	1.9	1.6	1.7	1.8	2.0	1.9	1.1	-0.2	-0.8	-1.0	-1.0	-1.2	-1.7	-1.8	-1.4	-1.0	-0.6	0.1	0.1	-0.1	-0.4	0.1
20	0.4	0.1	-0.4	-0.1	0.3	-0.2	-0.5	-1.1	-1.9	-1.8	-1.9	-1.9	-1.8	-1.9	-1.9	-2.0	-1.7	-1.7	-1.2	0.9	2.0	2.2	1.3	0.9
21	0.9	1.3	1.3	2.1	1.7	1.4	1.5	1.7	-0.1	-0.9	-0.8	-2.3	-2.2	-2.2	-1.7	-2.0	-2.1	-2.0	-0.8	0.1	1.7	3.6	4.3	4.7
22	5.4	4.9	4.1	3.8	3.6	4.3	4.0	3.6	1.2	-0.8	-1.0	-1.1	-1.2	-1.2	-1.1	-1.0	-1.0	-0.7	0.1	0.6	1.3	0.9	0.1	0.6
23	0.6	0.5	-0.3	-0.3	-0.2	0.3	0.8	0.6	0.3	-0.6	-0.8	-0.9	-1.0	-1.7	-1.3	-1.4	-0.6	-0.2	1.3	3.2	3.3	3.2	2.3	1.7
24	1.8	0.5	0.4	0.0	-0.3	0.4	0.1	0.1	-1.5	-2.1	-2.0	-1.7	-M-	-M-	-M-	-2.6	-2.1	-1.9	-0.3	0.4	-0.2	-0.4	-1.2	-0.9
25	-0.9	-0.7	-0.8	-0.7	-0.3	-1.0	-0.1	-0.8	-1.8	-2.2	-1.7	-1.7	-1.8	-2.0	-2.1	-1.6	-1.8	-1.6	0.7	1.4	2.5	4.4	5.2	4.9
26	6.0	4.3	2.9	4.0	2.8	3.1	2.2	1.5	0.3	-0.7	-0.8	-1.0	-1.1	-1.0	-1.0	-1.0	-0.7	-0.4	0.7	1.4	1.5	2.5	2.1	0.9
27	0.1	-0.1	-0.3	0.8	0.8	0.4	0.5	-0.5	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.8	-0.6	-0.2	0.5	0.7	0.5	0.1	0.5
28	-0.1	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
29	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
30	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.5	-0.3	0.2	1.3	2.0	2.8	2.4	1.1	-M-
HOURLY MEAN	1.0	0.7	0.5	0.7	0.3	0.4	0.4	0.1	-0.6	-1.1	-1.2	-1.4	-1.4	-1.4	-1.4	-1.4	-1.1	-0.9	-0.2	0.5	1.0	1.2	1.0	1.0

MAXIMUM = 6.2 MINIMUM = -2.9 MEAN = -0.1 661 VALID OBSERVATIONS (91.8%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	3.2	6.2	4.4	4.8	1.8	1.4	0.7	0.4	0.8	0.3	1.7	1.6	-0.7	-0.7	1.2
MIN	-2.7	-2.9	-2.4	-1.0	-1.0	-0.9	-1.0	-1.1	-0.9	-1.0	-1.1	-1.5	-2.1	-2.7	-2.0
MEAN	0.0	-0.1	0.8	0.8	-0.1	-0.4	-0.3	-0.6	-0.3	-0.4	-0.2	-0.6	-1.5	-1.5	-0.9

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	1.3	1.4	4.5	3.3	2.2	4.7	5.4	3.3	1.8	5.2	6.0	0.8	-0.1	-M-	2.8
MIN	-1.1	-1.7	-1.7	-1.8	-2.0	-2.3	-1.2	-1.7	-2.6	-2.2	-1.1	-1.0	-0.5	-M-	-0.5
MEAN	-0.2	-0.4	0.4	0.3	-0.6	0.4	1.2	0.4	-0.6	-0.2	1.2	-0.2	-0.4	-M-	1.1

MEAN MAXIMUM = 2.4 MEAN MINIMUM = -1.6

318-155 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.2	-0.0	0.4	0.9	0.4	0.2	0.4	0.9	0.4	-0.7	-0.7	-0.7	-0.9	-0.7	-0.7	-0.7	-0.6	-0.1	0.9	1.7	0.8	0.1	-0.3	-0.2
2	-0.3	-0.5	1.0	0.5	-0.4	-0.5	-0.4	-0.4	-0.6	-1.0	-1.4	-1.5	-1.5	-1.9	-1.9	-1.9	-1.6	-0.8	0.2	1.5	3.8	4.5	4.7	1.9
3	0.5	1.5	3.0	3.9	4.4	4.6	6.1	5.6	2.1	-0.1	-0.3	-0.6	-0.9	-0.8	-0.7	-0.7	-0.8	-0.6	0.4	1.4	2.1	3.3	5.[illegible]	4.9
4	4.8	3.8	3.5	4.2	4.6	3.9	2.5	1.8	-M-	-0.6	-0.7	-1.1	-1.1	-1.1	-1.1	-0.9	-0.5	-0.0	0.8	1.1	1.1	1.3	1.[illegible]	1.1
5	1.2	2.2	1.3	-0.2	-0.2	-0.1	-0.2	-0.4	-0.2	0.1	-0.6	-1.0	-1.1	-1.1	-1.1	-1.0	-0.8	-0.4	-0.2	-0.1	-0.1	0.1	0.1	0.1
6	-0.0	-0.0	-0.1	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-1.0	-1.2	-1.4	-1.4	-1.4	-1.5	-1.5	-1.4	-1.0	-0.3	1.0	1.5	2.6	4.9	4.3
7	4.4	2.6	2.2	1.8	2.3	1.9	2.0	1.5	0.7	-0.4	-0.9	-1.2	-1.2	-1.2	-1.2	-1.1	-0.9	-0.4	0.7	1.6	1.2	2.5	2.7	3.9
8	4.3	2.6	3.3	1.5	1.6	1.8	2.0	0.7	-0.7	-0.8	-0.4	-1.2	-0.8	-0.7	-0.7	-1.7	-1.2	-0.9	-0.1	-0.1	-0.4	-0.5	0.2	-0.3
9	-0.4	-0.4	-0.8	-0.7	-0.8	-0.8	-0.7	-0.7	-0.8	-0.9	-0.8	-1.0	-0.9	-1.1	-0.9	-0.8	-0.8	-0.7	-0.5	-0.6	-0.8	-0.8	-0.7	-0.8
10	-0.7	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-1.0	-1.1	-1.3	-1.4	-1.5	-1.5	-1.4	-1.3	-1.2	-1.1	-1.1	-1.2	-1.1	-1.3	-1.3	-1.2
11	-1.0	-1.0	-0.6	-0.5	-0.5	-0.6	-0.7	-0.6	-0.9	-1.3	-1.5	-1.5	-1.3	-1.6	-1.3	-1.2	-1.1	-0.7	0.2	2.2	3.3	3.8	5.4	4.6
12	2.5	0.3	1.6	1.8	2.8	3.7	1.6	1.3	0.7	-1.7	-1.9	-1.6	-1.6	-2.2	-1.7	-1.7	-1.7	-1.6	-0.8	0.4	0.4	-0.8	-1.5	-1.1
13	-0.5	-0.5	0.2	-0.0	-0.5	-0.5	-0.7	-0.7	-1.1	-1.3	-1.7	-2.0	-1.9	-1.9	-1.6	-1.5	-1.3	-1.3	-1.2	-0.6	-0.1	1.6	1.6	3.9
14	4.6	5.1	4.7	2.4	2.7	2.8	4.2	3.9	0.2	-0.7	-0.8	-0.9	-1.0	-1.1	-1.1	-1.0	-0.8	-0.4	1.0	2.9	3.9	3.7	3.6	3.2
15	0.7	0.6	0.5	0.9	1.5	1.7	1.5	0.0	-0.6	-1.1	-0.9	-1.0	-1.1	-1.2	-1.6	-1.3	-1.2	-1.0	-0.4	0.2	0.4	0.7	0.7	0.6
16	1.0	1.9	2.6	3.1	4.0	4.1	4.8	4.5	3.5	0.1	-0.8	-0.8	-1.0	-1.0	-1.0	-1.0	-1.0	-0.7	0.2	1.0	1.1	1.1	0.8	0.5
17	0.3	0.0	0.2	0.1	-0.1	-0.1	-0.2	-0.4	-0.6	-0.8	-0.9	-1.1	-1.2	-1.2	-1.1	-1.1	-0.9	-0.1	0.7	0.3	-0.1	-0.1	-0.2	-0.2
18	-0.2	-0.3	-0.2	0.1	-0.0	0.1	0.1	0.1	-0.6	-0.9	-0.9	-1.1	-1.2	-1.2	-1.1	-1.1	-0.9	-0.6	0.2	1.1	1.7	2.1	3.9	3.4
19	2.6	2.4	2.6	3.2	2.5	1.8	-1.2	-1.3	-1.1	-1.2	-1.3	-1.4	-M-	-1.4	-1.4	-1.4	-1.3	-1.2	-1.3	-1.1	-1.1	-1.1	-1.1	-0.9
20	-0.8	-0.8	-0.8	-0.7	-0.7	-0.8	-0.9	-1.0	-1.5	-1.6	-1.8	-1.9	-2.0	-2.2	-2.0	-1.9	-1.8	-1.4	-1.1	-0.7	0.1	-0.1	1.5	0.9
21	1.2	3.3	3.8	3.1	3.5	3.9	4.4	2.8	2.9	-0.1	-0.7	-1.0	-1.0	-0.9	-1.0	-0.8	-0.8	-0.7	-0.2	1.8	2.2	1.9	2.1	3.0
22	2.5	2.0	2.8	2.1	2.4	3.2	4.3	3.0	2.2	-0.6	-0.9	-0.9	-1.1	-1.1	-1.1	-1.0	-0.9	-0.5	0.2	0.7	0.5	0.7	1.0	0.9
23	0.2	0.5	0.8	0.8	0.7	0.4	0.5	0.4	-0.2	-0.8	-0.9	-1.0	-1.1	-1.1	-1.0	-0.9	-0.8	-0.5	0.1	0.1	0.0	1.0	1.4	0.3
24	0.4	1.3	0.6	0.5	0.6	1.0	1.3	1.9	0.9	-0.6	-0.9	-0.9	-1.1	-1.1	-1.1	-0.9	-0.8	-0.4	0.2	1.1	0.8	0.7	0.3	0.3
25	0.5	0.6	0.8	1.4	1.5	1.7	2.4	1.7	0.3	-0.4	-0.8	-0.9	-1.0	-1.1	-1.1	-1.0	-0.8	-0.5	0.4	1.4	1.7	1.9	1.8	1.5
26	2.0	2.1	2.8	3.9	3.7	4.6	5.0	4.8	1.8	1.1	-0.6	-0.9	-0.9	-1.0	-0.8	-0.9	-0.8	-0.5	0.3	1.6	2.5	1.0	-0.3	-0.2
27	-0.2	-0.3	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.7	-0.9	-0.9	-0.8	-0.9	-0.8	-0.7	-0.5	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3
28	-0.2	-0.3	-0.5	-0.6	-0.5	-0.7	-0.5	-0.7	-1.1	-1.5	-1.7	-2.2	-1.7	-2.1	-1.5	-1.5	-1.1	-0.3	0.6	1.9	-0.2	-0.5	-0.5	-0.4
29	0.1	0.8	0.2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.5	-0.2	0.4	0.4	0.5	0.5	0.3	0.0	0.1
30	0.0	0.1	-0.1	0.1	0.0	-0.2	0.7	1.5	0.9	-0.6	-0.7	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.4	0.3	0.7	1.3	3.1	3.2	4.9
31	5.2	4.9	2.9	3.0	2.5	1.5	2.1	2.0	2.7	3.2	-0.3	-0.7	-0.[illegible]	-1.0	-0.9	-0.8	-0.5	-0.2	0.0	0.3	0.6	0.9	1.3	-0.2
HOURLY MEAN	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.0	0.3	-0.6	-1.0	-1.2	-1.2	-1.3	-1.2	-1.1	-1.0	-0.6	0.0	0.7	0.9	1.1	1.3	1.2

MAXIMUM = 6.1 MINIMUM = -2.2 MEAN = 0.2 730 VALID OBSERVATIONS (98.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	1.7	4.7	6.1	4.8	2.2	4.9	4.4	4.3	-0.4	-0.7	5.4	3.7	3.9	5.1	1.7	4.8
MIN	-0.9	-1.9	-0.9	-1.1	-1.1	-1.5	-1.2	-1.7	-1.1	-1.5	-1.6	-2.2	-2.0	-1.1	-1.6	-1.0
MEAN	0.0	0.1	1.8	1.2	-0.1	0.0	1.0	0.3	-0.8	-1.1	0.1	-0.1	-0.6	1.7	-0.1	1.1

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0.7	3.9	3.2	1.5	4.4	4.3	1.4	1.9	2.4	5.0	-0.1	1.9	0.8	4.9	5.2
MIN	-1.2	-1.2	-1.4	-2.2	-1.0	-1.1	-1.1	-1.1	-1.1	-1.0	-0.9	-2.2	-0.5	-0.9	-1.0
MEAN	-0.4	0.1	-0.2	-1.0	1.4	0.8	-0.0	0.2	0.5	1.3	-0.5	-0.7	0.2	0.4	1.2

MEAN MAXIMUM = 3.2 MEAN MINIMUM = -1.3

318-155 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-0.7	-1.1	-1.2	-1.4	-1.7	-1.9	-1.4	-1.0	-0.8	-1.1	-1.3	-1.4	-1.5	-1.1	-1.6	-1.1	-1.3	-1.8	-1.6	-1.6	-1.5	-1.2	-1.2	-1.5
2	-0.9	-1.4	-0.4	-0.2	0.0	-0.9	-0.9	-0.3	-1.2	-1.3	-M-	-M-	-1.9	-1.7	-1.4	-1.6	-1.3	-1.1	-1.1	-1.0	-1.1	-1.2	-1.2	-1.0
3	-1.1	-0.9	-0.8	-0.7	-0.8	-0.7	-0.4	-0.7	-1.1	-1.5	-1.7	-1.8	-2.0	-1.9	-1.9	-1.7	-1.6	-1.2	-0.9	-0.6	-1.1	-0.9	0.2	0.1
4	-0.5	-0.9	-0.9	-0.9	-0.8	-0.9	-0.5	-0.7	-1.4	-1.7	-1.6	-1.7	-1.7	-1.8	-1.7	-1.9	-1.6	-1.4	-1.1	-0.9	-0.3	0.5	0.6	0.6
5	0.9	0.4	-0.1	-0.2	-0.2	0.5	1.4	1.0	-0.8	-1.5	-1.3	-1.5	-1.9	-1.3	-1.0	-0.9	-0.9	-0.7	-0.3	0.5	2.3	1.7	2.2	2.0
6	1.3	0.1	-0.1	0.0	0.3	1.4	1.8	1.0	0.8	-0.3	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.7	-0.4	0.7	2.6	2.4	1.6	1.4	1.3
7	1.6	1.6	1.8	2.4	2.1	1.6	1.2	0.1	-0.2	-0.6	-0.9	-1.0	-1.0	-1.0	-0.9	-1.1	-0.7	-0.9	-0.6	-0.5	-0.5	-0.3	-0.3	-0.2
8	-0.3	-0.2	-0.5	-0.6	-0.6	-0.7	-0.7	-0.7	-0.7	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.9	-0.5	-0.3	0.0	0.2	1.1
9	1.2	1.0	1.1	0.7	0.5	0.2	1.5	2.1	1.8	1.9	-0.2	-0.8	-1.0	-1.0	-0.9	-0.8	-0.6	0.3	-0.1	-0.3	-0.5	-0.5	-0.4	-0.3
10	-0.4	-0.2	-0.0	-0.2	-0.2	-1.1	-1.4	-1.5	-1.6	-1.8	-2.2	-2.3	-2.3	-2.3	-1.8	-1.6	-1.4	-1.5	-2.1	-1.8	-1.0	-0.4	-0.4	-0.6
11	-0.7	-0.7	-0.9	-0.4	-0.2	0.0	0.0	0.6	1.7	-0.4	-2.1	-1.8	-0.9	-2.9	-1.6	-0.5	-0.4	-0.4	0.0	0.6	1.4	-1.5	-1.3	-1.1
12	-1.0	-1.0	-1.0	-0.9	-1.0	-1.0	-1.1	-1.1	-1.3	-1.5	-1.7	-1.9	-1.9	-2.0	-1.9	-1.7	-1.5	-1.3	-1.2	-1.2	-0.9	-1.0	-0.5	0.1
13	0.6	0.2	1.1	1.2	0.1	-M-	-M-	-M-	-0.8	-0.9	-0.9	-0.9	-0.9	-1.0	-0.9	-0.9	-0.7	-0.6	-0.3	-0.3	-0.3	-0.4	-0.1	0.6
14	0.5	0.4	0.7	0.0	-1.0	-1.2	-1.2	-1.1	-1.3	-1.4	-1.7	-1.9	-2.2	-2.1	-2.1	-1.9	-1.6	-1.1	-0.5	0.3	1.2	2.7	3.4	3.5
15	3.1	1.7	2.4	1.3	1.8	1.1	0.9	0.7	0.6	-0.7	-1.0	-0.9	-1.0	-0.9	-0.9	-0.9	-0.7	-0.5	-0.2	-0.2	-0.4	-0.3	-0.3	-0.4
16	-0.2	-0.3	0.2	-0.0	0.0	0.2	0.3	0.5	0.5	-0.3	-0.8	-0.8	-1.0	-1.0	-1.0	-1.4	-1.2	-0.8	-0.2	2.1	2.1	2.1	5.3	6.9
17	4.5	5.6	5.2	6.1	7.1	5.6	6.3	4.6	4.0	4.6	0.5	-M-	-M-	-M-	-0.8	-0.7	-0.5	-0.2	-0.1	0.3	0.2	-0.0	0.2	1.2
18	2.0	1.4	1.3	1.1	1.3	1.6	3.0	1.9	1.9	1.8	0.3	-0.4	-0.8	-0.9	-0.8	-0.8	-0.7	-0.6	-0.3	-0.4	-0.2	-0.0	-0.6	-1.2
19	-1.1	-1.0	-0.7	-0.7	-1.3	-0.9	-0.6	-0.6	-0.6	-0.7	-0.6	-0.6	-0.8	-1.0	-0.8	-0.8	-0.6	-0.4	-0.3	-0.2	-0.0	-0.2	-0.4	-0.4
20	-0.4	-0.3	-0.3	-0.1	-0.3	-0.4	-0.8	-0.9	-1.0	-1.2	-1.5	-1.5	-1.8	-1.7	-1.6	-2.2	-1.5	-0.5	0.0	0.3	0.5	1.0	4.1	3.3
21	2.2	3.9	2.3	7.6	6.2	6.3	2.8	4.0	3.1	3.1	0.3	-0.8	-0.9	-0.9	-0.9	-0.8	-0.6	0.2	1.4	1.8	1.2	1.6	1.6	1.7
22	1.2	1.1	1.0	0.6	1.1	0.3	0.1	-0.2	-0.2	-1.7	-1.5	-1.2	-1.7	-1.8	-1.7	-1.7	-1.5	-1.3	-1.2	-1.2	-1.2	-1.1	-1.1	-1.0
23	-1.1	-1.4	-1.3	-1.5	-1.5	-1.4	-1.5	-1.6	-1.6	-1.6	-1.8	-1.8	-2.0	-2.1	-2.0	-1.8	-1.3	-1.1	-0.4	0.0	-0.8	-0.3	0.5	1.3
24	0.9	2.1	1.0	0.1	0.7	1.4	1.0	2.2	1.8	0.2	-0.8	-1.0	-1.0	-1.0	-1.1	-0.9	-0.8	-0.1	0.6	0.5	0.5	0.7	1.4	1.2
25	0.8	0.5	0.5	0.4	-0.0	-0.3	-0.2	-0.4	-0.4	-0.8	-0.8	-0.9	-1.0	-0.9	-0.9	-0.8	-0.8	-0.6	-0.4	-0.4	-0.5	-0.2	-0.2	-0.1
26	-0.4	-0.3	-1.3	-1.3	-1.5	-1.5	-1.5	-1.4	-1.6	-1.8	-1.6	-1.5	-1.9	-2.1	-1.9	-1.6	-1.3	-0.5	-0.8	0.3	0.8	0.5	0.7	0.8
27	0.5	0.8	0.8	1.1	0.7	-0.1	-0.1	-0.2	0.1	-0.4	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.6	-0.5	-0.4	-0.5	-0.6	-0.6	-0.5	-0.6
28	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-0.5	-0.5	-0.7	-0.7	-1.1	-1.2	-0.7	-0.0	-0.2	-0.1	-0.3	-0.2	0.0	0.1	-0.2	-0.2	-0.2
29	-0.2	-0.5	-0.8	-0.6	0.1	0.1	-0.0	0.1	0.1	0.2	0.3	-0.4	-0.6	-0.4	-0.6	-0.7	-0.7	-0.7	-0.3	0.3	0.7	1.8	2.1	2.0
30	2.2	2.5	2.9	2.7	2.8	3.2	3.0	4.8	5.1	1.8	0.7	0.7	1.5	1.9	0.3	-0.5	-0.2	0.6	0.8	-0.3	0.7	1.0	1.6	3.3
HOURLY MEAN	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.2	-0.4	-0.9	-1.1	-1.3	-1.3	-1.2	-1.1	-0.9	-0.7	-0.4	-0.1	0.1	0.2	0.6	0.7

MAXIMUM = 7.6 MINIMUM = -2.9 MEAN = -0.2 712 VALID OBSERVATIONS (98.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	-0.7	0.0	0.2	0.6	2.3	2.6	2.4	1.1	2.1	-0.0	1.7	0.1	1.2	3.5	3.1
MIN	-1.9	-1.9	-2.0	-1.9	-1.9	-0.9	-1.1	-0.9	-1.0	-2.3	-2.9	-2.0	-1.0	-2.2	-1.0
MEAN	-1.3	-1.0	-1.1	-1.0	0.0	0.4	0.1	-0.6	0.2	-1.3	-0.6	-1.2	-0.3	-0.4	0.2

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	6.9	7.1	3.0	-0.0	4.1	7.6	1.2	1.3	2.2	0.8	0.8	1.1	0.1	2.1	5.1
MIN	-1.4	-0.8	-1.2	-1.3	-2.2	-0.9	-1.8	-2.1	-1.1	-1.0	-2.1	-0.9	-1.2	-0.8	-0.5
MEAN	0.5	2.6	0.4	-0.6	-0.4	1.9	-0.7	-1.2	0.4	-0.4	-0.9	-0.3	-0.4	0.0	1.8

MEAN MAXIMUM = 2.1 MEAN MINIMUM = -1.5

318-155 FT DIFFERENTIAL TEMPERATURE (DEG C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.4	1.2	1.2	1.4	0.9	0.3	0.1	0.1	-0.2	-0.5	-0.7	-0.7	-0.8	-0.7	-0.7	-0.3	-0.1	0.5	2.0	2.4	1.1	0.0	-1.2	1.6
2	2.6	1.2	0.7	0.7	1.0	0.8	0.9	1.5	1.2	-M-	-M-	-M-	-M-	-M-	-1.2	-1.1	-1.0	-0.4	0.2	0.8	2.5	3.5	2.8	1.0
3	0.8	-0.1	-1.0	-0.5	-0.8	-0.9	-1.1	-1.0	-1.1	-0.5	-1.0	-1.7	-2.6	-2.6	-2.3	-2.4	-1.9	-1.8	-1.0	-0.2	0.8	0.2	0.7	0.4
4	1.1	1.1	1.5	0.4	-0.1	-0.3	-0.7	-1.0	-1.4	-2.3	-1.9	-1.8	-1.8	-1.8	-2.0	-1.6	-1.4	-1.4	-0.7	-0.5	-0.5	-0.4	-0.9	-1.7
5	-1.3	-1.1	-1.4	-1.4	-1.6	-1.6	-1.3	-1.4	-1.3	-1.4	-1.3	-1.8	-1.6	-1.5	-1.6	-1.5	-1.5	-1.4	-1.5	-1.3	-1.1	-1.1	-1.1	-1.2
6	-1.2	-0.8	-1.0	-0.9	-0.9	-0.9	-0.5	-0.1	-0.2	-0.7	-1.0	-1.2	-1.2	-1.2	-1.3	-1.2	-1.1	-0.5	-0.4	0.3	0.3	0.0	0.5	0.6
7	0.7	1.0	0.8	0.5	-0.7	-0.5	-1.2	-1.3	-1.4	-1.5	-1.3	-1.3	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.4	-1.5	-1.5	-1.5
8	-1.7	-1.6	-1.6	-1.6	-1.7	-1.7	-1.7	-1.8	-2.1	-1.9	-1.8	-1.9	-2.2	-2.0	-1.9	-1.8	-1.8	-1.5	-1.6	-1.4	-1.4	-1.3	-1.3	-1.2
9	-1.9	-1.5	-1.1	-1.2	-1.3	-1.2	-1.2	-1.1	-1.4	-1.4	-1.3	-1.3	-1.4	-1.4	-1.3	-1.3	-1.2	-1.1	-1.2	-1.1	-1.0	-0.9	-0.8	-0.9
10	-0.9	-1.0	-0.7	-0.8	-0.8	-0.7	-0.9	-0.5	-0.6	-1.4	-2.3	-2.5	-2.5	-3.0	-2.4	-2.2	-2.0	-1.6	-1.7	-1.7	-1.9	-1.7	-1.8	-1.8
11	-1.5	-1.5	-1.6	-1.7	-1.6	-1.8	-1.8	-1.9	-2.2	-2.1	-2.3	-2.6	-2.8	-2.7	-2.6	-2.6	-2.2	-1.5	-1.5	-1.3	-0.6	-0.6	0.6	-0.0
12	-0.2	0.6	1.0	1.7	2.1	1.4	0.8	0.9	0.2	-0.8	-1.2	-1.3	-1.3	-1.3	-1.3	-1.2	-1.3	-1.1	-1.0	-0.9	-1.0	-0.9	-0.9	-0.9
13	-1.0	-0.9	-0.9	-0.9	-0.8	-0.7	-0.8	-0.7	-0.8	-0.9	-1.1	-1.2	-1.2	-1.2	-1.1	-1.0	-0.9	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.8
14	-0.9	-0.8	-0.6	-0.7	-0.8	-0.9	-1.1	-1.0	-1.0	-1.0	-1.0	-1.2	-2.1	-1.9	-1.8	-1.8	-1.7	-1.7	-1.6	-1.3	-1.0	-0.6	-0.4	-0.0
15	0.2	-0.1	1.0	-0.3	-0.5	-1.3	-0.9	-1.2	-1.6	-1.9	-2.2	-2.2	-2.3	-2.1	-2.2	-2.0	-1.8	-1.4	-0.5	-0.4	0.2	0.3	-0.2	-0.5
16	-M-	-M-	-M-	-1.6	-1.3	-1.2	-1.1	-1.0	-1.1	-1.2	-1.4	-1.4	-1.3	-1.3	-1.3	-1.3	-1.2	-1.2	-1.3	-1.2	-1.3	-1.2	-1.2	-1.2
17	-1.3	-1.2	-1.2	-1.3	-1.2	-1.1	-0.9	-1.0	-1.0	-1.2	-1.1	-1.2	-1.2	-1.2	-1.1	-0.6	-0.1	-0.4	-0.4	-0.3	0.2	-0.1	0.4	-0.2
18	-0.1	0.1	-0.0	0.3	0.2	0.8	1.2	0.1	-0.4	-0.8	-1.7	-0.9	-1.5	-1.8	-1.7	-1.7	-1.0	0.9	1.5	-0.6	-1.3	-1.4	-1.4	-1.4
19	-1.6	-1.4	-1.1	-0.9	-0.6	-0.7	-0.8	-0.5	-0.6	-1.3	-1.9	-1.8	-1.4	-1.3	-1.3	-1.2	-1.0	0.0	1.3	1.4	3.6	2.6	2.7	2.5
20	2.0	1.0	-0.3	0.2	-0.3	-0.5	-0.4	-0.7	-0.2	-0.9	-2.3	-2.4	-2.6	-1.2	-1.6	-1.4	-1.1	-0.3	0.7	1.5	1.9	1.8	3.0	4.4
21	2.2	2.2	2.7	0.2	0.7	-0.1	-0.6	-0.2	1.1	0.1	-0.8	-1.1	-1.2	-1.2	-1.3	-1.2	-1.0	0.6	1.1	0.9	0.7	0.9	1.1	1.3
22	2.0	1.9	2.1	1.6	0.7	1.1	1.5	1.8	0.9	1.4	1.6	1.8	0.4	-0.1	0.7	-0.4	-0.2	0.3	-0.3	0.7	1.7	2.9	3.9	4.4
23	4.4	3.3	4.7	2.3	-0.1	-0.9	-1.4	-1.3	-1.3	-0.9	-0.9	-0.7	-0.5	-0.6	-0.8	-0.9	-0.8	-0.7	-0.3	-0.3	-0.2	0.0	0.2	-0.2
24	-0.0	0.5	1.4	1.6	1.6	1.4	1.5	0.6	0.9	0.3	-0.6	-0.8	-0.9	-1.0	-0.8	-0.9	-1.1	-0.6	-0.6	-0.7	-0.3	-0.3	1.9	0.1
25	1.0	0.6	0.5	0.0	-0.9	-1.2	-1.2	-1.3	-1.6	-1.7	-1.7	-1.4	-1.5	-1.5	-1.3	-1.4	-1.5	-1.5	-1.7	-2.3	-1.8	-1.7	-1.7	-1.6
26	-1.5	-1.6	-1.6	-1.7	-1.8	-1.1	-0.7	-0.5	-1.6	-2.4	-1.5	-1.3	-1.1	-1.3	-1.4	-1.4	-1.2	-0.9	-1.0	-0.7	-0.5	-0.2	-0.7	-0.6
27	-0.9	-1.3	-1.3	-1.3	-1.3	-1.2	-1.3	-1.2	-1.2	-1.1	-1.3	-1.5	-1.4	-1.3	-1.3	-1.4	-1.1	-1.1	-1.3	-1.3	-1.2	-1.1	-1.4	-1.4
28	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-1.7	-1.8	-1.9	-2.0	-2.2	-2.1	-2.2	-2.1	-1.8	-1.8	-2.0	-2.1	-1.7	-1.6	-1.0
29	-0.5	0.3	-1.0	-0.1	0.4	0.5	-0.2	0.4	-0.2	-0.8	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.2	-1.1	-0.5	0.3	1.1	0.3	0.1	-0.1
30	0.0	0.3	0.1	0.5	0.7	1.0	0.2	1.3	1.8	-0.3	-0.1	-1.0	-1.0	-1.1	-1.2	-1.1	-1.1	-1.0	-0.8	-0.9	-0.7	-0.4	0.1	-0.1
31	-0.5	-0.5	-0.1	-0.0	0.2	1.3	-0.1	0.0	-0.5	0.2	-0.6	-1.0	-1.2	-1.2	-1.2	-1.2	-1.2	-0.9	-0.7	-0.5	0.1	0.2	1.4	0.4
HOURLY MEAN	0.0	-0.1	-0.0	-0.2	-0.4	-0.4	-0.6	-0.5	-0.7	-1.0	-1.3	-1.4	-1.5	-1.5	-1.4	-1.4	-1.2	-0.9	-0.6	-0.5	-0.2	-0.2	0.0	-0.1

MAXIMUM = 4.7 MINIMUM = -3.0 MEAN = -0.7 736 VALID OBSERVATIONS (98.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	2.4	3.5	0.8	1.5	-1.1	0.6	1.0	-1.2	-0.8	-0.5	0.6	2.1	-0.5	-0.0	1.0	-1.0
MIN	-1.2	-1.2	-2.6	-2.3	-1.8	-1.3	-1.5	-2.2	-1.9	-3.0	-2.8	-1.3	-1.2	-2.1	-2.3	-1.6
MEAN	0.4	0.9	-0.9	-0.8	-1.4	-0.6	-1.0	-1.7	-1.2	-1.6	-1.7	-0.3	-0.8	-1.1	-1.0	-1.3

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0.4	1.5	3.6	4.4	2.7	4.4	4.7	1.9	1.0	-0.2	-0.9	-1.0	1.1	1.8	1.4
MIN	-1.3	-1.8	-1.9	-2.6	-1.3	-0.4	-1.4	-1.1	-2.3	-2.4	-1.5	-2.2	-1.3	-1.2	-1.2
MEAN	-0.8	-0.5	-0.2	0.0	0.3	1.4	0.1	0.1	-1.2	-1.2	-1.3	-1.7	-0.4	-0.2	-0.3

MEAN MAXIMUM = 1.1 MEAN MINIMUM = -1.7

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUL-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
6	5	15	0	0	45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	2	1	0	5	3	0	0	0	0	0	0	8	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12	3	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	27	23	1	2	2	0	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
17	-M-	-M-	-M-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
21	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	1	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 45 MINIMUM = 0 TOTAL = 171.00 709 VALID OBSERVATIONS (95.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	1	0	0	0	6	45	0	0	0	8	0	12	0	0	27	-M-
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-
SUM	2	0	0	0	6	66	0	0	0	19	0	16	0	0	55	-M-

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0

MEAN MAXIMUM = 3 MEAN MINIMUM = 0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

AUG-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	34	16	68
10	60	11	13	13	3	0	4	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	10	23	119	38	9	0	0	0	0	0	0	0	0	0	27	16	18
13	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	-M-
21	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	0	0	0	0	0	0	0
22	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
23	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	1	0	0	0	5	3	4	1	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	18	17	2	0	0	0	0	0	0	35	63
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	2	1	0	0	0	0	1	1	1	4	1	0	0	1	1	0	0	0	0	0	1	2	2	5

MAXIMUM = 119 MINIMUM = 0 TOTAL = 747.00 723 VALID OBSERVATIONS (97.2%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0	0	0	1	1	1	0	0	68	60	0	119	7	3	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	2	2	1	0	0	134	108	0	260	12	3	0	0

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0	0	0	1	0	33	2	30	0	5	0	0	63	0	1
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	2	0	38	4	30	0	14	0	0	135	0	2

MEAN MAXIMUM = .13 , MEAN MINIMUM = 0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

SEP-1982

HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
4	-M-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
6	0	0	1	1	11	25	5	3	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	-M-	-M-	-M-	-M-	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	3	14	5	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	2	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 25 MINIMUM = 0 TOTAL = 93.00 700 VALID OBSERVATIONS (97.2%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	0	0	0	0	4	25	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	4	50	0	0	0	0	0	0	0	0	0

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	0	14	0	0	0	0	0	0	0	0	0	0	0	3	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	32	0	0	0	0	0	0	0	0	0	0	0	7	0

MEAN MAXIMUM = 2 MEAN MINIMUM = 0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

OCT-1982 HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	5	2	0	0	0	0	0	0	0	16	9	3	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	11	2	5	7	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

MAXIMUM = 16 MINIMUM = 0 TOTAL = 88.00 742 VALID OBSERVATIONS (99.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0	2	0	0	1	7	0	16	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	4	0	0	1	7	0	35	0	0	0	0	0	0	0	0

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0	0	2	0	0	0	0	0	0	0	0	11	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	3	0	0	0	0	0	0	0	0	38	0	0	0

MEAN MAXIMUM = 1 MEAN MINIMUM = 0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

NOV-1982

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
3	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	5	1	12	7	0	1	1	0	0	0	0	0	13	7	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	-M-	-M-	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	1	8	11	1
28	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 13 MINIMUM = 0 TOTAL = 79.00 679 VALID OBSERVATIONS (94.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	0	0	3	0	0	0	0	0	0	0	0	11	2	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	3	0	0	0	0	0	0	0	0	26	3	0	0

MEAN MAXIMUM = 1 MEAN MINIMUM = 0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

DEC-1982 — HOUR

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	10	19	7	6	9	8	2	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	5	11	5	5	1	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	17	8	12	2	0	0	0	1	0	0	1	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	1	1	8	5	37	7	6	4	0	0	3	22	18	10	8	1	0
28	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	1	1	0	0	1	0	1	1	0	1	0	0	0	1	1	0	2	0	0

MAXIMUM = 51 MINIMUM = 0 TOTAL = 332.00 715 VALID OBSERVATIONS (96.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	51	12	0	0	19	0	0	0	0	11	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	51	12	0	0	61	0	0	0	0	34	0	0	0	0	0	0

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0	0	0	0	0	0	1	17	0	0	37	1	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	0	0	1	41	0	0	131	1	0	0	0

MEAN MAXIMUM = 5 MEAN MINIMUM = 0

APPENDIX B

JOINT FREQUENCY TABLES

Wind speed, wind direction, and 318-35 ft differential temperature data presented in Section A are categorized as shown on Page B-3. Joint frequency of occurrence of each wind speed and wind direction category for each wind level is computed, and the number of joint occurrences and the percent frequency of occurrence are shown. Joint frequency of occurrence of wind speed versus wind direction is shown across all atmospheric stability categories and for each atmospheric stability category individually. The percent frequency of occurrence is normalized to 100 percent on each table, i.e., the total in the right hand corner of the table is 100 percent. Row totals and column totals are shown in the right column and bottom row, respectively, of each table. The number of calm hours and the percentage of calm hours are shown in the first wind speed category of each table. The number of valid data pairs collected are shown in the lower right hand corner of each table.

Several abbreviations are used on the tables:

WDC = Wind Direction Category
WSC = Wind Speed Category
DTC = Differential Temperature Category

The numerals 1 and 2 refer to the 35-ft and 318-ft wind levels, respectively.

The notation "." indicates missing values. The number of missing data pairs is given in the upper left hand corner of each table (see Page B-6 where 51 wind speed - wind direction data pairs are missing for the period July - September 1982). The number of missing pairs due to only one parameter being missing is given in the top row (see Page B-22 where 2 occurrences of 1-4 mph wind speed did not have a corresponding wind direction value) or left hand column (see Page B-23 where 6 occurrences of a north-northwest (NNW) wind did not have a corresponding wind speed value). The number of missing values are not used in the calculations and are only presented in the interest of completeness. Rows in which no observations occur are not shown in the tables.

CLASSIFICATION OF METEOROLOGICAL CATEGORIES USED IN JOINT FREQUENCY ANALYSES

WIND SPEED

Beaufort Wind Scale	Wind Speed (mph)
Calm	$V \leq *$
1	$* < V \leq 4$
2	$4 < V \leq 8$
3	$8 < V \leq 13$
4	$13 < V \leq 19$
5	$19 < V \leq 25$
6	$25 < V \leq 32$
7	$32 < V \leq 39$
8	$39 < V \leq 45$
9	$45 < V$

WIND DIRECTION

Wind Sector	Wind Direction (Degrees)
N	$348.75° < \theta \leq 11.25°$
NNE	$11.25° < \theta \leq 33.75°$
NE	$33.75° < \theta \leq 56.25°$
ENE	$56.25° < \theta \leq 78.75°$
E	$78.75° < \theta \leq 101.25°$
ESE	$101.25° < \theta \leq 123.75°$
SE	$123.75° < \theta \leq 146.25°$
SSE	$146.25° < \theta < 168.75°$
S	$168.75° < \theta < 191.25°$
SSW	$191.25° < \theta \leq 213.75°$
SW	$213.75° < \theta \leq 236.25°$
WSW	$236.25° < \theta \leq 258.75°$
W	$258.75° < \theta \leq 281.25°$
WNW	$281.25° < \theta \leq 303.75°$
NW	$303.75° < \theta \leq 326.25°$
NNW	$326.25° < \theta \leq 348.75°$

PASQUILL STABILITY

Category	Classification	ΔT (C/100 m)
A	Extremely unstable	$\Delta T \leq -1.9$
B	Moderately unstable	$-1.9 < \Delta T \leq -1.7$
C	Slightly unstable	$-1.7 < \Delta T \leq -1.5$
D	Neutral	$-1.5 < \Delta T \leq -0.5$
E	Slightly stable	$-0.5 < \Delta T \leq 1.5$
F	Moderately stable	$1.5 < \Delta T \leq 4.0$
G	Extremely stable	$4.0 < \Delta T$

Note: * means threshold speed of anemometer or wind vane, whichever is higher.

ARRANGEMENT OF JOINT FREQUENCY TABLES

Title	Page
318-ft Wind Speed Vs. Wind Direction	
All occurrences, July - September 1982	B-6
Extremely unstable, July - September 1982	B-8
Moderately unstable, July - September 1982	B-10
Slightly unstable, July - September 1982	B-12
Neutral, July - September 1982	B-14
Slightly stable, July - September 1982	B-16
Moderately stable, July - September 1982	B-18
Extremely stable, July - September 1982	B-20
All occurrences, October - December 1982	B-22
Extremely unstable, October - December 1982	B-24
Moderately unstable, October - December 1982	B-26
Slightly unstable, October - December 1982	B-28
Neutral, October - December 1982	B-30
Slightly stable, October - December 1982	B-32
Moderately stable, October December 1982	B-34
Extremely stable, October - December 1982	B-36
All occurrences, July - December 1982	B-38
Extremely unstable, July - December 1982	B-40
Moderately unstable, July - December 1982	B-42
Slightly unstable, July - December 1982	B-44
Neutral, July - December 1982	B-46
Slightly stable, July - December 1982	B-48
Moderately stable, July - December 1982	B-50
Extremely stable, July - December 1982	B-52
All occurrences, January - December 1982	B-54
Extremely unstable, January - December 1982	B-56
Moderately unstable, January - December 1982	B-58
Slightly unstable, January - December 1982	B-60
Neutral, January - December 1982	B-62
Slightly stable, January - December 1982	B-64
Moderately stable, January - December 1982	B-66
Extremely stable, January - December 1982	B-68
35-ft Wind Speed Vs. Wind Direction	
All occurrences, July - September 1982	B-70
Extremely unstable, July - September 1982	B-72
Moderately unstable, July - September 1982	B-74
Slightly unstable, July - September 1982	B-76
Neutral, July - September 1982	B-78
Slightly stable, July - September 1982	B-80
Moderately stable, July - September 1982	B-82
Extremely stable, July - September 1982	B-84

ARRANGEMENT OF JOINT FREQUENCY TABLES (CONT.)

Title	Page
All occurrences, October - December 1982	B-86
Extremely unstable, October - December 1982	B-88
Moderately unstable, October - December 1982	B-90
Slightly unstable, July - December 1982	B-92
Neutral, October - December 1982	B-94
Slightly stable, October - December 1982	B-96
Moderately stable, October - December 1982	B-98
Extremely stable, October - December 1982	B-100
All occurrences, July - December 1982	B-102
Extremely unstable, July - December 1982	B-104
Moderately unstable, July - December 198	B-106
Slightly unstable, July - December 1982	B-108
Neutral, July - December 1982	B-110
Slightly stable, July - December 1982	B-112
Moderately stable, July - December 1982	B-114
Extremely stable, July - December 1982	B-116
All occurrences, January - December 1982	B-118
Extremely unstable, January - December 1982	B-120
Moderately unstable, January - December 1982	B-122
Slightly unstable, January - December 1982	B-124
Neutral, January - December 1982	B-126
Slightly stable, January - December 1982	B-128
Moderately stable, January - December 1982	B-130
Extremely stable, January - December 1982	B-132

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	51	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.
N	0	2	26	53	65	31	1	0	178
	.	0.10	1.25	2.55	3.13	1.49	0.05	0.00	8.58
NNE	0	2	15	36	60	9	0	0	122
	.	0.10	0.72	1.73	2.89	0.43	0.00	0.00	5.88
NE	0	1	10	33	49	3	0	0	96
	.	0.05	0.48	1.59	2.36	0.14	0.00	0.00	4.63
ENE	0	1	10	52	25	2	0	1	91
	.	0.05	0.48	2.51	1.20	0.10	0.00	0.05	4.39
E	0	2	17	58	18	1	0	0	96
	.	0.10	0.82	2.80	0.87	0.05	0.00	0.00	4.63
ESE	0	2	27	53	72	7	0	0	161
	.	0.10	1.30	2.55	3.47	0.34	0.00	0.00	7.76
SE	0	3	21	57	87	32	7	0	207
	.	0.14	1.01	2.75	4.19	1.54	0.34	0.00	9.98
SSE	0	1	19	51	129	72	10	0	282
	.	0.05	0.92	2.46	6.22	3.47	0.48	0.00	13.59
TOTAL	.	16	231	575	784	385	78	6	2075
	.	0.77	11.13	27.71	37.78	18.55	3.76	0.29	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0	0	14	56	115	103	33	2	323
	.	0.00	0.67	2.70	5.54	4.96	1.59	0.10	15.57
SSW	0	0	6	39	66	62	14	3	190
	.	0.00	0.29	1.88	3.18	2.99	0.67	0.14	9.16
SW	0	0	7	16	26	16	5	0	70
	.	0.00	0.34	0.77	1.25	0.77	0.24	0.00	3.37
WSW	0	1	11	9	2	6	2	0	31
	.	0.05	0.53	0.43	0.10	0.29	0.10	0.00	1.49
W	0	0	18	14	3	4	1	0	40
	.	0.00	0.87	0.67	0.14	0.19	0.05	0.00	1.93
WNW	0	0	10	11	7	3	2	0	33
	.	0.00	0.48	0.53	0.34	0.14	0.10	0.00	1.59
NW	0	0	7	19	11	10	0	0	47
	.	0.00	0.34	0.92	0.53	0.48	0.00	0.00	2.27
NNW	0	1	13	18	49	24	3	0	108
	.	0.05	0.63	0.87	2.36	1.16	0.14	0.00	5.20
TOTAL	.	16	231	575	784	385	78	6	2075
	.	0.77	11.13	27.71	37.78	18.55	3.76	0.29	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 .	4 2.41	23 13.86	25 15.06	11 6.63	0 0.00	0 0.00	63 37.95
NNE	0 .	0 .	1 0.60	5 3.01	13 7.83	0 0.00	0 0.00	0 0.00	19 11.45
NE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
ENE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
E	0 .	0 .	2 1.20	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2 1.20
ESE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
SE	0 .	0 .	0 0.00	2 1.20	2 1.20	1 0.60	0 0.00	0 0.00	5 3.01
SSE	0 .	0 .	0 0.00	1 0.60	6 3.61	0 0.00	0 0.00	0 0.00	7 4.22
TOTAL	. .	. .	16 9.64	39 23.49	74 44.58	33 19.88	2 1.20	2 1.20	166 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0	0	0	1	5	5	0	0	11
	.	.	0.00	0.60	3.01	3.01	0.00	0.00	6.63
SSW	0	0	0	1	3	2	2	2	10
	.	.	0.00	0.60	1.81	1.20	1.20	1.20	6.02
SW	0	0	0	0	2	0	0	0	2
	.	.	0.00	0.00	1.20	0.00	0.00	0.00	1.20
WSW	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	0.00
W	0	0	3	0	0	0	0	0	3
	.	.	1.81	0.00	0.00	0.00	0.00	0.00	1.81
WNW	0	0	2	0	0	0	0	0	2
	.	.	1.20	0.00	0.00	0.00	0.00	0.00	1.20
NW	0	0	1	3	4	0	0	0	8
	.	.	0.60	1.81	2.41	0.00	0.00	0.00	4.82
NNW	0	0	3	3	14	14	0	0	34
	.	.	1.81	1.81	8.43	8.43	0.00	0.00	20.48
TOTAL	.	.	16	39	74	33	2	2	166
	.	.	9.64	23.49	44.58	19.88	1.20	1.20	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 .	2 2.33	4 4.65	6 6.98	3 3.49	1 1.16	0 0.00	16 18.60
NNE	0 .	0 .	3 3.49	1 1.16	4 4.65	1 1.16	0 0.00	0 0.00	9 10.47
NE	0 .	0 .	0 0.00	0 0.00	4 4.65	0 0.00	0 0.00	0 0.00	4 4.65
ENE	0 .	0 .	0 0.00	1 1.16	0 0.00	0 0.00	0 0.00	0 0.00	1 1.16
E	0 .	0 .	1 1.16	3 3.49	0 0.00	0 0.00	0 0.00	0 0.00	4 4.65
ESE	0 .	0 .	2 2.33	1 1.16	2 2.33	0 0.00	0 0.00	0 0.00	5 5.81
SE	0 .	0 .	2 2.33	3 3.49	0 0.00	1 1.16	0 0.00	0 0.00	6 6.98
SSE	0 .	0 .	0 0.00	5 5.81	6 6.98	0 0.00	0 0.00	0 0.00	11 12.79
TOTAL	. .	. .	10 11.63	22 25.58	39 45.35	10 11.63	4 4.65	1 1.16	86 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0 .	0 .	0 0.00	0 0.00	11 12.79	2 2.33	2 2.33	1 1.16	16 18.60
SSW	0 .	0 .	0 0.00	0 0.00	2 2.33	1 1.16	1 1.16	0 0.00	4 4.65
SW	0 .	0 .	0 0.00	1 1.16	3 3.49	0 0.00	0 0.00	0 0.00	4 4.65
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 .	0 0.00	1 1.16	0 0.00	0 0.00	0 0.00	0 0.00	1 1.16
WNW	0 .	0 .	0 0.00	1 1.16	0 0.00	0 0.00	0 0.00	0 0.00	1 1.16
NW	0 .	0 .	0 0.00	1 1.16	0 0.00	0 0.00	0 0.00	0 0.00	1 1.16
NNW	0 .	0 .	0 0.00	0 0.00	1 1.16	2 2.33	0 C.00	0 0.00	3 3.49
TOTAL	. .	. .	10 11.63	22 25.58	39 45.35	10 11.63	4 4.65	1 1.16	86 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	3 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	2 1.16	6 3.49	9 5.23	6 3.49	0 0.00	0 .	23 13.37
NNE	0 .	1 0.58	1 0.58	1 0.58	5 2.91	3 1.74	0 0.00	0 .	11 6.40
NE	0 .	0 0.00	2 1.16	4 2.33	2 1.16	0 0.00	0 0.00	0 .	8 4.65
ENE	0 .	0 0.00	2 1.16	6 3.49	1 0.58	0 0.00	0 0.00	0 .	9 5.23
E	0 .	0 0.00	2 1.16	7 4.07	0 0.00	0 0.00	0 0.00	0 .	9 5.23
ESE	0 .	0 0.00	2 1.16	2 1.16	7 4.07	0 0.00	0 0.00	0 .	11 6.40
SE	0 .	1 0.58	3 1.74	4 2.33	11 6.40	3 1.74	0 0.00	0 .	22 12.79
SSE	0 .	1 0.58	0 0.00	5 2.91	5 2.91	3 1.74	1 0.58	0 .	15 8.72
TOTAL	. .	3 1.74	17 9.88	53 30.81	60 34.88	34 19.77	5 2.91	. .	172 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0 .	0 0.00	1 0.58	4 2.33	7 4.07	6 3.49	4 2.33	0 .	22 12.79
SSW	0 .	0 0.00	0 0.00	5 2.91	5 2.91	8 4.65	0 0.00	0 .	18 10.47
SW	0 .	0 0.00	0 0.00	2 1.16	3 1.74	2 1.16	0 0.00	0 .	7 4.07
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 0.00	0 0.00	3 1.74	0 0.00	1 0.58	0 0.00	0 .	4 2.33
WNW	0 .	0 0.00	0 0.00	1 0.58	1 0.58	0 0.00	0 0.00	0 .	2 1.16
NW	0 .	0 0.00	0 0.00	1 0.58	0 0.00	0 0.00	0 0.00	0 .	1 0.58
NNW	0 .	0 0.00	2 1.16	2 1.16	4 2.33	2 1.16	0 0.00	0 .	10 5.81
TOTAL	. .	3 1.74	17 9.88	53 30.81	60 34.88	34 19.77	5 2.91	. .	172 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	15 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	2 0.26	8 1.02	11 1.41	15 1.92	10 1.28	0 0.00	0 0.00	46 5.89
NNE	0 .	1 0.13	4 0.51	19 2.43	27 3.46	5 0.64	0 0.00	0 0.00	56 7.17
NE	0 .	0 0.00	3 0.38	23 2.94	33 4.23	3 0.38	0 0.00	0 0.00	62 7.94
ENE	0 .	1 0.13	2 0.26	29 3.71	11 1.41	1 0.13	0 0.00	1 0.13	45 5.76
E	0 .	1 0.13	5 0.64	25 3.20	6 0.77	1 0.13	0 0.00	0 0.00	38 4.87
ESE	0 .	1 0.13	7 0.90	32 4.10	47 6.02	6 0.77	0 0.00	0 0.00	93 11.91
SE	0 .	0 0.00	9 1.15	26 3.33	53 6.79	8 1.02	2 0.26	0 0.00	98 12.55
SSE	0 .	0 0.00	7 0.90	14 1.79	37 4.74	18 2.30	2 0.26	0 0.00	78 9.99
TOTAL	. .	6 0.77	76 9.73	239 30.60	304 38.92	124 15.88	29 3.71	3 0.38	781 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0	0	6	21	30	41	16	1	115
	.	0.00	0.77	2.69	3.84	5.25	2.05	0.13	14.72
SSW	0	0	0	15	20	17	1	1	54
	.	0.00	0.00	1.92	2.56	2.18	0.13	0.13	6.91
SW	0	0	4	8	6	4	5	0	27
	.	0.00	0.51	1.02	0.77	0.51	0.64	0.00	3.46
WSW	0	0	4	4	0	3	1	0	12
	.	0.00	0.51	0.51	0.00	0.38	0.13	0.00	1.54
W	0	0	8	3	2	0	0	0	13
	.	0.00	1.02	0.38	0.26	0.00	0.00	0.00	1.66
WNW	0	0	4	3	3	1	0	0	11
	.	0.00	0.51	0.38	0.38	0.13	0.00	0.00	1.41
NW	0	0	4	3	2	3	0	0	12
	.	0.00	0.51	0.38	0.26	0.38	0.00	0.00	1.54
NNW	0	0	1	3	12	3	2	0	21
	.	0.00	0.13	0.38	1.54	0.38	0.26	0.00	2.69
TOTAL	.	6	76	239	304	124	29	3	781
	.	0.77	9.73	30.60	38.92	15.88	3.71	0.38	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	22 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	7 1.11	1 0.16	9 1.42	1 0.16	0 0.00	0 .	18 2.84
NNE	0 .	0 0.00	5 0.79	6 0.95	9 1.42	0 0.00	0 0.00	0 .	20 3.16
NE	0 .	0 0.00	3 0.47	4 0.63	10 1.58	0 0.00	0 0.00	0 .	17 2.69
ENE	0 .	0 0.00	2 0.32	14 2.21	12 1.90	1 0.16	0 0.00	0 .	29 4.58
E	0 .	0 0.00	6 0.95	16 2.53	10 1.58	0 0.00	0 0.00	0 .	32 5.06
ESE	0 .	0 0.00	12 1.90	14 2.21	12 1.90	1 0.16	0 0.00	0 .	39 6.16
SE	0 .	1 0.16	3 0.47	13 2.05	16 2.53	17 2.69	5 0.79	0 .	55 8.69
SSE	0 .	0 0.00	5 0.79	11 1.74	57 9.00	50 7.90	7 1.11	0 .	130 20.54
TOTAL	. .	2 0.32	74 11.69	126 19.91	235 37.12	160 25.28	36 5.69	. .	633 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0	0	4	19	41	46	11	0	121
	.	0.00	0.63	3.00	6.48	7.27	1.74	.	19.12
SSW	0	0	5	8	25	25	10	0	73
	.	0.00	0.79	1.26	3.95	3.95	1.58	.	11.53
SW	0	0	2	3	9	6	0	0	20
	.	0.00	0.32	0.47	1.42	0.95	0.00	.	3.16
WSW	0	0	6	4	2	1	1	0	14
	.	0.00	0.95	0.63	0.32	0.16	0.16	.	2.21
W	0	0	5	2	1	1	0	0	9
	.	0.00	0.79	0.32	0.16	0.16	0.00	.	1.42
WNW	0	0	4	2	2	1	1	0	10
	.	0.00	0.63	0.32	0.32	0.16	0.16	.	1.58
NW	0	0	1	5	5	7	0	0	18
	.	0.00	0.16	0.79	0.79	1.11	0.00	.	2.84
NNW	0	1	4	4	15	3	1	0	28
	.	0.16	0.63	0.63	2.37	0.47	0.16	.	4.42
TOTAL	.	2	74	126	235	160	36	.	633
	.	0.32	11.69	19.91	37.12	25.28	5.69	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	8 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	2 1.04	8 4.15	1 0.52	0 0.00	0 0.00	0 .	11 5.70
NNE	0 .	0 0.00	0 0.00	1 0.52	0 0.00	0 0.00	0 0.00	0 .	1 0.52
NE	0 .	1 0.52	2 1.04	2 1.04	0 0.00	0 0.00	0 0.00	0 .	5 2.59
ENE	0 .	0 0.00	4 2.07	2 1.04	1 0.52	0 0.00	0 0.00	0 .	7 3.63
E	0 .	1 0.52	1 0.52	6 3.11	2 1.04	0 0.00	0 0.00	0 .	10 5.18
ESE	0 .	1 0.52	2 1.04	2 1.04	4 2.07	0 0.00	0 0.00	0 .	9 4.66
SE	0 .	0 0.00	1 0.52	8 4.15	4 2.07	2 1.04	0 0.00	0 .	15 7.77
SSE	0 .	0 0.00	6 3.11	10 5.18	16 8.29	1 0.52	0 0.00	0 .	33 17.10
TOTAL	. .	4 2.07	30 15.54	73 37.82	61 31.61	23 11.92	2 1.04	. .	193 100.00

(CONTINUED)

ECOLOGICAL ANALYSIS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0	0	3	8	17	3	0	0	31
	.	0.00	1.55	4.15	8.81	1.55	0.00	.	16.06
SSW	0	0	1	8	9	9	0	0	27
	.	0.00	0.52	4.15	4.66	4.66	0.00	.	13.99
SW	0	0	1	1	3	4	0	0	9
	.	0.00	0.52	0.52	1.55	2.07	0.00	.	4.66
WSW	0	1	1	0	0	1	0	0	3
	.	0.52	0.52	0.00	0.00	0.52	0.00	.	1.55
W	0	0	2	3	0	2	1	0	8
	.	0.00	1.04	1.55	0.00	1.04	0.52	.	4.15
WNW	0	0	0	3	1	1	1	0	6
	.	0.00	0.00	1.55	0.52	0.52	0.52	.	3.11
NW	0	0	1	6	0	0	0	0	7
	.	0.00	0.52	3.11	0.00	0.00	0.00	.	3.63
NNW	0	0	3	5	3	0	0	0	11
	.	0.00	1.55	2.59	1.55	0.00	0.00	.	5.70
TOTAL	.	4	30	73	61	23	2	.	193
	.	2.07	15.54	37.82	31.61	11.92	1.04	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 / FREQUENCY PERCENT	WSC2 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
.	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	1 2.27	0 0.00	0 0.00	0 0.00	0 .	0 .	1 2.27
NNE	0 .	0 0.00	1 2.27	3 6.82	2 4.55	0 0.00	0 .	0 .	6 13.64
NE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
ENE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
E	0 .	0 0.00	0 0.00	1 2.27	0 0.00	0 0.00	0 .	0 .	1 2.27
ESE	0 .	0 0.00	2 4.55	2 4.55	0 0.00	0 0.00	0 .	0 .	4 9.09
SE	0 .	1 2.27	3 6.82	1 2.27	1 2.27	0 0.00	0 .	0 .	6 13.64
SSE	0 .	0 0.00	1 2.27	5 11.36	2 4.55	0 0.00	0 .	0 .	8 18.18
TOTAL	. .	1 2.27	8 18.18	23 52.27	11 25.00	1 2.27	. .	. .	44 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	TOTAL
S	0 .	0 0.00	0 0.00	3 6.82	4 9.09	0 0.00	0 .	0 .	7 15.91
SSW	0 .	0 0.00	0 0.00	2 4.55	2 4.55	0 0.00	0 .	0 .	4 9.09
SW	0 .	0 0.00	0 0.00	1 2.27	0 0.00	0 0.00	0 .	0 .	1 2.27
WSW	0 .	0 0.00	0 0.00	1 2.27	0 0.00	1 2.27	0 .	0 .	2 4.55
W	0 .	0 0.00	0 0.00	2 4.55	0 0.00	0 0.00	0 .	0 .	2 4.55
WNW	0 .	0 0.00	0 0.00	1 2.27	0 0.00	0 0.00	0 .	0 .	1 2.27
NW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNW	0 .	0 0.00	0 0.00	1 2.27	0 0.00	0 0.00	0 .	0 .	1 2.27
TOTAL	. .	1 2.27	8 18.18	23 52.27	11 25.00	1 2.27	. .	. .	44 100.00

ECOLOGICAL ANALYSIS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	16 .	0 .	2 .	10 .	4 .	3 .	0 .	0 .	0 .	0 .	. .
N	0 .	3 0.14	12 0.56	38 1.78	63 2.95	39 1.83	29 1.36	0 0.00	1 0.05	0 0.00	185 8.67
NNE	0 .	0 0.00	5 0.23	16 0.75	29 1.36	29 1.36	8 0.38	0 0.00	0 0.00	0 0.00	87 4.08
NE	0 .	2 0.09	5 0.23	9 0.42	12 0.56	9 0.42	3 0.14	0 0.00	0 0.00	0 0.00	40 1.88
ENE	0 .	0 0.00	5 0.23	14 0.66	30 1.41	5 0.23	0 0.00	0 0.00	0 0.00	0 0.00	54 2.53
E	0 .	5 0.23	6 0.28	24 1.13	10 0.47	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	45 2.11
ESE	0 .	1 0.05	7 0.33	17 0.80	27 1.27	6 0.28	0 0.00	0 0.00	0 0.00	0 0.00	58 2.72
SE	0 .	1 0.05	11 0.52	31 1.45	48 2.25	34 1.59	6 0.28	0 0.00	0 0.00	0 0.00	131 6.14
SSE	0 .	2 0.09	12 0.56	18 0.84	75 3.52	105 4.92	35 1.64	2 0.09	0 0.00	0 0.00	249 11.67
TOTAL	. .	31 1.45	168 7.88	357 16.74	642 30.10	618 28.97	253 11.86	49 2.30	12 0.56	3 0.14	2133 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	7	35	131	134	57	9	0	0	373
	.	0.00	0.33	1.64	6.14	6.28	2.67	0.42	0.00	0.00	17.49
SSW	0	2	16	21	51	70	25	2	0	0	187
	.	0.09	0.75	0.98	2.39	3.28	1.17	0.09	0.00	0.00	8.77
SW	0	5	27	31	22	19	17	3	0	0	124
	.	0.23	1.27	1.45	1.03	0.89	0.80	0.14	0.00	0.00	5.81
WSW	1	5	13	15	14	13	6	2	0	0	68
	.	0.23	0.61	0.70	0.66	0.61	0.28	0.09	0.00	0.00	3.19
W	0	1	4	16	21	10	1	0	0	0	53
	.	0.05	0.19	0.75	0.98	0.47	0.05	0.00	0.00	0.00	2.48
WNW	0	4	16	13	18	27	5	0	0	0	83
	.	0.19	0.75	0.61	0.84	1.27	0.23	0.00	0.00	0.00	3.89
NW	0	0	14	25	30	60	21	17	1	0	168
	.	0.00	0.66	1.17	1.41	2.81	0.98	0.80	0.05	0.00	7.88
NNW	6	0	8	34	61	58	40	14	10	3	228
	.	0.00	0.38	1.59	2.86	2.72	1.88	0.66	0.47	0.14	10.69
TOTAL	.	31	168	357	642	618	253	49	12	3	2133
	.	1.45	7.88	16.74	30.10	28.97	11.86	2.30	0.56	0.14	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 FREQUENCY PERCENT	WSC2 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	2	15	10	8	0	0	0	35
	.	.	.	1.59	11.90	7.94	6.35	0.00	0.00	.	27.78
NNE	0	0	0	0	1	4	1	0	0	0	6
	.	.	.	0.00	0.79	3.17	0.79	0.00	0.00	.	4.76
NE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
TOTAL	.	.	.	11	30	52	23	7	3	.	126
	.	.	.	8.73	23.81	41.27	18.25	5.56	2.38	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSIS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 .	0 .	0 0.00	1 0.79	5 3.97	0 0.00	1 0.79	0 0.00	0 .	7 5.56
SSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
SW	0 .	0 .	0 .	0 0.00	0 0.00	0 0.00	0 0.00	1 0.79	0 0.00	0 .	1 0.79
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 .	0 .	0 0.00	0 0.00	1 0.79	0 0.00	0 0.00	0 0.00	0 .	1 0.79
WNW	0 .	0 .	0 .	1 0.79	3 2.38	5 3.97	0 0.00	0 0.00	0 0.00	0 .	9 7.14
NW	0 .	0 .	0 .	7 5.56	4 3.17	5 3.97	0 0.00	1 0.79	0 0.00	0 .	17 13.49
NNW	0 .	0 .	0 .	1 0.79	6 4.76	22 17.46	14 11.11	4 3.17	3 2.38	0 .	50 39.68
TOTAL	. .	. .	. .	11 8.73	30 23.81	52 41.27	23 18.25	7 5.56	3 2.38	. .	126 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	1	0	0	0	1	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	3	6	11	13	0	0	0	33
	.	0.00	0.00	2.48	4.96	9.09	10.74	0.00	0.00	.	27.27
NNE	0	0	0	0	4	12	1	0	0	0	17
	.	0.00	0.00	0.00	3.31	9.92	0.83	0.00	0.00	.	14.05
NE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
E	0	1	1	0	0	0	0	0	0	0	2
	.	0.83	0.83	0.00	0.00	0.00	0.00	0.00	0.00	.	1.65
ESE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	2	0	0	0	0	0	0	0	2
	.	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	.	1.65
TOTAL	.	1	4	9	32	53	20	1	1	.	121
	.	0.83	3.31	7.44	26.45	43.80	16.53	0.83	0.83	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	0 0.00	2 1.65	7 5.79	8 6.61	0 0.00	0 0.00	0 0.00	0 .	17 14.05
SSW	0 .	0 0.00	0 0.00	0 0.00	3 2.48	6 4.96	1 0.83	0 0.00	0 0.00	0 .	10 8.26
SW	0 .	0 0.00	0 0.00	0 0.00	2 1.65	1 0.83	0 0.00	0 0.00	0 0.00	0 .	3 2.48
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
WNW	0 .	0 0.00	0 0.00	1 0.83	3 2.48	2 1.65	0 0.00	0 0.00	0 0.00	0 .	6 4.96
NW	0 .	0 0.00	1 0.83	2 1.65	3 2.48	6 4.96	0 0.00	0 0.00	1 0.83	0 .	13 10.74
NNW	1 .	0 0.00	0 0.00	1 0.83	4 3.31	7 5.79	5 4.13	1 0.83	0 0.00	0 .	18 14.88
TOTAL	. .	1 0.83	4 3.31	9 7.44	32 26.45	53 43.80	20 16.53	1 0.83	1 0.83	. .	121 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	2 .	0 .	0 .	1 .	1 .	1 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	1 0.70	1 0.70	10 7.04	4 2.82	8 5.63	0 0.00	1 0.70	0 .	25 17.61
NNE	0 .	0 0.00	0 0.00	1 0.70	7 4.93	5 3.52	3 2.11	0 0.00	0 0.00	0 .	16 11.27
NE	0 .	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.70	0 0.00	0 0.00	0 .	1 0.70
ENE	0 .	0 0.00	1 0.70	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 .	1 0.70
E	0 .	0 0.00	1 0.70	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 .	1 0.70
ESE	0 .	0 0.00	2 1.41	0 0.00	1 0.70	1 0.70	0 0.00	0 0.00	0 0.00	0 .	4 2.82
SE	0 .	0 0.00	0 0.00	1 0.70	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 .	1 0.70
SSE	0 .	1 0.70	0 0.00	0 0.00	1 0.70	1 0.70	0 0.00	0 0.00	0 0.00	0 .	3 2.11
TOTAL	. .	1 0.70	13 9.15	15 10.56	36 25.35	41 28.87	24 16.90	10 7.04	2 1.41	. .	142 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	2	4	9	2	3	0	0	21
	.	0.00	0.70	1.41	2.82	6.34	1.41	2.11	0.00	.	14.79
SSW	0	0	2	0	5	6	3	0	0	0	16
	.	0.00	1.41	0.00	3.52	4.23	2.11	0.00	0.00	.	11.27
SW	0	0	1	4	1	1	0	1	0	0	8
	.	0.00	0.70	2.82	0.70	0.70	0.00	0.70	0.00	.	5.63
WSW	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	.	0.70
W	0	0	0	1	0	1	0	0	0	0	2
	.	0.00	0.00	0.70	0.00	0.70	0.00	0.00	0.00	.	1.41
WNW	0	0	0	1	1	2	2	0	0	0	6
	.	0.00	0.00	0.70	0.70	1.41	1.41	0.00	0.00	.	4.23
NW	0	0	2	2	1	4	2	3	0	0	14
	.	0.00	1.41	1.41	0.70	2.82	1.41	2.11	0.00	.	9.86
NNW	0	0	2	1	5	7	3	3	1	0	22
	.	0.00	1.41	0.70	3.52	4.93	2.11	2.11	0.70	.	15.49
TOTAL	.	1	13	15	36	41	24	10	2	.	142
	.	0.70	9.15	10.56	25.35	28.87	16.90	7.04	1.41	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	6-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	5	0	2	9	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	1	4	14	20	10	0	0	0	0	49
	.	0.13	0.52	1.81	2.58	1.29	0.00	0.00	0.00	0.00	6.33
NNE	0	0	1	11	13	7	3	0	0	0	35
	.	0.00	0.13	1.42	1.68	0.90	0.39	0.00	0.00	0.00	4.52
NE	0	1	2	5	9	9	2	0	0	0	28
	.	0.13	0.26	0.65	1.16	1.16	0.26	0.00	0.00	0.00	3.62
ENE	0	0	0	6	19	5	0	0	0	0	30
	.	0.00	0.00	0.78	2.45	0.65	0.00	0.00	0.00	0.00	3.88
E	0	2	3	17	3	0	0	0	0	0	25
	.	0.26	0.39	2.20	0.39	0.00	0.00	0.00	0.00	0.00	3.23
ESE	0	0	3	6	9	1	0	0	0	0	19
	.	0.00	0.39	0.78	1.16	0.13	0.00	0.00	0.00	0.00	2.45
SE	0	0	5	17	14	4	0	0	0	0	40
	.	0.00	0.65	2.20	1.81	0.52	0.00	0.00	0.00	0.00	5.17
SSE	0	0	3	2	22	36	16	1	0	0	80
	.	0.00	0.39	0.26	2.84	4.65	2.07	0.13	0.00	0.00	10.34
TOTAL	.	13	60	153	212	212	87	28	6	3	774
	.	1.68	7.75	19.77	27.39	27.39	11.24	3.62	0.78	0.39	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	3	13	26	45	12	5	0	0	104
	.	0.00	0.39	1.68	3.36	5.81	1.55	0.65	0.00	0.00	13.44
SSW	0	1	4	9	13	14	5	2	0	0	48
	.	0.13	0.52	1.16	1.68	1.81	0.65	0.26	0.00	0.00	6.20
SW	0	3	12	10	2	10	10	1	0	0	48
	.	0.39	1.55	1.29	0.26	1.29	1.29	0.13	0.00	0.00	6.20
WSW	0	2	4	3	2	7	4	0	0	0	22
	.	0.26	0.52	0.39	0.26	0.90	0.52	0.00	0.00	0.00	2.84
W	0	0	1	10	13	2	0	0	0	0	26
	.	0.00	0.13	1.29	1.68	0.26	0.00	0.00	0.00	0.00	3.36
WNW	0	3	9	5	10	15	1	0	0	0	43
	.	0.39	1.16	0.65	1.29	1.94	0.13	0.00	0.00	0.00	5.56
NW	0	0	4	9	8	29	16	13	0	0	79
	.	0.00	0.52	1.16	1.03	3.75	2.07	1.68	0.00	0.00	10.21
NNW	3	0	2	16	29	18	18	6	6	3	98
	.	0.00	0.26	2.07	3.75	2.33	2.33	0.78	0.78	0.39	12.66
TOTAL	.	13	60	153	212	212	87	28	6	3	774
	.	1.68	7.75	19.77	27.39	27.39	11.24	3.62	0.78	0.39	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	4	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	1	3	10	7	4	0	0	0	0	25
	.	0.15	0.45	1.51	1.06	0.61	0.00	0.00	.	.	3.78
NNE	0	0	2	3	4	0	0	0	0	0	9
	.	0.00	0.30	0.45	0.61	0.00	0.00	0.00	.	.	1.36
NE	0	1	3	2	3	0	0	0	0	0	9
	.	0.15	0.45	0.30	0.45	0.00	0.00	0.00	.	.	1.36
ENE	0	0	3	5	11	0	0	0	0	0	19
	.	0.00	0.45	0.76	1.66	0.00	0.00	0.00	.	.	2.87
E	0	1	0	4	7	0	0	0	0	0	12
	.	0.15	0.00	0.61	1.06	0.00	0.00	0.00	.	.	1.82
ESE	0	1	1	8	15	4	0	0	0	0	29
	.	0.15	0.15	1.21	2.27	0.61	0.00	0.00	.	.	4.39
SE	0	0	5	6	22	23	4	0	0	0	60
	.	0.00	0.76	0.91	3.33	3.48	0.61	0.00	.	.	9.08
SSE	0	0	2	11	29	50	17	1	0	0	110
	.	0.00	0.30	1.66	4.39	7.56	2.57	0.15	.	.	16.64
TOTAL	.	9	60	104	203	197	87	1	.	.	661
	.	1.36	9.08	15.73	30.71	29.80	13.16	0.15	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	7	56	50	40	0	0	0	154
	.	0.00	0.15	1.06	8.47	7.56	6.05	0.00	.	.	23.30
SSW	0	0	7	9	10	32	16	0	0	0	74
	.	0.00	1.06	1.36	1.51	4.84	2.42	0.00	.	.	11.20
SW	0	2	13	12	8	4	4	0	0	0	43
	.	0.30	1.97	1.82	1.21	0.61	0.61	0.00	.	.	6.51
WSW	0	3	7	5	1	4	2	0	0	0	22
	.	0.45	1.06	0.76	0.15	0.61	0.30	0.00	.	.	3.33
W	0	0	3	3	5	3	0	0	0	0	14
	.	0.00	0.45	0.45	0.76	0.45	0.00	0.00	.	.	2.12
WNW	0	0	6	3	1	3	1	0	0	0	14
	.	0.00	0.91	0.45	0.15	0.45	0.15	0.00	.	.	2.12
NW	0	0	2	5	10	16	3	0	0	0	36
	.	0.00	0.30	0.76	1.51	2.42	0.45	0.00	.	.	5.45
NNW	0	0	2	11	14	4	0	0	0	0	31
	.	0.00	0.30	1.66	2.12	0.61	0.00	0.00	.	.	4.69
TOTAL	.	9	60	104	203	197	87	1	.	.	661
	.	1.36	9.08	15.73	30.71	29.80	13.16	0.15	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	4 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	1 0.44	1 0.44	2 0.88	3 1.32	0 0.00	0 0.00	0 0.00	0 .	0 .	7 3.07
NNE	0 .	0 0.00	1 0.44	1 0.44	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	2 0.88
NE	0 .	0 0.00	0 0.00	1 0.44	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	1 0.44
ENE	0 .	0 0.00	1 0.44	3 1.32	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	4 1.75
E	0 .	0 0.00	0 0.00	2 0.88	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	2 0.88
ESE	0 .	0 0.00	1 0.44	2 0.88	2 0.88	0 0.00	0 0.00	0 0.00	0 .	0 .	5 2.19
SE	0 .	0 0.00	0 0.00	4 1.75	7 3.07	6 2.63	2 0.88	0 0.00	0 .	0 .	19 8.33
SSE	0 .	0 0.00	1 0.44	4 1.75	20 8.77	18 7.89	2 0.88	0 0.00	0 .	0 .	45 19.74
TOTAL	. .	2 0.88	17 7.46	41 17.98	91 41.23	60 26.32	12 5.26	2 0.88	. .	. .	228 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	2	9	33	17	3	0	0	0	64
	.	0.00	0.88	3.95	14.47	7.46	1.32	0.00	.	.	28.07
SSW	0	0	3	1	12	11	0	0	0	0	27
	.	0.00	1.32	0.44	5.26	4.82	0.00	0.00	.	.	11.84
SW	0	0	1	3	4	3	3	0	0	0	14
	.	0.00	0.44	1.32	1.75	1.32	1.32	0.00	.	.	6.14
WSW	0	0	2	4	6	2	0	2	0	0	16
	.	0.00	0.88	1.75	2.63	0.88	0.00	0.88	.	.	7.02
W	0	0	0	2	2	3	1	0	0	0	8
	.	0.00	0.00	0.88	0.88	1.32	0.44	0.00	.	.	3.51
WNW	0	1	0	1	0	0	1	0	0	0	3
	.	0.44	0.00	0.44	0.00	0.00	0.44	0.00	.	.	1.32
NW	0	0	3	0	3	0	0	0	0	0	6
	.	0.00	1.32	0.00	1.32	0.00	0.00	0.00	.	.	2.63
NNW	0	0	1	2	2	0	0	0	0	0	5
	.	0.00	0.44	0.88	0.88	0.00	0.00	0.00	.	.	2.19
TOTAL	.	2	17	41	94	60	12	2	.	.	228
	.	0.88	7.46	17.98	41.23	26.32	5.26	0.88	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	3 3.70	6 7.41	2 2.47	0 0.00	0 .	0 .	0 .	0 .	11 13.58
NNE	0 .	0 0.00	1 1.23	0 0.00	0 0.00	1 1.23	0 .	0 .	0 .	0 .	2 2.47
NE	0 .	0 0.00	0 0.00	1 1.23	0 0.00	0 0.00	0 .	0 .	0 .	0 .	1 1.23
ENE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
E	0 .	1 1.23	1 1.23	1 1.23	0 0.00	0 0.00	0 .	0 .	0 .	0 .	3 3.70
ESE	0 .	0 0.00	0 0.00	1 1.23	0 0.00	0 0.00	0 .	0 .	0 .	0 .	1 1.23
SE	0 .	1 1.23	1 1.23	3 3.70	5 6.17	1 1.23	0 .	0 .	0 .	0 .	11 13.58
SSE	0 .	1 1.23	4 4.94	1 1.23	3 3.70	0 0.00	0 .	0 .	0 .	0 .	9 11.11
TOTAL	. .	5 6.17	14 17.28	24 29.63	35 43.21	3 3.70	. .	. .	. .	. .	81 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	0	2	4	0	0	0	0	0	6
	.	0.00	0.00	2.47	4.94	0.00	.	.	.	.	7.41
SSW	0	1	0	2	8	1	0	0	0	0	12
	.	1.23	0.00	2.47	9.88	1.23	.	.	.	.	14.81
SW	0	0	0	2	5	0	0	0	0	0	7
	.	0.00	0.00	2.47	6.17	0.00	.	.	.	.	8.64
WSW	1	0	0	2	3	0	0	0	0	0	7
	.	0.00	0.00	2.47	6.17	0.00	.	.	.	.	8.64
W	0	1	0	0	1	0	0	0	0	0	2
	.	1.23	0.00	0.00	1.23	0.00	.	.	.	.	2.47
WNW	0	0	1	1	0	0	0	0	0	0	2
	.	0.00	1.23	1.23	0.00	0.00	.	.	.	.	2.47
NW	0	0	2	0	1	0	0	0	0	0	3
	.	0.00	2.47	0.00	1.23	0.00	.	.	.	.	3.70
NNW	2	0	1	2	1	0	0	0	0	0	4
	.	0.00	1.23	2.47	1.23	0.00	.	.	.	.	4.94
TOTAL	.	5	14	24	35	3	.	.	.	.	81
	.	6.17	17.28	29.63	43.21	3.70	.	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	67	0	2	10	4	3	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	5	38	91	128	70	30	0	1	0	363
	.	0.12	0.90	2.16	3.04	1.66	0.71	0.00	0.02	0.00	8.63
NNE	0	2	20	52	89	38	8	0	0	0	209
	.	0.05	0.48	1.24	2.12	0.90	0.19	0.00	0.00	0.00	4.97
NE	0	3	15	42	61	12	3	0	0	0	136
	.	0.07	0.36	1.00	1.45	0.29	0.07	0.00	0.00	0.00	3.23
ENE	0	1	15	66	55	7	0	1	0	0	145
	.	0.02	0.36	1.57	1.31	0.17	0.00	0.02	0.00	0.00	3.45
E	0	7	23	82	28	1	0	0	0	0	141
	.	0.17	0.55	1.95	0.67	0.02	0.00	0.00	0.00	0.00	3.35
ESE	0	3	34	70	99	13	0	0	0	0	219
	.	0.07	0.81	1.66	2.35	0.31	0.00	0.00	0.00	0.00	5.20
SE	0	4	32	88	135	66	13	0	0	0	338
	.	0.10	0.76	2.09	3.21	1.57	0.31	0.00	0.00	0.00	8.03
SSE	0	3	31	69	204	177	45	2	0	0	531
	.	0.07	0.74	1.64	4.85	4.21	1.07	0.05	0.00	0.00	12.62
TOTAL	.	47	399	932	1426	1003	331	55	12	3	4208
	.	1.12	9.48	22.15	33.89	23.84	7.87	1.31	0.29	0.07	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	21	91	246	237	90	11	0	0	696
	.	0.00	0.50	2.16	5.85	5.63	2.14	0.26	0.00	0.00	16.54
SSW	0	2	22	60	117	132	39	5	0	0	377
	.	0.05	0.52	1.43	2.78	3.14	0.93	0.12	0.00	0.00	8.96
SW	0	5	34	47	48	35	22	3	0	0	194
	.	0.12	0.81	1.12	1.14	0.83	0.52	0.07	0.00	0.00	4.61
WSW	1	6	24	24	16	19	8	2	0	0	99
	.	0.14	0.57	0.57	0.38	0.45	0.19	0.05	0.00	0.00	2.35
W	0	1	22	30	24	14	2	0	0	0	93
	.	0.02	0.52	0.71	0.57	0.33	0.05	0.00	0.00	0.00	2.21
WNW	0	4	26	24	25	30	7	0	0	0	116
	.	0.10	0.62	0.57	0.59	0.71	0.17	0.00	0.00	0.00	2.76
NW	0	0	21	44	41	70	21	17	1	0	215
	.	0.00	0.50	1.05	0.97	1.66	0.50	0.40	0.02	0.00	5.11
NNW	6	1	21	52	110	82	43	14	10	3	336
	.	0.02	0.50	1.24	2.61	1.95	1.02	0.33	0.24	0.07	7.98
TOTAL	.	47	399	932	1426	1003	331	55	12	3	4208
	.	1.12	9.48	22.15	33.89	23.84	7.87	1.31	0.29	0.07	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	1	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	4	25	40	21	8	0	0	0	98
	.	.	1.37	8.56	13.70	7.19	2.74	0.00	0.00	.	33.56
NNE	0	0	1	5	14	4	1	0	0	0	25
	.	.	0.34	1.71	4.79	1.37	0.34	0.00	0.00	.	8.56
NE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
E	0	0	2	0	0	0	0	0	0	0	2
	.	.	0.68	0.00	0.00	0.00	0.00	0.00	0.00	.	0.68
ESE	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	2	2	1	0	0	0	0	5
	.	.	0.00	0.68	0.68	0.34	0.00	0.00	0.00	.	1.71
SSE	0	0	0	1	6	0	0	0	0	0	7
	.	.	0.00	0.34	2.05	0.00	0.00	0.00	0.00	.	2.40
TOTAL	.	.	16	50	104	85	25	9	3	.	292
	.	.	5.48	17.12	35.62	29.11	8.56	3.08	1.03	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 .	0 0.00	1 0.34	6 2.05	10 3.42	0 0.00	1 0.34	0 0.00	0 .	18 6.16
SSW	0 .	0 .	0 0.00	1 0.34	3 1.03	2 0.68	2 0.68	2 0.68	0 0.00	0 .	10 3.42
SW	0 .	0 .	0 0.00	0 0.00	2 0.68	0 0.00	0 0.00	1 0.34	0 0.00	0 .	3 1.03
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 .	3 1.03	0 0.00	0 0.00	1 0.34	0 0.00	0 0.00	0 0.00	0 .	4 1.37
WNW	0 .	0 .	2 0.68	1 0.34	3 1.03	5 1.71	0 0.00	0 0.00	0 0.00	0 .	11 3.77
NW	0 .	0 .	1 0.34	10 3.42	8 2.74	5 1.71	0 0.00	1 0.34	0 0.00	0 .	25 8.56
NNW	0 .	0 .	3 1.03	4 1.37	20 6.85	36 12.33	14 4.79	4 1.37	3 1.03	0 .	84 28.77
TOTAL	. .	. .	16 5.48	50 17.12	104 35.62	85 29.11	25 8.56	9 3.08	3 1.03	. .	292 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	2 .	0 .	0 .	0 .	1 .	2 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	2 0.97	7 3.38	12 5.80	14 6.76	14 6.76	0 0.00	0 0.00	0 .	49 23.67
NNE	0 .	0 0.00	3 1.45	1 0.48	8 3.86	13 6.28	1 0.48	0 0.00	0 0.00	0 .	26 12.56
NE	0 .	0 0.00	0 0.00	0 0.00	4 1.93	0 0.00	0 0.00	0 0.00	0 0.00	0 .	4 1.93
ENE	0 .	0 0.00	0 0.00	1 0.48	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 .	1 0.48
E	0 .	1 0.48	2 0.97	3 1.45	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 .	6 2.90
ESE	0 .	0 0.00	2 0.97	1 0.48	2 0.97	0 0.00	0 0.00	0 0.00	0 0.00	0 .	5 2.42
SE	0 .	0 0.00	2 0.97	3 1.45	0 0.00	1 0.48	0 0.00	0 0.00	0 0.00	0 .	6 2.90
SSE	0 .	0 0.00	2 0.97	5 2.42	6 2.90	0 0.00	0 0.00	0 0.00	0 0.00	0 .	13 6.28
TOTAL	. .	1 0.48	14 6.76	31 14.98	71 34.30	63 30.43	24 11.59	2 0.97	1 0.48	. .	207 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	0 0.00	2 0.97	18 8.70	10 4.83	2 0.97	1 0.48	0 0.00	0 .	33 15.94
SSW	0 .	0 0.00	0 0.00	0 0.00	5 2.42	7 3.38	2 0.97	0 0.00	0 0.00	0 .	14 6.76
SW	0 .	0 0.00	0 0.00	1 0.48	5 2.42	1 0.48	0 0.00	0 0.00	0 0.00	0 .	7 3.38
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 0.00	0 0.00	1 0.48	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 .	1 0.48
WNW	0 .	0 0.00	0 0.00	2 0.97	3 1.45	2 0.97	0 0.00	0 0.00	0 0.00	0 .	7 3.38
NW	0 .	0 0.00	1 0.48	3 1.45	3 1.45	6 2.90	0 0.00	0 0.00	1 0.48	0 .	14 6.76
NNW	1 .	0 0.00	0 0.00	1 0.48	5 2.42	9 4.35	5 2.42	1 0.48	0 0.00	0 .	21 10.14
TOTAL	. .	1 0.48	14 6.76	31 14.98	71 34.30	63 30.43	24 11.59	2 0.97	1 0.48	. .	207 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	5	0	0	1	1	1	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	3	7	19	10	8	0	1	0	48
	.	0.00	0.96	2.23	6.05	3.18	2.55	0.00	0.32	.	15.29
NNE	0	1	1	2	12	8	3	0	0	0	27
	.	0.32	0.32	0.64	3.82	2.55	0.96	0.00	0.00	.	8.60
NE	0	0	2	4	2	0	1	0	0	0	9
	.	0.00	0.64	1.27	0.64	0.00	0.32	0.00	0.00	.	2.87
ENE	0	0	3	6	1	0	0	0	0	0	10
	.	0.00	0.96	1.91	0.32	0.00	0.00	0.00	0.00	.	3.18
E	0	0	3	7	0	0	0	0	0	0	10
	.	0.00	0.96	2.23	0.00	0.00	0.00	0.00	0.00	.	3.18
ESE	0	0	4	2	8	1	0	0	0	0	15
	.	0.00	1.27	0.64	2.55	0.32	0.00	0.00	0.00	.	4.78
SE	0	1	3	5	11	3	0	0	0	0	23
	.	0.32	0.96	1.59	3.50	0.96	0.00	0.00	0.00	.	7.32
SSE	0	2	0	5	6	4	1	0	0	0	18
	.	0.64	0.00	1.59	1.91	1.27	0.32	0.00	0.00	.	5.73
TOTAL	.	4	30	68	96	75	29	10	2	.	314
	.	1.27	9.55	21.66	30.57	23.89	9.24	3.18	0.64	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	2	6	11	15	6	3	0	0	43
	.	0.00	0.64	1.91	3.50	4.78	1.91	0.96	0.00	.	13.69
SSW	0	0	2	5	10	14	3	0	0	0	34
	.	0.00	0.64	1.59	3.18	4.46	0.96	0.00	0.00	.	10.83
SW	0	0	1	6	4	3	0	1	0	0	15
	.	0.00	0.32	1.91	1.27	0.96	0.00	0.32	0.00	.	4.78
WSW	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	.	0.32
W	0	0	0	4	0	2	0	0	0	0	6
	.	0.00	0.00	1.27	0.00	0.64	0.00	0.00	0.00	.	1.91
WNW	0	0	0	2	2	2	2	0	0	0	8
	.	0.00	0.00	0.64	0.64	0.64	0.64	0.00	0.00	.	2.55
NW	0	0	2	3	1	4	2	3	0	0	15
	.	0.00	0.64	0.96	0.32	1.27	0.64	0.96	0.00	.	4.78
NNW	0	0	4	3	9	9	3	3	1	0	32
	.	0.00	1.27	0.96	2.87	2.87	0.96	0.96	0.32	.	10.19
TOTAL	.	4	30	68	96	75	29	10	2	.	314
	.	1.27	9.55	21.66	30.57	23.89	9.24	3.18	0.64	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	20	0	2	9	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	3	12	25	35	20	0	0	0	0	95
	.	0.19	0.77	1.61	2.25	1.29	0.00	0.00	0.00	0.00	6.11
NNE	0	1	5	30	40	12	3	0	0	0	91
	.	0.06	0.32	1.93	2.57	0.77	0.19	0.00	0.00	0.00	5.85
NE	0	1	5	28	42	12	2	0	0	0	90
	.	0.06	0.32	1.80	2.70	0.77	0.13	0.00	0.00	0.00	5.79
ENE	0	1	2	35	30	6	0	1	0	0	75
	.	0.06	0.13	2.25	1.93	0.39	0.00	0.06	0.00	0.00	4.82
E	0	3	8	42	9	1	0	0	0	0	63
	.	0.19	0.51	2.70	0.58	0.06	0.00	0.00	0.00	0.00	4.05
ESE	0	1	10	38	56	7	0	0	0	0	112
	.	0.06	0.64	2.44	3.60	0.45	0.00	0.00	0.00	0.00	7.20
SE	0	0	14	43	67	12	2	0	0	0	138
	.	0.00	0.90	2.77	4.31	0.77	0.13	0.00	0.00	0.00	8.87
SSE	0	0	10	16	59	54	18	1	0	0	158
	.	0.00	0.64	1.03	3.79	3.47	1.16	0.06	0.00	0.00	10.16
TOTAL	.	19	136	392	516	336	116	31	6	3	1555
	.	1.22	8.75	25.21	33.18	21.61	7.46	1.99	0.39	0.19	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	9 0.58	34 2.19	56 3.60	86 5.53	28 1.80	6 0.39	0 0.00	0 0.00	219 14.08
SSW	0 .	1 0.06	4 0.26	24 1.54	33 2.12	31 1.99	6 0.39	3 0.19	0 0.00	0 0.00	102 6.56
SW	0 .	3 0.19	16 1.03	18 1.16	8 0.51	14 0.90	15 0.96	1 0.06	0 0.00	0 0.00	75 4.82
WSW	0 .	2 0.13	8 0.51	7 0.45	2 0.13	10 0.64	5 0.32	0 0.00	0 0.00	0 0.00	34 2.19
W	0 .	0 0.00	9 0.58	13 0.84	15 0.96	2 0.13	0 0.00	0 0.00	0 0.00	0 0.00	39 2.51
WNW	0 .	3 0.19	13 0.84	8 0.51	13 0.84	16 1.03	1 0.06	0 0.00	0 0.00	0 0.00	54 3.47
NW	0 .	0 0.00	8 0.51	12 0.77	10 0.64	32 2.06	16 1.03	13 0.84	0 0.00	0 0.00	91 5.85
NNW	3 .	0 0.00	3 0.19	19 1.22	41 2.64	21 1.35	20 1.29	6 0.39	6 0.39	3 0.19	119 7.65
TOTAL	. .	19 1.22	136 8.75	392 25.21	516 33.18	336 21.61	116 7.46	31 1.99	6 0.39	3 0.19	1555 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	26 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	1 0.08	10 0.77	11 0.85	16 1.24	5 0.39	0 0.00	0 0.00	0 .	0 .	43 3.32
NNE	0 .	0 0.00	7 0.54	9 0.70	13 1.00	0 0.00	0 0.00	0 0.00	0 .	0 .	29 2.24
NE	0 .	1 0.08	6 0.46	6 0.46	13 1.00	0 0.00	0 0.00	0 0.00	0 .	0 .	26 2.01
ENE	0 .	0 0.00	5 0.39	19 1.47	23 1.78	1 0.08	0 0.00	0 0.00	0 .	0 .	48 3.71
E	0 .	1 0.08	6 0.46	20 1.55	17 1.31	0 0.00	0 0.00	0 0.00	0 .	0 .	44 3.40
ESE	0 .	1 0.08	13 1.00	22 1.70	27 2.09	5 0.39	0 0.00	0 0.00	0 .	0 .	68 5.26
SE	0 .	1 0.08	8 0.62	19 1.47	38 2.94	40 3.09	9 0.70	0 0.00	0 .	0 .	115 8.89
SSE	0 .	0 0.00	7 0.54	22 1.70	86 6.65	100 7.73	24 1.85	1 0.08	0 .	0 .	240 18.55
TOTAL	. .	11 0.85	134 10.36	230 17.77	438 33.85	357 27.59	123 9.51	1 0.08	. .	. .	1294 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	5	26	97	96	51	0	0	0	275
	.	0.00	0.39	2.01	7.50	7.42	3.94	0.00	.	.	21.25
SSW	0	0	12	17	35	57	26	0	0	0	147
	.	0.00	0.93	1.31	2.70	4.40	2.01	0.00	.	.	11.36
SW	0	2	15	15	17	10	4	0	0	0	63
	.	0.15	1.16	1.16	1.31	0.77	0.31	0.00	.	.	4.87
WSW	0	3	13	9	3	5	3	0	0	0	36
	.	0.23	1.00	0.70	0.23	0.39	0.23	0.00	.	.	2.78
W	0	0	8	5	6	4	0	0	0	0	23
	.	0.00	0.62	0.39	0.46	0.31	0.00	0.00	.	.	1.78
WNW	0	0	10	5	3	4	2	0	0	0	24
	.	0.00	0.77	0.39	0.23	0.31	0.15	0.00	.	.	1.85
NW	0	0	3	10	15	23	3	0	0	0	54
	.	0.00	0.23	0.77	1.16	1.78	0.23	0.00	.	.	4.17
NNW	0	1	6	15	29	7	1	0	0	0	59
	.	0.08	0.46	1.16	2.24	0.54	0.08	0.00	.	.	4.56
TOTAL	.	11	134	230	438	357	123	1	.	.	1294
	.	0.85	10.36	17.77	33.85	27.59	9.51	0.08	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	12 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	. / .
N	0 / .	1 / 0.24	3 / 0.71	10 / 2.38	4 / 0.95	0 / 0.00	0 / 0.00	0 / 0.00	0 / .	0 / .	18 / 4.28
NNE	0 / .	0 / 0.00	1 / 0.24	2 / 0.48	0 / 0.00	0 / 0.00	0 / 0.00	0 / 0.00	0 / .	0 / .	3 / 0.71
NE	0 / .	1 / 0.24	2 / 0.48	3 / 0.71	0 / 0.00	0 / 0.00	0 / 0.00	0 / 0.00	0 / .	0 / .	6 / 1.43
ENE	0 / .	0 / 0.00	5 / 1.19	5 / 1.19	1 / 0.24	0 / 0.00	0 / 0.00	0 / 0.00	0 / .	0 / .	11 / 2.61
E	0 / .	1 / 0.24	1 / 0.24	8 / 1.90	2 / 0.48	0 / 0.00	0 / 0.00	0 / 0.00	0 / .	0 / .	12 / 2.85
ESE	0 / .	1 / 0.24	3 / 0.71	4 / 0.95	6 / 1.43	0 / 0.00	0 / 0.00	0 / 0.00	0 / .	0 / .	14 / 3.33
SE	0 / .	0 / 0.00	1 / 0.24	12 / 2.85	11 / 2.61	8 / 1.90	2 / 0.48	0 / 0.00	0 / .	0 / .	34 / 8.08
SSE	0 / .	0 / 0.00	7 / 1.66	14 / 3.33	36 / 8.55	19 / 4.51	2 / 0.48	0 / 0.00	0 / .	0 / .	78 / 18.53
TOTAL	. / .	6 / 1.43	47 / 11.16	114 / 27.08	155 / 36.82	83 / 19.71	14 / 3.33	2 / 0.48	. / .	. / .	421 / 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	5 1.19	17 4.04	50 11.88	20 4.75	3 0.71	0 0.00	0 .	0 .	95 22.57
SSW	0 .	0 0.00	4 0.95	9 2.14	21 4.99	20 4.75	0 0.00	0 0.00	0 .	0 .	54 12.83
SW	0 .	0 0.00	2 0.48	4 0.95	7 1.66	7 1.66	3 0.71	0 0.00	0 .	0 .	23 5.46
WSW	0 .	1 0.24	3 0.71	4 0.95	6 1.43	3 0.71	0 0.00	2 0.48	0 .	0 .	19 4.51
W	0 .	0 0.00	2 0.48	5 1.19	2 0.48	5 1.19	2 0.48	0 0.00	0 .	0 .	16 3.80
WNW	0 .	1 0.24	0 0.00	4 0.95	1 0.24	1 0.24	2 0.48	0 0.00	0 .	0 .	9 2.14
NW	0 .	0 0.00	4 0.95	6 1.43	3 0.71	0 0.00	0 0.00	0 0.00	0 .	0 .	13 3.09
NNW	0 .	0 0.00	4 0.95	7 1.66	5 1.19	0 0.00	0 0.00	0 0.00	0 .	0 .	16 3.80
TOTAL	. .	6 1.43	47 11.16	114 27.08	155 36.82	83 19.71	14 3.33	2 0.48	. .	. .	421 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	4 3.20	6 4.80	2 1.60	0 0.00	0 .	0 .	0 .	0 .	12 9.60
NNE	0 .	0 0.00	2 1.60	3 2.40	2 1.60	1 0.80	0 .	0 .	0 .	0 .	8 6.40
NE	0 .	0 0.00	0 0.00	1 0.80	0 0.00	0 0.00	0 .	0 .	0 .	0 .	1 0.80
ENE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
E	0 .	1 0.80	1 0.80	2 1.60	0 0.00	0 0.00	0 .	0 .	0 .	0 .	4 3.20
ESE	0 .	0 0.00	2 1.60	3 2.40	0 0.00	0 0.00	0 .	0 .	0 .	0 .	5 4.00
SE	0 .	2 1.60	4 3.20	4 3.20	6 4.80	1 0.80	0 .	0 .	0 .	0 .	17 13.60
SSE	0 .	1 0.80	5 4.00	6 4.80	5 4.00	0 0.00	0 .	0 .	0 .	0 .	17 13.60
TOTAL	. .	6 4.80	22 17.60	47 37.60	46 36.80	4 3.20	. .	. .	. .	. .	125 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	0 0.00	5 4.00	8 6.40	0 0.00	0 .	0 .	0 .	0 .	13 10.40
SSW	0 .	1 0.80	0 0.00	4 3.20	10 8.00	1 0.80	0 .	0 .	0 .	0 .	16 12.80
SW	0 .	0 0.00	0 0.00	3 2.40	5 4.00	0 0.00	0 .	0 .	0 .	0 .	8 6.40
WSW	1 .	0 0.00	0 0.00	3 2.40	5 4.00	1 0.80	0 .	0 .	0 .	0 .	9 7.20
W	0 .	1 0.80	0 0.00	2 1.60	1 0.80	0 0.00	0 .	0 .	0 .	0 .	4 3.20
WNW	0 .	0 0.00	1 0.80	2 1.60	0 0.00	0 0.00	0 .	0 .	0 .	0 .	3 2.40
NW	0 .	0 0.00	2 1.60	0 0.00	1 0.80	0 0.00	0 .	0 .	0 .	0 .	3 2.40
NNW	2 .	0 0.00	1 0.80	3 2.40	1 0.80	0 0.00	0 .	0 .	0 .	0 .	5 4.00
TOTAL	. .	6 4.80	22 17.60	47 37.60	46 36.80	4 3.20	. .	. .	. .	. .	125 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	177	2	6	13	15	11	1	1	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	5	6	70	135	241	223	102	15	6	0	798
	.	0.07	0.87	1.67	2.98	2.76	1.26	0.19	0.07	0.00	9.88
NNE	5	4	36	85	150	95	22	2	0	0	394
	.	0.05	0.45	1.05	1.86	1.18	0.27	0.02	0.00	0.00	4.88
NE	0	9	30	76	101	38	13	0	0	0	267
	.	0.11	0.37	0.94	1.25	0.47	0.16	0.00	0.00	0.00	3.30
ENE	1	5	30	104	87	26	4	1	0	0	257
	.	0.06	0.37	1.29	1.08	0.32	0.05	0.01	0.00	0.00	3.18
E	0	8	49	135	77	31	2	0	0	0	302
	.	0.10	0.61	1.67	0.95	0.38	0.02	0.00	0.00	0.00	3.74
ESE	1	7	61	123	202	73	12	1	0	0	479
	.	0.09	0.75	1.52	2.50	0.90	0.15	0.01	0.00	0.00	5.93
SE	0	6	62	159	245	125	26	1	0	0	624
	.	0.07	0.77	1.97	3.03	1.55	0.32	0.01	0.00	0.00	7.72
SSE	2	7	53	130	327	237	77	8	0	0	839
	.	0.09	0.66	1.61	4.05	2.93	0.95	0.10	0.00	0.00	10.38
TOTAL	.	89	773	1643	2557	1993	756	198	57	14	8080
	.	1.10	9.57	20.33	31.65	24.67	9.36	2.45	0.71	0.17	100.00

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ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 FREQUENCY PERCENT	WSC2 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	6 .	0 0.00	47 0.58	127 1.57	349 4.32	323 4.00	168 2.08	50 0.62	18 0.22	0 0.00	1082 13.39
SSW	6 .	5 0.06	36 0.45	85 1.05	190 2.35	244 3.02	94 1.16	27 0.33	3 0.04	0 0.00	684 8.47
SW	2 .	7 0.09	54 0.67	91 1.13	95 1.18	99 1.23	40 0.50	9 0.11	3 0.04	0 0.00	398 4.93
WSW	4 .	11 0.14	52 0.64	84 1.04	67 0.83	31 0.38	11 0.14	5 0.06	0 0.00	0 0.00	261 3.23
W	0 .	4 0.05	50 0.62	75 0.93	53 0.66	25 0.31	8 0.10	7 0.09	1 0.01	0 0.00	223 2.76
WNW	0 .	6 0.07	45 0.56	69 0.85	55 0.68	72 0.89	27 0.33	14 0.17	6 0.07	0 0.00	294 3.64
NW	2 .	2 0.02	52 0.64	74 0.92	115 1.42	145 1.79	43 0.53	27 0.33	3 0.04	11 0.14	472 5.84
NNW	6 .	2 0.02	46 0.57	91 1.13	203 2.51	206 2.55	107 1.32	31 0.38	17 0.21	3 0.04	706 8.74
TOTAL	. .	89 1.10	773 9.57	1643 20.33	2557 31.65	1993 24.67	756 9.36	198 2.45	57 0.71	14 0.17	8080 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	2	1	2	1	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	1	0	10	34	63	61	29	7	0	0	204
	.	0.00	1.62	5.51	10.21	9.89	4.70	1.13	0.00	.	33.06
NNE	2	0	3	7	15	6	2	0	0	0	33
	.	0.00	0.49	1.13	2.43	0.97	0.32	0.00	0.00	.	5.35
NE	0	2	0	0	0	0	0	0	0	0	2
	.	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.	0.32
ENE	1	0	1	1	1	1	0	0	0	0	4
	.	0.00	0.16	0.16	0.16	0.16	0.00	0.00	0.00	.	0.65
E	0	0	4	1	1	2	1	0	0	0	9
	.	0.00	0.65	0.16	0.16	0.32	0.16	0.00	0.00	.	1.46
ESE	0	0	0	0	0	2	1	0	0	0	3
	.	0.00	0.00	0.00	0.00	0.32	0.16	0.00	0.00	.	0.49
SE	0	0	1	2	2	1	0	0	0	0	6
	.	0.00	0.16	0.32	0.32	0.16	0.00	0.00	0.00	.	0.97
SSE	0	0	0	2	6	2	1	0	0	0	11
	.	0.00	0.00	0.32	0.97	0.32	0.16	0.00	0.00	.	1.78
TOTAL	.	2	31	81	166	189	98	42	8	.	617
	.	0.32	5.02	13.13	26.90	30.63	15.88	6.81	1.30	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	1	7	11	5	3	3	0	31
	.	0.00	0.16	0.16	1.13	1.78	0.81	0.49	0.49	.	5.02
SSW	0	0	0	1	3	4	7	12	1	0	28
	.	0.00	0.00	0.16	0.49	0.65	1.13	1.94	0.16	.	4.54
SW	0	0	0	2	2	2	0	2	1	0	9
	.	0.00	0.00	0.32	0.32	0.32	0.00	0.32	0.16	.	1.46
WSW	0	0	0	1	0	0	0	2	0	0	3
	.	0.00	0.00	0.16	0.00	0.00	0.00	0.32	0.00	.	0.49
W	0	0	3	0	2	3	0	2	0	0	10
	.	0.00	0.49	0.00	0.32	0.49	0.00	0.32	0.00	.	1.62
WNW	0	0	2	5	6	13	2	2	0	0	30
	.	0.00	0.32	0.81	0.97	2.11	0.32	0.32	0.00	.	4.86
NW	0	0	2	12	28	28	6	5	0	0	81
	.	0.00	0.32	1.94	4.54	4.54	0.97	0.81	0.00	.	13.13
NNW	0	0	4	12	30	53	44	7	3	0	153
	.	0.00	0.65	1.94	4.86	8.59	7.13	1.13	0.49	.	24.80
TOTAL	.	2	31	81	166	189	98	42	8	.	617
	.	0.32	5.02	13.13	26.90	30.63	15.88	6.81	1.30	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	4	1	0	0	2	3	0	1	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	6	9	28	72	34	4	2	0	155
	.	0.00	1.17	1.76	5.48	14.09	6.65	0.78	0.39	0.00	30.33
NNE	1	0	4	7	12	22	4	0	0	0	49
	.	0.00	0.78	1.37	2.35	4.31	0.78	0.00	0.00	0.00	9.59
NE	0	0	0	0	4	2	0	0	0	0	6
	.	0.00	0.00	0.00	0.78	0.39	0.00	0.00	0.00	0.00	1.17
ENE	0	1	1	3	1	0	1	0	0	0	7
	.	0.20	0.20	0.59	0.20	0.00	0.20	0.00	0.00	0.00	1.37
E	0	1	2	7	1	4	0	0	0	0	15
	.	0.20	0.39	1.37	0.20	0.78	0.00	0.00	0.00	0.00	2.94
ESE	0	0	2	2	3	1	0	0	0	0	8
	.	0.00	0.39	0.39	0.59	0.20	0.00	0.00	0.00	0.00	1.57
SE	0	0	4	3	3	1	0	0	0	0	11
	.	0.00	0.78	0.59	0.59	0.20	0.00	0.00	0.00	0.00	2.15
SSE	0	0	2	6	8	4	2	0	0	0	22
	.	0.00	0.39	1.17	1.57	0.78	0.39	0.00	0.00	0.00	4.31
TOTAL	.	2	32	58	130	186	70	24	7	2	511
	.	0.39	6.26	11.35	25.44	36.40	13.70	4.70	1.37	0.39	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	2	21	16	9	4	4	0	57
	.	0.00	0.20	0.39	4.11	3.13	1.76	0.78	0.78	0.00	11.15
SSW	0	0	0	0	6	15	5	4	0	0	30
	.	0.00	0.00	0.00	1.17	2.94	0.98	0.78	0.00	0.00	5.87
SW	0	0	1	1	5	4	1	2	0	0	14
	.	0.00	0.20	0.20	0.98	0.78	0.20	0.39	0.00	0.00	2.74
WSW	0	0	2	1	3	0	0	0	0	0	6
	.	0.00	0.39	0.20	0.59	0.00	0.00	0.00	0.00	0.00	1.17
W	0	0	1	7	1	1	0	1	0	0	11
	.	0.00	0.20	1.37	0.20	0.20	0.00	0.20	0.00	0.00	2.15
WNW	0	0	2	4	9	5	4	4	0	0	28
	.	0.00	0.39	0.78	1.76	0.98	0.78	0.78	0.00	0.00	5.48
NW	0	0	3	4	8	9	0	1	1	2	28
	.	0.00	0.59	0.78	1.57	1.76	0.00	0.20	0.20	0.39	5.48
NNW	1	0	1	2	17	30	10	4	0	0	64
	.	0.00	0.20	0.39	3.33	5.87	1.96	0.78	0.00	0.00	12.52
TOTAL	.	2	32	58	130	186	70	24	7	2	511
	.	0.39	6.26	11.35	25.44	36.40	13.70	4.70	1.37	0.39	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	14 .	0 .	0 .	2 .	1 .	1 .	1 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	4 0.59	18 2.67	41 6.08	29 4.30	24 3.56	3 0.45	4 0.59	0 0.00	123 18.25
NNE	2 .	1 0.15	3 0.45	4 0.59	22 3.26	27 4.01	9 1.34	0 0.00	0 0.00	0 0.00	66 9.79
NE	0 .	0 0.00	2 0.30	6 0.89	3 0.45	2 0.30	1 0.15	0 0.00	0 0.00	0 0.00	14 2.08
ENE	0 .	1 0.15	5 0.74	10 1.48	3 0.45	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	19 2.82
E	0 .	0 0.00	6 0.89	8 1.19	4 0.59	8 1.19	0 0.00	0 0.00	0 0.00	0 0.00	26 3.86
ESE	0 .	0 0.00	7 1.04	6 0.89	13 1.93	4 0.59	1 0.15	1 0.15	0 0.00	0 0.00	32 4.75
SE	0 .	1 0.15	5 0.74	14 2.08	21 3.12	8 1.19	1 0.15	0 0.00	0 0.00	0 0.00	50 7.42
SSE	0 .	2 0.30	0 0.00	9 1.34	16 2.37	7 1.04	2 0.30	0 0.00	0 0.00	0 0.00	36 5.34
TOTAL	. .	5 0.74	50 7.42	122 18.10	204 30.27	176 26.11	75 11.13	29 4.30	10 1.48	3 0.45	674 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	1	0	6	9	15	19	10	6	2	0	67
	.	0.00	0.89	1.34	2.23	2.82	1.48	0.89	0.30	0.00	9.94
SSW	1	0	3	5	14	19	6	3	0	0	50
	.	0.00	0.45	0.74	2.08	2.82	0.89	0.45	0.00	0.00	7.42
SW	0	0	1	8	6	11	2	1	0	0	29
	.	0.00	0.15	1.19	0.89	1.63	0.30	0.15	0.00	0.00	4.30
WSW	0	0	0	3	7	0	0	0	0	0	10
	.	0.00	0.00	0.45	1.04	0.00	0.00	0.00	0.00	0.00	1.48
W	0	0	2	6	2	2	0	1	1	0	14
	.	0.00	0.30	0.89	0.30	0.30	0.00	0.15	0.15	0.00	2.08
WNW	0	0	0	6	5	3	2	0	0	0	16
	.	0.00	0.00	0.89	0.74	0.45	0.30	0.00	0.00	0.00	2.37
NW	0	0	2	5	5	9	4	3	0	3	31
	.	0.00	0.30	0.74	0.74	1.34	0.59	0.45	0.00	0.45	4.60
NNW	0	0	4	5	27	28	13	11	3	0	91
	.	0.00	0.59	0.74	4.01	4.15	1.93	1.63	0.45	0.00	13.50
TOTAL	.	5	50	122	204	176	75	29	10	3	674
	.	0.74	7.42	18.10	30.27	26.11	11.13	4.30	1.48	0.45	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	66	0	3	9	2	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	4	3	26	37	64	46	15	1	0	0	192
	.	0.09	0.81	1.16	2.00	1.44	0.47	0.03	0.00	0.00	6.01
NNE	0	1	15	46	77	36	6	2	0	0	183
	.	0.03	0.47	1.44	2.41	1.13	0.19	0.06	0.00	0.00	5.73
NE	0	4	11	49	75	31	12	0	0	0	182
	.	0.13	0.34	1.53	2.35	0.97	0.38	0.00	0.00	0.00	5.69
ENE	0	1	11	56	54	23	3	1	0	0	149
	.	0.03	0.34	1.75	1.69	0.72	0.09	0.03	0.00	0.00	4.66
E	0	4	20	81	46	13	1	0	0	0	165
	.	0.13	0.63	2.53	1.44	0.41	0.03	0.00	0.00	0.00	5.16
ESE	0	3	25	72	126	54	9	0	0	0	289
	.	0.09	0.78	2.25	3.94	1.69	0.28	0.00	0.00	0.00	9.04
SE	0	1	27	86	119	40	11	1	0	0	285
	.	0.03	0.84	2.69	3.72	1.25	0.34	0.03	0.00	0.00	8.92
SSE	2	2	25	43	98	79	38	4	0	0	289
	.	0.06	0.78	1.35	3.07	2.47	1.19	0.13	0.00	0.00	9.04
TOTAL	.	36	316	735	1002	702	285	82	29	9	3196
	.	1.13	9.89	23.00	31.35	21.96	8.92	2.57	0.91	0.28	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	21 0.66	50 1.56	89 2.78	107 3.35	56 1.75	27 0.84	9 0.28	0 0.00	359 11.23
SSW	4 .	2 0.06	8 0.25	32 1.00	58 1.81	53 1.66	26 0.81	8 0.25	0 0.00	0 0.00	187 5.85
SW	0 .	4 0.13	26 0.81	39 1.22	20 0.63	25 0.78	28 0.88	1 0.03	1 0.03	0 0.00	144 4.51
WSW	0 .	4 0.13	25 0.78	28 0.88	16 0.50	10 0.31	7 0.22	1 0.03	0 0.00	0 0.00	91 2.85
W	0 .	2 0.06	23 0.72	28 0.88	26 0.81	5 0.16	3 0.09	3 0.09	0 0.00	0 0.00	90 2.82
WNW	0 .	3 0.09	21 0.66	32 1.00	21 0.66	41 1.28	10 0.31	7 0.22	6 0.19	0 0.00	141 4.41
NW	1 .	1 0.03	21 0.66	22 0.69	39 1.22	64 2.00	22 0.69	17 0.53	2 0.06	6 0.19	194 6.07
NNW	3 .	1 0.03	11 0.34	34 1.06	74 2.32	75 2.35	38 1.19	9 0.28	11 0.34	3 0.09	256 8.01
TOTAL	. .	36 1.13	316 9.89	735 23.00	1002 31.35	702 21.96	285 8.92	82 2.57	29 0.91	9 0.28	3196 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	65	0	1	1	5	3	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	1	12	20	37	15	0	0	0	0	85
	.	0.05	0.56	0.93	1.72	0.70	0.00	0.00	0.00	.	3.95
NNE	0	2	7	14	21	2	1	0	0	0	47
	.	0.09	0.33	0.65	0.98	0.09	0.05	0.00	0.00	.	2.19
NE	0	2	10	13	19	3	0	0	0	0	47
	.	0.09	0.46	0.60	0.88	0.14	0.00	0.00	0.00	.	2.19
ENE	0	1	5	28	27	2	0	0	0	0	63
	.	0.05	0.23	1.30	1.26	0.09	0.00	0.00	0.00	.	2.93
E	0	1	11	25	23	4	0	0	0	0	64
	.	0.05	0.51	1.16	1.07	0.19	0.00	0.00	0.00	.	2.98
ESE	0	2	20	33	50	12	1	0	0	0	118
	.	0.09	0.93	1.53	2.32	0.56	0.05	0.00	0.00	.	5.49
SE	0	2	20	35	74	60	12	0	0	0	203
	.	0.09	0.93	1.63	3.44	2.79	0.56	0.00	0.00	.	9.44
SSE	0	0	12	44	150	115	32	4	0	0	357
	.	0.00	0.56	2.05	6.97	5.35	1.49	0.19	0.00	.	16.60
TOTAL	.	24	215	392	738	551	209	19	3	.	2151
	.	1.12	10.00	18.22	34.31	25.62	9.72	0.88	0.14	.	100.00

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ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	5	0	6	37	135	128	85	10	0	0	401
	.	0.00	0.28	1.72	6.28	5.95	3.95	0.46	0.00	.	18.64
SSW	1	1	18	25	57	102	50	0	2	0	255
	.	0.05	0.84	1.16	2.65	4.74	2.32	0.00	0.09	.	11.85
SW	2	3	20	22	36	33	4	3	1	0	122
	.	0.14	0.93	1.02	1.67	1.53	0.19	0.14	0.05	.	5.67
WSW	3	5	16	24	13	10	4	0	0	0	72
	.	0.23	0.74	1.12	0.60	0.46	0.19	0.00	0.00	.	3.35
W	0	1	16	19	13	9	1	0	0	0	59
	.	0.05	0.74	0.88	0.60	0.42	0.05	0.00	0.00	.	2.74
WNW	0	2	15	11	10	8	7	1	0	0	54
	.	0.09	0.70	0.51	0.46	0.37	0.33	0.05	0.00	.	2.51
NW	1	0	10	19	30	32	11	1	0	0	103
	.	0.00	0.46	0.88	1.39	1.49	0.51	0.05	0.00	.	4.79
NNW	0	1	17	23	43	16	1	0	0	0	101
	.	0.05	0.79	1.07	2.00	0.74	0.05	0.00	0.00	.	4.70
TOTAL	.	24	215	392	738	551	209	19	3	.	2151
	.	1.12	10.00	18.22	34.31	25.62	9.72	0.88	0.14	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	25	0	0	0	3	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	2	6	11	5	0	0	0	0	0	24
	.	0.29	0.86	1.57	0.71	0.00	0.00	0.00	.	.	3.43
NNE	0	0	1	4	1	1	0	0	0	0	7
	.	0.00	0.14	0.57	0.14	0.14	0.00	0.00	.	.	1.00
NE	0	1	6	5	0	0	0	0	0	0	12
	.	0.14	0.86	0.71	0.00	0.00	0.00	0.00	.	.	1.71
ENE	0	1	7	5	1	0	0	0	0	0	14
	.	0.14	1.00	0.71	0.14	0.00	0.00	0.00	.	.	2.00
E	0	1	4	9	2	0	0	0	0	0	16
	.	0.14	0.57	1.29	0.29	0.00	0.00	0.00	.	.	2.29
ESE	0	1	5	7	10	0	0	0	0	0	23
	.	0.14	0.71	1.00	1.43	0.00	0.00	0.00	.	.	3.29
SE	0	0	1	14	20	14	2	0	0	0	51
	.	0.00	0.14	2.00	2.86	2.00	0.29	0.00	.	.	7.29
SSE	0	1	8	20	44	28	2	0	0	0	103
	.	0.14	1.14	2.86	6.29	4.00	0.29	0.00	.	.	14.71
TOTAL	.	11	87	176	240	165	19	2	.	.	700
	.	1.57	12.43	25.14	34.29	23.57	2.71	0.29	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	11	23	67	38	3	0	0	0	142
	.	0.00	1.57	3.29	9.57	5.43	0.43	0.00	.	.	20.29
SSW	0	1	6	15	37	45	0	0	0	0	104
	.	0.14	0.86	2.14	5.29	6.43	0.00	0.00	.	.	14.86
SW	0	0	5	13	19	17	5	0	0	0	59
	.	0.00	0.71	1.86	2.71	2.43	0.71	0.00	.	.	8.43
WSW	0	1	8	20	17	10	0	2	0	0	58
	.	0.14	1.14	2.86	2.43	1.43	0.00	0.29	.	.	8.29
W	0	0	3	8	2	5	4	0	0	0	22
	.	0.00	0.43	1.14	0.29	0.71	0.57	0.00	.	.	3.14
WNW	0	1	1	5	2	1	2	0	0	0	12
	.	0.14	0.14	0.71	0.29	0.14	0.29	0.00	.	.	1.71
NW	0	1	8	8	3	2	0	0	0	0	22
	.	0.14	1.14	1.14	0.43	0.29	0.00	0.00	.	.	3.14
NNW	0	0	7	9	10	4	1	0	0	0	31
	.	0.00	1.00	1.29	1.43	0.57	0.14	0.00	.	.	4.43
TOTAL	.	11	87	176	240	165	19	2	.	.	700
	.	1.57	12.43	25.14	34.29	23.57	2.71	0.29	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	6 2.60	6 2.60	3 1.30	0 0.00	0 .	0 .	0 .	0 .	15 6.49
NNE	0 .	0 0.00	3 1.30	3 1.30	2 0.87	1 0.43	0 .	0 .	0 .	0 .	9 3.90
NE	0 .	0 0.00	1 0.43	3 1.30	0 0.00	0 0.00	0 .	0 .	0 .	0 .	4 1.73
ENE	0 .	0 0.00	0 0.00	1 0.43	0 0.00	0 0.00	0 .	0 .	0 .	0 .	1 0.43
E	0 .	1 0.43	2 0.87	4 1.73	0 0.00	0 0.00	0 .	0 .	0 .	0 .	7 3.03
ESE	1 .	1 0.43	2 0.87	3 1.30	0 0.00	0 0.00	0 .	0 .	0 .	0 .	6 2.60
SE	0 .	2 0.87	4 1.73	5 2.16	6 2.60	1 0.43	0 .	0 .	0 .	0 .	18 7.79
SSE	0 .	2 0.87	6 2.60	6 2.60	5 2.16	2 0.87	0 .	0 .	0 .	0 .	21 9.09
TOTAL	. .	9 3.90	42 18.18	79 34.20	77 33.33	24 10.39	. .	. .	. .	. .	231 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COPPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0 .	0 0.00	1 0.43	5 2.16	15 6.49	4 1.73	0 .	0 .	0 .	0 .	25 10.82
SSW	0 .	1 0.43	1 0.43	7 3.03	15 6.49	6 2.60	0 .	0 .	0 .	0 .	30 12.99
SW	0 .	0 0.00	1 0.43	6 2.60	7 3.03	7 3.03	0 .	0 .	0 .	0 .	21 9.09
WSW	1 .	1 0.43	1 0.43	7 3.03	11 4.76	1 0.43	0 .	0 .	0 .	0 .	21 9.09
W	0 .	1 0.43	2 0.87	7 3.03	7 3.03	0 0.00	0 .	0 .	0 .	0 .	17 7.36
WNW	0 .	0 0.00	4 1.73	6 2.60	2 0.87	1 0.43	0 .	0 .	0 .	0 .	13 5.63
NW	0 .	0 0.00	6 2.60	4 1.73	2 0.87	1 0.43	0 .	0 .	0 .	0 .	13 5.63
NNW	2 .	0 0.00	2 0.87	6 2.60	2 0.87	0 0.00	0 .	0 .	0 .	0 .	10 4.33
TOTAL	. .	9 3.90	42 18.18	79 34.20	77 33.33	24 10.39	. .	. .	. .	. .	231 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	77	19	86	68	10	4	0	.
	.	.	.	.	.	.	.	.
N	20	4	40	65	27	0	0	136
	.	0.25	2.48	4.02	1.67	0.00	0.00	8.42
NNE	16	16	69	69	15	0	0	169
	.	0.99	4.27	4.27	0.93	0.00	0.00	10.46
NE	17	14	49	38	4	0	0	105
	.	0.87	3.03	2.35	0.25	0.00	0.00	6.50
ENE	24	5	37	12	1	0	0	55
	.	0.31	2.29	0.74	0.06	0.00	0.00	3.41
E	12	8	39	21	1	0	0	69
	.	0.50	2.41	1.30	0.06	0.00	0.00	4.27
ESE	8	6	26	32	8	0	0	72
	.	0.37	1.61	1.98	0.50	0.00	0.00	4.46
SE	28	12	43	84	35	0	0	174
	.	0.74	2.66	5.20	2.17	0.00	0.00	10.77
SSE	22	11	72	85	72	3	0	243
	.	0.68	4.46	5.26	4.46	0.19	0.00	15.05
TOTAL	.	84	465	599	385	72	10	1615
	.	5.20	28.79	37.09	23.84	4.46	0.62	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	37 .	1 0.06	44 2.72	83 5.14	105 6.50	21 1.30	1 0.06	255 15.79
SSW	28 .	1 0.06	9 0.56	25 1.55	49 3.03	28 1.73	7 0.43	119 7.37
SW	4 .	1 0.06	7 0.43	17 1.05	17 1.05	8 0.50	0 0.00	50 3.10
WSW	1 .	1 0.06	7 0.43	10 0.62	3 0.19	2 0.12	1 0.06	24 1.49
W	3 .	0 0.00	5 0.31	8 0.50	5 0.31	2 0.12	1 0.06	21 1.30
WNW	7 .	0 0.00	2 0.12	8 0.50	2 0.12	2 0.12	0 0.00	14 0.87
NW	10 .	1 0.06	8 0.50	13 0.80	4 0.25	0 0.00	0 0.00	26 1.61
NNW	10 .	3 0.19	8 0.50	29 1.80	37 2.29	6 0.37	0 0.00	83 5.14
TOTAL	. .	84 5.20	465 28.79	599 37.09	385 23.84	72 4.46	10 0.62	1615 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	4	0	5	7	0	0	0	.
	.	.	.	.	.	.	.	.
N	4	0	1	22	21	0	0	44
	.	.	0.76	16.67	15.91	0.00	0.00	33.33
NNE	0	0	1	22	6	0	0	29
	.	.	0.76	16.67	4.55	0.00	0.00	21.97
NE	0	0	2	0	0	0	0	2
	.	.	1.52	0.00	0.00	0.00	0.00	1.52
ENE	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	3	0	0	3
	.	.	0.00	0.00	2.27	0.00	0.00	2.27
SSE	0	0	0	2	4	0	0	6
	.	.	0.00	1.52	3.03	0.00	0.00	4.55
TOTAL	.	.	5	58	60	5	4	132
	.	.	3.79	43.94	45.45	3.79	3.03	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	6 .	0 .	0 0.00	0 0.00	3 2.27	0 0.00	0 0.00	3 2.27
SSW	3 .	0 .	1 0.76	1 0.76	2 1.52	2 1.52	4 3.03	10 7.58
SW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
WNW	0 .	0 .	0 0.00	1 0.76	0 0.00	0 0.00	0 0.00	1 0.76
NW	0 .	0 .	0 0.00	8 6.06	3 2.27	0 0.00	0 0.00	11 8.33
NNW	6 .	0 .	0 0.00	2 1.52	18 13.64	3 2.27	0 0.00	23 17.42
TOTAL	. .	. .	5 3.79	58 43.94	60 45.45	5 3.79	4 3.03	132 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	4 / .	0 / .	1 / .	2 / .	0 / .	0 / .	0 / .	. / .
N	0 / .	0 / .	1 / 1.35	5 / 6.76	2 / 2.70	0 / 0.00	0 / 0.00	8 / 10.81
NNE	0 / .	0 / .	1 / 1.35	7 / 9.46	1 / 1.35	0 / 0.00	0 / 0.00	9 / 12.16
NE	0 / .	0 / .	0 / 0.00	0 / 0.00	2 / 2.70	0 / 0.00	0 / 0.00	2 / 2.70
ENE	0 / .	0 / .	2 / 2.70	0 / 0.00	0 / 0.00	0 / 0.00	0 / 0.00	2 / 2.70
E	2 / .	0 / .	2 / 2.70	1 / 1.35	0 / 0.00	0 / 0.00	0 / 0.00	3 / 4.05
ESE	0 / .	0 / .	1 / 1.35	2 / 2.70	0 / 0.00	0 / 0.00	0 / 0.00	3 / 4.05
SE	0 / .	0 / .	0 / 0.00	2 / 2.70	2 / 2.70	0 / 0.00	0 / 0.00	4 / 5.41
SSE	0 / .	0 / .	1 / 1.35	2 / 2.70	7 / 9.46	0 / 0.00	0 / 0.00	10 / 13.51
TOTAL	. / .	. / .	9 / 12.16	22 / 29.73	40 / 54.05	1 / 1.35	2 / 2.70	74 / 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	2 .	0 .	0 0.00	0 0.00	15 20.27	0 0.00	0 0.00	15 20.27
SSW	1 .	0 .	0 0.00	0 0.00	1 1.35	1 1.35	2 2.70	4 5.41
SW	0 .	0 .	0 0.00	0 0.00	1 1.35	0 0.00	0 0.00	1 1.35
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	0 .	0 .	0 0.00	1 1.35	0 0.00	0 0.00	0 0.00	1 1.35
WNW	0 .	0 .	1 1.35	0 0.00	1 1.35	0 0.00	0 0.00	2 2.70
NW	0 .	0 .	0 0.00	1 1.35	0 0.00	0 0.00	0 0.00	1 1.35
NNW	1 .	0 .	0 0.00	1 1.35	8 10.81	0 0.00	0 0.00	9 12.16
TOTAL	. .	. .	9 12.16	22 29.73	40 54.05	1 1.35	2 2.70	74 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 FREQUENCY PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	7 .	0 .	7 .	5 .	1 .	2 .	0 .	. .
N	2 .	0 0.00	3 2.17	11 7.97	2 1.45	0 0.00	0 0.00	16 11.59
NNE	1 .	0 0.00	2 1.45	2 1.45	4 2.90	0 0.00	0 0.00	8 5.80
NE	0 .	1 0.72	0 0.00	7 5.07	0 0.00	0 0.00	0 0.00	8 5.80
ENE	1 .	0 0.00	0 0.00	3 2.17	0 0.00	0 0.00	0 0.00	3 2.17
E	3 .	0 0.00	2 1.45	5 3.62	0 0.00	0 0.00	0 0.00	7 5.07
ESE	1 .	0 0.00	2 1.45	1 0.72	1 0.72	0 0.00	0 0.00	4 2.90
SE	3 .	0 0.00	2 1.45	5 3.62	8 5.80	0 0.00	0 0.00	15 10.87
SSE	0 .	0 0.00	1 0.72	6 4.35	10 7.25	0 0.00	0 0.00	17 12.32
TOTAL	. .	1 0.72	14 10.14	57 41.30	53 38.41	12 8.70	1 0.72	138 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	2 .	0 0.00	0 0.00	4 2.90	11 7.97	4 2.90	0 0.00	19 13.77
SSW	1 .	0 0.00	0 0.00	1 0.72	5 3.62	7 5.07	0 0.00	13 9.42
SW	0 .	0 0.00	1 0.72	0 0.00	5 3.62	1 0.72	0 0.00	7 5.07
WSW	0 .	0 0.00	1 0.72	0 0.00	0 0.00	0 0.00	0 0.00	1 0.72
W	0 .	0 0.00	0 0.00	2 1.45	1 0.72	0 0.00	1 0.72	4 2.90
WNW	0 .	0 0.00	0 0.00	3 2.17	0 0.00	0 0.00	0 0.00	3 2.17
NW	1 .	0 0.00	0 0.00	0 0.00	1 0.72	0 0.00	0 0.00	1 0.72
NNW	0 .	0 0.00	0 0.00	7 5.07	5 3.62	0 0.00	0 0.00	12 8.70
TOTAL	. .	1 0.72	14 10.14	57 41.30	53 38.41	12 8.70	1 0.72	138 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	10 .	2 .	22 .	45 .	8 .	2 .	0 .	. .
N	5 .	1 0.16	22 3.47	24 3.79	1 0.16	0 0.00	0 0.00	48 7.57
NNE	7 .	0 0.00	19 3.00	29 4.57	4 0.63	0 0.00	0 0.00	52 8.20
NE	8 .	0 0.00	21 3.31	29 4.57	2 0.32	0 0.00	0 0.00	52 8.20
ENE	10 .	0 0.00	16 2.52	7 1.10	1 0.16	0 0.00	0 0.00	24 3.79
E	3 .	0 0.00	20 3.15	12 1.89	1 0.16	0 0.00	0 0.00	33 5.21
ESE	4 .	1 0.16	9 1.42	26 4.10	6 0.95	0 0.00	0 0.00	42 6.62
SE	8 .	0 0.00	8 1.26	46 7.26	18 2.84	0 0.00	0 0.00	72 11.36
SSE	2 .	0 0.00	13 2.05	36 5.68	38 5.99	3 0.47	0 0.00	90 14.20
TOTAL	. .	2 0.32	147 23.19	286 45.11	152 23.97	44 6.94	3 0.47	634 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	9	0	8	29	42	15	1	95
	.	0.00	1.26	4.57	6.62	2.37	0.16	14.98
SSW	6	0	1	14	23	14	1	53
	.	0.00	0.16	2.21	3.63	2.21	0.16	8.36
SW	4	0	2	6	7	6	0	21
	.	0.00	0.32	0.95	1.10	0.95	0.00	3.31
WSW	0	0	3	4	2	1	1	11
	.	0.00	0.47	0.63	0.32	0.16	0.16	1.74
W	1	0	0	2	2	0	0	4
	.	0.00	0.00	0.32	0.32	0.00	0.00	0.63
WNW	1	0	1	3	0	2	0	6
	.	0.00	0.16	0.47	0.00	0.32	0.00	0.95
NW	5	0	2	2	0	0	0	4
	.	0.00	0.32	0.32	0.00	0.00	0.00	0.63
NNW	0	0	2	17	5	3	0	27
	.	0.00	0.32	2.68	0.79	0.47	0.00	4.26
TOTAL	.	2	147	286	152	44	3	634
	.	0.32	23.19	45.11	23.97	6.94	0.47	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	26 .	4 .	35 .	9 .	1 .	0 .	0 .	. .
N	9 .	1 0.21	8 1.69	3 0.63	1 0.21	0 0.00	0 .	13 2.74
NNE	6 .	9 1.90	28 5.91	9 1.90	0 0.00	0 0.00	0 .	46 9.70
NE	7 .	2 0.42	21 4.43	2 0.42	0 0.00	0 0.00	0 .	25 5.27
ENE	10 .	2 0.42	18 3.80	2 0.42	0 0.00	0 0.00	0 .	22 4.64
E	2 .	2 0.42	10 2.11	3 0.63	0 0.00	0 0.00	0 .	15 3.16
ESE	1 .	2 0.42	12 2.53	3 0.63	1 0.21	0 0.00	0 .	18 3.80
SE	12 .	1 0.21	18 3.80	31 6.54	4 0.84	0 0.00	0 .	54 11.39
SSE	18 .	0 0.00	34 7.17	38 8.02	13 2.74	0 0.00	0 .	85 17.93
TOTAL	. .	20 4.22	195 41.14	174 36.71	76 16.03	9 1.90	. .	474 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	14	0	26	49	34	2	0	111
	.	0.00	5.49	10.34	7.17	0.42	.	23.42
SSW	15	0	3	9	17	4	0	33
	.	0.00	0.63	1.90	3.59	0.84	.	6.96
SW	0	0	3	11	3	1	0	18
	.	0.00	0.63	2.32	0.63	0.21	.	3.80
WSW	0	0	1	6	1	1	0	9
	.	0.00	0.21	1.27	0.21	0.21	.	1.90
W	1	0	4	3	0	1	0	8
	.	0.00	0.84	0.63	0.00	0.21	.	1.69
WNW	5	0	0	1	1	0	0	2
	.	0.00	0.00	0.21	0.21	0.00	.	0.42
NW	4	0	3	2	0	0	0	5
	.	0.00	0.63	0.42	0.00	0.00	.	1.05
NNW	2	1	6	2	1	0	0	10
	.	0.21	1.27	0.42	0.21	0.00	.	2.11
TOTAL	.	20	195	174	76	9	.	474
	.	4.22	41.14	36.71	16.03	1.90	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	26 .	7 .	15 .	0 .	0 .	0 .	0 .	. .
N	0 .	2 1.53	5 3.82	0 0.00	0 0.00	0 0.00	0 .	7 5.34
NNE	1 .	4 3.05	13 9.92	0 0.00	0 0.00	0 0.00	0 .	17 12.98
NE	2 .	8 6.11	5 3.82	0 0.00	0 0.00	0 0.00	0 .	13 9.92
ENE	3 .	3 2.29	1 0.76	0 0.00	0 0.00	0 0.00	0 .	4 3.05
E	0 .	4 3.05	5 3.82	0 0.00	0 0.00	0 0.00	0 .	9 6.87
ESE	1 .	3 2.29	2 1.53	0 0.00	0 0.00	0 0.00	0 .	5 3.82
SE	5 .	6 4.58	12 9.16	0 0.00	0 0.00	0 0.00	0 .	18 13.74
SSE	2 .	6 4.58	20 15.27	1 0.76	0 0.00	0 0.00	0 .	27 20.61
TOTAL	. .	41 31.30	84 64.12	2 1.53	3 2.29	1 0.76	. .	131 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	2	1	10	1	0	0	0	12
	.	0.76	7.63	0.76	0.00	0.00	.	9.16
SSW	2	0	4	0	1	0	0	5
	.	0.00	3.05	0.00	0.76	0.00	.	3.82
SW	0	1	1	0	0	0	0	2
	.	0.76	0.76	0.00	0.00	0.00	.	1.53
WSW	1	1	2	0	0	0	0	3
	.	0.76	1.53	0.00	0.00	0.00	.	2.29
W	1	0	1	0	2	1	0	4
	.	0.00	0.76	0.00	1.53	0.76	.	3.05
WNW	1	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
NW	0	1	3	0	0	0	0	4
	.	0.76	2.29	0.00	0.00	0.00	.	3.05
NNW	1	1	0	0	0	0	0	1
	.	0.76	0.00	0.00	0.00	0.00	.	0.76
TOTAL	.	41	84	2	3	1	.	131
	.	31.30	64.12	1.53	2.29	0.76	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
.	0 .	6 .	1 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNE	1 .	3 9.38	5 15.63	0 .	0 0.00	0 .	0 .	8 25.00
NE	0 .	3 9.38	0 0.00	0 .	0 0.00	0 .	0 .	3 9.38
ENE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
E	2 .	2 6.25	0 0.00	0 .	0 0.00	0 .	0 .	2 6.25
ESE	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
SE	0 .	5 15.63	3 9.38	0 .	0 0.00	0 .	0 .	8 25.00
SSE	0 .	5 15.63	3 9.38	0 .	0 0.00	0 .	0 .	8 25.00
TOTAL	. .	20 62.50	11 34.38	. .	1 3.13	. .	. .	32 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - SEPTEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	TOTAL
S	2 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
SSW	0 / .	1 / 3.13	0 / 0.00	0 / .	0 / 0.00	0 / .	0 / .	1 / 3.13
SW	0 / .	0 / 0.00	0 / 0.00	0 / .	1 / 3.13	0 / .	0 / .	1 / 3.13
WSW	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
W	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
WNW	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
NW	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
NNW	0 / .	1 / 3.13	0 / 0.00	0 / .	0 / 0.00	0 / .	0 / .	1 / 3.13
TOTAL	. / .	20 / 62.50	11 / 34.38	. / .	1 / 3.13	. / .	. / .	32 / 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	130 .	1 .	7 .	28 .	4 .	2 .	0 .	0 .	0 .	. .
N	70 .	1 0.09	26 2.26	16 1.39	31 2.70	17 1.48	0 0.00	0 0.00	0 0.00	91 7.93
NNE	31 .	6 0.52	24 2.09	16 1.39	20 1.74	16 1.39	0 0.00	0 0.00	0 0.00	82 7.14
NE	17 .	4 0.35	35 3.05	16 1.39	0 0.00	1 0.09	0 0.00	0 0.00	0 0.00	56 4.88
ENE	11 .	5 0.44	21 1.83	8 0.70	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	34 2.96
E	9 .	3 0.26	8 0.70	8 0.70	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	19 1.66
ESE	23 .	8 0.70	16 1.39	6 0.52	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	30 2.61
SE	82 .	8 0.70	32 2.79	27 2.35	8 0.70	0 0.00	0 0.00	0 0.00	0 0.00	75 6.53
SSE	88 .	5 0.44	44 3.83	35 3.05	19 1.66	7 0.61	0 0.00	0 0.00	0 0.00	110 9.58
TOTAL	. .	45 3.92	353 30.75	320 27.87	278 24.22	125 10.89	15 1.31	11 0.96	1 0.09	1148 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 / FREQUENCY / PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	175	2	46	54	69	18	1	0	0	190
	.	0.17	4.01	4.70	6.01	1.57	0.09	0.00	0.00	16.55
SSW	84	1	29	28	33	18	2	0	0	111
	.	0.09	2.53	2.44	2.87	1.57	0.17	0.00	0.00	9.67
SW	28	0	17	19	11	2	1	0	0	50
	.	0.00	1.48	1.66	0.96	0.17	0.09	0.00	0.00	4.36
WSW	22	0	6	4	4	4	0	0	0	18
	.	0.00	0.52	0.35	0.35	0.35	0.00	0.00	0.00	1.57
W	24	0	11	13	7	3	0	0	0	34
	.	0.00	0.96	1.13	0.61	0.26	0.00	0.00	0.00	2.96
WNW	37	0	13	22	22	2	0	0	0	59
	.	0.00	1.13	1.92	1.92	0.17	0.00	0.00	0.00	5.14
NW	64	1	13	30	31	12	4	5	0	96
	.	0.09	1.13	2.61	2.70	1.05	0.35	0.44	0.00	8.36
NNW	90	1	12	18	23	25	7	6	1	93
	.	0.09	1.05	1.57	2.00	2.18	0.61	0.52	0.09	8.10
TOTAL	.	45	353	320	278	125	15	11	1	1148
	.	3.92	30.75	27.87	24.22	10.89	1.31	0.96	0.09	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	4	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	9	0	0	3	16	2	0	0	0	21
	.	.	.	4.41	23.53	2.94	0.00	0.00	.	30.88
NNE	1	0	0	1	3	0	0	0	0	4
	.	.	.	1.47	4.41	0.00	0.00	0.00	.	5.88
NE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
TOTAL	.	.	.	14	28	16	4	6	.	68
	.	.	.	20.59	41.18	23.53	5.88	8.82	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	5	0	0	0	0	0	1	0	0	1
	.	.	.	0.00	0.00	0.00	1.47	0.00	.	1.47
SSW	1	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SW	0	0	0	0	0	1	0	0	0	1
	.	.	.	0.00	0.00	1.47	0.00	0.00	.	1.47
WSW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
W	0	0	0	1	0	0	0	0	0	1
	.	.	.	1.47	0.00	0.00	0.00	0.00	.	1.47
WNW	7	0	0	2	0	0	0	0	0	2
	.	.	.	2.94	0.00	0.00	0.00	0.00	.	2.94
NW	8	0	0	4	5	3	2	5	0	19
	.	.	.	5.88	7.35	4.41	2.94	7.35	[illegible]	27.94
NNW	23	0	0	3	4	10	1	1	0	19
	.	.	.	4.41	5.88	14.71	1.47	1.47	.	27.94
TOTAL	.	.	.	14	28	16	4	6	.	68
	.	.	.	20.59	41.18	23.53	5.88	8.82	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	4 .	0 .	0 .	4 .	1 .	0 .	0 .	0 .	0 .	. .
N	9 .	0 .	1 1.82	2 3.64	10 18.18	9 16.36	0 0.00	0 .	0 .	22 40.00
NNE	0 .	0 .	0 0.00	0 0.00	4 7.27	8 14.55	0 0.00	0 .	0 .	12 21.82
NE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
ENE	0 .	0 .	1 1.82	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	1 1.82
E	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
ESE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
SE	0 .	0 .	1 1.82	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	1 1.82
SSE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
TOTAL	. .	. .	3 5.45	4 7.27	23 41.82	24 43.64	1 1.82	. .	. .	55 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	10	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSW	15	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SW	3	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
WSW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
W	1	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
WNW	6	0	0	0	2	2	0	0	0	4
	.	.	0.00	0.00	3.64	3.64	0.00	.	.	7.27
NW	7	0	0	2	2	1	0	0	0	5
	.	.	0.00	3.64	3.64	1.82	0.00	.	.	9.09
NNW	11	0	0	0	5	4	1	0	0	10
	.	.	0.00	0.00	9.09	7.27	1.82	.	.	18.18
TOTAL	.	.	3	4	23	24	1	.	.	55
	.	.	5.45	7.27	41.82	43.64	1.82	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 FREQUENCY PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	10	0	0	0	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	14	0	0	2	3	6	0	0	0	11
	.	.	0.00	3.57	5.36	10.71	.	.	.	19.64
NNE	3	0	1	2	7	2	0	0	0	12
	.	.	1.79	3.57	12.50	3.57	.	.	.	21.43
NE	0	0	1	0	0	0	0	0	0	1
	.	.	1.79	0.00	0.00	0.00	.	.	.	1.79
ENE	0	0	1	0	0	0	0	0	0	1
	.	.	1.79	0.00	0.00	0.00	.	.	.	1.79
E	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	1	0	1	2	0	0	0	0	0	3
	.	.	1.79	3.57	0.00	0.00	.	.	.	5.36
SSE	1	0	1	1	0	0	0	0	0	2
	.	.	1.79	1.79	0.00	0.00	.	.	.	3.57
TOTAL	.	.	6	14	22	14	.	.	.	56
	.	.	10.71	25.00	39.29	25.00	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	13	0	0	1	1	1	0	0	0	3
	.	.	0.00	1.79	1.79	1.79	.	.	.	5.36
SSW	14	0	0	0	4	2	0	0	0	6
	.	.	0.00	0.00	7.14	3.57	.	.	.	10.71
SW	3	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
WSW	1	0	1	1	0	0	0	0	0	2
	.	.	1.79	1.79	0.00	0.00	.	.	.	3.57
W	1	0	0	1	0	1	0	0	0	2
	.	.	0.00	1.79	0.00	1.79	.	.	.	3.57
WNW	4	0	0	2	2	0	0	0	0	4
	.	.	0.00	3.57	3.57	0.00	.	.	.	7.14
NW	11	0	0	1	3	0	0	0	0	4
	.	.	0.00	1.79	5.36	0.00	.	.	.	7.14
NNW	13	0	0	1	2	2	0	0	0	5
	.	.	0.00	1.79	3.57	3.57	.	.	.	8.93
TOTAL	.	.	6	14	22	14	.	.	.	56
	.	.	10.71	25.00	39.29	25.00	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	54 .	1 .	2 .	18 .	1 .	2 .	0 .	0 .	0 .	. .
N	20 .	0 0.00	9 1.97	8 1.75	2 0.44	0 0.00	0 0.00	0 0.00	0 0.00	19 4.15
NNE	6 .	1 0.22	13 2.84	12 2.62	6 1.31	6 1.31	0 0.00	0 0.00	0 0.00	38 8.30
NE	3 .	1 0.22	12 2.62	15 3.28	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	28 6.11
ENE	1 .	1 0.22	9 1.97	8 1.75	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	18 3.93
E	2 .	0 0.00	5 1.09	3 0.66	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	8 1.75
ESE	4 .	0 0.00	4 0.87	4 0.87	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	8 1.75
SE	14 .	0 0.00	6 1.31	9 1.97	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	15 3.28
SSE	23 .	0 0.00	5 1.09	13 2.84	10 2.18	3 0.66	0 0.00	0 0.00	0 0.00	31 6.77
TOTAL	. .	4 0.87	109 23.80	156 34.06	123 26.86	50 10.92	10 2.18	5 1.09	1 0.22	458 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	42	0	8	21	43	12	0	0	0	84
	.	0.00	1.75	4.59	9.39	2.62	0.00	0.00	0.00	18.34
SSW	17	0	8	12	14	9	2	0	0	45
	.	0.00	1.75	2.62	3.06	1.97	0.44	0.00	0.00	9.83
SW	13	0	9	7	5	1	1	0	0	23
	.	0.00	1.97	1.53	1.09	0.22	0.22	0.00	0.00	5.02
WSW	14	0	2	1	1	1	0	0	0	5
	.	0.00	0.44	0.22	0.22	0.22	0.00	0.00	0.00	1.09
W	16	0	2	8	5	1	0	0	0	16
	.	0.00	0.44	1.75	1.09	0.22	0.00	0.00	0.00	3.49
WNW	16	0	6	8	13	0	0	0	0	27
	.	0.00	1.31	1.75	2.84	0.00	0.00	0.00	0.00	5.90
NW	34	0	5	15	16	8	2	0	0	46
	.	0.00	1.09	3.28	3.49	1.75	0.44	0.00	0.00	10.04
NNW	34	1	6	12	8	9	5	5	1	47
	.	0.22	1.31	2.62	1.75	1.97	1.09	1.09	0.22	10.26
TOTAL	.	4	109	156	123	50	10	5	1	458
	.	0.87	23.80	34.06	26.86	10.92	2.18	1.09	0.22	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	38	0	3	4	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	12	1	14	1	0	0	0	0	0	16
	.	0.25	3.53	0.25	0.00	0.00	.	.	.	4.03
NNE	10	4	9	1	0	0	0	0	0	14
	.	1.01	2.27	0.25	0.00	0.00	.	.	.	3.53
NE	3	2	19	1	0	0	0	0	0	22
	.	0.50	4.79	0.25	0.00	0.00	.	.	.	5.54
ENE	2	2	7	0	0	0	0	0	0	9
	.	0.50	1.76	0.00	0.00	0.00	.	.	.	2.27
E	1	1	3	5	0	0	0	0	0	9
	.	0.25	0.76	1.26	0.00	0.00	.	.	.	2.27
ESE	3	4	9	2	0	0	0	0	0	15
	.	1.01	2.27	0.50	0.00	0.00	.	.	.	3.78
SE	22	3	15	15	6	0	0	0	0	39
	.	0.76	3.78	3.78	1.51	0.00	.	.	.	9.82
SSE	38	2	22	21	9	4	0	0	0	58
	.	0.50	5.54	5.29	2.27	1.01	.	.	.	14.61
TOTAL	.	20	169	113	77	18	.	.	.	397
	.	5.04	42.57	28.46	19.40	4.53	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	82 .	0 0.00	18 4.53	25 6.30	25 6.30	5 1.26	0 .	0 .	0 .	73 18.39
SSW	27 .	0 0.00	16 4.03	10 2.52	15 3.78	7 1.76	0 .	0 .	0 .	48 12.09
SW	5 .	0 0.00	7 1.76	8 2.02	4 1.01	0 0.00	0 .	0 .	0 .	19 4.79
WSW	5 .	0 0.00	2 0.50	2 0.50	3 0.76	1 0.25	0 .	0 .	0 .	8 2.02
W	2 .	0 0.00	7 1.76	2 0.50	2 0.50	1 0.25	0 .	0 .	0 .	12 3.02
WNW	2 .	0 0.00	7 1.76	10 2.52	5 1.26	0 0.00	0 .	0 .	0 .	22 5.54
NW	2 .	1 0.25	8 2.02	8 2.02	5 1.26	0 0.00	0 .	0 .	0 .	22 5.54
NNW	7 .	0 0.00	6 1.51	2 0.50	3 0.76	0 0.00	0 .	0 .	0 .	11 2.77
TOTAL	. .	20 5.04	169 42.57	113 28.46	77 19.40	18 4.53	. .	. .	. .	397 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 FREQUENCY PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	12	0	2	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	5	0	2	0	0	0	0	0	0	2
	.	0.00	2.15	0.00	0.00	0.00	.	.	.	2.15
NNE	7	1	1	0	0	0	0	0	0	2
	.	1.08	1.08	0.00	0.00	0.00	.	.	.	2.15
NE	5	1	2	0	0	0	0	0	0	3
	.	1.08	2.15	0.00	0.00	0.00	.	.	.	3.23
ENE	5	2	2	0	0	0	0	0	0	4
	.	2.15	2.15	0.00	0.00	0.00	.	.	.	4.30
E	3	2	0	0	0	0	0	0	0	2
	.	2.15	0.00	0.00	0.00	0.00	.	.	.	2.15
ESE	9	4	2	0	0	0	0	0	0	6
	.	4.30	2.15	0.00	0.00	0.00	.	.	.	6.45
SE	37	5	7	1	2	0	0	0	0	15
	.	5.38	7.53	1.08	2.15	0.00	.	.	.	16.13
SSE	16	2	12	0	0	0	0	0	0	14
	.	2.15	12.90	0.00	0.00	0.00	.	.	.	15.05
TOTAL	.	18	49	19	5	2	.	.	.	93
	.	19.35	52.69	20.43	5.38	2.15	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	15 .	1 1.08	13 13.98	7 7.53	0 0.00	0 0.00	0 .	0 .	0 .	21 22.58
SSW	8 .	0 0.00	4 4.30	6 6.45	0 0.00	0 0.00	0 .	0 .	0 .	10 10.75
SW	3 .	0 0.00	1 1.08	4 4.30	2 2.15	0 0.00	0 .	0 .	0 .	7 7.53
WSW	2 .	0 0.00	1 1.08	0 0.00	0 0.00	2 2.15	0 .	0 .	0 .	3 3.23
W	3 .	0 0.00	2 2.15	1 1.08	0 0.00	0 0.00	0 .	0 .	0 .	3 3.23
WNW	2 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NW	2 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNW	1 .	0 0.00	0 0.00	0 0.00	1 1.08	0 0.00	0 .	0 .	0 .	1 1.08
TOTAL	. .	18 19.35	49 52.69	19 20.43	5 5.38	2 2.15	. .	. .	. .	93 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 / FREQUENCY / PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	8 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	. / .
N	1 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
NNE	4 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
NE	6 / .	0 / 0.00	1 / 4.76	0 / .	0 / .	1 / 4.76	0 / .	0 / .	0 / .	2 / 9.52
ENE	3 / .	0 / 0.00	1 / 4.76	0 / .	0 / .	0 / 0.00	0 / .	0 / .	0 / .	1 / 4.76
E	3 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / .	0 / 0.00
ESE	7 / .	0 / 0.00	1 / 4.76	0 / .	0 / .	0 / 0.00	0 / .	0 / .	0 / .	1 / 4.76
SE	8 / .	0 / 0.00	2 / 9.52	0 / .	0 / .	0 / 0.00	0 / .	0 / .	0 / .	2 / 9.52
SSE	10 / .	1 / 4.76	4 / 19.05	0 / .	0 / .	0 / 0.00	0 / .	0 / .	0 / .	5 / 23.81
TOTAL	. / .	3 / 14.29	17 / 80.95	. / .	. / .	1 / 4.76	. / .	. / .	. / .	21 / 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
OCTOBER - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	8 .	1 4.76	7 33.33	0 .	0 .	0 0.00	0 .	0 .	0 .	8 38.10
SSW	2 .	1 4.76	1 4.76	0 .	0 .	0 0.00	0 .	0 .	0 .	2 9.52
SW	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
WNW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNW	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
TOTAL	. .	3 14.29	17 80.95	. .	. .	1 4.76	. .	. .	. .	21 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	207	20	93	96	14	6	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	90	5	66	81	58	17	0	0	0	227
	.	0.18	2.39	2.93	2.10	0.62	0.00	0.00	0.00	8.22
NNE	47	22	93	85	35	16	0	0	0	251
	.	0.80	3.37	3.08	1.27	0.58	0.00	0.00	0.00	9.08
NE	34	18	84	54	4	1	0	0	0	161
	.	0.65	3.04	1.95	0.14	0.04	0.00	0.00	0.00	5.83
ENE	35	10	58	20	1	0	0	0	0	89
	.	0.36	2.10	0.72	0.04	0.00	0.00	0.00	0.00	3.22
E	21	11	47	29	1	0	0	0	0	88
	.	0.40	1.70	1.05	0.04	0.00	0.00	0.00	0.00	3.18
ESE	31	14	42	38	8	0	0	0	0	102
	.	0.51	1.52	1.38	0.29	0.00	0.00	0.00	0.00	3.69
SE	110	20	75	111	43	0	0	0	0	249
	.	0.72	2.71	4.02	1.56	0.00	0.00	0.00	0.00	9.01
SSE	110	16	116	120	91	10	0	0	0	353
	.	0.58	4.20	4.34	3.29	0.36	0.00	0.00	0.00	12.78
TOTAL	.	129	818	919	663	197	25	11	1	2763
	.	4.67	29.61	33.26	24.00	7.13	0.90	0.40	0.04	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 FREQUENCY PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	212	3	90	137	174	39	2	0	0	445
	.	0.11	3.26	4.96	6.30	1.41	0.07	0.00	0.00	16.11
SSW	112	2	38	53	82	46	9	0	0	230
	.	0.07	1.38	1.92	2.97	1.66	0.33	0.00	0.00	8.32
SW	32	1	24	36	28	10	1	0	0	100
	.	0.04	0.87	1.30	1.01	0.36	0.04	0.00	0.00	3.62
WSW	23	1	13	14	7	6	1	0	0	42
	.	0.04	0.47	0.51	0.25	0.22	0.04	0.00	0.00	1.52
W	27	0	16	21	12	5	1	0	0	55
	.	0.00	0.58	0.76	0.43	0.18	0.04	0.00	0.00	1.99
WNW	44	0	15	30	24	4	0	0	0	73
	.	0.00	0.54	1.09	0.87	0.14	0.00	0.00	0.00	2.64
NW	74	2	21	43	35	12	4	5	0	122
	.	0.07	0.76	1.56	1.27	0.43	0.14	0.18	0.00	4.42
NNW	100	4	20	47	60	31	7	6	1	176
	.	0.14	0.72	1.70	2.17	1.12	0.25	0.22	0.04	6.37
TOTAL	.	129	818	919	663	197	25	11	1	2763
	.	4.67	29.61	33.26	24.00	7.13	0.90	0.40	0.04	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 FREQUENCY PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	8	0	5	7	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	13	0	1	25	37	2	0	0	0	65
	.	.	0.50	12.50	18.50	1.00	0.00	0.00	.	32.50
NNE	1	0	1	23	9	0	0	0	0	33
	.	.	0.50	11.50	4.50	0.00	0.00	0.00	.	16.50
NE	0	0	2	0	0	0	0	0	0	2
	.	.	1.00	0.00	0.00	0.00	0.00	0.00	.	1.00
ENE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	3	0	0	0	0	3
	.	.	0.00	0.00	1.50	0.00	0.00	0.00	.	1.50
SSE	0	0	0	2	4	0	0	0	0	6
	.	.	0.00	1.00	2.00	0.00	0.00	0.00	.	3.00
TOTAL	.	.	5	72	88	21	8	6	.	200
	.	.	2.50	36.00	44.00	10.50	4.00	3.00	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	11	0	0	0	3	0	1	0	0	4
	.	.	0.00	0.00	1.50	0.00	0.50	0.00	.	2.00
SSW	4	0	1	1	2	2	4	0	0	10
	.	.	0.50	0.50	1.00	1.00	2.00	0.00	.	5.00
SW	0	0	0	0	0	1	0	0	0	1
	.	.	0.00	0.00	0.00	0.50	0.00	0.00	.	0.50
WSW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
W	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	0.50	0.00	0.00	0.00	0.00	.	0.50
WNW	7	0	0	3	0	0	0	0	0	3
	.	.	0.00	1.50	0.00	0.00	0.00	0.00	.	1.50
NW	8	0	0	12	8	3	2	5	0	30
	.	.	0.00	6.00	4.00	1.50	1.00	2.50	.	15.00
NNW	29	0	0	5	22	13	1	1	0	42
	.	.	0.00	2.50	11.00	6.50	0.50	0.50	.	21.00
TOTAL	.	.	5	72	88	21	8	6	.	200
	.	.	2.50	36.00	44.00	10.50	4.00	3.00	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	8	0	1	6	1	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	9	0	2	7	12	9	0	0	0	30
	.	.	1.55	5.43	9.30	6.98	0.00	.	.	23.26
NNE	0	0	1	7	5	8	0	0	0	21
	.	.	0.78	5.43	3.88	6.20	0.00	.	.	16.28
NE	0	0	0	0	2	0	0	0	0	2
	.	.	0.00	0.00	1.55	0.00	0.00	.	.	1.55
ENE	0	0	3	0	0	0	0	0	0	3
	.	.	2.33	0.00	0.00	0.00	0.00	.	.	2.33
E	2	0	2	1	0	0	0	0	0	3
	.	.	1.55	0.78	0.00	0.00	0.00	.	.	2.33
ESE	0	0	1	2	0	0	0	0	0	3
	.	.	0.78	1.55	0.00	0.00	0.00	.	.	2.33
SE	0	0	1	2	2	0	0	0	0	5
	.	.	0.78	1.55	1.55	0.00	0.00	.	.	3.88
SSE	0	0	1	2	7	0	0	0	0	10
	.	.	0.78	1.55	5.43	0.00	0.00	.	.	7.75
TOTAL	.	.	12	26	63	25	3	.	.	129
	.	.	9.30	20.16	48.84	19.38	2.33	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 FREQUENCY PERCENT	WSC1 .	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	12 .	0 .	0 0.00	0 0.00	15 11.63	0 0.00	0 0.00	0 .	0 .	15 11.63
SSW	16 .	0 .	0 0.00	0 0.00	1 0.78	1 0.78	2 1.55	0 .	0 .	4 3.10
SW	3 .	0 .	0 0.00	0 0.00	1 0.78	0 0.00	0 0.00	0 .	0 .	1 0.78
WSW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
W	1 .	0 .	0 0.00	1 0.78	0 0.00	0 0.00	0 0.00	0 .	0 .	1 0.78
WNW	6 .	0 .	1 0.78	0 0.00	3 2.33	2 1.55	0 0.00	0 .	0 .	6 4.65
NW	7 .	0 .	0 0.00	3 2.33	2 1.55	1 0.78	0 0.00	0 .	0 .	6 4.65
NNW	12 .	0 .	0 0.00	1 0.78	13 10.08	4 3.10	1 0.78	0 .	0 .	19 14.73
TOTAL	. .	. .	12 9.30	26 20.16	63 48.84	25 19.38	3 2.33	. .	. .	129 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	17 .	0 .	7 .	5 .	3 .	2 .	0 .	0 .	0 .	. .
N	16 .	0 0.00	3 1.55	13 6.70	5 2.58	6 3.09	0 0.00	0 .	0 .	27 13.92
NNE	4 .	0 0.00	3 1.55	4 2.06	11 5.67	2 1.03	0 0.00	0 .	0 .	20 10.31
NE	0 .	1 0.52	1 0.52	7 3.61	0 0.00	0 0.00	0 0.00	0 .	0 .	9 4.64
ENE	1 .	0 0.00	1 0.52	3 1.55	0 0.00	0 0.00	0 0.00	0 .	0 .	4 2.06
E	3 .	0 0.00	2 1.03	5 2.58	0 0.00	0 0.00	0 0.00	0 .	0 .	7 3.61
ESE	1 .	0 0.00	2 1.03	1 0.52	1 0.52	0 0.00	0 0.00	0 .	0 .	4 2.06
SE	4 .	0 0.00	3 1.55	7 3.61	8 4.12	0 0.00	0 0.00	0 .	0 .	13 9.28
SSE	1 .	0 0.00	2 1.03	7 3.61	10 5.15	0 0.00	0 0.00	0 .	0 .	19 9.79
TOTAL	. .	1 0.52	20 10.31	71 36.60	75 38.66	26 13.40	1 0.52	. .	. .	194 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	15 .	0 0.00	0 0.00	5 2.58	12 6.19	5 2.58	0 0.00	0 .	0 .	22 11.34
SSW	15 .	0 0.00	0 0.00	1 0.52	9 4.64	9 4.64	0 0.00	0 .	0 .	19 9.79
SW	3 .	0 0.00	1 0.52	0 0.00	5 2.58	1 0.52	0 0.00	0 .	0 .	7 3.61
WSW	1 .	0 0.00	2 1.03	1 0.52	0 0.00	0 0.00	0 0.00	0 .	0 .	3 1.55
W	1 .	0 0.00	0 0.00	3 1.55	1 0.52	1 0.52	1 0.52	0 .	0 .	6 3.09
WNW	4 .	0 0.00	0 0.00	5 2.58	2 1.03	0 0.00	0 0.00	0 .	0 .	7 3.61
NW	12 .	0 0.00	0 0.00	1 0.52	4 2.06	0 0.00	0 0.00	0 .	0 .	5 2.58
NNW	13 .	0 0.00	0 0.00	8 4.12	7 3.61	2 1.03	0 0.00	0 .	0 .	17 8.76
TOTAL	. .	1 0.52	20 10.31	71 36.60	75 38.66	26 13.40	1 0.52	. .	. .	194 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	64 .	3 .	24 .	63 .	9 .	4 .	0 .	0 .	0 .	. .
N	25 .	1 0.09	31 2.84	32 2.93	3 0.27	0 0.00	0 0.00	0 0.00	0 0.00	67 6.14
NNE	13 .	1 0.09	32 2.93	41 3.75	10 0.92	6 0.55	0 0.00	0 0.00	0 0.00	90 8.24
NE	11 .	1 0.09	33 3.02	44 4.03	2 0.18	0 0.00	0 0.00	0 0.00	0 0.00	80 7.33
ENE	11 .	1 0.09	25 2.29	15 1.37	1 0.09	0 0.00	0 0.00	0 0.00	0 0.00	42 3.85
E	5 .	0 0.00	25 2.29	15 1.37	1 0.09	0 0.00	0 0.00	0 0.00	0 0.00	41 3.75
ESE	8 .	1 0.09	13 1.19	30 2.75	6 0.55	0 0.00	0 0.00	0 0.00	0 0.00	50 4.58
SE	22 .	0 0.00	14 1.28	55 5.04	18 1.65	0 0.00	0 0.00	0 0.00	0 0.00	87 7.97
SSE	25 .	0 0.00	18 1.65	49 4.49	48 4.40	6 0.55	0 0.00	0 0.00	0 0.00	121 11.08
TOTAL	. .	6 0.55	256 23.44	442 40.48	275 25.18	94 8.61	13 1.19	5 0.46	1 0.09	1092 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	51	0	16	50	85	27	1	0	0	179
	.	0.00	1.47	4.58	7.78	2.47	0.09	0.00	0.00	16.39
SSW	23	0	9	26	37	23	3	0	0	98
	.	0.00	0.82	2.38	3.39	2.11	0.27	0.00	0.00	8.97
SW	17	0	11	13	12	7	1	0	0	44
	.	0.00	1.01	1.19	1.10	0.64	0.09	0.00	0.00	4.03
WSW	14	0	5	5	3	2	1	0	0	16
	.	0.00	0.46	0.46	0.27	0.18	0.09	0.00	0.00	1.47
W	17	0	2	10	7	1	0	0	0	20
	.	0.00	0.18	0.92	0.64	0.09	0.00	0.00	0.00	1.83
WNW	17	0	7	11	13	2	0	0	0	33
	.	0.00	0.64	1.01	1.19	0.18	0.00	0.00	0.00	3.02
NW	39	0	7	17	16	8	2	0	0	50
	.	0.00	0.64	1.56	1.47	0.73	0.18	0.00	0.00	4.58
NNW	34	1	8	29	13	12	5	5	1	74
	.	0.09	0.73	2.66	1.19	1.10	0.46	0.46	0.09	6.78
TOTAL	.	6	256	442	275	94	13	5	1	1092
	.	0.55	23.44	40.48	25.18	8.61	1.19	0.46	0.09	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 / WSC1 FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	64 .	4 .	38 .	13 .	1 .	0 .	0 .	0 .	0 .	. .
N	21 .	2 0.23	22 2.53	4 0.46	1 0.11	0 0.00	0 .	0 .	0 .	29 3.33
NNE	16 .	13 1.49	37 4.25	10 1.15	0 0.00	0 0.00	0 .	0 .	0 .	60 6.89
NE	10 .	4 0.46	40 4.59	3 0.34	0 0.00	0 0.00	0 .	0 .	0 .	47 5.40
ENE	12 .	4 0.46	25 2.87	2 0.23	0 0.00	0 0.00	0 .	0 .	0 .	31 3.56
E	3 .	3 0.34	13 1.49	8 0.92	0 0.00	0 0.00	0 .	0 .	0 .	24 2.76
ESE	4 .	6 0.69	21 2.41	5 0.57	1 0.11	0 0.00	0 .	0 .	0 .	33 3.79
SE	34 .	4 0.46	33 3.79	46 5.28	10 1.15	0 0.00	0 .	0 .	0 .	93 10.68
SSE	56 .	2 0.23	56 6.43	59 6.77	22 2.53	4 0.46	0 .	0 .	0 .	143 16.42
TOTAL	. .	40 4.59	364 41.79	287 32.95	153 17.57	27 3.10	. .	. .	. .	871 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	96	0	44	74	59	7	0	0	0	184
	.	0.00	5.05	8.50	6.77	0.80	.	.	.	21.13
SSW	42	0	19	19	32	11	0	0	0	81
	.	0.00	2.18	2.18	3.67	1.26	.	.	.	9.30
SW	5	0	10	19	7	1	0	0	0	37
	.	0.00	1.15	2.18	0.80	0.11	.	.	.	4.25
WSW	5	0	3	8	4	2	0	0	0	17
	.	0.00	0.34	0.92	0.46	0.23	.	.	.	1.95
W	3	0	11	5	2	2	0	0	0	20
	.	0.00	1.26	0.57	0.23	0.23	.	.	.	2.30
WNW	7	0	7	11	6	0	0	0	0	24
	.	0.00	0.80	1.26	0.69	0.00	.	.	.	2.76
NW	6	1	11	10	5	0	0	0	0	27
	.	0.11	1.26	1.15	0.57	0.00	.	.	.	3.10
NNW	9	1	12	4	4	0	0	0	0	21
	.	0.11	1.38	0.46	0.46	0.00	.	.	.	2.41
TOTAL	.	40	364	287	153	27	.	.	.	871
	.	4.59	41.79	32.95	17.57	3.10	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	38 .	7 .	17 .	2 .	0 .	0 .	0 .	0 .	0 .	. .
N	5 .	2 0.89	7 3.13	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	9 4.02
NNE	8 .	5 2.23	14 6.25	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	19 8.48
NE	7 .	9 4.02	7 3.13	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	16 7.14
ENE	8 .	5 2.23	3 1.34	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	8 3.57
E	3 .	6 2.68	5 2.23	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	11 4.91
ESE	10 .	7 3.13	4 1.79	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	11 4.91
SE	42 .	11 4.91	19 8.48	1 0.45	2 0.89	0 0.00	0 .	0 .	0 .	33 14.73
SSE	18 .	8 3.57	32 14.29	1 0.45	0 0.00	0 0.00	0 .	0 .	0 .	41 18.30
TOTAL	. .	59 26.34	133 59.38	21 9.38	8 3.57	3 1.34	. .	. .	. .	224 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	17 .	2 0.89	23 10.27	8 3.57	0 0.00	0 0.00	0 .	0 .	0 .	33 14.73
SSW	10 .	0 0.00	8 3.57	6 2.68	1 0.45	0 0.00	0 .	0 .	0 .	15 6.70
SW	3 .	1 0.45	2 0.89	4 1.79	2 0.89	0 0.00	0 .	0 .	0 .	9 4.02
WSW	3 .	1 0.45	3 1.34	0 0.00	0 0.00	2 0.89	0 .	0 .	0 .	6 2.68
W	4 .	0 0.00	3 1.34	1 0.45	2 0.89	1 0.45	0 .	0 .	0 .	7 3.13
WNW	3 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NW	2 .	1 0.45	3 1.34	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	4 1.79
NNW	2 .	1 0.45	0 0.00	0 0.00	1 0.45	0 0.00	0 .	0 .	0 .	2 0.89
TOTAL	. .	59 26.34	133 59.38	21 9.38	8 3.57	3 1.34	. .	. .	. .	224 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	8 .	6 .	1 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	1 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNE	5 .	3 5.66	5 9.43	0 .	0 0.00	0 0.00	0 .	0 .	0 .	8 15.09
NE	6 .	3 5.66	1 1.89	0 .	0 0.00	1 1.89	0 .	0 .	0 .	5 9.43
ENE	3 .	0 0.00	1 1.89	0 .	0 0.00	0 0.00	0 .	0 .	0 .	1 1.89
E	5 .	2 3.77	0 0.00	0 .	0 0.00	0 0.00	0 .	0 .	0 .	2 3.77
ESE	8 .	0 0.00	1 1.89	0 .	0 0.00	0 0.00	0 .	0 .	0 .	1 1.89
SE	8 .	5 9.43	5 9.43	0 .	0 0.00	0 0.00	0 .	0 .	0 .	10 18.87
SSE	10 .	6 11.32	7 13.21	0 .	0 0.00	0 0.00	0 .	0 .	0 .	13 24.53
TOTAL	. .	23 43.40	28 52.83	. .	1 1.89	1 1.89	. .	. .	. .	53 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JULY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	10	1	7	0	0	0	0	0	0	8
	.	1.89	13.21	.	0.00	0.00	.	.	.	15.09
SSW	2	2	1	0	0	0	0	0	0	3
	.	3.77	1.89	.	0.00	0.00	.	.	.	5.66
SW	1	0	0	0	1	0	0	0	0	1
	.	0.00	0.00	.	1.89	0.00	.	.	.	1.89
WSW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
W	1	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
WNW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NNW	1	1	0	0	0	0	0	0	0	1
	.	1.89	0.00	.	0.00	0.00	.	.	.	1.89
TOTAL	.	23	28	.	1	1	.	.	.	53
	.	43.40	52.83	.	1.89	1.89	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	253	20	94	107	29	15	4	1	0	.
	.	.	.	.	.	.	.	.	.	.
N	113	5	97	203	201	129	25	9	0	669
	.	0.08	1.49	3.12	3.09	1.98	0.38	0.14	0.00	10.27
NNE	67	22	149	191	130	55	11	3	0	561
	.	0.34	2.29	2.93	2.00	0.84	0.17	0.05	0.00	8.61
NE	43	18	144	112	27	11	10	0	0	322
	.	0.28	2.21	1.72	0.41	0.17	0.15	0.00	0.00	4.94
ENE	42	11	111	70	15	4	5	0	0	216
	.	0.17	1.70	1.07	0.23	0.06	0.08	0.00	0.00	3.32
E	26	11	92	86	25	11	4	0	0	229
	.	0.17	1.41	1.32	0.38	0.17	0.06	0.00	0.00	3.51
ESE	37	15	95	128	63	5	0	0	0	306
	.	0.23	1.46	1.96	0.97	0.08	0.00	0.00	0.00	4.70
SE	120	20	166	231	125	10	2	0	0	554
	.	0.31	2.55	3.55	1.92	0.15	0.03	0.00	0.00	8.50
SSE	128	16	192	255	175	45	1	0	0	684
	.	0.25	2.95	3.91	2.69	0.69	0.02	0.00	0.00	10.50
TOTAL	.	132	1480	2130	1633	801	235	90	14	6515
	.	2.03	22.72	32.69	25.07	12.29	3.61	1.38	0.21	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	249	3	158	259	270	153	30	5	0	878
	.	0.05	2.43	3.98	4.14	2.35	0.46	0.08	0.00	13.48
SSW	127	3	75	138	157	124	54	27	0	578
	.	0.05	1.15	2.12	2.41	1.90	0.83	0.41	0.00	8.87
SW	37	1	36	78	68	55	18	3	2	261
	.	0.02	0.55	1.20	1.04	0.84	0.28	0.05	0.03	4.01
WSW	27	1	28	59	45	11	7	3	0	154
	.	0.02	0.43	0.91	0.69	0.17	0.11	0.05	0.00	2.36
W	36	0	30	53	33	12	5	5	2	140
	.	0.00	0.46	0.81	0.51	0.18	0.08	0.08	0.03	2.15
WNW	48	0	36	67	57	26	12	6	0	204
	.	0.00	0.55	1.03	0.87	0.40	0.18	0.09	0.00	3.13
NW	83	2	38	87	114	45	15	13	8	322
	.	0.03	0.58	1.34	1.75	0.69	0.23	0.20	0.12	4.94
NNW	125	4	33	113	128	105	36	16	2	437
	.	0.06	0.51	1.73	1.96	1.61	0.55	0.25	0.03	6.71
TOTAL	.	132	1480	2130	1633	801	235	90	14	6515
	.	2.03	22.72	32.69	25.07	12.29	3.61	1.38	0.21	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	9 .	0 .	5 .	7 .	1 .	1 .	0 .	0 .	0 .	. .
N	15 .	0 .	1 0.19	44 8.41	79 15.11	51 9.75	8 1.53	6 1.15	0 0.00	189 36.14
NNE	3 .	0 .	4 0.76	30 5.74	18 3.44	5 0.96	0 0.00	0 0.00	0 0.00	57 10.90
NE	1 .	0 .	3 0.57	5 0.96	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	8 1.53
ENE	0 .	0 .	1 0.19	1 0.19	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2 0.38
E	0 .	0 .	2 0.38	1 0.19	3 0.57	1 0.19	0 0.00	0 0.00	0 0.00	7 1.34
ESE	1 .	0 .	0 0.00	0 0.00	1 0.19	1 0.19	0 0.00	0 0.00	0 0.00	2 0.38
SE	0 .	0 .	0 0.00	1 0.19	3 0.57	0 0.00	0 0.00	0 0.00	0 0.00	4 0.76
SSE	0 .	0 .	0 0.00	3 0.57	4 0.76	0 0.00	0 0.00	0 0.00	0 0.00	7 1.34
TOTAL	. .	. .	13 2.49	119 22.75	181 34.61	125 23.90	51 9.75	32 6.12	2 0.38	523 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	12	0	0	1	4	3	4	0	0	12
	.	.	0.00	0.19	0.76	0.57	0.76	0.00	0.00	2.29
SSW	6	0	1	1	3	2	12	11	0	30
	.	.	0.19	0.19	0.57	0.38	2.29	2.10	0.00	5.74
SW	0	0	0	0	0	6	1	0	1	8
	.	.	0.00	0.00	0.00	1.15	0.19	0.00	0.19	1.53
WSW	0	0	0	2	0	0	0	2	0	4
	.	.	0.00	0.38	0.00	0.00	0.00	0.38	0.00	0.76
W	1	0	0	2	0	3	0	1	1	7
	.	.	0.00	0.38	0.00	0.57	0.00	0.19	0.19	1.34
WNW	7	0	0	5	1	3	1	0	0	10
	.	.	0.00	0.96	0.19	0.57	0.19	0.00	0.00	1.91
NW	8	0	0	14	34	18	9	7	0	82
	.	.	0.00	2.68	6.50	3.44	1.72	1.34	0.00	15.68
NNW	29	0	1	9	31	32	16	5	0	94
	.	.	0.19	1.72	5.93	6.12	3.06	0.96	0.00	17.97
TOTAL	.	.	13	119	181	125	51	32	2	523
	.	.	2.49	22.75	34.61	23.90	9.75	6.12	0.38	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	10 .	0 .	1 .	9 .	5 .	2 .	1 .	0 .	0 .	. .
N	11 .	0 .	2 0.48	25 6.01	66 15.87	33 7.93	7 1.68	1 0.24	0 0.00	134 32.21
NNE	6 .	0 .	3 0.72	15 3.61	26 6.25	20 4.81	0 0.00	0 0.00	0 0.00	64 15.38
NE	0 .	0 .	0 0.00	2 0.48	2 0.48	0 0.00	0 0.00	0 0.00	0 0.00	4 0.96
ENE	0 .	0 .	5 1.20	2 0.48	3 0.72	0 0.00	0 0.00	0 0.00	0 0.00	10 2.40
E	2 .	0 .	4 0.96	3 0.72	1 0.24	3 0.72	0 0.00	0 0.00	0 0.00	11 2.64
ESE	0 .	0 .	1 0.24	3 0.72	1 0.24	2 0.48	0 0.00	0 0.00	0 0.00	7 1.68
SE	0 .	0 .	1 0.24	4 0.96	2 0.48	0 0.00	0 0.00	0 0.00	0 0.00	7 1.68
SSE	0 .	0 .	1 0.24	3 0.72	10 2.40	3 0.72	0 0.00	0 0.00	0 0.00	17 4.09
TOTAL	. .	. .	19 4.57	70 16.83	175 42.07	105 25.24	34 8.17	10 2.40	3 0.72	416 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	[illegible]	0	0	0	16	4	4	1	0	25
		.	0.00	0.00	3.85	0.96	0.96	0.24	0.00	6.01
SSW	17	0	1	0	6	8	9	6	0	30
	.	.	0.24	0.00	1.44	1.92	2.16	1.44	0.00	7.21
SW	3	0	0	1	2	7	4	0	0	14
	.	.	0.00	0.24	0.48	1.68	0.96	0.00	0.00	3.37
WSW	0	0	0	1	2	1	0	0	0	4
	.	.	0.00	0.24	0.48	0.24	0.00	0.00	0.00	0.96
W	1	0	0	3	0	1	0	0	1	5
	.	.	0.00	0.72	0.00	0.24	0.00	0.00	0.24	1.20
WNW	6	0	1	3	9	4	5	0	0	22
	.	.	0.24	0.72	2.16	0.96	1.20	0.00	0.00	5.29
NW	8	0	0	4	7	3	0	1	1	16
	.	.	0.00	0.96	1.68	0.72	0.00	0.24	0.24	3.85
NNW	12	0	0	1	22	16	5	1	1	46
	.	.	0.00	0.24	5.29	3.85	1.20	0.24	0.24	11.06
TOTAL	.	.	19	70	175	105	34	10	3	416
	.	.	4.57	16.83	42.07	25.24	8.17	2.40	0.72	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	22 / .	0 / .	7 / .	7 / .	4 / .	4 / .	3 / .	0 / .	0 / .	. / .
N	23 / .	0 / 0.00	3 / 0.57	27 / 5.10	26 / 4.91	23 / 4.35	8 / 1.51	2 / C.38	0 / 0.00	89 / 16.82
NNE	7 / .	0 / 0.00	5 / 0.95	16 / 3.02	42 / 7.94	16 / 3.02	5 / 0.95	0 / 0.00	0 / 0.00	84 / 15.88
NE	0 / .	1 / 0.19	2 / 0.38	12 / 2.27	4 / 0.76	0 / 0.00	0 / 0.00	0 / 0.00	0 / 0.00	19 / 3.59
ENE	1 / .	0 / 0.00	3 / 0.57	8 / 1.51	2 / 0.38	0 / 0.00	0 / 0.00	0 / 0.00	0 / 0.00	13 / 2.46
E	3 / .	0 / 0.00	3 / 0.57	8 / 1.51	3 / 0.57	0 / 0.00	0 / 0.00	0 / 0.00	0 / 0.00	14 / 2.65
ESE	2 / .	0 / 0.00	2 / 0.38	6 / 1.13	9 / 1.70	2 / 0.38	0 / 0.00	0 / 0.00	0 / 0.00	19 / 3.59
SE	5 / .	0 / 0.00	5 / 0.95	11 / 2.08	21 / 3.97	1 / 0.19	2 / 0.38	0 / 0.00	0 / 0.00	40 / 7.56
SSE	1 / .	0 / 0.00	2 / 0.38	9 / 1.70	23 / 4.35	3 / 0.57	0 / 0.00	0 / 0.00	0 / 0.00	37 / 6.99
TOTAL	. / .	1 / 0.19	28 / 5.29	148 / 27.98	213 / 40.26	97 / 18.34	30 / 5.67	9 / 1.70	3 / 0.57	529 / 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	20	0	0	7	19	14	2	0	0	42
	.	0.00	0.00	1.32	3.59	2.65	0.38	0.00	0.00	7.94
SSW	17	0	0	3	17	17	7	1	0	45
	.	0.00	0.00	0.57	3.21	3.21	1.32	0.19	0.00	8.51
SW	4	0	1	3	7	7	1	2	0	21
	.	0.00	0.19	0.57	1.32	1.32	0.19	0.38	0.00	3.97
WSW	1	0	2	4	6	0	1	1	0	14
	.	0.00	0.38	0.76	1.13	0.00	0.19	0.19	0.00	2.65
W	1	0	0	7	5	1	1	2	0	16
	.	0.00	0.00	1.32	0.95	0.19	0.19	0.38	0.00	3.02
WNW	4	0	0	7	2	1	0	0	0	10
	.	0.00	0.00	1.32	0.38	0.19	0.00	0.00	0.00	1.89
NW	12	0	0	4	10	1	0	0	3	18
	.	0.00	0.00	0.76	1.89	0.19	0.00	0.00	0.57	3.40
NNW	20	0	0	16	17	11	3	1	0	48
	.	0.00	0.00	3.02	3.21	2.08	0.57	0.19	0.00	9.07
TOTAL	.	1	28	148	213	97	30	9	3	529
	.	0.19	5.29	27.98	40.26	18.34	5.67	1.70	0.57	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	99	3	25	69	17	8	0	1	0	.
	.	.	.	.	.	.	.	.	.	.
N	34	1	42	83	25	21	2	0	0	174
	.	0.04	1.58	3.13	0.94	0.79	0.08	0.00	0.00	6.56
NNE	17	1	45	91	37	13	6	3	0	196
	.	0.04	1.70	3.43	1.39	0.49	0.23	0.11	0.00	7.39
NE	19	1	56	82	18	10	10	0	0	177
	.	0.04	2.11	3.09	0.68	0.38	0.38	0.00	0.00	6.67
ENE	15	1	48	48	9	4	5	0	0	115
	.	0.04	1.81	1.81	0.34	0.15	0.19	0.00	0.00	4.33
E	6	0	38	60	15	7	4	0	0	124
	.	0.00	1.43	2.26	0.57	0.26	0.15	0.00	0.00	4.67
ESE	9	1	22	98	49	0	0	0	0	170
	.	0.04	0.83	3.69	1.85	0.00	0.00	0.00	0.00	6.41
SE	26	0	28	125	78	9	0	0	0	240
	.	0.00	1.06	4.71	2.94	0.34	0.00	0.00	0.00	9.04
SSE	27	0	27	102	93	28	1	0	0	251
	.	0.00	1.02	3.84	3.50	1.06	0.04	0.00	0.00	9.46
TOTAL	.	7	410	1047	698	347	103	36	6	2654
	.	0.26	15.45	39.45	26.30	13.07	3.88	1.36	0.23	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	63	0	20	77	133	80	18	4	0	332
	.	0.00	0.75	2.90	5.01	3.01	0.68	0.15	0.00	12.51
SSW	29	1	15	41	64	58	19	7	0	205
	.	0.04	0.57	1.54	2.41	2.19	0.72	0.26	0.00	7.72
SW	19	0	15	31	28	27	8	0	1	110
	.	0.00	0.57	1.17	1.06	1.02	0.30	0.00	0.04	4.14
WSW	17	0	11	36	15	4	5	0	0	71
	.	0.00	0.41	1.36	0.57	0.15	0.19	0.00	0.00	2.68
W	23	0	6	30	17	2	2	2	0	59
	.	0.00	0.23	1.13	0.64	0.08	0.08	0.08	0.00	2.22
WNW	17	0	14	33	29	16	6	6	0	104
	.	0.00	0.53	1.24	1.09	0.60	0.23	0.23	0.00	3.92
NW	45	0	9	48	40	23	6	5	4	135
	.	0.00	0.34	1.81	1.51	0.87	0.23	0.19	0.15	5.09
NNW	50	1	14	62	48	45	11	9	1	191
	.	0.04	0.53	2.34	1.81	1.70	0.41	0.34	0.04	7.20
TOTAL	.	7	410	1047	698	347	103	36	6	2654
	.	0.26	15.45	39.45	26.30	13.07	3.88	1.36	0.23	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	67 .	4 .	38 .	13 .	2 .	0 .	0 .	0 .	0 .	. .
N	24 .	2 0.12	37 2.13	23 1.33	5 0.29	1 0.06	0 0.00	0 0.00	0 .	68 3.92
NNE	20 .	13 0.75	56 3.23	36 2.08	7 0.40	1 0.06	0 0.00	0 0.00	0 .	113 6.52
NE	10 .	4 0.23	61 3.52	11 0.63	3 0.17	0 0.00	0 0.00	0 0.00	0 .	79 4.56
ENE	14 .	5 0.29	38 2.19	11 0.63	1 0.06	0 0.00	0 0.00	0 0.00	0 .	55 3.17
E	6 .	3 0.17	28 1.61	14 0.81	3 0.17	0 0.00	0 0.00	0 0.00	0 .	48 2.77
ESE	6 .	7 0.40	39 2.25	19 1.10	3 0.17	0 0.00	0 0.00	0 0.00	0 .	68 3.92
SE	35 .	4 0.23	64 3.69	81 4.67	19 1.10	0 0.00	0 0.00	0 0.00	0 .	168 9.69
SSE	60 .	2 0.12	94 5.42	122 7.04	40 2.31	11 0.63	0 0.00	0 0.00	0 .	269 15.51
TOTAL	. .	42 2.42	620 35.76	609 35.12	323 18.63	121 6.98	16 0.92	3 0.17	. .	1734 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	112	0	71	135	93	50	2	0	0	351
	.	0.00	4.09	7.79	5.36	2.88	0.12	0.00	.	20.24
SSW	45	0	30	49	60	39	7	2	0	187
	.	0.00	1.73	2.83	3.46	2.25	0.40	0.12	.	10.78
SW	7	0	16	31	22	8	4	1	0	82
	.	0.00	0.92	1.79	1.27	0.46	0.23	0.06	.	4.73
WSW	6	0	10	13	15	4	1	0	0	43
	.	0.00	0.58	0.75	0.87	0.23	0.06	0.00	.	2.48
W	5	0	18	8	9	4	1	0	0	40
	.	0.00	1.04	0.46	0.52	0.23	0.06	0.00	.	2.31
WNW	11	0	17	18	16	2	0	0	0	53
	.	0.00	0.98	1.04	0.92	0.12	0.00	0.00	.	3.06
NW	8	1	23	15	20	0	0	0	0	59
	.	0.06	1.33	0.87	1.15	0.00	0.00	0.00	.	3.40
NNW	11	1	18	23	7	1	1	0	0	51
	.	0.06	1.04	1.33	0.40	0.06	0.06	0.00	.	2.94
TOTAL	.	42	620	609	323	121	16	3	.	1734
	.	2.42	35.76	35.12	18.63	6.98	0.92	0.17	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	38	7	17	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	5	2	11	1	0	0	0	0	0	14
	.	0.40	2.19	0.20	0.00	0.00	0.00	.	.	2.78
NNE	9	5	29	3	0	0	0	0	0	37
	.	0.99	5.77	0.60	0.00	0.00	0.00	.	.	7.36
NE	7	9	17	0	0	0	0	0	0	26
	.	1.79	3.38	0.00	0.00	0.00	0.00	.	.	5.17
ENE	9	5	11	0	0	0	0	0	0	16
	.	0.99	2.19	0.00	0.00	0.00	0.00	.	.	3.18
E	4	6	11	0	0	0	0	0	0	17
	.	1.19	2.19	0.00	0.00	0.00	0.00	.	.	3.38
ESE	11	7	16	1	0	0	0	0	0	24
	.	1.39	3.18	0.20	0.00	0.00	0.00	.	.	4.77
SE	46	11	41	7	2	0	0	0	0	61
	.	2.19	8.15	1.39	0.40	0.00	0.00	.	.	12.13
SSE	28	8	53	10	5	0	0	0	0	76
	.	1.59	10.54	1.99	0.99	0.00	0.00	.	.	15.11
TOTAL	.	59	287	109	42	5	1	.	.	503
	.	11.73	57.06	21.67	8.35	0.99	0.20	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	17 .	2 0.40	55 10.93	36 7.16	5 0.99	2 0.40	0 0.00	0 .	0 .	100 19.88
SSW	10 .	0 0.00	20 3.98	33 6.56	7 1.39	0 0.00	0 0.00	0 .	0 .	60 11.93
SW	3 .	1 0.20	3 0.60	11 2.19	8 1.59	0 0.00	0 0.00	0 .	0 .	23 4.57
WSW	3 .	1 0.20	5 0.99	2 0.40	7 1.39	2 0.40	0 0.00	0 .	0 .	17 3.38
W	4 .	0 0.00	5 0.99	1 0.20	2 0.40	1 0.20	1 0.20	0 .	0 .	10 1.99
WNW	3 .	0 0.00	4 0.80	1 0.20	0 0.00	0 0.00	0 0.00	0 .	0 .	5 0.99
NW	2 .	1 0.20	6 1.19	2 0.40	3 0.60	0 0.00	0 0.00	0 .	0 .	12 2.39
NNW	2 .	1 0.20	0 0.00	1 0.20	3 0.60	0 0.00	0 0.00	0 .	0 .	5 0.99
TOTAL	. .	59 11.73	287 57.06	109 21.67	42 8.35	5 0.99	1 0.20	. .	. .	503 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	8 .	6 .	1 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	1 .	0 0.00	1 0.64	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	1 0.64
NNE	5 .	3 1.92	7 4.49	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	10 6.41
NE	6 .	3 1.92	5 3.21	0 0.00	0 0.00	1 0.64	0 .	0 .	0 .	9 5.77
ENE	3 .	0 0.00	5 3.21	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	5 3.21
E	5 .	2 1.28	6 3.85	0 0.00	0 0.00	0 0.00	0 .	0 .	0 .	8 5.13
ESE	8 .	0 0.00	15 9.62	1 0.64	0 0.00	0 0.00	0 .	0 .	0 .	16 10.26
SE	8 .	5 3.21	27 17.31	2 1.28	0 0.00	0 0.00	0 .	0 .	0 .	34 21.79
SSE	12 .	6 3.85	15 9.62	6 3.85	0 0.00	0 0.00	0 .	0 .	0 .	27 17.31
TOTAL	. .	23 14.74	103 66.03	28 17.95	1 0.64	1 0.64	. .	. .	. .	156 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - DECEMBER 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	11 .	1 0.64	12 7.69	3 1.92	0 0.00	0 0.00	0 .	0 .	0 .	16 10.26
SSW	3 .	2 1.28	8 5.13	11 7.05	0 0.00	0 0.00	0 .	0 .	0 .	21 13.46
SW	1 .	0 0.00	1 0.64	1 0.64	1 0.64	0 0.00	0 .	0 .	0 .	3 1.92
WSW	0 .	0 0.00	0 0.00	1 0.64	0 0.00	0 0.00	0 .	0 .	0 .	1 0.64
W	1 .	0 0.00	1 0.64	2 1.28	0 0.00	0 0.00	0 .	0 .	0 .	3 1.92
WNW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NW	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNW	1 .	1 0.64	0 0.00	1 0.64	0 0.00	0 0.00	0 .	0 .	0 .	2 1.28
TOTAL	. .	23 14.74	103 66.03	28 17.95	1 0.64	1 0.64	. .	. .	. .	156 100.00

APPENDIX C

RADIOLOGICAL DOSE CALCULATION

FROM AIRBORNE SOURCES

Five types of tables are presented: estimated concentration to emission ratios, estimated gamma radiation dose, individual radiation doses for selected sites, radiation doses for the ALARA population, and radiation doses for the NEPA population.

The tables of estimated concentration to emission ratios were generated using the computer model XOQDOQ discussed in Appendix D. Tables are presented for the vent stack and elevated release options separately, and the following time periods: July - September, October - December, July - December, and January - December.

The tables of estimated gamma radiation dose were generated using the GASPAR computer model. The tables are for a combined vent stack and elevated release. The time periods are the same as the concentration to emission ratio tables.

The individual radiation doses at selected points were generated using the GASPAR computer model discussed in Appendix D. Two sites were selected for each of the periods based on the predicted gamma radiation dose table; two locations for each quarter are given, one in the north quadrant and one in the south quadrant. Radiation dose is given for total body, gastrointestinal tract, bone, liver, kidney, thyroid, lung, and skin by seven pathways and four age groups.

Tables of radiation dose to the ALARA (As Low As Reasonably Achievable) population within 50 miles of the plant, and the NEPA (National Environmental Policy Act) population of the continental United States were generated using the GASPAR computer model. Tables are presented for each of the periods covered by this report and are combined vent stack and elevated releases. Radiation doses to the eight body components listed above are given for seven pathways, for individual isotopes by pathway, and a total for each isotope.

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COOPER NUCLEAR STATION - VENT RELEASE POINT - THIRD QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.190E-05	1.051E-05	6.665E-06	3.614E-06	1.531E-06	8.479E-07	5.440E-07	3.824E-07	2.859E-07	2.236E-07	1.807E-07
SSW	3.374E-05	2.223E-05	1.629E-05	9.515E-06	4.334E-06	2.494E-06	1.640E-06	1.174E-06	8.907E-07	7.049E-07	5.758E-07
SW	2.252E-05	1.449E-05	1.136E-05	6.941E-06	3.307E-06	1.945E-06	1.295E-06	9.351E-07	7.139E-07	5.677E-07	4.656E-07
WSW	1.347E-05	9.089E-06	6.478E-06	3.685E-06	1.617E-06	9.086E-07	5.873E-07	4.148E-07	3.114E-07	2.442E-07	1.979E-07
W	1.544E-05	9.981E-06	7.499E-06	4.478E-06	2.090E-06	1.218E-06	8.072E-07	5.808E-07	4.423E-07	3.510E-07	2.874E-07
WNW	1.614E-05	9.133E-06	6.348E-06	3.597E-06	1.583E-06	8.937E-07	5.802E-07	4.113E-07	3.095E-07	2.432E-07	1.975E-07
NW	3.678E-05	1.822E-05	1.299E-05	7.734E-06	3.655E-06	2.155E-06	1.441E-06	1.045E-06	8.004E-07	6.385E-07	5.251E-07
NNW	4.962E-05	2.470E-05	1.688E-05	9.747E-06	4.466E-06	2.593E-06	1.718E-06	1.237E-06	9.436E-07	7.499E-07	6.149E-07
N	4.934E-05	2.127E-05	1.237E-05	6.364E-06	2.550E-06	1.372E-06	8.643E-07	5.999E-07	4.445E-07	3.452E-07	2.776E-07
NNE	1.741E-05	6.698E-06	3.833E-06	2.015E-06	8.475E-07	4.728E-07	3.059E-07	2.168E-07	1.634E-07	1.287E-07	1.047E-07
NE	9.500E-06	4.036E-06	2.487E-06	1.338E-06	5.621E-07	3.102E-07	1.986E-07	1.394E-07	1.042E-07	8.147E-08	6.589E-08
ENE	5.124E-06	2.534E-06	1.721E-06	9.690E-07	4.242E-07	2.387E-07	1.546E-07	1.094E-07	8.228E-08	6.464E-08	5.248E-08
E	4.274E-06	1.925E-06	1.122E-06	5.748E-07	2.288E-07	1.227E-07	7.720E-08	5.354E-08	3.966E-08	3.079E-08	2.476E-08
ESE	2.419E-06	8.299E-07	4.267E-07	2.055E-07	7.619E-08	3.903E-08	2.372E-08	1.600E-08	1.158E-08	8.813E-09	6.965E-09
SE	3.848E-06	2.177E-06	1.589E-06	9.209E-07	4.146E-07	2.365E-07	1.545E-07	1.101E-07	8.321E-08	6.565E-08	5.350E-08
SSE	1.118E-05	4.960E-06	3.220E-06	1.822E-06	8.200E-07	4.715E-07	3.103E-07	2.224E-07	1.689E-07	1.338E-07	1.094E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.500E-07	7.764E-08	5.040E-08	2.892E-08	1.959E-08	1.451E-08	1.136E-08	9.241E-09	7.734E-09	6.613E-09	5.750E-09
SSW	4.822E-07	2.579E-07	1.713E-07	1.014E-07	6.999E-08	5.258E-08	4.165E-08	3.423E-08	2.889E-08	2.488E-08	2.178E-08
SW	3.911E-07	2.113E-07	1.412E-07	8.419E-08	5.845E-08	4.408E-08	3.502E-08	2.885E-08	2.440E-08	2.105E-08	1.845E-08
WSW	1.647E-07	8.591E-08	5.610E-08	3.242E-08	2.202E-08	1.633E-08	1.280E-08	1.043E-08	8.734E-09	7.472E-09	6.500E-09
W	2.412E-07	1.298E-07	8.656E-08	5.145E-08	3.564E-08	2.684E-08	2.130E-08	1.753E-08	1.481E-08	1.277E-08	1.119E-08
WNW	1.645E-07	8.606E-08	5.625E-08	3.251E-08	2.208E-08	1.637E-08	1.283E-08	1.045E-08	8.746E-09	7.480E-09	6.505E-09
NW	4.423E-07	2.414E-07	1.624E-07	9.771E-08	6.825E-08	5.171E-08	4.124E-08	3.408E-08	2.890E-08	2.500E-08	2.196E-08
NNW	5.167E-07	2.797E-07	1.873E-07	1.120E-07	7.793E-08	5.888E-08	4.686E-08	3.865E-08	3.273E-08	2.827E-08	2.481E-08
N	2.294E-07	1.171E-07	7.546E-08	4.293E-08	2.889E-08	2.129E-08	1.661E-08	1.347E-08	1.124E-08	9.587E-09	8.318E-09
NNE	8.745E-08	4.638E-08	3.068E-08	1.809E-08	1.249E-08	9.381E-09	7.435E-09	6.113E-09	5.162E-09	4.449E-09	3.896E-09
NE	5.471E-08	2.839E-08	1.849E-08	1.067E-08	7.256E-09	5.389E-09	4.230E-09	3.449E-09	2.891E-09	2.476E-09	2.156E-09
ENE	4.371E-08	2.292E-08	1.503E-08	8.741E-09	5.969E-09	4.446E-09	3.498E-09	2.858E-09	2.399E-09	2.057E-09	1.794E-09
E	2.047E-08	1.047E-08	6.759E-09	3.861E-09	2.611E-09	1.931E-09	1.511E-09	1.228E-09	1.028E-09	8.782E-10	7.633E-10
ESE	5.680E-09	2.776E-09	1.737E-09	9.561E-10	6.360E-10	4.650E-10	3.606E-10	2.913E-10	2.424E-10	2.063E-10	1.786E-10
SE	4.471E-08	2.374E-08	1.569E-08	9.224E-09	6.341E-09	4.747E-09	3.751E-09	3.075E-09	2.590E-09	2.226E-09	1.945E-09
SSE	9.173E-08	4.929E-08	3.284E-08	1.954E-08	1.356E-08	1.023E-08	8.132E-09	6.701E-09	5.670E-09	4.894E-09	4.292E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - THIRD QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.499E-05	4.672E-06	2.382E-06	1.164E-06	4.568E-07	2.484E-07	1.599E-07	1.139E-07	8.661E-08	6.895E-08	5.674E-08
SSW	1.432E-05	4.677E-06	2.438E-06	1.210E-06	4.794E-07	2.598E-07	1.654E-07	1.161E-07	8.704E-08	6.831E-08	5.547E-08
SW	1.256E-05	4.265E-06	2.225E-06	1.089E-06	4.165E-07	2.195E-07	1.367E-07	9.436E-08	6.972E-08	5.409E-08	4.352E-08
WSW	1.420E-05	4.912E-06	2.583E-06	1.268E-06	4.860E-07	2.566E-07	1.604E-07	1.111E-07	8.248E-08	6.427E-08	5.191E-08
W	1.547E-05	5.342E-06	2.822E-06	1.393E-06	5.419E-07	2.906E-07	1.843E-07	1.293E-07	9.701E-08	7.631E-08	6.215E-08
WNW	2.219E-05	7.580E-06	3.986E-06	1.965E-06	7.623E-07	4.085E-07	2.590E-07	1.817E-07	1.363E-07	1.072E-07	8.721E-08
NW	2.593E-05	8.839E-06	4.665E-06	2.312E-06	9.069E-07	4.878E-07	3.087E-07	2.155E-07	1.606E-07	1.254E-07	1.013E-07
NNW	3.536E-05	1.220E-05	6.492E-06	3.227E-06	1.269E-06	6.826E-07	4.316E-07	3.010E-07	2.241E-07	1.748E-07	1.412E-07
N	3.676E-05	1.266E-05	6.702E-06	3.312E-06	1.286E-06	6.850E-07	4.302E-07	2.985E-07	2.214E-07	1.721E-07	1.386E-07
NNE	2.278E-05	7.837E-06	4.158E-06	2.055E-06	7.963E-07	4.236E-07	2.659E-07	1.845E-07	1.370E-07	1.066E-07	8.594E-08
NE	8.273E-06	2.807E-06	1.476E-06	7.281E-07	2.842E-07	1.529E-07	9.694E-08	6.782E-08	5.064E-08	3.960E-08	3.204E-08
ENE	4.213E-06	1.453E-06	7.732E-07	3.872E-07	1.567E-07	8.780E-08	5.793E-08	4.203E-08	3.244E-08	2.613E-08	2.173E-08
E	5.825E-06	1.939E-06	1.026E-06	5.159E-07	2.124E-07	1.203E-07	7.961E-08	5.769E-08	4.432E-08	3.549E-08	2.929E-08
ESE	4.722E-06	1.605E-06	8.499E-07	4.243E-07	1.709E-07	9.481E-08	6.179E-08	4.425E-08	3.369E-08	2.678E-08	2.197E-08
SE	6.216E-06	2.151E-06	1.143E-06	5.674E-07	2.252E-07	1.226E-07	7.842E-08	5.522E-08	4.143E-08	3.253E-08	2.641E-08
SSE	1.036E-05	3.442E-06	1.810E-06	8.958E-07	3.525E-07	1.911E-07	1.226E-07	8.695E-08	6.588E-08	5.227E-08	4.289E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.792E-08	2.658E-08	1.802E-08	1.089E-08	7.601E-09	5.738E-09	4.555E-09	3.745E-09	3.160E-09	2.720E-09	2.379E-09
SSW	4.627E-08	2.449E-08	1.614E-08	9.434E-09	6.480E-09	4.840E-09	3.813E-09	3.118E-09	2.620E-09	2.247E-09	1.960E-09
SW	3.602E-08	1.869E-08	1.229E-08	7.271E-09	5.065E-09	3.836E-09	3.061E-09	2.530E-09	2.146E-09	1.856E-09	1.630E-09
WSW	4.311E-08	2.250E-08	1.475E-08	8.586E-09	5.870E-09	4.370E-09	3.433E-09	2.800E-09	2.347E-09	2.008E-09	1.747E-09
W	5.201E-08	2.799E-08	1.876E-08	1.126E-08	7.863E-09	5.951E-09	4.738E-09	3.908E-09	3.307E-09	2.853E-09	2.501E-09
WNW	7.291E-08	3.904E-08	2.604E-08	1.551E-08	1.076E-08	8.106E-09	6.431E-09	5.288E-09	4.464E-09	3.845E-09	3.364E-09
NW	8.406E-08	4.362E-08	2.840E-08	1.641E-08	1.121E-08	8.356E-09	6.581E-09	5.384E-09	4.528E-09	3.890E-09	3.397E-09
NNW	1.171E-07	6.087E-08	3.979E-08	2.314E-08	1.585E-08	1.184E-08	9.341E-09	7.649E-09	6.437E-09	5.530E-09	4.829E-09
N	1.148E-07	5.905E-08	3.831E-08	2.202E-08	1.494E-08	1.108E-08	8.687E-09	7.077E-09	5.928E-09	5.073E-09	4.415E-09
NNE	7.121E-08	3.681E-08	2.397E-08	1.386E-08	9.442E-09	7.023E-09	5.520E-09	4.506E-09	3.781E-09	3.240E-09	2.823E-09
NE	2.663E-08	1.389E-08	9.078E-09	5.258E-09	3.583E-09	2.663E-09	2.091E-09	1.705E-09	1.430E-09	1.224E-09	1.066E-09
ENE	1.852E-08	1.066E-08	7.493E-09	4.796E-09	3.489E-09	2.722E-09	2.218E-09	1.864E-09	1.602E-09	1.401E-09	1.242E-09
E	2.476E-08	1.366E-08	9.234E-09	5.564E-09	3.880E-09	2.931E-09	2.329E-09	1.918E-09	1.620E-09	1.397E-09	1.223E-09
ESE	1.847E-08	1.000E-08	6.678E-09	3.954E-09	2.722E-09	2.037E-09	1.606E-09	1.314E-09	1.104E-09	9.471E-10	8.258E-10
SE	2.201E-08	1.158E-08	7.608E-09	4.436E-09	3.032E-09	2.260E-09	1.778E-09	1.453E-09	1.220E-09	1.046E-09	9.114E-10
SSE	3.612E-08	1.986E-08	1.347E-08	8.205E-09	5.781E-09	4.400E-09	3.518E-09	2.910E-09	2.468E-09	2.135E-09	1.874E-09

COOPER NUCLEAR STATION - VENT RELEASE POINT - FOURTH QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.796E-05	9.285E-06	5.642E-06	2.945E-06	1.189E-06	6.396E-07	4.022E-07	2.786E-07	2.060E-07	1.596E-07	1.281E-07
SSW	1.943E-05	1.222E-05	8.314E-06	4.607E-06	1.975E-06	1.099E-06	7.064E-07	4.970E-07	3.719E-07	2.908E-07	2.351E-07
SW	2.035E-05	1.255E-05	8.343E-06	4.582E-06	1.955E-06	1.088E-06	7.003E-07	4.934E-07	3.697E-07	2.895E-07	2.344E-07
WSW	1.134E-05	8.004E-06	5.956E-06	3.464E-06	1.560E-06	8.914E-07	5.833E-07	4.157E-07	3.142E-07	2.477E-07	2.017E-07
W	6.473E-06	4.575E-06	3.578E-06	2.133E-06	9.765E-07	5.600E-07	3.665E-07	2.612E-07	1.973E-07	1.556E-07	1.267E-07
WNW	9.874E-06	9.704E-06	8.199E-06	4.996E-06	2.321E-06	1.339E-06	8.799E-07	6.287E-07	4.760E-07	3.759E-07	3.065E-07
NW	2.545E-05	1.649E-05	1.243E-05	7.281E-06	3.288E-06	1.877E-06	1.226E-06	8.729E-07	6.594E-07	5.199E-07	4.234E-07
NNW	3.575E-05	1.983E-05	1.351E-05	7.609E-06	3.352E-06	1.899E-06	1.238E-06	8.809E-07	6.656E-07	5.250E-07	4.278E-07
N	5.518E-05	2.473E-05	1.544E-05	8.375E-06	3.577E-06	2.000E-06	1.294E-06	9.165E-07	6.901E-07	5.430E-07	4.416E-07
NNE	3.186E-05	1.446E-05	8.625E-06	4.568E-06	1.914E-06	1.062E-06	6.840E-07	4.829E-07	3.628E-07	2.850E-07	2.314E-07
NE	1.700E-05	7.753E-06	4.467E-06	2.277E-06	9.011E-07	4.809E-07	3.011E-07	2.080E-07	1.535E-07	1.188E-07	9.522E-08
ENE	5.200E-06	2.387E-06	1.390E-06	7.116E-07	2.823E-07	1.508E-07	9.454E-08	6.536E-08	4.827E-08	3.738E-08	2.999E-08
E	1.044E-05	4.906E-06	2.885E-06	1.485E-06	5.929E-07	3.180E-07	1.998E-07	1.384E-07	1.024E-07	7.940E-08	6.377E-08
ESE	1.660E-05	7.090E-06	3.958E-06	1.986E-06	7.720E-07	4.078E-07	2.534E-07	1.740E-07	1.278E-07	9.850E-08	7.868E-08
SE	2.117E-05	9.297E-06	5.371E-06	2.750E-06	1.092E-06	5.826E-07	3.645E-07	2.514E-07	1.853E-07	1.432E-07	1.147E-07
SSE	1.614E-05	6.526E-06	3.593E-06	1.804E-06	7.146E-07	3.855E-07	2.439E-07	1.699E-07	1.261E-07	9.801E-08	7.881E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.057E-07	5.378E-08	3.458E-08	1.960E-08	1.317E-08	9.687E-09	7.547E-09	6.116E-09	5.101E-09	4.348E-09	3.771E-09
SSW	1.951E-07	1.007E-07	6.520E-08	3.719E-08	2.504E-08	1.844E-08	1.437E-08	1.165E-08	9.710E-09	8.274E-09	7.172E-09
SW	1.947E-07	1.009E-07	6.556E-08	3.758E-08	2.536E-08	1.872E-08	1.462E-08	1.186E-08	9.906E-09	8.452E-09	7.335E-09
WSW	1.683E-07	8.872E-08	5.823E-08	3.382E-08	2.303E-08	1.711E-08	1.343E-08	1.095E-08	9.177E-09	7.856E-09	6.838E-09
W	1.057E-07	5.584E-08	3.674E-08	2.143E-08	1.464E-08	1.091E-08	8.579E-09	7.007E-09	5.883E-09	5.043E-09	4.395E-09
WNW	2.562E-07	1.359E-07	8.968E-08	5.253E-08	3.599E-08	2.687E-08	2.117E-08	1.732E-08	1.455E-08	1.249E-08	1.089E-08
NW	3.536E-07	1.871E-07	1.234E-07	7.229E-08	4.956E-08	3.702E-08	2.919E-08	2.389E-08	2.009E-08	1.725E-08	1.505E-08
NNW	3.575E-07	1.899E-07	1.257E-07	7.400E-08	5.094E-08	3.819E-08	3.020E-08	2.478E-08	2.089E-08	1.798E-08	1.572E-08
N	3.685E-07	1.948E-07	1.286E-07	7.554E-08	5.195E-08	3.892E-08	3.077E-08	2.525E-08	2.129E-08	1.832E-08	1.602E-08
NNE	1.929E-07	1.015E-07	6.679E-08	3.908E-08	2.681E-08	2.005E-08	1.583E-08	1.297E-08	1.092E-08	9.388E-09	8.203E-09
NE	7.846E-08	3.959E-08	2.532E-08	1.423E-08	9.490E-09	6.942E-09	5.383E-09	4.345E-09	3.611E-09	3.068E-09	2.653E-09
ENE	2.473E-08	1.252E-08	8.032E-09	4.548E-09	3.061E-09	2.256E-09	1.760E-09	1.428E-09	1.192E-09	1.017E-09	8.827E-10
E	5.263E-08	2.672E-08	1.716E-08	9.716E-09	6.514E-09	4.786E-09	3.724E-09	3.015E-09	2.512E-09	2.139E-09	1.854E-09
ESE	6.464E-08	3.226E-08	2.047E-08	1.139E-08	7.550E-09	5.497E-09	4.246E-09	3.415E-09	2.830E-09	2.398E-09	2.069E-09
SE	9.440E-08	4.747E-08	3.026E-08	1.694E-08	1.127E-08	8.230E-09	6.371E-09	5.135E-09	4.262E-09	3.618E-09	3.125E-09
SSE	6.509E-08	3.301E-08	2.107E-08	1.176E-08	7.792E-09	5.664E-09	4.367E-09	3.507E-09	2.902E-09	2.456E-09	2.116E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - FOURTH QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.771E-05	5.597E-06	2.906E-06	1.438E-06	5.633E-07	3.043E-07	1.945E-07	1.376E-07	1.040E-07	8.242E-08	6.758E-08
SSW	7.917E-06	2.567E-06	1.313E-06	6.359E-07	2.404E-07	1.259E-07	7.816E-08	5.379E-08	3.965E-08	3.068E-08	2.461E-08
SW	4.617E-06	1.565E-06	8.222E-07	4.068E-07	1.605E-07	8.886E-08	5.876E-08	4.308E-08	3.370E-08	2.751E-08	2.314E-08
WSW	7.205E-06	2.534E-06	1.345E-06	6.634E-07	2.557E-07	1.354E-07	8.478E-08	5.874E-08	4.354E-08	3.386E-08	2.729E-08
W	6.803E-06	2.352E-06	1.283E-06	6.486E-07	2.568E-07	1.394E-07	8.990E-08	6.437E-08	4.933E-08	3.959E-08	3.284E-08
WNW	8.149E-06	2.869E-06	1.537E-06	7.654E-07	3.016E-07	1.636E-07	1.049E-07	7.424E-08	5.610E-08	4.437E-08	3.629E-08
NW	1.832E-05	6.285E-06	3.360E-06	1.679E-06	6.632E-07	3.586E-07	2.281E-07	1.599E-07	1.196E-07	9.368E-08	7.592E-08
NNW	2.671E-05	9.409E-06	5.059E-06	2.527E-06	9.974E-07	5.365E-07	3.388E-07	2.358E-07	1.752E-07	1.363E-07	1.099E-07
N	3.869E-05	1.349E-05	7.203E-06	3.573E-06	1.390E-06	7.403E-07	4.644E-07	3.219E-07	2.384E-07	1.852E-07	1.490E-07
NNE	2.042E-05	6.971E-06	3.728E-06	1.862E-06	7.340E-07	3.964E-07	2.524E-07	1.775E-07	1.333E-07	1.049E-07	8.542E-08
NE	1.507E-05	5.141E-06	2.739E-06	1.371E-06	5.523E-07	3.094E-07	2.053E-07	1.503E-07	1.170E-07	9.507E-08	7.958E-08
ENE	9.256E-06	3.134E-06	1.693E-06	8.562E-07	3.491E-07	1.984E-07	1.339E-07	9.978E-08	7.901E-08	6.513E-08	5.523E-08
E	6.962E-06	2.397E-06	1.266E-06	6.245E-07	2.420E-07	1.291E-07	8.138E-08	5.669E-08	4.220E-08	3.292E-08	2.660E-08
ESE	7.415E-06	2.435E-06	1.264E-06	6.249E-07	2.503E-07	1.402E-07	9.312E-08	6.840E-08	5.354E-08	4.374E-08	3.683E-08
SE	1.342E-05	4.467E-06	2.328E-06	1.143E-06	4.416E-07	2.345E-07	1.470E-07	1.018E-07	7.543E-08	5.859E-08	4.716E-08
SSE	1.823E-05	5.977E-06	3.098E-06	1.518E-06	5.829E-07	3.076E-07	1.916E-07	1.321E-07	9.741E-08	7.538E-08	6.046E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.692E-08	3.145E-08	2.144E-08	1.317E-08	9.338E-09	7.148E-09	5.744E-09	4.774E-09	4.067E-09	3.531E-09	3.111E-09
SSW	2.033E-08	1.041E-08	6.744E-09	3.880E-09	2.646E-09	1.970E-09	1.551E-09	1.268E-09	1.066E-09	9.154E-10	7.990E-10
SW	1.990E-08	1.170E-08	8.189E-09	5.083E-09	3.573E-09	2.701E-09	2.141E-09	1.756E-09	1.477E-09	1.267E-09	1.104E-09
WSW	2.260E-08	1.166E-08	7.585E-09	4.372E-09	2.969E-09	2.202E-09	1.725E-09	1.405E-09	1.176E-09	1.005E-09	8.737E-10
W	2.798E-08	1.605E-08	1.109E-08	6.816E-09	4.784E-09	3.623E-09	2.884E-09	2.377E-09	2.011E-09	1.735E-09	1.521E-09
WNW	3.045E-08	1.647E-08	1.102E-08	6.570E-09	4.552E-09	3.420E-09	2.706E-09	2.219E-09	1.868E-09	1.604E-09	1.400E-09
NW	6.316E-08	3.305E-08	2.166E-08	1.260E-08	8.609E-09	6.421E-09	5.062E-09	4.145E-09	3.490E-09	3.001E-09	2.623E-09
NNW	9.099E-08	4.686E-08	3.043E-08	1.755E-08	1.197E-08	8.919E-09	7.030E-09	5.757E-09	4.848E-09	4.169E-09	3.646E-09
N	1.233E-07	6.328E-08	4.101E-08	2.355E-08	1.598E-08	1.185E-08	9.288E-09	7.569E-09	6.342E-09	5.429E-09	4.726E-09
NNE	7.142E-08	3.817E-08	2.539E-08	1.506E-08	1.042E-08	7.838E-09	6.215E-09	5.110E-09	4.316E-09	3.720E-09	3.258E-09
NE	6.812E-08	3.938E-08	2.730E-08	1.681E-08	1.179E-08	8.910E-09	7.069E-09	5.803E-09	4.888E-09	4.198E-09	3.663E-09
ENE	4.782E-08	2.877E-08	2.044E-08	1.296E-08	9.254E-09	7.080E-09	5.670E-09	4.690E-09	3.975E-09	3.432E-09	3.008E-09
E	2.207E-08	1.144E-08	7.450E-09	4.302E-09	2.930E-09	2.184E-09	1.722E-09	1.412E-09	1.191E-09	1.027E-09	8.998E-10
ESE	3.172E-08	1.882E-08	1.328E-08	8.374E-09	5.966E-09	4.561E-09	3.652E-09	3.021E-09	2.562E-09	2.213E-09	1.941E-09
SE	3.903E-08	2.013E-08	1.309E-08	7.571E-09	5.174E-09	3.860E-09	3.043E-09	2.492E-09	2.097E-09	1.802E-09	1.574E-09
SSE	4.987E-08	2.537E-08	1.634E-08	9.[illegible]3E-09	6.302E-09	4.666E-09	3.655E-09	2.977E-09	2.494E-09	2.135E-09	1.859E-09

COOPER NUCLEAR STATION - VENT RELEASE POINT - SECOND SEMI-ANNUAL PERIOD 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.024E-05	9.968E-06	6.212E-06	3.321E-06	1.383E-06	7.585E-07	4.835E-07	3.382E-07	2.520E-07	1.965E-07	1.585E-07
SSW	2.781E-05	1.805E-05	1.294E-05	7.450E-06	3.340E-06	1.906E-06	1.247E-06	8.887E-07	6.720E-07	5.303E-07	4.322E-07
SW	2.160E-05	1.367E-05	1.010E-05	5.960E-06	2.745E-06	1.589E-06	1.048E-06	7.516E-07	5.709E-07	4.521E-07	3.695E-07
WSW	1.261E-05	8.634E-06	6.253E-06	3.588E-06	1.591E-06	9.001E-07	5.848E-07	4.147E-07	3.122E-07	2.454E-07	1.993E-07
W	1.168E-05	7.748E-06	5.896E-06	3.523E-06	1.638E-06	9.508E-07	6.283E-07	4.510E-07	3.429E-07	2.717E-07	2.222E-07
WNW	1.363E-05	9.414E-06	7.128E-06	4.178E-06	1.887E-06	1.077E-06	7.036E-07	5.008E-07	3.780E-07	2.978E-07	2.423E-07
NW	3.205E-05	1.747E-05	1.274E-05	7.532E-06	3.496E-06	2.035E-06	1.349E-06	9.712E-07	7.402E-07	5.879E-07	4.818E-07
NNW	4.387E-05	2.268E-05	1.550E-05	8.870E-06	4.009E-06	2.309E-06	1.522E-06	1.092E-06	8.299E-07	6.580E-07	5.384E-07
N	5.171E-05	2.267E-05	1.361E-05	7.183E-06	2.970E-06	1.630E-06	1.041E-06	7.304E-07	5.458E-07	4.268E-07	3.453E-07
NNE	2.353E-05	9.962E-06	5.842E-06	3.082E-06	1.291E-06	7.169E-07	4.621E-07	3.266E-07	2.455E-07	1.930E-07	1.568E-07
NE	1.262E-05	5.595E-06	3.336E-06	1.748E-06	7.139E-07	3.879E-07	2.458E-07	1.713E-07	1.273E-07	9.905E-08	7.979E-08
ENE	5.168E-06	2.506E-06	1.625E-06	8.912E-07	3.802E-07	2.112E-07	1.358E-07	9.556E-08	7.157E-08	5.604E-08	4.538E-08
E	6.890E-06	3.186E-06	1.869E-06	9.608E-07	3.834E-07	2.057E-07	1.293E-07	8.964E-08	6.635E-08	5.147E-08	4.136E-08
ESE	8.325E-06	3.428E-06	1.891E-06	9.432E-07	3.645E-07	1.918E-07	1.188E-07	8.144E-08	5.971E-08	4.595E-08	3.666E-08
SE	1.105E-05	5.172E-06	3.207E-06	1.714E-06	7.126E-07	3.903E-07	2.485E-07	1.737E-07	1.294E-07	1.009E-07	8.136E-08
SSE	1.325E-05	5.679E-06	3.458E-06	1.875E-06	8.099E-07	4.572E-07	2.977E-07	2.117E-07	1.598E-07	1.260E-07	1.026E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.313E-07	6.760E-08	4.375E-08	2.501E-08	1.689E-08	1.248E-08	9.754E-09	7.926E-09	6.626E-09	5.659E-09	4.917E-09
SSW	3.612E-07	1.917E-07	1.266E-07	7.431E-08	5.104E-08	3.819E-08	3.015E-08	2.471E-08	2.080E-08	1.788E-08	1.562E-08
SW	3.095E-07	1.654E-07	1.098E-07	6.479E-08	4.468E-08	3.352E-08	2.653E-08	2.178E-08	1.837E-08	1.581E-08	1.383E-08
WSW	1.660E-07	8.701E-08	5.694E-08	3.298E-08	2.242E-08	1.664E-08	1.306E-08	1.064E-08	8.912E-09	7.627E-09	6.636E-09
W	1.862E-07	9.979E-08	6.633E-08	3.925E-08	2.711E-08	2.036E-08	1.613E-08	1.325E-08	1.118E-08	9.628E-09	8.425E-09
WNW	2.022E-07	1.065E-07	6.997E-08	4.072E-08	2.778E-08	2.067E-08	1.624E-08	1.325E-08	1.112E-08	9.525E-09	8.296E-09
NW	4.045E-07	2.183E-07	1.459E-07	8.694E-08	6.034E-08	4.550E-08	3.615E-08	2.977E-08	2.518E-08	2.172E-08	1.904E-08
NNW	4.516E-07	2.430E-07	1.621E-07	9.647E-08	6.690E-08	5.042E-08	4.005E-08	3.298E-08	2.789E-08	2.406E-08	2.109E-08
N	2.869E-07	1.493E-07	9.749E-08	5.647E-08	3.848E-08	2.862E-08	2.250E-08	1.837E-08	1.542E-08	1.322E-08	1.153E-08
NNE	1.307E-07	6.894E-08	4.543E-08	2.664E-08	1.831E-08	1.371E-08	1.084E-08	8.893E-09	7.495E-09	6.449E-09	5.639E-09
NE	6.602E-08	3.383E-08	2.186E-08	1.247E-08	8.407E-09	6.203E-09	4.843E-09	3.932E-09	3.284E-09	2.803E-09	2.433E-09
ENE	3.772E-08	1.963E-08	1.281E-08	7.412E-09	5.047E-09	3.752E-09	2.947E-09	2.405E-09	2.017E-09	1.728E-09	1.505E-09
E	3.416E-08	1.739E-08	1.120E-08	6.362E-09	4.281E-09	3.153E-09	2.459E-09	1.995E-09	1.665E-09	1.420E-09	1.232E-09
ESE	3.009E-08	1.499E-08	9.497E-09	5.280E-09	3.501E-09	2.550E-09	1.971E-09	1.586E-09	1.315E-09	1.115E-09	9.626E-10
SE	6.741E-08	3.471E-08	2.249E-08	1.287E-08	8.694E-09	6.423E-09	5.020E-09	4.079E-09	3.410E-09	2.912E-09	2.530E-09
SSE	8.565E-08	4.532E-08	2.986E-08	1.747E-08	1.199E-08	8.959E-09	7.069E-09	5.790E-09	4.873E-09	4.188E-09	3.658E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - SECOND SEMI-ANNUAL PERIOD 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.639E-05	5.147E-06	2.650E-06	1.304E-06	5.112E-07	2.768E-07	1.773E-07	1.256E-07	9.508E-08	7.539E-08	6.183E-08
SSW	1.102E-05	3.590E-06	1.857E-06	9.133E-07	3.551E-07	1.900E-07	1.199E-07	8.357E-08	6.227E-08	4.863E-08	3.932E-08
SW	8.541E-06	2.900E-06	1.514E-06	[illegible].431E-07	2.863E-07	1.527E-07	9.663E-08	6.775E-08	5.083E-08	3.999E-08	3.258E-08
WSW	1.060E-05	3.689E-06	1.946E-06	9.567E-07	3.674E-07	1.942E-07	1.214E-07	8.409E-08	6.235E-08	4.852E-08	3.913E-08
W	1.105E-05	3.816E-06	2.032E-06	1.009E-06	3.943E-07	2.121E-07	1.351E-07	9.534E-08	7.197E-08	5.693E-08	4.661E-08
WNW	1.502E-05	5.176E-06	2.737E-06	1.353E-06	5.273E-07	2.834E-07	1.800E-07	1.264E-07	9.487E-08	7.460E-08	6.071E-08
NW	2.209E-05	7.548E-06	4.005E-06	1.992E-06	7.828E-07	4.217E-07	2.673E-07	1.868E-07	1.394E-07	1.089E-07	8.808E-08
NNW	3.092E-05	1.077E-05	5.757E-06	2.868E-06	1.130E-06	6.077E-07	3.840E-07	2.676E-07	1.990E-07	1.551E-07	1.252E-07
N	3.777E-05	1.309E-05	6.961E-06	3.447E-06	1.340E-06	7.136E-07	4.479E-07	3.106E-07	2.302E-07	1.789E-07	1.440E-07
NNE	2.160E-05	7.402E-06	3.942E-06	1.959E-06	7.655E-07	4.102E-07	2.593E-07	1.811E-07	1.352E-07	1.058E-07	8.567E-08
NE	1.179E-05	4.018E-06	2.132E-06	1.062E-06	4.234E-07	2.343E-07	1.533E-07	1.107E-07	8.523E-08	6.850E-08	5.682E-08
ENE	6.794E-06	2.314E-06	1.244E-06	6.274E-07	2.552E-07	1.444E-07	9.681E-08	7.157E-08	5.625E-08	4.607E-08	3.886E-08
E	6.445E-06	2.189E-06	1.157E-06	5.754E-07	2.289E-07	1.255E-07	8.089E-08	5.742E-08	4.341E-08	3.430E-08	2.801E-08
ESE	6.103E-06	2.033E-06	1.063E-06	5.276E-07	2.117E-07	1.181E-07	7.788E-08	5.663E-08	4.384E-08	3.543E-08	2.953E-08
SE	9.903E-06	3.338E-06	1.751E-06	8.630E-07	3.363E-07	1.801E-07	1.136E-07	7.916E-08	5.890E-08	4.592E-08	3.707E-08
SSE	1.436E-05	4.737E-06	2.470E-06	1.215E-06	4.707E-07	2.508E-07	1.578E-07	1.099E-07	8.183E-08	6.390E-08	5.168E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.207E-08	2.866E-08	1.943E-08	1.179E-08	8.276E-09	6.283E-09	5.015E-09	4.144E-09	3.513E-09	3.036E-09	2.665E-09
SSW	3.268E-08	1.710E-08	1.120E-08	6.505E-09	4.453E-09	3.320E-09	2.614E-09	2.136E-09	1.795E-09	1.539E-09	1.342E-09
SW	2.726E-08	1.466E-08	9.805E-09	5.859E-09	4.073E-09	3.069E-09	2.434E-09	2.001E-09	1.688E-09	1.452E-09	1.270E-09
WSW	3.244E-08	1.683E-08	1.099E-08	6.363E-09	4.337E-09	3.223E-09	2.530E-09	2.062E-09	1.728E-09	1.478E-09	1.286E-09
W	3.920E-08	2.147E-08	1.449E-08	8.723E-09	6.076E-09	4.584E-09	3.639E-09	2.993E-09	2.527E-09	2.176E-09	1.904E-09
WNW	5.073E-08	2.708E-08	1.800E-08	1.066E-08	7.368E-09	5.531E-09	4.376E-09	3.590E-09	3.024E-09	2.600E-09	2.271E-09
NW	7.315E-08	3.805E-08	2.483E-08	1.437E-08	9.807E-09	7.308E-09	5.756E-09	4.709E-09	3.962E-09	3.404E-09	2.974E-09
NNW	1.038E-07	5.372E-08	3.502E-08	2.029E-08	1.387E-08	1.035E-08	8.159E-09	6.680E-09	5.622E-09	4.831E-09	4.220E-09
N	1.192E-07	6.126E-08	3.973E-08	2.284E-08	1.550E-08	1.149E-08	9.013E-09	7.344E-09	6.154E-09	5.268E-09	4.585E-09
NNE	7.128E-08	3.744E-08	2.464E-08	1.443E-08	9.909E-09	7.413E-09	5.853E-09	4.796E-09	4.038E-09	3.471E-09	3.032E-09
NE	4.826E-08	2.719E-08	1.859E-08	1.129E-08	7.872E-09	5.929E-09	4.694E-09	3.849E-09	3.239E-09	2.781E-09	2.425E-09
ENE	3.349E-08	1.990E-08	1.408E-08	8.925E-09	6.389E-09	4.905E-09	3.941E-09	3.270E-09	2.779E-09	2.406E-09	2.113E-09
E	2.346E-08	1.256E-08	8.345E-09	4.931E-09	3.401E-09	2.552E-09	2.020E-09	1.659E-09	1.400E-09	1.205E-09	1.055E-09
ESE	2.519E-08	1.443E-08	9.964E-09	6.124E-09	4.300E-09	3.255E-09	2.588E-09	2.129E-09	1.797E-09	1.546E-09	1.352E-09
SE	3.075E-08	1.597E-08	1.042E-08	6.046E-09	4.134E-09	3.083E-09	2.430E-09	1.988E-09	1.672E-09	1.436E-09	1.253E-09
SSE	4.296E-08	2.252E-08	1.481E-08	8.683E-09	5.981E-09	4.484E-09	3.546E-09	2.909E-09	2.451E-09	2.108E-09	1.843E-09

COOPER NUCLEAR STATION - VENT RELEASE POINT - ANNUAL PERIOD 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.050E-05	8.519E-06	4.945E-06	2.555E-06	1.030E-06	5.554E-07	3.502E-07	2.432E-07	1.802E-07	1.398E-07	1.124E-07
SSW	2.437E-05	1.283E-05	8.476E-06	4.696E-06	2.032E-06	1.140E-06	7.377E-07	5.220E-07	3.926E-07	3.085E-07	2.505E-07
SW	1.744E-05	9.693E-06	6.630E-06	3.760E-06	1.668E-06	9.479E-07	6.183E-07	4.400E-07	3.323E-07	2.619E-07	2.133E-07
WSW	1.237E-05	7.087E-06	4.763E-06	2.642E-06	1.136E-06	6.329E-07	4.073E-07	2.870E-07	2.150E-07	1.684E-07	1.363E-07
W	1.217E-05	6.424E-06	4.358E-06	2.464E-06	1.089E-06	6.168E-07	4.015E-07	2.854E-07	2.153E-07	1.696E-07	1.380E-07
WNW	1.681E-05	8.801E-06	6.005E-06	3.376E-06	1.474E-06	8.288E-07	5.368E-07	3.800E-07	2.858E-07	2.246E-07	1.824E-07
NW	3.041E-05	1.473E-05	9.921E-06	5.620E-06	2.501E-06	1.426E-06	9.334E-07	6.663E-07	5.046E-07	3.988E-07	3.255E-07
NNW	3.686E-05	1.745E-05	1.118E-05	6.154E-06	2.668E-06	1.503E-06	9.770E-07	6.941E-07	5.239E-07	4.130E-07	3.363E-07
N	4.199E-05	1.813E-05	1.082E-05	5.673E-06	2.329E-06	1.273E-06	8.114E-07	5.683E-07	4.243E-07	3.315E-07	2.681E-07
NNE	2.490E-05	9.984E-06	5.812E-06	3.041E-06	1.257E-06	6.928E-07	4.445E-07	3.131E-07	2.348E-07	1.842E-07	1.494E-07
NE	1.192E-05	4.872E-06	2.810E-06	1.450E-06	5.833E-07	3.148E-07	1.987E-07	1.381E-07	1.025E-07	7.966E-08	6.411E-08
ENE	7.584E-06	3.195E-06	1.885E-06	9.836E-07	3.999E-07	2.168E-07	1.372E-07	9.548E-08	7.090E-08	5.514E-08	4.440E-08
E	6.841E-06	2.933E-06	1.695E-06	8.699E-07	3.471E-07	1.863E-07	1.172E-07	8.125E-08	6.016E-08	4.668E-08	3.752E-08
ESE	8.792E-06	3.651E-06	2.044E-06	1.029E-06	4.015E-07	2.125E-07	1.323E-07	9.094E-08	6.687E-08	5.158E-08	4.124E-08
SE	1.112E-05	4.716E-06	2.771E-06	1.441E-06	5.839E-07	3.157E-07	1.994E-07	1.386E-07	1.028E-07	7.986E-08	6.424E-08
SSE	1.386E-05	5.359E-06	3.050E-06	1.584E-06	6.510E-07	3.571E-07	2.281E-07	1.600E-07	1.195E-07	9.342E-08	7.553E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.290E-08	4.752E-08	3.066E-08	1.748E-08	1.181E-08	8.727E-09	6.826E-09	5.550E-09	4.643E-09	3.969E-09	3.450E-09
SSW	2.088E-07	1.098E-07	7.215E-08	4.210E-08	2.883E-08	2.152E-08	1.697E-08	1.389E-08	1.168E-08	1.003E-08	8.756E-09
SW	1.781E-07	9.420E-08	6.210E-08	3.638E-08	2.497E-08	1.867E-08	1.474E-08	1.207E-08	1.016E-08	8.733E-09	7.628E-09
WSW	1.133E-07	5.890E-08	3.838E-08	2.212E-08	1.500E-08	1.112E-08	8.711E-09	7.092E-09	5.938E-09	5.079E-09	4.418E-09
W	1.152E-07	6.095E-08	4.020E-08	2.357E-08	1.619E-08	1.211E-08	9.566E-09	7.841E-09	6.603E-09	5.677E-09	4.960E-09
WNW	1.520E-07	7.976E-08	5.233E-08	3.044E-08	2.079E-08	1.549E-08	1.219E-08	9.957E-09	8.363E-09	7.173E-09	6.254E-09
NW	2.725E-07	1.455E-07	9.662E-08	5.719E-08	3.953E-08	2.973E-08	2.357E-08	1.939E-08	1.637E-08	1.411E-08	1.236E-08
NNW	2.810E-07	1.492E-07	9.870E-08	5.815E-08	4.007E-08	3.006E-08	2.379E-08	1.953E-08	1.647E-08	1.418E-08	1.241E-08
N	2.226E-07	1.156E-07	7.548E-08	4.370E-08	2.976E-08	2.213E-08	1.740E-08	1.420E-08	1.192E-08	1.022E-08	8.909E-09
NNE	1.244E-07	6.535E-08	4.295E-08	2.510E-08	1.721E-08	1.287E-08	1.016E-08	8.324E-09	7.010E-09	6.026E-09	5.266E-09
NE	5.301E-08	2.713E-08	1.752E-08	1.000E-08	6.750E-09	4.985E-09	3.896E-09	3.166E-09	2.646E-09	2.261E-09	1.964E-09
ENE	3.673E-08	1.881E-08	1.215E-08	6.931E-09	4.678E-09	3.455E-09	2.700E-09	2.194E-09	1.834E-09	1.566E-09	1.360E-09
E	3.100E-08	1.581E-08	1.019E-08	5.804E-09	3.915E-09	2.890E-09	2.258E-09	1.835E-09	1.534E-09	1.310E-09	1.138E-09
ESE	3.392E-08	1.702E-08	1.084E-08	6.069E-09	4.040E-09	2.952E-09	2.287E-09	1.845E-09	1.533E-09	1.302E-09	1.125E-09
SE	5.310E-08	2.713E-08	1.749E-08	9.953E-09	6.700E-09	4.938E-09	3.852E-09	3.126E-09	2.609E-09	2.226E-09	1.932E-09
SSE	6.271E-08	3.254E-08	2.119E-08	1.222E-08	8.310E-09	6.173E-09	4.848E-09	3.955E-09	3.318E-09	2.843E-09	2.477E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - ANNUAL PERIOD 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.538E-05	4.799E-06	2.438E-06	1.186E-06	4.587E-07	2.458E-07	1.559E-07	1.094E-07	8.210E-08	6.457E-08	5.258E-08
SSW	1.001E-05	3.264E-06	1.682E-06	8.231E-07	3.184E-07	1.702E-07	1.076E-07	7.517E-08	5.611E-08	4.389E-08	3.554E-08
SW	8.464E-06	2.893E-06	1.506E-06	7.393E-07	2.865E-07	1.539E-07	9.809E-08	6.931E-08	5.240E-08	4.153E-08	3.405E-08
WSW	8.845E-06	3.043E-06	1.604E-06	7.924E-07	3.077E-07	1.641E-07	1.032E-07	7.174E-08	5.333E-08	4.157E-08	3.357E-08
W	1.069E-05	3.624E-06	1.906E-06	9.423E-07	3.675E-07	1.976E-07	1.256E-07	8.838E-08	6.646E-08	5.237E-08	4.270E-08
WNW	1.523E-05	5.230E-06	2.749E-06	1.355E-06	5.263E-07	2.824E-07	1.792E-07	1.258E-07	9.440E-08	7.421E-08	6.036E-08
NW	2.015E-05	6.916E-06	3.650E-06	1.804E-06	7.037E-07	3.777E-07	2.391E-07	1.671E-07	1.248E-07	9.755E-08	7.894E-08
NNW	2.512E-05	8.763E-06	4.660E-06	2.311E-06	9.044E-07	4.853E-07	3.066E-07	2.137E-07	1.591E-07	1.242E-07	1.003E-07
N	2.906E-05	1.005E-05	5.348E-06	2.651E-06	1.033E-06	5.515E-07	3.467E-07	2.407E-07	1.785E-07	1.388E-07	1.118E-07
NNE	1.922E-05	6.588E-06	3.515E-06	1.749E-06	6.855E-07	3.682E-07	2.332E-07	1.632E-07	1.220E-07	9.564E-08	7.760E-08
NE	1.256E-05	4.280E-06	2.278E-06	1.136E-06	4.517E-07	2.478E-07	1.606E-07	1.148E-07	8.754E-08	6.978E-08	5.746E-08
ENE	1.018E-05	3.465E-06	1.861E-06	9.362E-07	3.774E-07	2.100E-07	1.378E-07	9.977E-08	7.691E-08	6.191E-08	5.142E-08
E	7.974E-06	2.665E-06	1.412E-06	7.061E-07	2.829E-07	1.561E-07	1.013E-07	7.242E-08	5.512E-08	4.384E-08	3.600E-08
ESE	7.661E-06	2.517E-06	1.312E-06	6.490E-07	2.570E-07	1.412E-07	9.181E-08	6.589E-08	5.042E-08	4.032E-08	3.330E-08
SE	1.078E-05	3.577E-06	1.869E-06	9.227E-07	3.618E-07	1.953E-07	1.242E-07	8.715E-08	6.528E-08	5.121E-08	4.158E-08
SSE	1.446E-05	4.710E-06	2.435E-06	1.192E-06	4.600E-07	2.451E-07	1.545E-07	1.078E-07	8.037E-08	6.284E-08	5.089E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.402E-08	2.376E-08	1.592E-08	9.555E-09	6.684E-09	5.066E-09	4.040E-09	3.337E-09	2.829E-09	2.445E-09	2.147E-09
SSW	2.958E-08	1.553E-08	1.019E-08	5.920E-09	4.050E-09	3.016E-09	2.372E-09	1.936E-09	1.624E-09	1.392E-09	1.212E-09
SW	2.865E-08	1.570E-08	1.060E-08	6.368E-09	4.422E-09	3.325E-09	2.631E-09	2.157E-09	1.815E-09	1.559E-09	1.360E-09
WSW	2.787E-08	1.455E-08	9.549E-09	5.582E-09	3.839E-09	2.874E-09	2.269E-09	1.859E-09	1.565E-09	1.344E-09	1.173E-09
W	3.576E-08	1.924E-08	1.282E-08	7.592E-09	5.233E-09	3.918E-09	3.091E-09	2.530E-09	2.127E-09	1.825E-09	1.592E-09
WNW	5.042E-08	2.680E-08	1.772E-08	1.039E-08	7.115E-09	5.301E-09	4.168E-09	3.400E-09	2.851E-09	2.441E-09	2.124E-09
NW	6.561E-08	3.420E-08	2.233E-08	1.290E-08	8.768E-09	6.506E-09	5.102E-09	4.156E-09	3.482E-09	2.980E-09	2.593E-09
NNW	8.324E-08	4.324E-08	2.823E-08	1.636E-08	1.116E-08	8.315E-09	6.543E-09	5.348E-09	4.493E-09	3.855E-09	3.363E-09
N	9.256E-08	4.765E-08	3.094E-08	1.781E-08	1.210E-08	8.984E-09	7.052E-09	5.751E-09	4.823E-09	4.131E-09	3.597E-09
NNE	6.467E-08	3.418E-08	2.260E-08	1.332E-08	9.183E-09	6.889E-09	5.450E-09	4.473E-09	3.771E-09	3.245E-09	2.837E-09
NE	4.851E-08	2.677E-08	1.810E-08	1.088E-08	7.556E-09	5.680E-09	4.494E-09	3.684E-09	3.101E-09	2.663E-09	2.323E-09
ENE	4.375E-08	2.484E-08	1.712E-08	1.054E-08	7.432E-09	5.650E-09	4.510E-09	3.724E-09	3.154E-09	2.723E-09	2.387E-09
E	3.032E-08	1.656E-08	1.113E-08	6.644E-09	4.601E-09	3.457E-09	2.736E-09	2.246E-09	1.892E-09	1.628E-09	1.422E-09
ESE	2.819E-08	1.573E-08	1.071E-08	6.485E-09	4.523E-09	3.411E-09	2.706E-09	2.223E-09	1.875E-09	1.613E-09	1.410E-09
SE	3.467E-08	1.837E-08	1.216E-08	7.183E-09	4.963E-09	3.731E-09	2.957E-09	2.431E-09	2.053E-09	1.769E-09	1.549E-09
SSE	4.236E-08	2.229E-08	1.468E-08	8.607E-09	5.922E-09	4.434E-09	3.502E-09	2.869E-09	2.415E-09	2.075E-09	1.812E-09

COOPER NUCLEAR STATION - COMBINED RELEASE - THIRD QUARTER 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES										
SECTOR	0.500	1.000	2.000	3.000	4.000	5.000	10.00	20.00	30.00	40.00	50.00
S	1.01E+01	2.36E+00	4.33E-01	1.66E-01	8.52E-02	5.02E-02	9.03E-03	1.38E-03	4.39E-04	1.99E-04	1.10E-04
SSW	1.13E+01	2.86E+00	5.01E-01	1.88E-01	9.20E-02	5.37E-02	1.01E-02	1.68E-03	5.32E-04	2.34E-04	1.27E-04
SW	9.86E+00	2.50E+00	4.37E-01	1.64E-01	8.27E-02	4.87E-02	9.02E-03	1.16E-03	2.88E-04	1.12E-04	5.75E-05
WSW	1.04E+01	2.53E+00	4.54E-01	1.71E-01	8.62E-02	5.07E-02	9.88E-03	1.67E-03	5.35E-04	2.32E-04	1.23E-04
W	1.13E+01	2.83E+00	5.15E-01	1.97E-01	1.00E-01	5.92E-02	1.07E-02	1.44E-03	3.94E-04	1.62E-04	8.56E-05
WNW	1.55E+01	3.81E+00	6.88E-01	2.68E-01	1.37E-01	8.35E-02	1.65E-02	2.43E-03	6.76E-04	2.74E-04	1.40E-04
NW	1.93E+01	4.77E+00	8.60E-01	3.24E-01	1.61E-01	9.63E-02	1.90E-02	3.13E-03	9.42E-04	3.93E-04	2.03E-04
NNW	2.68E+01	6.74E+00	1.25E+00	4.89E-01	2.56E-01	1.58E-01	3.97E-02	9.83E-03	3.78E-03	1.78E-03	9.51E-04
N	2.76E+01	6.90E+00	1.28E+00	5.14E-01	2.74E-01	1.68E-01	4.41E-02	1.14E-02	4.62E-03	2.28E-03	1.25E-03
NNE	1.62E+01	4.05E+00	7.51E-01	3.03E-01	1.63E-01	1.02E-01	2.66E-02	7.07E-03	2.91E-03	1.45E-03	8.03E-04
NE	5.90E+00	1.45E+00	2.71E-01	1.08E-01	5.75E-02	3.50E-02	8.98E-03	2.15E-03	8.20E-04	3.83E-04	2.02E-04
ENE	3.04E+00	7.53E-01	1.47E-01	6.07E-02	3.29E-02	1.99E-02	3.76E-03	4.30E-04	1.10E-04	4.54E-05	2.40E-05
E	3.96E+00	9.61E-01	1.90E-01	8.13E-02	4.52E-02	2.87E-02	7.29E-03	1.58E-03	5.38E-04	2.32E-04	1.17E-04
ESE	3.14E+00	7.77E-01	1.51E-01	6.32E-02	3.45E-02	2.20E-02	5.64E-03	1.28E-03	4.52E-04	2.01E-04	1.02E-04
SE	4.39E+00	1.09E+00	2.06E-01	8.42E-02	4.49E-02	2.82E-02	7.10E-03	1.68E-03	6.29E-04	2.86E-04	1.49E-04
SSE	7.11E+00	1.76E+00	3.20E-01	1.22E-01	6.18E-02	3.63E-02	6.58E-03	9.85E-04	3.04E-04	1.36E-04	7.49E-05

COOPER NUCLEAR STATION - COMBINED RELEASE - FOURTH QUARTER 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES										
SECTOR	0.500	1.000	2.000	3.000	4.000	5.000	10.00	20.00	30.00	40.00	50.00
S	1.48E+00	3.81E-01	6.76E-02	2.52E-02	1.25E-02	7.18E-03	1.16E-03	1.51E-04	4.56E-05	2.09E-05	1.20E-05
SSW	1.35E+00	3.66E-01	5.87E-02	1.92E-02	8.45E-03	4.46E-03	6.96E-04	1.32E-04	4.81E-05	2.25E-05	1.23E-05
SW	1.37E+00	3.82E-01	6.50E-02	2.23E-02	1.01E-02	5.25E-03	6.34E-04	7.66E-05	2.46E-05	1.18E-05	7.05E-06
WSW	9.61E-01	2.88E-01	4.96E-02	1.68E-02	7.65E-03	4.14E-03	7.11E-04	1.44E-04	5.28E-05	2.46E-05	1.33E-05
W	6.2[illegible]E-01	1.88E-01	3.19E-02	1.05E-02	4.61E-03	2.35E-03	2.54E-04	2.96E-05	1.04E-05	5.67E-06	3.74E-06
WNW	1.06E+00	3.62E-01	6.17E-02	1.99E-02	8.73E-03	4.54E-03	5.98E-04	7.86E-05	2.55E-05	1.28E-05	8.05E-06
NW	2.12E+00	6.44E-01	1.13E-01	3.96E-02	1.86E-02	1.04E-02	1.96E-03	4.34E-04	1.64E-04	7.68E-05	4.12E-05
NNW	2.94E+00	8.29E-01	1.53E-01	5.58E-02	2.74E-02	1.57E-02	3.01E-03	6.44E-04	2.44E-04	1.15E-04	6.16E-05
N	4.04E+00	1.11E+00	2.09E-01	8.08E-02	4.15E-02	2.46E-02	5.20E-03	1.17E-03	4.79E-04	2.48E-04	1.44E-04
NNE	2.27E+00	6.09E-01	1.11E-01	4.28E-02	2.16E-02	1.26E-02	2.40E-03	4.24E-04	1.44E-04	6.53E-05	3.49E-05
NE	1.36E+00	3.60E-01	6.77E-02	2.68E-02	1.39E-02	8.39E-03	1.65E-03	2.90E-04	9.51E-05	4.19E-05	2.22E-05
ENE	5.61E-01	1.51E-01	2.92E-02	1.16E-02	5.95E-03	3.46E-03	6.07E-04	1.00E-04	3.40E-05	1.57E-05	8.86E-06
E	7.73E-01	2.07E-01	3.84E-02	1.53E-02	8.08E-03	4.96E-03	1.16E-03	2.38E-04	7.70E-05	3.12E-05	1.49E-05
ESE	1.03E+00	2.56E-01	4.75E-02	1.86E-02	9.62E-03	5.74E-03	1.14E-03	2.08E-04	6.92E-05	3.03E-05	1.57E-05
SE	1.41E+00	3.41E-01	5.95E-02	2.23E-02	1.11E-02	6.52E-03	1.32E-03	2.69E-04	9.68E-05	4.42E-05	2.32E-05
SSE	1.31E+00	3.28E-01	5.83E-02	2.24E-02	1.16E-02	6.97E-03	1.54E-03	3.48E-04	1.35E-04	6.45E-05	3.49E-05

COOPER NUCLEAR STATION - COMBINED RELEASE - SECOND SEMIANNUAL PERIOD 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES										
SECTOR	0.500	1.000	2.000	3.000	4.000	5.000	10.00	20.00	30.00	40.00	50.00
S	1.16E+01	2.75E+00	5.01E-01	1.92E-01	9.77E-02	5.74E-02	1.02E-02	1.53E-03	4.84E-04	2.20E-04	1.22E-04
SSW	1.27E+01	3.22E+00	5.60E-01	2.07E-01	1.00E-01	5.82E-02	1.08E-02	1.81E-03	5.80E-04	2.57E-04	1.39E-04
SW	1.12E+01	2.88E+00	5.02E-01	1.86E-01	9.27E-02	5.40E-02	9.65E-03	1.23E-03	3.12E-04	1.24E-04	6.46E-05
WSW	1.14E+01	2.82E+00	5.04E-01	1.87E-01	9.39E-02	5.48E-02	1.06E-02	1.81E-03	5.88E-04	2.57E-04	1.36E-04
W	1.19E+01	3.02E+00	5.47E-01	2.07E-01	1.05E-01	6.16E-02	1.10E-02	1.47E-03	4.04E-04	1.68E-04	8.93E-05
WNW	1.65E+01	4.18E+00	7.49E-01	2.88E-01	1.46E-01	8.80E-02	1.71E-02	2.51E-03	7.01E-04	2.86E-04	1.48E-04
NW	2.14E+01	5.41E+00	9.73E-01	3.63E-01	1.80E-01	1.07E-01	2.10E-02	3.56E-03	1.11E-03	4.70E-04	2.44E-04
NNW	2.98E+01	7.57E+00	1.40E+00	5.45E-01	2.83E-01	1.74E-01	4.28E-02	1.05E-02	4.02E-03	1.89E-03	1.01E-03
N	3.16E+01	8.00E+00	1.49E+00	5.95E-01	3.16E-01	1.92E-01	4.93E-02	1.26E-02	5.10E-03	2.52E-03	1.40E-03
NNE	1.84E+01	4.66E+00	8.63E-01	3.46E-01	1.85E-01	1.14E-01	2.90E-02	7.49E-03	3.06E-03	1.52E-03	8.38E-04
NE	7.25E+00	1.81E+00	3.39E-01	1.35E-01	7.14E-02	4.41E-02	1.06E-02	2.44E-03	9.16E-04	4.25E-04	2.24E-04
ENE	3.60E+00	9.04E-01	1.76E-01	7.24E-02	3.88E-02	2.34E-02	4.37E-03	5.30E-04	1.44E-04	6.12E-05	3.28E-05
E	4.74E+00	1.17E+00	2.29E-01	9.67E-02	5.33E-02	3.37E-02	8.45E-03	1.81E-03	6.15E-04	2.63E-04	1.31E-04
ESE	4.17E+00	1.03E+00	1.99E-01	8.19E-02	4.42E-02	2.77E-02	6.79E-03	1.49E-03	5.21E-04	2.31E-04	1.18E-04
SE	5.80E+00	1.43E+00	2.66E-01	1.06E-01	5.61E-02	3.47E-02	8.42E-03	1.95E-03	7.26E-04	3.31E-04	1.72E-04
SSE	8.42E+00	2.09E+00	3.79E-01	1.44E-01	7.34E-02	4.33E-02	8.12E-03	1.33E-03	4.38E-04	2.00E-04	1.10E-04

COOPER NUCLEAR STATION - COMBINED RELEASE - ANNUAL PERIOD 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES										
SECTOR	0.500	1.000	2.000	3.000	4.000	5.000	10.00	20.00	30.00	40.00	50.00
S	1.38E+01	3.26E+00	5.87E-01	2.24E-01	1.14E-01	6.73E-02	1.24E-02	2.01E-03	6.53E-04	2.95E-04	1.62E-04
SSW	1.52E+01	3.85E+00	6.68E-01	2.47E-01	1.21E-01	7.08E-02	1.35E-02	2.34E-03	7.57E-04	3.33E-04	1.78E-04
SW	1.31E+01	3.36E+00	5.89E-01	2.19E-01	1.10E-01	6.42E-02	1.18E-02	1.63E-03	4.35E-04	1.74E-04	8.96E-05
WSW	1.28E+01	3.21E+00	5.72E-01	2.13E-01	1.07E-01	6.22E-02	1.20E-02	2.06E-03	6.64E-04	2.89E-04	1.52E-04
W	1.34E+01	3.42E+00	6.19E-01	2.35E-01	1.19E-01	7.02E-02	1.28E-02	1.82E-03	5.13E-04	2.12E-04	1.11E-04
WNW	1.88E+01	4.79E+00	8.64E-01	3.32E-01	1.68E-01	1.01E-01	1.99E-02	3.01E-03	8.63E-04	3.55E-04	1.83E-04
NW	2.49E+01	6.43E+00	1.16E+00	4.37E-01	2.19E-01	1.31E-01	2.63E-02	4.59E-03	1.44E-03	6.12E-04	3.16E-04
NNW	3.36E+01	8.58E+00	1.58E+00	6.16E-01	3.20E-01	1.97E-01	4.79E-02	1.15E-02	4.37E-03	2.04E-03	1.09E-03
N	3.58E+01	9.14E+00	1.70E+00	6.76E-01	3.58E-01	2.18E-01	5.54E-02	1.39E-02	5.55E-03	2.72E-03	1.50E-03
NNE	2.14E+01	5.45E+00	1.01E+00	4.03E-01	2.15E-01	1.33E-01	3.33E-02	8.41E-03	3.39E-03	1.66E-03	9.17E-04
NE	8.57E+00	2.13E+00	3.98E-01	1.57E-01	8.32E-02	5.14E-02	1.23E-02	2.83E-03	1.06E-03	4.89E-04	2.58E-04
ENE	4.75E+00	1.19E+00	2.27E-01	9.20E-02	4.90E-02	2.96E-02	5.77E-03	8.16E-04	2.43E-04	1.05E-04	5.57E-05
E	5.56E+00	1.37E+00	2.66E-01	1.11E-01	6.07E-02	3.81E-02	9.44E-03	2.01E-03	6.79E-04	2.91E-04	1.46E-04
ESE	5.30E+00	1.31E+00	2.49E-01	1.01E-01	5.38E-02	3.35E-02	8.05E-03	1.74E-03	6.04E-04	2.67E-04	1.36E-04
SE	7.15E+00	1.77E+00	3.23E-01	1.28E-01	6.75E-02	4.16E-02	1.00E-02	2.28E-03	8.37E-04	3.80E-04	1.98E-04
SSE	1.00E+01	2.45E+00	4.43E-01	1.68E-01	8.58E-02	5.08E-02	9.93E-03	1.75E-03	5.98E-04	2.76E-04	1.50E-04

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.65E-01 97.61%	3.65E-01 98.43%	3.65E-01 93.23%	3.65E-01 97.93%	3.65E-01 97.71%	3.65E-01 25.02%	3.70E-01 98.93%	8.01E-01 99.69%
GROUND	2.15E-03 0.58%	2.15E-03 0.58%	2.15E-03 0.55%	2.15E-03 0.58%	2.15E-03 0.58%	2.15E-03 0.15%	2.15E-03 0.58%	2.52E-03 0.31%
INHAL	1.24E-04 0.03%	1.93E-04 0.05%	9.21E-04 0.24%	1.32E-04 0.04%	1.97E-04 0.05%	3.57E-02 2.45%	1.61E-03 0.43%	0.0 0.0 %
VEGET	4.63E-03 1.24%	2.77E-03 0.75%	1.89E-02 4.82%	2.15E-03 0.58%	2.46E-03 0.66%	4.18E-01 28.68%	9.94E-05 0.03%	0.0 0.0 %
COW MILK	1.90E-03 0.51%	5.38E-04 0.15%	4.23E-03 1.08%	3.17E-03 0.85%	3.66E-03 0.98%	6.24E-01 42.83%	1.45E-04 0.04%	0.0 0.0 %
MEAT	1.15E-04 0.03%	1.55E-04 0.04%	3.31E-04 0.08%	1.14E-04 0.03%	9.10E-05 0.02%	1.29E-02 0.88%	8.16E-06 0.00%	0.0 0.0 %
TOTAL	3.73E-01	3.70E-01	3.91E-01	3.72E-01	3.73E-01	1.46E+00	3.74E-01	8.03E-01

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	3.13E-06 0.0 %	1.58E-04 0.02%
KR 85M	9.48E-03 2.60%	9.48E-03 2.60%	9.48E-03 2.60%	9.48E-03 2.60%	9.48E-03 2.60%	9.48E-03 2.60%	9.80E-03 2.65%	3.47E-02 4.34%
KR 87	4.00E-02 10.98%	4.00E-02 10.98%	4.00E-02 10.98%	4.00E-02 10.98%	4.00E-02 10.98%	4.00E-02 10.98%	4.14E-02 11.21%	1.78E-01 22.23%
KR 88	2.37E-01 65.13%	2.37E-01 65.13%	2.37E-01 65.13%	2.37E-01 65.13%	2.37E-01 65.13%	2.37E-01 65.13%	2.39E-01 64.56%	3.49E-01 43.60%
XE133	4.83E-03 1.32%	4.83E-03 1.32%	4.83E-03 1.32%	4.83E-03 1.32%	4.83E-03 1.32%	4.83E-03 1.32%	5.17E-03 1.40%	1.65E-02 2.06%
XE135	6.06E-02 16.62%	6.06E-02 16.62%	6.06E-02 16.62%	6.06E-02 16.62%	6.06E-02 16.62%	6.06E-02 16.62%	6.22E-02 16.85%	1.96E-01 24.47%
XE135M	8.94E-04 0.25%	8.94E-04 0.25%	8.94E-04 0.25%	8.94E-04 0.25%	8.94E-04 0.25%	8.94E-04 0.25%	8.99E-04 0.24%	1.48E-03 0.18%
XE138	1.11E-02 3.05%	1.11E-02 3.05%	1.11E-02 3.05%	1.11E-02 3.05%	1.11E-02 3.05%	1.11E-02 3.05%	1.12E-02 3.04%	2.32E-02 2.90%
KR 89	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.40E-07 0.0 %	1.03E-06 0.0 %
KR 83M	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.13E-05 0.0 %	4.10E-05 0.0 %
XE137	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	5.05E-07 0.0 %	7.91E-06 0.0 %
XE133M	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.74E-04 0.05%	1.46E-03 0.18%
XE131M	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	5.73E-06 0.0 %	5.68E-05 0.0 %
TOTAL	3.65E-01	3.65E-01	3.65E-01	3.65E-01	3.65E-01	3.65E-01	3.70E-01	8.01E-01

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	7.83E-05 3.10%
I 133	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.87E-06 0.07%
SR 89	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	2.30E-09 0.0 %
CS134	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	4.61E-05 1.83%
CS137	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	7.86E-04 31.13%
BA140	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	6.04E-05 2.39%
I 131	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	1.09E-06 0.04%
CO 60	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.54E-03 60.96%
MN 54	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	1.13E-05 0.45%
I 131	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	5.39E-07 0.02%
TOTAL	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.52E-03

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.90E-05 47.49%	1.50E-05 7.75%	8.03E-05 8.72%	1.04E-04 78.64%	1.77E-04 89.58%	3.43E-02 96.11%	0.0 0.0 %	0.0 0.0 %
I 133	2.28E-06 1.83%	3.63E-06 1.88%	4.51E-06 0.49%	7.08E-06 5.35%	1.22E-05 6.20%	1.10E-03 3.07%	0.0 0.0 %	0.0 0.0 %
SR 89	2.85E-07 0.23%	8.53E-06 4.41%	9.93E-06 1.08%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	4.40E-05 2.74%	0.0 0.0 %
SR 90	4.81E-05 38.72%	5.09E-06 2.63%	7.76E-04 84.32%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.72E-05 5.43%	0.0 0.0 %
CS134	2.74E-06 2.21%	4.06E-08 0.02%	1.94E-06 0.21%	4.03E-06 3.05%	1.35E-06 0.69%	0.0 0.0 %	4.76E-07 0.03%	0.0 0.0 %
CS137	8.02E-06 6.46%	1.68E-07 0.09%	1.28E-05 1.39%	1.52E-05 11.45%	5.38E-06 2.73%	0.0 0.0 %	1.90E-06 0.12%	0.0 0.0 %
BA140	2.17E-06 1.75%	1.44E-04 74.63%	3.42E-05 3.72%	3.92E-08 0.03%	1.32E-08 0.0 %	0.0 0.0 %	1.05E-03 65.21%	0.0 0.0 %
I 131	1.08E-07 0.09%	2.75E-08 0.01%	1.47E-07 0.02%	1.91E-07 0.14%	3.24E-07 0.16%	6.29E-05 0.18%	0.0 0.0 %	0.0 0.0 %
CO 58	6.03E-09 0.0 %	2.37E-07 0.12%	0.0 0.0 %	4.29E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	2.58E-06 0.16%	0.0 0.0 %
CO 60	1.07E-06 0.86%	1.58E-05 8.16%	0.0 0.0 %	7.77E-07 0.59%	0.0 0.0 %	0.0 0.0 %	4.12E-04 25.65%	0.0 0.0 %
MN 54	5.03E-08 0.04%	4.70E-07 0.24%	0.0 0.0 %	2.94E-07 0.22%	7.22E-08 0.04%	0.0 0.0 %	1.06E-05 0.66%	0.0 0.0 %
I 131	3.94E-07 0.32%	1.00E-07 0.05%	5.36E-07 0.06%	6.95E-07 0.53%	1.18E-06 0.60%	2.29E-04 0.64%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.24E-04	1.93E-04	9.21E-04	1.32E-04	1.97E-04	3.57E-02	1.61E-03	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.25E-04 15.68%	2.42E-04 8.71%	1.04E-03 5.52%	1.28E-03 59.51%	2.16E-03 87.85%	4.15E-01 99.27%	0.0 0.0 %	0.0 0.0 %
I 133	2.28E-10 0.0 %	4.72E-10 0.0 %	4.56E-10 0.0 %	6.85E-10 0.0 %	1.18E-09 0.0 %	1.10E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	6.36E-05 1.38%	2.18E-04 7.87%	2.22E-03 11.78%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.35E-03 72.33%	3.19E-04 11.52%	1.35E-02 71.47%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	4.26E-05 0.92%	9.60E-07 0.03%	3.74E-05 0.20%	7.66E-05 3.56%	2.44E-05 0.99%	0.0 0.0 %	8.48E-06 8.53%	0.0 0.0 %
CS137	3.26E-04 7.04%	1.06E-05 0.38%	6.55E-04 3.47%	7.69E-04 35.75%	2.57E-04 10.46%	0.0 0.0 %	9.00E-05 90.56%	0.0 0.0 %
BA140	8.81E-05 1.90%	1.82E-03 65.57%	1.42E-03 7.52%	1.53E-06 0.07%	5.11E-07 0.02%	0.0 0.0 %	9.08E-07 0.91%	0.0 0.0 %
I 131	3.61E-07 0.0 %	1.20E-07 0.0 %	5.18E-07 0.0 %	6.37E-07 0.03%	1.07E-06 0.04%	2.06E-04 0.05%	0.0 0.0 %	0.0 0.0 %
CO 58	2.93E-07 0.0 %	1.68E-06 0.06%	0.0 0.0 %	1.16E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	2.85E-05 0.62%	1.55E-04 5.59%	0.0 0.0 %	1.15E-05 0.54%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	5.57E-07 0.01%	5.61E-06 0.20%	0.0 0.0 %	2.57E-06 0.12%	7.49E-07 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.00E-06 0.11%	1.67E-06 0.06%	7.17E-06 0.04%	8.82E-06 0.41%	1.49E-05 0.61%	2.86E-03 0.68%	0.0 0.0 %	0.0 0.0 %
TOTAL	4.63E-03	2.77E-03	1.89E-02	2.15E-03	2.46E-03	4.18E-01	9.94E-05	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.08E-03 56.87%	3.35E-04 62.27%	1.60E-03 37.80%	1.91E-03 60.43%	3.22E-03 88.06%	6.19E-01 99.23%	0.0 0.0 %	0.0 0.0 %
I 133	4.58E-07 0.02%	8.81E-07 0.16%	9.24E-07 0.02%	1.35E-06 0.04%	2.31E-06 0.06%	2.21E-04 0.04%	0.0 0.0 %	0.0 0.0 %
SR 89	6.26E-06 0.33%	1.94E-05 3.61%	2.19E-04 5.17%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.12E-04 16.40%	2.83E-05 5.27%	1.25E-03 29.67%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	5.58E-05 2.93%	1.28E-06 0.24%	5.55E-05 1.31%	1.11E-04 3.49%	3.51E-05 0.96%	0.0 0.0 %	1.23E-05 8.49%	0.0 0.0 %
CS137	4.29E-04 22.51%	1.43E-05 2.66%	9.85E-04 23.31%	1.13E-03 35.54%	3.76E-04 10.27%	0.0 0.0 %	1.33E-04 91.47%	0.0 0.0 %
BA140	6.32E-06 0.33%	1.19E-04 22.15%	1.03E-04 2.43%	1.08E-07 0.0 %	3.59E-08 0.0 %	0.0 0.0 %	6.44E-08 0.04%	0.0 0.0 %
I 131	5.26E-07 0.03%	1.63E-07 0.03%	7.77E-07 0.02%	9.31E-07 0.03%	1.57E-06 0.04%	3.01E-04 0.05%	0.0 0.0 %	0.0 0.0 %
CO 58	3.38E-08 0.0 %	1.74E-07 0.03%	0.0 0.0 %	1.31E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	3.43E-06 0.18%	1.69E-05 3.13%	0.0 0.0 %	1.36E-06 0.04%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.65E-08 0.0 %	1.49E-07 0.03%	0.0 0.0 %	7.43E-08 0.0 %	2.16E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	7.46E-06 0.39%	2.31E-06 0.43%	1.10E-05 0.26%	1.32E-05 0.42%	2.22E-05 0.61%	4.27E-03 0.68%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.90E-03	5.38E-04	4.23E-03	3.17E-03	3.66E-03	6.24E-01	1.45E-04	0.0

COOPER NUCLEAR STATION ; THIRD QUARTERLY PERIOD 1982 ; COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.24E-05 19.43%	8.74E-06 5.65%	2.99E-05 9.02%	3.93E-05 34.60%	6.68E-05 73.40%	1.28E-02 99.27%	0.0 0.0 %	0.0 0.0 %
I 133	9.21E-14 0.0 %	2.26E-13 0.0 %	1.80E-13 0.0 %	2.88E-13 0.0 %	4.98E-13 0.0 %	4.44E-11 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	5.77E-07 0.50%	2.49E-06 1.61%	2.01E-05 6.08%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.29E-05 37.26%	4.56E-06 2.95%	1.74E-04 52.43%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	4.38E-06 3.81%	9.63E-08 0.06%	2.97E-06 0.90%	6.51E-06 5.73%	2.09E-06 2.29%	0.0 0.0 %	7.13E-07 8.74%	0.0 0.0 %
CS137	3.37E-05 29.25%	1.04E-06 0.67%	5.10E-05 15.41%	6.41E-05 56.45%	2.16E-05 23.72%	0.0 0.0 %	7.41E-06 90.82%	0.0 0.0 %
BA140	3.39E-06 2.95%	8.57E-05 55.36%	5.33E-05 16.10%	6.15E-08 0.05%	2.07E-08 0.02%	0.0 0.0 %	3.61E-08 0.44%	0.0 0.0 %
I 131	1.11E-08 0.0 %	4.32E-09 0.0 %	1.48E-08 0.0 %	1.94E-08 0.02%	3.31E-08 0.04%	6.32E-06 0.05%	0.0 0.0 %	0.0 0.0 %
CO 58	6.42E-08 0.06%	4.61E-07 0.30%	0.0 0.0 %	2.69E-08 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	7.59E-06 6.60%	5.15E-05 33.29%	0.0 0.0 %	3.24E-06 2.85%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	8.74E-09 0.0 %	1.11E-07 0.07%	0.0 0.0 %	4.28E-08 0.04%	1.26E-08 0.01%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.54E-07 0.13%	6.02E-08 0.04%	2.06E-07 0.06%	2.71E-07 0.24%	4.60E-07 0.51%	8.80E-05 0.68%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.15E-04	1.55E-04	3.31E-04	1.14E-04	9.10E-05	1.29E-02	8.16E-06	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	9.40E-07 0.0 %	3.13E-06 0.0 %	1.58E-04 0.02%
KR 85M	9.48E-03 2.54%	9.48E-03 2.56%	9.48E-03 2.42%	9.48E-03 2.55%	9.48E-03 2.54%	9.48E-03 0.65%	9.80E-03 2.62%	3.47E-02 4.32%
KR 87	4.00E-02 10.72%	4.00E-02 10.81%	4.00E-02 10.24%	4.00E-02 10.76%	4.00E-02 10.73%	4.00E-02 2.75%	4.14E-02 11.09%	1.78E-01 22.16%
KR 88	2.37E-01 63.58%	2.37E-01 64.11%	2.37E-01 60.72%	2.37E-01 63.78%	2.37E-01 63.64%	2.37E-01 16.29%	2.39E-01 63.86%	3.49E-01 43.47%
XE133	4.83E-03 1.29%	4.83E-03 1.30%	4.83E-03 1.24%	4.83E-03 1.30%	4.83E-03 1.29%	4.83E-03 0.33%	5.17E-03 1.39%	1.65E-02 2.05%
XE135	6.06E-02 16.23%	6.06E-02 16.36%	6.06E-02 15.50%	6.06E-02 16.28%	6.06E-02 16.24%	6.06E-02 4.16%	6.22E-02 16.67%	1.96E-01 24.39%
XE135M	8.94E-04 0.24%	8.94E-04 0.24%	8.94E-04 0.23%	8.94E-04 0.24%	8.94E-04 0.24%	8.94E-04 0.06%	8.99E-04 0.24%	1.48E-03 0.18%
XE138	1.11E-02 2.97%	1.11E-02 3.00%	1.11E-02 2.84%	1.11E-02 2.98%	1.11E-02 2.98%	1.11E-02 0.76%	1.12E-02 3.01%	2.32E-02 2.89%
KR 89	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.34E-07 0.0 %	4.40E-07 0.0 %	1.03E-06 0.0 %
KR 83M	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.45E-07 0.0 %	1.13E-05 0.0 %	4.10E-05 0.0 %
XE137	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	4.31E-07 0.0 %	5.05E-07 0.0 %	7.91E-06 0.0 %
XE133M	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.04%	1.56E-04 0.01%	1.74E-04 0.05%	1.46E-03 0.18%
XE131M	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	4.62E-06 0.0 %	5.73E-06 0.0 %	5.68E-05 0.0 %
I 131	1.95E-03 0.52%	6.65E-04 0.18%	2.81E-03 0.72%	3.40E-03 0.91%	5.69E-03 1.52%	1.08E+00 74.20%	6.45E-05 0.02%	7.83E-05 0.0 %

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	4.27E-06 0.0 %	6.05E-06 0.0 %	6.97E-06 0.0 %	9.97E-06 0.0 %	1.61E-05 0.0 %	1.32E-03 0.09%	1.54E-06 0.0 %	1.87E-06 0.0 %
SR 89	7.07E-05 0.02%	2.49E-04 0.07%	2.47E-03 0.63%	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	4.40E-05 0.01%	2.30E-09 0.0 %
SR 90	3.75E-03 1.00%	3.57E-04 0.10%	1.57E-02 4.01%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.72E-05 0.02%	0.0 0.0 %
CS134	1.45E-04 0.04%	4.19E-05 0.01%	1.37E-04 0.04%	2.37E-04 0.06%	1.02E-04 0.03%	3.95E-05 0.0 %	6.15E-05 0.02%	4.61E-05 0.0 %
CS137	1.47E-03 0.39%	7.00E-04 0.19%	2.38E-03 0.61%	2.65E-03 0.71%	1.33E-03 0.36%	6.74E-04 0.05%	9.06E-04 0.24%	7.86E-04 0.10%
BA140	1.53E-04 0.04%	2.22E-03 0.60%	1.66E-03 0.42%	5.46E-05 0.01%	5.35E-05 0.01%	5.29E-05 0.0 %	1.10E-03 0.29%	6.04E-05 0.0 %
I 131	1.04E-06 0.0 %	3.49E-07 0.0 %	1.49E-06 0.0 %	1.81E-06 0.0 %	3.03E-06 0.0 %	5.77E-04 0.04%	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	1.33E-06 0.0 %	3.48E-06 0.0 %	9.29E-07 0.0 %	1.09E-06 0.0 %	9.29E-07 0.0 %	9.29E-07 0.0 %	3.51E-06 0.0 %	1.09E-06 0.0 %
CO 60	1.35E-03 0.36%	1.55E-03 0.42%	1.31E-03 0.33%	1.32E-03 0.36%	1.31E-03 0.35%	1.31E-03 0.09%	1.72E-03 0.46%	1.54E-03 0.19%
MN 54	1.02E-05 0.0 %	1.60E-05 0.0 %	9.61E-06 0.0 %	1.26E-05 0.0 %	1.05E-05 0.0 %	9.61E-06 0.0 %	2.02E-05 0.0 %	1.13E-05 0.0 %
I 131	1.34E-05 0.0 %	4.58E-06 0.0 %	1.94E-05 0.0 %	2.34E-05 0.0 %	3.92E-05 0.01%	7.45E-03 0.51%	4.44E-07 0.0 %	5.39E-07 0.0 %
TOTAL	3.73E-01	3.70E-01	3.91E-01	3.72E-01	3.73E-01	1.46E+00	3.74E-01	8.03E-01

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.21E-02 79.53%	4.21E-02 83.69%	4.21E-02 76.84%	4.21E-02 73.94%	4.21E-02 80.20%	4.21E-02 14.93%	4.27E-02 82.23%	9.41E-02 92.16%
GROUND	6.82E-03 12.89%	6.82E-03 13.56%	6.82E-03 12.45%	6.82E-03 11.98%	6.82E-03 13.00%	6.82E-03 2.42%	6.82E-03 13.12%	8.00E-03 7.84%
INHAL	1.20E-04 0.23%	8.22E-05 0.16%	1.47E-04 0.27%	1.97E-04 0.35%	1.09E-04 0.21%	1.01E-02 3.59%	1.61E-03 3.10%	0.0 0.0 %
VEGET	1.69E-03 3.20%	8.75E-04 1.74%	2.44E-03 4.45%	3.14E-03 5.53%	1.38E-03 2.63%	8.84E-02 31.38%	3.19E-04 0.61%	0.0 0.0 %
COW MILK	2.02E-03 3.81%	1.98E-04 0.39%	3.12E-03 5.69%	4.41E-03 7.75%	1.98E-03 3.78%	1.32E-01 46.71%	4.57E-04 0.88%	0.0 0.0 %
MEAT	1.78E-04 0.34%	2.24E-04 0.45%	1.59E-04 0.29%	2.57E-04 0.45%	9.16E-05 0.17%	2.72E-03 0.97%	2.65E-05 0.05%	0.0 0.0 %
TOTAL	5.29E-02	5.03E-02	5.48E-02	5.69E-02	5.25E-02	2.82E-01	5.20E-02	1.02E-01

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	9.92E-06 0.02%	5.01E-04 0.53%
KR 85M	3.14E-03 7.47%	3.14E-03 7.47%	3.14E-03 7.47%	3.14E-03 7.47%	3.14E-03 7.47%	3.14E-03 7.47%	3.25E-03 7.60%	1.15E-02 12.22%
KR 87	2.67E-03 6.35%	2.67E-03 6.35%	2.67E-03 6.35%	2.67E-03 6.35%	2.67E-03 6.35%	2.67E-03 6.35%	2.77E-03 6.47%	1.19E-02 12.62%
KR 88	2.68E-02 63.59%	2.68E-02 63.59%	2.68E-02 63.59%	2.68E-02 63.59%	2.68E-02 63.59%	2.68E-02 63.59%	2.69E-02 62.91%	3.93E-02 41.79%
XE133	1.51E-03 3.59%	1.51E-03 3.59%	1.51E-03 3.59%	1.51E-03 3.59%	1.51E-03 3.59%	1.51E-03 3.59%	1.62E-03 3.79%	5.16E-03 5.48%
XE135	7.67E-03 18.22%	7.67E-03 18.22%	7.67E-03 18.22%	7.67E-03 18.22%	7.67E-03 18.22%	7.67E-03 18.22%	7.88E-03 18.43%	2.48E-02 26.33%
XE135M	2.22E-05 0.05%	2.22E-05 0.05%	2.22E-05 0.05%	2.22E-05 0.05%	2.22E-05 0.05%	2.22E-05 0.05%	2.23E-05 0.05%	3.67E-05 0.04%
XE138	2.62E-04 0.62%	2.62E-04 0.62%	2.62E-04 0.62%	2.62E-04 0.62%	2.62E-04 0.62%	2.62E-04 0.62%	2.65E-04 0.62%	5.49E-04 0.58%
KR 89	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.10E-08 0.0 %	4.93E-08 0.0 %
KR 83M	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	9.08E-07 0.0 %	3.30E-06 0.0 %
XE137	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.55E-08 0.0 %	2.42E-07 0.0 %
XE133M	3.26E-05 0.08%	3.26E-05 0.08%	3.26E-05 0.08%	3.26E-05 0.08%	3.26E-05 0.08%	3.26E-05 0.08%	3.64E-05 0.09%	3.06E-04 0.32%
XE131M	5.39E-06 0.01%	5.39E-06 0.01%	5.39E-06 0.01%	5.39E-06 0.01%	5.39E-06 0.01%	5.39E-06 0.01%	6.69E-06 0.02%	6.63E-05 0.07%
TOTAL	4.21E-02	4.21E-02	4.21E-02	4.21E-02	4.21E-02	4.21E-02	4.27E-02	9.41E-02

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.30E-05 0.16%
I 133	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.75E-07 0.0 %
SR 89	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.30E-10 0.0 %
CS134	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	7.92E-04 9.90%
CS137	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.41E-03 17.60%
BA140	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.45E-06 0.03%
I 131	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.73E-06 0.03%
CO 58	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	1.14E-05 0.14%
CO 60	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	5.69E-03 71.11%
MN 54	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	8.12E-05 1.01%
I 131	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	6.82E-03	6.82E-03	6.82E-03	6.82E-03	6.82E-03	6.82E-03	6.82E-03	8.00E-03

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.06E-05 8.80%	2.69E-06 3.28%	1.44E-05 9.80%	1.87E-05 9.50%	3.17E-05 28.99%	6.16E-03 60.88%	0.0 0.0 %	0.0 0.0 %
I 133	5.36E-07 0.45%	8.56E-07 1.04%	1.06E-06 0.72%	1.67E-06 0.85%	2.88E-06 2.63%	2.58E-04 2.55%	0.0 0.0 %	0.0 0.0 %
SR 89	2.84E-08 0.02%	8.50E-07 1.03%	9.90E-07 0.67%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	4.39E-06 0.27%	0.0 0.0 %
SR 90	8.38E-07 0.70%	8.86E-08 0.11%	1.35E-05 9.19%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.52E-06 0.09%	0.0 0.0 %
CS134	5.79E-05 48.12%	8.58E-07 1.04%	4.10E-05 27.84%	8.52E-05 43.30%	2.86E-05 26.10%	0.0 0.0 %	1.00E-05 0.62%	0.0 0.0 %
CS137	3.99E-05 33.14%	8.33E-07 1.01%	6.36E-05 43.24%	7.53E-05 38.30%	2.67E-05 24.43%	0.0 0.0 %	9.42E-06 0.58%	0.0 0.0 %
BA140	2.47E-07 0.21%	1.64E-05 19.96%	3.89E-06 2.64%	4.45E-09 0.0 %	1.50E-09 0.0 %	0.0 0.0 %	1.19E-04 7.38%	0.0 0.0 %
I 131	6.35E-06 5.28%	1.61E-06 1.97%	8.65E-06 5.88%	1.12E-05 5.70%	1.90E-05 17.38%	3.69E-03 36.50%	0.0 0.0 %	0.0 0.0 %
CO 58	5.65E-08 0.05%	2.22E-06 2.70%	0.0 0.0 %	4.02E-08 0.02%	0.0 0.0 %	0.0 0.0 %	2.42E-05 1.50%	0.0 0.0 %
CO 60	3.56E-06 2.96%	5.26E-05 64.04%	0.0 0.0 %	2.59E-06 1.32%	0.0 0.0 %	0.0 0.0 %	1.37E-03 85.16%	0.0 0.0 %
MN 54	3.35E-07 0.28%	3.13E-06 3.81%	0.0 0.0 %	1.96E-06 1.00%	4.81E-07 0.44%	0.0 0.0 %	7.06E-05 4.38%	0.0 0.0 %
I 131	1.25E-08 0.01%	3.19E-09 0.0 %	1.71E-08 0.01%	2.21E-08 0.01%	3.76E-08 0.03%	7.30E-06 0.07%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.20E-04	8.22E-05	1.47E-04	1.97E-04	1.09E-04	1.01E-02	1.61E-03	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.29E-04 7.59%	4.28E-05 4.89%	1.84E-04 7.56%	2.27E-04 7.22%	3.83E-04 27.73%	7.35E-02 83.15%	0.0 0.0 %	0.0 0.0 %
I 133	4.97E-11 0.0 %	1.03E-10 0.0 %	9.95E-11 0.0 %	1.49E-10 0.0 %	2.54E-10 0.0 %	2.40E-08 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	3.77E-06 0.22%	1.29E-05 1.48%	1.32E-04 5.40%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.69E-05 2.18%	3.52E-06 0.40%	1.49E-04 6.10%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	7.78E-04 45.94%	1.76E-05 2.01%	6.84E-04 28.04%	1.40E-03 44.58%	4.46E-04 32.28%	0.0 0.0 %	1.55E-04 48.59%	0.0 0.0 %
CS137	5.93E-04 35.02%	1.93E-05 2.20%	1.19E-03 48.94%	1.40E-03 44.56%	4.69E-04 33.94%	0.0 0.0 %	1.64E-04 51.40%	0.0 0.0 %
BA140	3.67E-06 0.22%	7.58E-05 8.66%	5.91E-05 2.42%	6.37E-08 0.0 %	2.13E-08 0.0 %	0.0 0.0 %	3.79E-08 0.01%	0.0 0.0 %
I 131	2.59E-05 1.53%	8.63E-06 0.99%	3.71E-05 1.52%	4.57E-05 1.45%	7.71E-05 5.58%	1.48E-02 16.74%	0.0 0.0 %	0.0 0.0 %
CO 58	3.36E-06 0.20%	1.93E-05 2.20%	0.0 0.0 %	1.33E-06 0.04%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.16E-04 6.83%	6.31E-04 72.10%	0.0 0.0 %	4.69E-05 1.49%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.39E-06 0.26%	4.43E-05 5.06%	0.0 0.0 %	2.03E-05 0.64%	5.91E-06 0.43%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.64E-07 0.0 %	5.48E-08 0.0 %	2.36E-07 0.0 %	2.90E-07 0.0 %	4.90E-07 0.04%	9.40E-05 0.11%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.69E-03	8.75E-04	2.44E-03	3.14E-03	1.38E-03	8.84E-02	3.19E-04	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.92E-04 9.52%	5.94E-05 29.97%	2.83E-04 9.09%	3.40E-04 7.70%	5.71E-04 28.80%	1.10E-01 83.45%	0.0 0.0 %	0.0 0.0 %
I 133	9.99E-08 0.0 %	1.92E-07 0.10%	2.02E-07 0.0 %	2.95E-07 0.0 %	5.05E-07 0.03%	4.83E-05 0.04%	0.0 0.0 %	0.0 0.0 %
SR 89	3.68E-07 0.02%	1.14E-06 0.58%	1.29E-05 0.41%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.40E-06 0.17%	3.08E-07 0.16%	1.36E-05 0.44%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.01E-03 50.10%	2.32E-05 11.69%	1.00E-03 32.23%	2.00E-03 45.46%	6.35E-04 32.00%	0.0 0.0 %	2.23E-04 48.72%	0.0 0.0 %
CS137	7.58E-04 37.57%	2.53E-05 12.76%	1.74E-03 55.89%	1.99E-03 45.17%	6.64E-04 33.47%	0.0 0.0 %	2.35E-04 51.28%	0.0 0.0 %
BA140	2.58E-07 0.01%	4.87E-06 2.45%	4.19E-06 0.13%	4.40E-09 0.0 %	1.47E-09 0.0 %	0.0 0.0 %	2.63E-09 0.0 %	0.0 0.0 %
I 131	3.77E-05 1.87%	1.17E-05 5.89%	5.57E-05 1.79%	6.67E-05 1.51%	1.12E-04 5.66%	2.16E-02 16.40%	0.0 0.0 %	0.0 0.0 %
CO 58	3.90E-07 0.02%	2.01E-06 1.01%	0.0 0.0 %	1.51E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.40E-05 0.70%	6.89E-05 34.76%	0.0 0.0 %	5.56E-06 0.13%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.31E-07 0.0 %	1.18E-06 0.60%	0.0 0.0 %	5.88E-07 0.01%	1.71E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.46E-07 0.01%	7.60E-08 0.04%	3.63E-07 0.01%	4.35E-07 0.0 %	7.31E-07 0.04%	1.41E-04 0.11%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.02E-03	1.98E-04	3.12E-03	4.41E-03	1.98E-03	1.32E-01	4.57E-04	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.96E-06 2.23%	1.55E-06 0.69%	5.30E-06 3.34%	6.97E-06 2.71%	1.18E-05 12.92%	2.26E-03 83.24%	0.0 0.0 %	0.0 0.0 %
I 133	2.01E-14 0.0 %	4.92E-14 0.0 %	3.92E-14 0.0 %	6.27E-14 0.0 %	1.09E-13 0.0 %	9.68E-12 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	3.42E-08 0.02%	1.48E-07 0.07%	1.19E-06 0.75%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.72E-07 0.27%	5.02E-08 0.02%	1.91E-06 1.21%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	7.99E-05 44.87%	1.76E-06 0.78%	5.41E-05 34.13%	1.19E-04 46.13%	3.81E-05 41.54%	0.0 0.0 %	1.30E-05 49.11%	0.0 0.0 %
CS137	6.12E-05 34.36%	1.89E-06 0.85%	9.27E-05 58.50%	1.17E-04 45.27%	3.92E-05 42.83%	0.0 0.0 %	1.35E-05 50.88%	0.0 0.0 %
BA140	1.41E-07 0.08%	3.56E-06 1.59%	2.22E-06 1.40%	2.56E-09 0.0 %	8.61E-10 0.0 %	0.0 0.0 %	1.50E-09 0.0 %	0.0 0.0 %
I 131	7.93E-07 0.45%	3.10E-07 0.14%	1.06E-06 0.67%	1.39E-06 0.54%	2.37E-06 2.59%	4.53E-04 16.66%	0.0 0.0 %	0.0 0.0 %
CO 58	7.34E-07 0.41%	5.27E-06 2.35%	0.0 0.0 %	3.07E-07 0.12%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	3.08E-05 17.28%	2.09E-04 93.13%	0.0 0.0 %	1.31E-05 5.10%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	6.87E-08 0.04%	8.72E-07 0.39%	0.0 0.0 %	3.36E-07 0.13%	9.91E-08 0.11%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.07E-09 0.0 %	1.98E-09 0.0 %	6.77E-09 0.0 %	8.91E-09 0.0 %	1.51E-08 0.02%	2.90E-06 0.11%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.78E-04	2.24E-04	1.59E-04	2.57E-04	9.16E-05	2.72E-03	2.65E-05	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	2.99E-06 0.0 %	9.92E-06 0.02%	5.01E-04 0.49%
KR 85M	3.14E-03 5.94%	3.14E-03 6.25%	3.14E-03 5.74%	3.14E-03 5.52%	3.14E-03 5.99%	3.14E-03 1.11%	3.25E-03 6.25%	1.15E-02 11.27%
KR 87	2.67E-03 5.05%	2.67E-03 5.32%	2.67E-03 4.88%	2.67E-03 4.70%	2.67E-03 5.10%	2.67E-03 0.95%	2.77E-03 5.32%	1.19E-02 11.63%
KR 88	2.68E-02 50.58%	2.68E-02 53.22%	2.68E-02 48.87%	2.68E-02 47.02%	2.68E-02 51.01%	2.68E-02 9.50%	2.69E-02 51.73%	3.93E-02 38.52%
XE133	1.51E-03 2.85%	1.51E-03 3.00%	1.51E-03 2.76%	1.51E-03 2.65%	1.51E-03 2.88%	1.51E-03 0.54%	1.62E-03 3.11%	5.16E-03 5.05%
XE135	7.67E-03 14.49%	7.67E-03 15.25%	7.67E-03 14.00%	7.67E-03 13.47%	7.67E-03 14.62%	7.67E-03 2.72%	7.88E-03 15.16%	2.48E-02 24.27%
XE135M	2.22E-05 0.04%	2.22E-05 0.04%	2.22E-05 0.04%	2.22E-05 0.04%	2.22E-05 0.04%	2.22E-05 0.0 %	2.23E-05 0.04%	3.67E-05 0.04%
XE138	2.62E-04 0.50%	2.62E-04 0.52%	2.62E-04 0.48%	2.62E-04 0.46%	2.62E-04 0.50%	2.62E-04 0.09%	2.65E-04 0.51%	5.49E-04 0.54%
KR 89	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.08E-08 0.0 %	2.10E-08 0.0 %	4.93E-08 0.0 %
KR 83M	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	1.16E-08 0.0 %	9.08E-07 0.0 %	3.30E-06 0.0 %
XE137	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.32E-08 0.0 %	1.55E-08 0.0 %	2.42E-07 0.0 %
XE133M	3.26E-05 0.06%	3.26E-05 0.06%	3.26E-05 0.06%	3.26E-05 0.06%	3.26E-05 0.06%	3.26E-05 0.01%	3.64E-05 0.07%	3.06E-04 0.30%
XE131M	5.39E-06 0.01%	5.39E-06 0.01%	5.39E-06 0.0 %	5.39E-06 0.0 %	5.39E-06 0.01%	5.39E-06 0.0 %	6.69E-06 0.01%	6.63E-05 0.06%
I 131	3.46E-04 0.65%	1.17E-04 0.23%	4.98E-04 0.91%	6.03E-04 1.06%	1.01E-03 1.92%	1.92E-01 68.07%	1.07E-05 0.02%	1.30E-05 0.01%

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	9.44E-07 0.0 %	1.36E-06 0.0 %	1.57E-06 0.0 %	2.27E-06 0.0 %	3.70E-06 0.0 %	3.07E-04 0.11%	3.08E-07 0.0 %	3.75E-07 0.0 %
SR 89	4.20E-06 0.0 %	1.51E-05 0.03%	1.47E-04 0.27%	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	4.39E-06 0.0 %	1.30E-10 0.0 %
SR 90	4.16E-05 0.08%	3.97E-06 0.0 %	1.78E-04 0.32%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.52E-06 0.0 %	0.0 0.0 %
CS134	2.61E-03 4.93%	7.22E-04 1.44%	2.46E-03 4.50%	4.29E-03 7.54%	1.83E-03 3.48%	6.79E-04 0.24%	1.08E-03 2.08%	7.92E-04 0.78%
CS137	2.66E-03 5.03%	1.26E-03 2.50%	4.30E-03 7.85%	4.79E-03 8.42%	2.41E-03 4.59%	1.21E-03 0.43%	1.63E-03 3.14%	1.41E-03 1.38%
BA140	6.46E-06 0.01%	1.03E-04 0.20%	7.16E-05 0.13%	2.22E-06 0.0 %	2.17E-06 0.0 %	2.14E-06 0.0 %	1.21E-04 0.23%	2.45E-06 0.0 %
I 131	7.30E-05 0.14%	2.45E-05 0.05%	1.05E-04 0.19%	1.27E-04 0.22%	2.13E-04 0.41%	4.05E-02 14.39%	2.25E-06 0.0 %	2.73E-06 0.0 %
CO 58	1.42E-05 0.03%	3.84E-05 0.08%	9.70E-06 0.02%	1.15E-05 0.02%	9.70E-06 0.02%	9.70E-06 0.0 %	3.39E-05 0.07%	1.14E-05 0.01%
CO 60	5.00E-03 9.46%	5.80E-03 11.54%	4.84E-03 8.84%	4.91E-03 8.62%	4.84E-03 9.22%	4.84E-03 1.72%	6.21E-03 11.95%	5.69E-03 5.57%
MN 54	7.42E-05 0.14%	1.19E-04 0.24%	6.93E-05 0.13%	9.24E-05 0.16%	7.59E-05 0.14%	6.93E-05 0.02%	1.40E-04 0.27%	8.12E-05 0.08%
I 131	4.41E-07 0.0 %	1.50E-07 0.0 %	6.36E-07 0.0 %	7.70E-07 0.0 %	1.29E-06 0.0 %	2.45E-04 0.09%	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	5.29E-02	5.03E-02	5.48E-02	5.69E-02	5.25E-02	2.82E-01	5.20E-02	1.02E-01

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.07E-01 95.37%	4.07E-01 96.67%	4.07E-01 91.21%	4.07E-01 94.75%	4.07E-01 95.55%	4.07E-01 23.38%	4.12E-01 96.89%	8.95E-01 98.84%
GROUND	8.97E-03 2.10%	8.97E-03 2.13%	8.97E-03 2.01%	8.97E-03 2.09%	8.97E-03 2.11%	8.97E-03 0.52%	8.97E-03 2.11%	1.05E-02 1.16%
INHAL	2.44E-04 0.06%	2.76E-04 0.07%	1.07E-03 0.24%	3.29E-04 0.08%	3.07E-04 0.07%	4.58E-02 2.63%	3.22E-03 0.76%	0.0 0.0 %
VEGET	6.32E-03 1.48%	3.65E-03 0.87%	2.13E-02 4.78%	5.29E-03 1.23%	3.84E-03 0.90%	5.06E-01 29.11%	4.18E-04 0.10%	0.0 0.0 %
COW MILK	3.92E-03 0.92%	7.36E-04 0.17%	7.34E-03 1.65%	7.58E-03 1.77%	5.64E-03 1.33%	7.56E-01 43.46%	6.02E-04 0.14%	0.0 0.0 %
MEAT	2.93E-04 0.07%	3.79E-04 0.09%	4.90E-04 0.11%	3.71E-04 0.09%	1.83E-04 0.04%	1.56E-02 0.90%	3.46E-05 0.01%	0.0 0.0 %
TOTAL	4.26E-01	4.21E-01	4.46E-01	4.29E-01	4.26E-01	1.74E+00	4.25E-01	9.05E-01

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	3.93E-06	3.93E-06	3.93E-06	3.93E-06	3.93E-06	3.93E-06	1.30E-05	6.58E-04
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.07%
KR 85M	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.30E-02	4.62E-02
	3.10%	3.10%	3.10%	3.10%	3.10%	3.10%	3.16%	5.17%
KR 87	4.27E-02	4.27E-02	4.27E-02	4.27E-02	4.27E-02	4.27E-02	4.42E-02	1.90E-01
	10.51%	10.51%	10.51%	10.51%	10.51%	10.51%	10.72%	21.22%
KR 88	2.64E-01	2.64E-01	2.64E-01	2.64E-01	2.64E-01	2.64E-01	2.65E-01	3.88E-01
	64.97%	64.97%	64.97%	64.97%	64.97%	64.97%	64.39%	43.41%
XE133	6.34E-03	6.34E-03	6.34E-03	6.34E-03	6.34E-03	6.34E-03	6.79E-03	2.16E-02
	1.56%	1.56%	1.56%	1.56%	1.56%	1.56%	1.65%	2.42%
XE135	6.83E-02	6.83E-02	6.83E-02	6.83E-02	6.83E-02	6.83E-02	7.01E-02	2.21E-01
	16.79%	16.79%	16.79%	16.79%	16.79%	16.79%	17.01%	24.66%
XE135M	9.16E-04	9.16E-04	9.16E-04	9.16E-04	9.16E-04	9.16E-04	9.22E-04	1.51E-03
	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.22%	0.17%
XE138	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.15E-02	2.38E-02
	2.79%	2.79%	2.79%	2.79%	2.79%	2.79%	2.79%	2.66%
KR 89	4.55E-07	4.55E-07	4.55E-07	4.55E-07	4.55E-07	4.55E-07	4.61E-07	1.08E-06
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
KR 83M	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.22E-05	4.43E-05
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
XE137	4.44E-07	4.44E-07	4.44E-07	4.44E-07	4.44E-07	4.44E-07	5.21E-07	8.15E-06
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
XE133M	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	2.10E-04	1.77E-03
	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.20%
XE131M	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.24E-05	1.23E-04
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.01%
TOTAL	4.07E-01	4.07E-01	4.07E-01	4.07E-01	4.07E-01	4.07E-01	4.12E-01	8.95E-01

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	9.13E-05 0.87%
I 133	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.8[illegible] [illegible]2%	1.85E-06 0.02%	2.25E-06 0.02%
SR 89	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.43E-09 0.0 %
CS134	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	8.38E-04 7.96%
CS137	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	2.19E-03 20.85%
BA140	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	6.29E-05 0.60%
I 131	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.24E-05 0.12%
CO 60	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	7.23E-03 68.68%
MN 54	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	9.25E-05 0.88%
I 131	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.73E-06 0.03%
I 131	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	8.97E-03	8.97E-03	8.97E-03	8.97E-03	8.97E-03	8.97E-03	8.97E-03	1.05E-02

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	6.96E-05	1.77E-05	9.48E-05	1.23E-04	2.08E-04	4.04E-02	0.0	0.0
	28.45%	6.42%	8.87%	37.31%	67.95%	88.33%	0.0 %	0.0 %
I 133	2.81E-06	4.49E-06	5.57E-06	8.74E-06	1.51E-05	1.35E-03	0.0	0.0
	1.15%	1.63%	0.52%	2.66%	4.93%	2.96%	0.0 %	0.0 %
SR 89	3.13E-07	9.38E-06	1.09E-05	0.0	0.0	0.0	4.84E-05	0.0
	0.13%	3.40%	1.02%	0.0 %	0.0 %	0.0 %	1.51%	0.0 %
SR 90	4.89E-05	5.17E-06	7.90E-04	0.0	0.0	0.0	8.87E-05	0.0
	20.01%	1.88%	73.97%	0.0 %	0.0 %	0.0 %	2.76%	0.0 %
CS134	6.06E-05	8.98E-07	4.29E-05	8.92E-05	2.99E-05	0.0	1.05E-05	0.0
	24.80%	0.33%	4.02%	27.11%	9.76%	0.0 %	0.33%	0.0 %
CS137	4.79E-05	1.00E-06	7.64E-05	9.05E-05	3.21E-05	0.0	1.13E-05	0.0
	19.59%	0.36%	7.16%	27.50%	10.47%	0.0 %	0.35%	0.0 %
BA140	2.42E-06	1.61E-04	3.81E-05	4.36E-08	1.47E-08	0.0	1.17E-03	0.0
	0.99%	58.33%	3.57%	0.01%	0.0 %	0.0 %	36.25%	0.0 %
I 131	1.08E-07	2.75E-08	1.47E-07	1.91E-07	3.24E-07	6.29E-05	0.0	0.0
	0.04%	0.0 %	0.01%	0.06%	0.11%	0.14%	0.0 %	0.0 %
CO 58	6.25E-08	2.46E-06	0.0	4.45E-08	0.0	0.0	2.68E-05	0.0
	0.03%	0.89%	0.0 %	0.01%	0.0 %	0.0 %	0.83%	0.0 %
CO 60	4.63E-06	6.84E-05	0.0	3.37E-06	0.0	0.0	1.78E-03	0.0
	1.89%	24.82%	0.0 %	1.02%	0.0 %	0.0 %	55.45%	0.0 %
MN 54	3.86E-07	3.60E-06	0.0	2.25E-06	5.53E-07	0.0	8.12E-05	0.0
	0.16%	1.31%	0.0 %	0.68%	0.18%	0.0 %	2.52%	0.0 %
I 131	3.94E-07	1.00E-07	5.36E-07	6.95E-07	1.18E-06	2.29E-04	0.0	0.0
	0.16%	0.04%	0.05%	0.21%	0.38%	0.50%	0.0 %	0.0 %
I 131	6.35E-06	1.61E-06	8.65E-06	1.12E-05	1.90E-05	3.69E-03	0.0	0.0
	2.60%	0.59%	0.81%	3.41%	6.20%	8.06%	0.0 %	0.0 %
I 131	1.25E-08	3.19E-09	1.71E-08	2.21E-08	3.76E-08	7.30E-06	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.01%	0.02%	0.0 %	0.0 %
TOTAL	2.44E-04	2.76E-04	1.07E-03	3.29E-04	3.07E-04	4.58E-02	3.22E-03	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	8.54E-04 13.51%	2.85E-04 7.80%	1.23E-03 5.75%	1.51E-03 28.46%	2.54E-03 66.23%	4.88E-01 96.45%	0.0 0.0 %	0.0 0.0 %
I 133	2.78E-10 0.0 %	5.75E-10 0.0 %	5.56E-10 0.0 %	8.34E-10 0.0 %	1.43E-09 0.0 %	1.34E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	6.74E-05 1.07%	2.31E-04 6.33%	2.35E-03 11.05%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.38E-03 53.53%	3.23E-04 8.85%	1.36E-02 63.98%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	8.21E-04 12.99%	1.85E-05 0.51%	7.21E-04 3.39%	1.48E-03 27.92%	4.70E-04 12.24%	0.0 0.0 %	1.64E-04 39.07%	0.0 0.0 %
CS137	9.19E-04 14.54%	2.98E-05 0.82%	1.85E-03 8.68%	2.17E-03 40.98%	7.26E-04 18.90%	0.0 0.0 %	2.54E-04 60.70%	0.0 0.0 %
BA140	9.17E-05 1.45%	1.89E-03 51.92%	1.48E-03 6.94%	1.59E-06 0.03%	5.32E-07 0.01%	0.0 0.0 %	9.46E-07 0.23%	0.0 0.0 %
I 131	3.61E-07 0.0 %	1.20E-07 0.0 %	5.18E-07 0.0 %	6.37E-07 0.01%	1.07E-06 0.03%	2.06E-04 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	3.65E-06 0.06%	2.09E-05 0.57%	0.0 0.0 %	1.44E-06 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.44E-04 2.28%	7.86E-04 21.55%	0.0 0.0 %	5.84E-05 1.10%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.95E-06 0.08%	4.99E-05 1.37%	0.0 0.0 %	2.28E-05 0.43%	6.66E-06 0.17%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.00E-06 0.08%	1.67E-06 0.05%	7.17E-06 0.03%	8.82E-06 0.17%	1.49E-05 0.39%	2.86E-03 0.56%	0.0 0.0 %	0.0 0.0 %
I 131	2.59E-05 0.41%	8.63E-06 0.24%	3.71E-05 0.17%	4.57E-05 0.86%	7.71E-05 2.01%	1.48E-02 2.92%	0.0 0.0 %	0.0 0.0 %
I 131	1.64E-07 0.0 %	5.48E-08 0.0 %	2.36E-07 0.0 %	2.90E-07 0.0 %	4.90E-07 0.01%	9.40E-05 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	6.32E-03	3.65E-03	2.13E-02	5.29E-03	3.84E-03	5.06E-01	4.18E-04	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.27E-03 32.51%	3.94E-04 53.57%	1.88E-03 25.62%	2.25E-03 29.75%	3.79E-03 67.22%	7.29E-01 96.48%	0.0 0.0 %	0.0 0.0 %
I 133	5.57E-07 0.01%	1.07E-06 0.15%	1.13E-06 0.02%	1.65E-06 0.02%	2.82E-06 0.05%	2.69E-04 0.04%	0.0 0.0 %	0.0 0.0 %
SR 89	6.62E-06 0.17%	2.05E-05 2.79%	2.31E-04 3.15%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.16E-04 8.05%	2.86E-05 3.89%	1.27E-03 17.26%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.07E-03 27.20%	2.44E-05 3.32%	1.06E-03 14.44%	2.11E-03 27.91%	6.70E-04 11.88%	0.0 0.0 %	2.35E-04 39.04%	0.0 0.0 %
CS137	1.19E-03 30.26%	3.96E-05 5.38%	2.73E-03 37.14%	3.12E-03 41.14%	1.04E-03 18.43%	0.0 0.0 %	3.67E-04 60.95%	0.0 0.0 %
BA140	6.57E-06 0.17%	1.24E-04 16.84%	1.07E-04 1.45%	1.12E-07 0.0 %	3.73E-08 0.0 %	0.0 0.0 %	6.70E-08 0.01%	0.0 0.0 %
I 131	5.26E-07 0.01%	1.63E-07 0.02%	7.77E-07 0.01%	9.31E-07 0.01%	1.57E-06 0.03%	3.01E-04 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	4.24E-07 0.01%	2.18E-06 0.30%	0.0 0.0 %	1.64E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.75E-05 0.45%	8.58E-05 11.65%	0.0 0.0 %	6.92E-06 0.09%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.47E-07 0.0 %	1.33E-06 0.18%	0.0 0.0 %	6.63E-07 0.0 %	1.93E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	7.46E-06 0.19%	2.31E-06 0.31%	1.10E-05 0.15%	1.32E-05 0.17%	2.22E-05 0.39%	4.27E-03 0.56%	0.0 0.0 %	0.0 0.0 %
I 131	3.77E-05 0.96%	1.17E-05 1.59%	5.57E-05 0.76%	6.67E-05 0.88%	1.12E-04 1.99%	2.16E-02 2.86%	0.0 0.0 %	0.0 0.0 %
I 131	2.46E-07 0.0 %	7.60E-08 0.01%	3.63E-07 0.0 %	4.35E-07 0.0 %	7.31E-07 0.01%	1.41E-04 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	3.92E-03	7.36E-04	7.34E-03	7.58E-03	5.64E-03	7.56E-01	6.02E-04	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.63E-05 8.98%	1.03E-05 2.71%	3.52E-05 7.18%	4.63E-05 12.47%	7.87E-05 43.06%	1.50E-02 96.47%	0.0 0.0 %	0.0 0.0 %
I 133	1.12E-13 0.0 %	2.75E-13 0.0 %	2.19E-13 0.0 %	3.51E-13 0.0 %	6.06E-13 0.0 %	5.41E-11 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	6.12E-07 0.21%	2.64E-06 0.70%	2.13E-05 4.36%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.33E-05 14.79%	4.61E-06 1.22%	1.76E-04 35.85%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	8.42E-05 28.75%	1.85E-06 0.49%	5.71E-05 11.65%	1.25E-04 33.76%	4.01E-05 21.98%	0.0 0.0 %	1.37E-05 39.60%	0.0 0.0 %
CS137	9.48E-05 32.35%	2.94E-06 0.78%	1.44E-04 29.35%	1.81E-04 48.69%	6.08E-05 33.31%	0.0 0.0 %	2.09E-05 60.30%	0.0 0.0 %
BA140	3.53E-06 1.20%	8.92E-05 23.55%	5.55E-05 11.34%	6.41E-08 0.02%	2.16E-08 0.01%	0.0 0.0 %	3.76E-08 0.11%	0.0 0.0 %
I 131	1.11E-08 0.0 %	4.32E-09 0.0 %	1.48E-08 0.0 %	1.94E-08 0.0 %	3.31E-08 0.02%	6.32E-06 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	7.98E-07 0.27%	5.73E-06 1.51%	0.0 0.0 %	3.34E-07 0.09%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	3.83E-05 13.09%	2.60E-04 68.69%	0.0 0.0 %	1.64E-05 4.41%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	7.75E-08 0.03%	9.82E-07 0.26%	0.0 0.0 %	3.79E-07 0.10%	1.12E-07 0.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.54E-07 0.05%	6.02E-08 0.02%	2.06E-07 0.04%	2.71E-07 0.07%	4.60E-07 0.25%	8.80E-05 0.56%	0.0 0.0 %	0.0 0.0 %
I 131	7.93E-07 0.27%	3.10E-07 0.08%	1.06E-06 0.22%	1.39E-06 0.38%	2.37E-06 1.30%	4.53E-04 2.91%	0.0 0.0 %	0.0 0.0 %
I 131	5.07E-09 0.0 %	1.98E-09 0.0 %	6.77E-09 0.0 %	8.91E-09 0.0 %	1.51E-08 0.0 %	2.90E-06 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.93E-04	3.79E-04	4.90E-04	3.71E-04	1.83E-04	1.56E-02	3.46E-05	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	3.93E-06	3.93E-06	3.93E-06	3.93E-06	3.93E-06	3.93E-06	1.30E-05	6.58E-04
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.07%
KR 85M	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.30E-02	4.62E-02
	2.96%	3.00%	2.83%	2.94%	2.97%	0.73%	3.07%	5.11%
KR 87	4.27E-02	4.27E-02	4.27E-02	4.27E-02	4.27E-02	4.27E-02	4.42E-02	1.90E-01
	10.02%	10.16%	9.58%	9.95%	10.04%	2.46%	10.39%	20.97%
KR 88	2.64E-01	2.64E-01	2.64E-01	2.64E-01	2.64E-01	2.64E-01	2.65E-01	3.88E-01
	61.97%	62.81%	59.27%	61.56%	62.08%	15.19%	62.38%	42.91%
XE133	6.34E-03	6.34E-03	6.34E-03	6.34E-03	6.34E-03	6.34E-03	6.79E-03	2.16E-02
	1.49%	1.51%	1.42%	1.48%	1.49%	0.36%	1.60%	2.39%
XE135	6.83E-02	6.83E-02	6.83E-02	6.83E-02	6.83E-02	6.83E-02	7.01E-02	2.21E-01
	16.01%	16.23%	15.31%	15.91%	16.04%	3.93%	16.48%	24.38%
XE135M	9.16E-04	9.16E-04	9.16E-04	9.16E-04	9.16E-04	9.16E-04	9.22E-04	1.51E-03
	0.21%	0.22%	0.21%	0.21%	0.22%	0.05%	0.22%	0.17%
XE138	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.15E-02	2.38E-02
	2.67%	2.70%	2.55%	2.65%	2.67%	0.65%	2.70%	2.63%
KR 89	4.55E-07	4.55E-07	4.55E-07	4.55E-07	4.55E-07	4.55E-07	4.61E-07	1.08E-06
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
KR 83M	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.22E-05	4.43E-05
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
XE137	4.44E-07	4.44E-07	4.44E-07	4.44E-07	4.44E-07	4.44E-07	5.21E-07	8.15E-06
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
XE133M	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	2.10E-04	1.77E-03
	0.04%	0.04%	0.04%	0.04%	0.04%	0.01%	0.05%	0.20%
XE131M	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.24E-05	1.23E-04
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.01%
I 131	2.30E-03	7.82E-04	3.31E-03	4.01E-03	6.70E-03	1.27E+00	7.52E-05	9.13E-05
	0.54%	0.19%	0.74%	0.93%	1.57%	73.21%	0.02%	0.01%

COOPER NUCLEAR STATION ; SECOND SEMIANNUAL PERIOD 1982 ; COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	5.22E-06 0.0 %	7.41E-06 0.0 %	8.54E-06 0.0 %	1.22E-05 0.0 %	1.98E-05 0.0 %	1.62E-03 0.09%	1.85E-06 0.0 %	2.25E-06 0.0 %
SR 89	7.49E-05 0.02%	2.64E-04 0.06%	2.62E-03 0.59%	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	4.84E-05 0.01%	2.43E-09 0.0 %
SR 90	3.79E-03 0.89%	3.61E-04 0.09%	1.59E-02 3.56%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.87E-05 0.02%	0.0 0.0 %
CS134	2.75E-03 0.65%	7.64E-04 0.18%	2.60E-03 0.58%	4.53E-03 1.05%	1.93E-03 0.45%	7.19E-04 0.04%	1.14E-03 0.27%	8.38E-04 0.09%
CS137	4.13E-03 0.97%	1.95E-03 0.46%	6.68E-03 1.50%	7.44E-03 1.73%	3.74E-03 0.88%	1.88E-03 0.11%	2.53E-03 0.60%	2.19E-03 0.24%
BA140	1.59E-04 0.04%	2.32E-03 0.55%	1.73E-03 0.39%	5.68E-05 0.01%	5.56E-05 0.01%	5.50E-05 0.0 %	1.22E-03 0.29%	6.29E-05 0.0 %
I 131	1.04E-06 0.0 %	3.49E-07 0.0 %	1.49E-06 0.0 %	1.81E-06 0.0 %	3.03E-06 0.0 %	5.77E-04 0.03%	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	1.56E-05 0.0 %	4.19E-05 0.0 %	1.06E-05 0.0 %	1.26E-05 0.0 %	1.06E-05 0.0 %	1.06E-05 0.0 %	3.74E-05 0.0 %	1.24E-05 0.0 %
CO 60	6.35E-03 1.49%	7.35E-03 1.75%	6.15E-03 1.38%	6.23E-03 1.45%	6.15E-03 1.44%	6.15E-03 0.35%	7.93E-03 1.86%	7.23E-03 0.80%
MN 54	8.44E-05 0.02%	1.35E-04 0.03%	7.89E-05 0.02%	1.05E-04 0.02%	8.64E-05 0.02%	7.89E-05 0.0 %	1.60E-04 0.04%	9.25E-05 0.01%
I 131	1.34E-05 0.0 %	4.58E-06 0.0 %	1.94E-05 0.0 %	2.34E-05 0.0 %	3.92E-05 0.0 %	7.45E-03 0.43%	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	7.30E-05 0.02%	2.45E-05 0.0 %	1.05E-04 0.02%	1.27E-04 0.03%	2.13E-04 0.05%	4.05E-02 2.33%	2.25E-06 0.0 %	2.73E-06 0.0 %
I 131	4.41E-07 0.0 %	1.50E-07 0.0 %	6.36E-07 0.0 %	7.70E-07 0.0 %	1.29E-06 0.0 %	2.45E-04 0.01%	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	4.26E-01	4.21E-01	4.46E-01	4.29E-01	4.26E-01	1.74E+00	4.25E-01	9.05E-01

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.72E-01 95.17%	4.72E-01 96.53%	4.72E-01 90.62%	4.72E-01 94.80%	4.72E-01 95.57%	4.72E-01 24.99%	4.78E-01 96.79%	1.04E+00 98.75%
GROUND	1.12E-02 2.26%	1.12E-02 2.29%	1.12E-02 2.15%	1.12E-02 2.25%	1.12E-02 2.26%	1.12E-02 0.59%	1.12E-02 2.26%	1.31E-02 1.25%
INHAL	2.68E-04 0.05%	2.97E-04 0.06%	1.28E-03 0.25%	3.49E-04 0.07%	3.28E-04 0.07%	4.88E-02 2.59%	3.55E-03 0.72%	0.0 0.0 %
VEGET	7.84E-03 1.58%	4.19E-03 0.86%	2.74E-02 5.27%	5.74E-03 1.15%	4.11E-03 0.83%	5.37E-01 28.47%	4.55E-04 0.09%	0.0 0.0 %
COW MILK	4.33E-03 0.87%	8.20E-04 0.17%	8.34E-03 1.60%	8.19E-03 1.65%	6.04E-03 1.22%	8.02E-01 42.49%	6.56E-04 0.13%	0.0 0.0 %
MEAT	3.40E-04 0.07%	4.72E-04 0.10%	5.82E-04 0.11%	4.07E-04 0.08%	1.97E-04 0.04%	1.65E-02 0.88%	3.76E-05 0.01%	0.0 0.0 %
TOTAL	4.95E-01	4.88E-01	5.20E-01	4.97E-01	4.93E-01	1.89E+00	4.94E-01	1.05E+00

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	1.76E-05 0.0 %	8.90E-04 0.09%
KR 85M	1.46E-02 3.10%	1.46E-02 3.10%	1.46E-02 3.10%	1.46E-02 3.10%	1.46E-02 3.10%	1.46E-02 3.10%	1.51E-02 3.15%	5.35E-02 5.15%
KR 87	4.93E-02 10.45%	4.93E-02 10.45%	4.93E-02 10.45%	4.93E-02 10.45%	4.93E-02 10.45%	4.93E-02 10.45%	5.10E-02 10.66%	2.19E-01 21.09%
KR 88	3.06E-01 64.83%	3.06E-01 64.83%	3.06E-01 64.83%	3.06E-01 64.83%	3.06E-01 64.83%	3.06E-01 64.83%	3.07E-01 64.24%	4.49E-01 43.28%
XE133	7.55E-03 1.60%	7.55E-03 1.60%	7.55E-03 1.60%	7.55E-03 1.60%	7.55E-03 1.60%	7.55E-03 1.60%	8.09E-03 1.69%	2.58E-02 2.48%
XE135	7.97E-02 16.91%	7.97E-02 16.91%	7.97E-02 16.91%	7.97E-02 16.91%	7.97E-02 16.91%	7.97E-02 16.91%	8.19E-02 17.13%	2.58E-01 24.82%
XE135M	1.07E-03 0.23%	1.07E-03 0.23%	1.07E-03 0.23%	1.07E-03 0.23%	1.07E-03 0.23%	1.07E-03 0.23%	1.08E-03 0.22%	1.77E-03 0.17%
XE138	1.33E-02 2.83%	1.33E-02 2.83%	1.33E-02 2.83%	1.33E-02 2.83%	1.33E-02 2.83%	1.33E-02 2.83%	1.35E-02 2.82%	2.79E-02 2.69%
KR 89	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.55E-06 0.0 %	5.97E-06 0.0 %
KR 83M	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.41E-05 0.0 %	5.11E-05 0.0 %
XE137	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.60E-06 0.0 %	2.50E-05 0.0 %
XE133M	2.22E-04 0.05%	2.22E-04 0.05%	2.22E-04 0.05%	2.22E-04 0.05%	2.22E-04 0.05%	2.22E-04 0.05%	2.48E-04 0.05%	2.08E-03 0.20%
XE131M	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.48E-05 0.0 %	1.47E-04 0.01%
TOTAL	4.72E-01	4.72E-01	4.72E-01	4.72E-01	4.72E-01	4.72E-01	4.78E-01	1.04E+00

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	9.67E-05 0.74%
I 133	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	3.15E-06 0.02%
SR 89	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	3.17E-09 0.0 %
CS134	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	9.10E-04 6.94%
CS137	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.38E-03 18.15%
BA140	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	6.45E-05 0.49%
I 131	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.41E-05 0.11%
CO 60	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	9.52E-03 72.60%
MN 54	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.21E-04 0.92%
I 131	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.92E-07 0.0 %
I 131	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CR 51	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	3.46E-07 0.0 %
I 131	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	4.17E-08 0.0 %
I 131	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.73E-06 0.02%
I 131	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.31E-02

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.38E-05 27.58%	1.88E-05 6.32%	1.01E-04 7.85%	1.30E-04 37.35%	2.21E-04 67.38%	4.29E-02 87.91%	0.0 0.0 %	0.0 0.0 %
I 133	3.86E-06 1.44%	6.16E-06 2.07%	7.64E-06 0.60%	1.20E-05 3.44%	2.07E-05 6.32%	1.86E-03 3.80%	0.0 0.0 %	0.0 0.0 %
SR 89	3.88E-07 0.15%	1.16E-05 3.91%	1.35E-05 1.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	6.00E-05 1.69%	0.0 0.0 %
SR 90	6.11E-05 22.81%	6.46E-06 2.17%	9.86E-04 76.95%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.11E-04 3.12%	0.0 0.0 %
CS134	6.30E-05 23.54%	9.33E-07 0.31%	4.46E-05 3.48%	9.27E-05 26.57%	3.11E-05 9.47%	0.0 0.0 %	1.09E-05 0.31%	0.0 0.0 %
CS137	5.03E-05 18.79%	1.05E-06 0.35%	8.03E-05 6.26%	9.50E-05 27.24%	3.37E-05 10.28%	0.0 0.0 %	1.19E-05 0.33%	0.0 0.0 %
BA140	2.49E-06 0.93%	1.66E-04 55.71%	3.92E-05 3.06%	4.49E-08 0.01%	1.52E-08 0.0 %	0.0 0.0 %	1.20E-03 33.81%	0.0 0.0 %
I 131	3.43E-08 0.01%	8.72E-09 0.0 %	4.67E-08 0.0 %	6.05E-08 0.02%	1.03E-07 0.03%	1.99E-05 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	6.61E-08 0.02%	2.60E-06 0.87%	0.0 0.0 %	4.71E-08 0.01%	0.0 0.0 %	0.0 0.0 %	2.83E-05 0.80%	0.0 0.0 %
CO 60	5.28E-06 1.97%	7.81E-05 26.28%	0.0 0.0 %	3.84E-06 1.10%	0.0 0.0 %	0.0 0.0 %	2.04E-03 57.33%	0.0 0.0 %
MN 54	4.38E-07 0.16%	4.10E-06 1.38%	0.0 0.0 %	2.56E-06 0.73%	6.29E-07 0.19%	0.0 0.0 %	9.23E-05 2.60%	0.0 0.0 %
I 131	1.71E-09 0.0 %	4.34E-10 0.0 %	2.33E-09 0.0 %	3.01E-09 0.0 %	5.11E-09 0.0 %	9.93E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.52E-08 0.02%	1.40E-08 0.0 %	7.52E-08 0.0 %	9.74E-08 0.03%	1.65E-07 0.05%	3.21E-05 0.07%	0.0 0.0 %	0.0 0.0 %
ZN 65	1.83E-08 0.0 %	1.60E-08 0.0 %	1.22E-08 0.0 %	3.78E-08 0.01%	2.49E-08 0.0 %	0.0 0.0 %	3.24E-07 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.75E-09 0.0 %	9.53E-10 0.0 %	5.11E-09 0.0 %	6.62E-09 0.0 %	1.12E-08 0.0 %	2.18E-06 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	1.81E-09 0.0 %	4.60E-08 0.02%	0.0 0.0 %	0.0 0.0 %	3.82E-10 0.0 %	1.05E-09 0.0 %	2.49E-07 0.0 %	0.0 0.0 %
I 131	1.08E-07 0.04%	2.75E-08 0.0 %	1.47E-07 0.01%	1.91E-07 0.05%	3.24E-07 0.10%	6.29E-05 0.13%	0.0 0.0 %	0.0 0.0 %
I 131	3.94E-07 0.15%	1.00E-07 0.03%	5.36E-07 0.04%	6.95E-07 0.20%	1.18E-06 0.36%	2.29E-04 0.47%	0.0 0.0 %	0.0 0.0 %
I 131	6.35E-06 2.37%	1.61E-06 0.54%	8.65E-06 0.68%	1.12E-05 3.21%	1.90E-05 5.80%	3.69E-03 7.56%	0.0 0.0 %	0.0 0.0 %
I 131	1.25E-08 0.0 %	3.19E-09 0.0 %	1.71E-08 0.0 %	2.21E-08 0.0 %	3.76E-08 0.01%	7.30E-06 0.01%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.68E-04	2.97E-04	1.28E-03	3.49E-04	3.28E-04	4.88E-02	3.55E-03	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	9.07E-04 11.56%	3.02E-04 7.20%	1.30E-03 4.75%	1.60E-03 27.90%	2.70E-03 65.76%	5.19E-01 96.56%	0.0 0.0 %	0.0 0.0 %
I 133	3.97E-10 0.0 %	8.21E-10 0.0 %	7.94E-10 0.0 %	1.19E-09 0.0 %	2.04E-09 0.0 %	1.92E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	8.96E-05 1.14%	3.07E-04 7.32%	3.13E-03 11.42%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.62E-03 58.97%	4.41E-04 10.52%	1.86E-02 67.94%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	8.92E-04 11.38%	2.01E-05 0.48%	7.84E-04 2.86%	1.61E-03 28.02%	5.11E-04 12.44%	0.0 0.0 %	1.78E-04 39.08%	0.0 0.0 %
CS137	9.99E-04 12.74%	3.24E-05 0.77%	2.01E-03 7.33%	2.36E-03 41.13%	7.89E-04 19.21%	0.0 0.0 %	2.76E-04 60.70%	0.0 0.0 %
BA140	9.42E-05 1.20%	1.95E-03 46.39%	1.52E-03 5.54%	1.63E-06 0.03%	5.47E-07 0.01%	0.0 0.0 %	9.72E-07 0.21%	0.0 0.0 %
I 131	3.03E-07 0.0 %	1.01E-07 0.0 %	4.35E-07 0.0 %	5.35E-07 0.0 %	9.03E-07 0.02%	1.73E-04 0.03%	0.0 0.0 %	0.0 0.0 %
CO 58	4.13E-06 0.05%	2.37E-05 0.56%	0.0 0.0 %	1.63E-06 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.91E-04 2.44%	1.04E-03 24.88%	0.0 0.0 %	7.76E-05 1.35%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	6.49E-06 0.08%	6.54E-05 1.56%	0.0 0.0 %	2.99E-05 0.52%	8.73E-06 0.21%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.79E-08 0.0 %	9.30E-09 0.0 %	4.00E-08 0.0 %	4.92E-08 0.0 %	8.31E-08 0.0 %	1.60E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	4.71E-07 0.0 %	1.57E-07 0.0 %	6.76E-07 0.0 %	8.31E-07 0.01%	1.40E-06 0.03%	2.69E-04 0.05%	0.0 0.0 %	0.0 0.0 %
ZN 65	7.18E-07 0.0 %	6.32E-07 0.02%	4.66E-07 0.0 %	1.41E-06 0.02%	9.17E-07 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.48E-08 0.0 %	1.83E-08 0.0 %	7.86E-08 0.0 %	9.67E-08 0.0 %	1.63E-07 0.0 %	3.13E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	8.91E-09 0.0 %	1.42E-06 0.03%	0.0 0.0 %	0.0 0.0 %	1.71E-09 0.0 %	5.12E-09 0.0 %	1.08E-08 0.0 %	0.0 0.0 %
I 131	3.61E-07 0.0 %	1.20E-07 0.0 %	5.18E-07 0.0 %	6.37E-07 0.01%	1.07E-06 0.03%	2.06E-04 0.04%	0.0 0.0 %	0.0 0.0 %
I 131	5.00E-06 0.06%	1.67E-06 0.04%	7.17E-06 0.03%	8.82E-06 0.15%	1.49E-05 0.36%	2.86E-03 0.53%	0.0 0.0 %	0.0 0.0 %
I 131	2.59E-05 0.33%	8.63E-06 0.21%	3.71E-05 0.14%	4.57E-05 0.80%	7.71E-05 1.88%	1.48E-02 2.76%	0.0 0.0 %	0.0 0.0 %
I 131	1.64E-07 0.0 %	5.48E-08 0.0 %	2.36E-07 0.0 %	2.90E-07 0.0 %	4.90E-07 0.01%	9.40E-05 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	7.84E-03	4.19E-03	2.74E-02	5.74E-03	4.11E-03	5.37E-01	4.55E-04	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.35E-03 31.27%	4.19E-04 51.07%	2.00E-03 23.93%	2.39E-03 29.22%	4.03E-03 66.71%	7.74E-01 96.58%	0.0 0.0 %	0.0 0.0 %
I 133	7.95E-07 0.02%	1.53E-06 0.19%	1.61E-06 0.02%	2.35E-06 0.03%	4.02E-06 0.07%	3.84E-04 0.05%	0.0 0.0 %	0.0 0.0 %
SR 89	8.81E-06 0.20%	2.73E-05 3.33%	3.08E-04 3.69%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.32E-04 9.97%	3.92E-05 4.78%	1.73E-03 20.78%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.16E-03 26.84%	2.66E-05 3.25%	1.15E-03 13.84%	2.30E-03 28.12%	7.30E-04 12.09%	0.0 0.0 %	2.56E-04 39.06%	0.0 0.0 %
CS137	1.29E-03 29.83%	4.31E-05 5.26%	2.97E-03 35.56%	3.39E-03 41.41%	1.13E-03 18.74%	0.0 0.0 %	4.00E-04 60.93%	0.0 0.0 %
BA140	6.75E-06 0.16%	1.27E-04 15.53%	1.10E-04 1.31%	1.15E-07 0.0 %	3.83E-08 0.0 %	0.0 0.0 %	6.88E-08 0.01%	0.0 0.0 %
I 131	4.49E-07 0.01%	1.39E-07 0.02%	6.63E-07 0.0 %	7.94E-07 0.0 %	1.34E-06 0.02%	2.57E-04 0.03%	0.0 0.0 %	0.0 0.0 %
CO 58	4.81E-07 0.01%	2.48E-06 0.30%	0.0 0.0 %	1.86E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	2.33E-05 0.54%	1.14E-04 13.96%	0.0 0.0 %	9.24E-06 0.11%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.94E-07 0.0 %	1.75E-06 0.21%	0.0 0.0 %	8.72E-07 0.01%	2.54E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	4.17E-08 0.0 %	1.29E-08 0.0 %	6.15E-08 0.0 %	7.37E-08 0.0 %	1.24E-07 0.0 %	2.39E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	6.95E-07 0.02%	2.15E-07 0.03%	1.03E-06 0.01%	1.23E-06 0.02%	2.07E-06 0.03%	3.98E-04 0.05%	0.0 0.0 %	0.0 0.0 %
ZN 65	3.09E-06 0.07%	2.44E-06 0.30%	1.98E-06 0.02%	5.90E-06 0.07%	3.83E-06 0.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	8.18E-08 0.0 %	2.53E-08 0.0 %	1.21E-07 0.0 %	1.45E-07 0.0 %	2.43E-07 0.0 %	4.68E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	2.56E-09 0.0 %	3.66E-07 0.04%	0.0 0.0 %	0.0 0.0 %	4.77E-10 0.0 %	1.46E-09 0.0 %	3.04E-09 0.0 %	0.0 0.0 %
I 131	5.26E-07 0.01%	1.63E-07 0.02%	7.77E-07 0.0 %	9.31E-07 0.01%	1.57E-06 0.03%	3.01E-04 0.04%	0.0 0.0 %	0.0 0.0 %
I 131	7.46E-06 0.17%	2.31E-06 0.28%	1.10E-05 0.13%	1.32E-05 0.16%	2.22E-05 0.37%	4.27E-03 0.53%	0.0 0.0 %	0.0 0.0 %
I 131	3.77E-05 0.87%	1.17E-05 1.42%	5.57E-05 0.67%	6.67E-05 0.81%	1.12E-04 1.86%	2.16E-02 2.69%	0.0 0.0 %	0.0 0.0 %
I 131	2.46E-07 0.0 %	7.60E-08 0.0 %	3.63E-07 0.0 %	4.35E-07 0.0 %	7.31E-07 0.01%	1.41E-04 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	4.33E-03	8.20E-04	8.34E-03	8.19E-03	6.04E-03	8.02E-01	6.56E-04	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.79E-05 8.23%	1.09E-05 2.32%	3.73E-05 6.41%	4.91E-05 12.07%	8.35E-05 42.41%	1.60E-02 96.58%	0.0 0.0 %	0.0 0.0 %
I 133	1.60E-13 0.0 %	3.92E-13 0.0 %	3.12E-13 0.0 %	5.00E-13 0.0 %	8.65E-13 0.0 %	7.72E-11 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	8.13E-07 0.24%	3.51E-06 0.74%	2.84E-05 4.87%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	5.92E-05 17.44%	6.30E-06 1.34%	2.40E-04 41.18%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	9.16E-05 26.98%	2.01E-06 0.43%	6.21E-05 10.65%	1.36E-04 33.48%	4.37E-05 22.17%	0.0 0.0 %	1.49E-05 39.61%	0.0 0.0 %
CS137	1.03E-04 30.35%	3.19E-06 0.68%	1.56E-04 26.83%	1.96E-04 48.26%	6.61E-05 33.58%	0.0 0.0 %	2.27E-05 60.29%	0.0 0.0 %
BA140	3.62E-06 1.07%	9.16E-05 19.42%	5.70E-05 9.79%	6.58E-08 0.02%	2.22E-08 0.01%	0.0 0.0 %	3.86E-08 0.10%	0.0 0.0 %
I 131	9.34E-09 0.0 %	3.65E-09 0.0 %	1.25E-08 0.0 %	1.64E-08 0.0 %	2.79E-08 0.01%	5.33E-06 0.03%	0.0 0.0 %	0.0 0.0 %
CO 58	9.04E-07 0.27%	6.48E-06 1.37%	0.0 0.0 %	3.78E-07 0.09%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	5.09E-05 14.99%	3.45E-04 73.25%	0.0 0.0 %	2.17E-05 5.34%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.02E-07 0.03%	1.29E-06 0.27%	0.0 0.0 %	4.97E-07 0.12%	1.46E-07 0.07%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.59E-10 0.0 %	3.36E-10 0.0 %	1.15E-09 0.0 %	1.51E-09 0.0 %	2.57E-09 0.0 %	4.91E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.45E-08 0.0 %	5.66E-09 0.0 %	1.94E-08 0.0 %	2.55E-08 0.0 %	4.33E-08 0.02%	8.28E-06 0.05%	0.0 0.0 %	0.0 0.0 %
ZN 65	3.79E-07 0.11%	4.18E-07 0.09%	2.53E-07 0.04%	7.84E-07 0.19%	5.17E-07 0.26%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.69E-09 0.0 %	6.59E-10 0.0 %	2.25E-09 0.0 %	2.96E-09 0.0 %	5.04E-09 0.0 %	9.63E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	3.06E-10 0.0 %	6.09E-08 0.01%	0.0 0.0 %	0.0 0.0 %	6.26E-11 0.0 %	1.79E-10 0.0 %	3.87E-10 0.0 %	0.0 0.0 %
I 131	1.11E-08 0.0 %	4.32E-09 0.0 %	1.48E-08 0.0 %	1.94E-08 0.0 %	3.31E-08 0.02%	6.32E-06 0.04%	0.0 0.0 %	0.0 0.0 %
I 131	1.54E-07 0.05%	6.02E-08 0.01%	2.06E-07 0.04%	2.71E-07 0.07%	4.60E-07 0.23%	8.80E-05 0.53%	0.0 0.0 %	0.0 0.0 %
I 131	7.93E-07 0.23%	3.10E-07 0.07%	1.06E-06 0.18%	1.39E-06 0.34%	2.37E-06 1.20%	4.53E-04 2.74%	0.0 0.0 %	0.0 0.0 %
I 131	5.07E-09 0.0 %	1.98E-09 0.0 %	6.77E-09 0.0 %	8.91E-09 0.0 %	1.51E-08 0.0 %	2.90E-06 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	3.40E-04	4.72E-04	5.82E-04	4.07E-04	1.97E-04	1.65E-02	3.76E-05	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	5.31E-06 0.0 %	1.76E-05 0.0 %	8.90E-04 0.08%
KR 85M	1.46E-02 2.95%	1.46E-02 2.99%	1.46E-02 2.81%	1.46E-02 2.93%	1.46E-02 2.96%	1.46E-02 0.77%	1.51E-02 3.05%	5.35E-02 5.08%
KR 87	4.93E-02 9.95%	4.93E-02 10.09%	4.93E-02 9.47%	4.93E-02 9.91%	4.93E-02 9.99%	4.93E-02 2.61%	5.10E-02 10.32%	2.19E-01 20.83%
KR 88	3.06E-01 61.70%	3.06E-01 62.58%	3.06E-01 58.75%	3.06E-01 61.46%	3.06E-01 61.96%	3.06E-01 16.20%	3.07E-01 62.18%	4.49E-01 42.75%
XE133	7.55E-03 1.52%	7.55E-03 1.55%	7.55E-03 1.45%	7.55E-03 1.52%	7.55E-03 1.53%	7.55E-03 0.40%	8.09E-03 1.64%	2.58E-02 2.45%
XE135	7.97E-02 16.09%	7.97E-02 16.32%	7.97E-02 15.32%	7.97E-02 16.03%	7.97E-02 16.16%	7.97E-02 4.23%	8.19E-02 16.58%	2.58E-01 24.51%
XE135M	1.07E-03 0.22%	1.07E-03 0.22%	1.07E-03 0.21%	1.07E-03 0.21%	1.07E-03 0.22%	1.07E-03 0.06%	1.08E-03 0.22%	1.77E-03 0.17%
XE138	1.33E-02 2.69%	1.33E-02 2.73%	1.33E-02 2.57%	1.33E-02 2.68%	1.33E-02 2.71%	1.33E-02 0.71%	1.35E-02 2.73%	2.79E-02 2.66%
KR 89	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.51E-06 0.0 %	2.55E-06 0.0 %	5.97E-06 0.0 %
KR 83M	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.80E-07 0.0 %	1.41E-05 0.0 %	5.11E-05 0.0 %
XE137	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.36E-06 0.0 %	1.60E-06 0.0 %	2.50E-05 0.0 %
XE133M	2.22E-04 0.04%	2.22E-04 0.05%	2.22E-04 0.04%	2.22E-04 0.04%	2.22E-04 0.05%	2.22E-04 0.01%	2.48E-04 0.05%	2.08E-03 0.20%
XE131M	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	1.48E-05 0.0 %	1.47E-04 0.01%
I 131	2.44E-03 0.49%	8.30E-04 0.17%	3.52E-03 0.68%	4.25E-03 0.85%	7.11E-03 1.44%	1.35E+00 71.65%	7.97E-05 0.02%	9.67E-05 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	7.24E-06 0.0 %	1.03E-05 0.0 %	1.18E-05 0.0 %	1.69E-05 0.0 %	2.73E-05 0.0 %	2.24E-03 0.12%	2.59E-06 0.0 %	3.15E-06 0.0 %
SR 89	9.96E-05 0.02%	3.50E-04 0.07%	3.48E-03 0.67%	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	6.00E-05 0.01%	3.17E-09 0.0 %
SR 90	5.17E-03 1.04%	4.93E-04 0.10%	2.16E-02 4.15%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.11E-04 0.02%	0.0 0.0 %
CS134	2.99E-03 0.60%	8.30E-04 0.17%	2.83E-03 0.54%	4.92E-03 0.99%	2.10E-03 0.42%	7.80E-04 0.04%	1.24E-03 0.25%	9.10E-04 0.09%
CS137	4.48E-03 0.91%	2.12E-03 0.43%	7.26E-03 1.39%	8.08E-03 1.63%	4.06E-03 0.82%	2.04E-03 0.11%	2.75E-03 0.56%	2.38E-03 0.23%
BA140	1.63E-04 0.03%	2.39E-03 0.49%	1.78E-03 0.34%	5.83E-05 0.01%	5.70E-05 0.01%	5.64E-05 0.0 %	1.26E-03 0.25%	6.45E-05 0.0 %
I 131	8.21E-07 0.0 %	2.78E-07 0.0 %	1.18E-06 0.0 %	1.43E-06 0.0 %	2.40E-06 0.0 %	4.56E-04 0.02%	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	1.76E-05 0.0 %	4.73E-05 0.0 %	1.20E-05 0.0 %	1.42E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	4.03E-05 0.0 %	1.41E-05 0.0 %
CO 60	8.37E-03 1.69%	9.68E-03 1.98%	[illegible].10E-03 1.56%	8.21E-03 1.65%	8.10E-03 1.64%	8.10E-03 0.43%	1.01E-02 2.05%	9.52E-03 0.91%
MN 54	1.10E-04 0.02%	1.75E-04 0.04%	1.03E-04 0.02%	1.37E-04 0.03%	1.13E-04 0.02%	1.03E-04 0.0 %	1.95E-04 0.04%	1.21E-04 0.01%
I 131	7.44E-08 0.0 %	2.52E-08 0.0 %	1.07E-07 0.0 %	1.30E-07 0.0 %	2.17E-07 0.0 %	4.13E-05 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	1.28E-06 0.0 %	4.33E-07 0.0 %	1.84E-06 0.0 %	2.22E-06 0.0 %	3.72E-06 0.0 %	7.07E-04 0.04%	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	4.80E-06 0.0 %	4.10E-06 0.0 %	3.31E-06 0.0 %	8.73E-06 0.0 %	5.89E-06 0.0 %	6.01E-07 0.0 %	9.25E-07 0.0 %	6.92E-07 0.0 %
I 131	1.47E-07 0.0 %	4.98E-08 0.0 %	2.11E-07 0.0 %	2.56E-07 0.0 %	4.28E-07 0.0 %	8.13E-05 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CR 51	3.06E-07 0.0 %	2.18E-06 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.95E-07 0.0 %	3.01E-07 0.0 %	5.56E-07 0.0 %	3.46E-07 0.0 %
I 131	1.04E-06 0.0 %	3.49E-07 0.0 %	1.49E-06 0.0 %	1.81E-06 0.0 %	3.03E-06 0.0 %	5.77E-04 0.03%	3.43E-08 0.0 %	4.17E-08 0.0 %
I 131	1.34E-05 0.0 %	4.58E-06 0.0 %	1.94E-05 0.0 %	2.34E-05 0.0 %	3.92E-05 0.0 %	7.45E-03 0.39%	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	7.30E-05 0.01%	2.45E-05 0.0 %	1.05E-04 0.02%	1.27E-04 0.03%	2.13E-04 0.04%	4.05E-02 2.15%	2.25E-06 0.0 %	2.73E-06 0.0 %
I 131	4.41E-07 0.0 %	1.50E-07 0.0 %	6.36E-07 0.0 %	7.70E-07 0.0 %	1.29E-06 0.0 %	2.45E-04 0.01%	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	4.95E-01	4.88E-01	5.20E-01	4.97E-01	4.93E-01	1.89E+00	4.94E-01	1.05E+00

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.36E+00 98.12%	1.36E+00 98.89%	1.36E+00 94.15%	1.36E+00 98.32%	1.36E+00 98.12%	1.36E+00 25.17%	1.38E+00 99.66%	3.24E+00 99.92%
GROUND	2.15E-03 0.16%	2.15E-03 0.16%	2.15E-03 0.15%	2.15E-03 0.16%	2.15E-03 0.16%	2.15E-03 0.04%	2.15E-03 0.15%	2.52E-03 0.08%
INHAL	1.24E-04 0.01%	1.93E-04 0.01%	9.21E-04 0.06%	1.32E-04 0.01%	1.97E-04 0.01%	3.57E-02 0.66%	1.61E-03 0.12%	0.0 0.0 %
VEGET	1.48E-02 1.07%	8.87E-03 0.65%	6.03E-02 4.19%	6.88E-03 0.50%	7.87E-03 0.57%	1.34E+00 24.81%	3.18E-04 0.02%	0.0 0.0 %
COW MILK	7.64E-03 0.55%	2.16E-03 0.16%	1.70E-02 1.18%	1.27E-02 0.92%	1.47E-02 1.06%	2.51E+00 46.49%	5.82E-04 0.04%	0.0 0.0 %
MEAT	1.37E-03 0.10%	1.84E-03 0.13%	3.93E-03 0.27%	1.35E-03 0.10%	1.08E-03 0.08%	1.53E-01 2.83%	9.68E-05 0.01%	0.0 0.0 %
TOTAL	1.38E+00	1.37E+00	1.44E+00	1.38E+00	1.38E+00	5.39E+00	1.39E+00	3.24E+00

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	3.29E-04 0.02%	1.66E-02 0.51%
KR 85M	3.38E-02 2.49%	3.38E-02 2.49%	3.38E-02 2.49%	3.38E-02 2.49%	3.38E-02 2.49%	3.38E-02 2.49%	3.49E-02 2.52%	1.24E-01 3.82%
KR 87	1.07E-01 7.90%	1.07E-01 7.90%	1.07E-01 7.90%	1.07E-01 7.90%	1.07E-01 7.90%	1.07E-01 7.90%	1.11E-01 8.01%	4.76E-01 14.71%
KR 88	7.47E-01 55.06%	7.47E-01 55.06%	7.47E-01 55.06%	7.47E-01 55.06%	7.47E-01 55.06%	7.47E-01 55.06%	7.50E-01 54.21%	1.10E+00 33.91%
XE133	1.47E-01 10.84%	1.47E-01 10.84%	1.47E-01 10.84%	1.47E-01 10.84%	1.47E-01 10.84%	1.47E-01 10.84%	1.57E-01 11.38%	5.02E-01 15.50%
XE135	2.89E-01 21.30%	2.89E-01 21.30%	2.89E-01 21.30%	2.89E-01 21.30%	2.89E-01 21.30%	2.89E-01 21.30%	2.97E-01 21.44%	9.34E-01 28.84%
XE135M	2.19E-03 0.16%	2.19E-03 0.16%	2.19E-03 0.16%	2.19E-03 0.16%	2.19E-03 0.16%	2.19E-03 0.16%	2.20E-03 0.16%	3.62E-03 0.11%
XE138	2.77E-02 2.04%	2.77E-02 2.04%	2.77E-02 2.04%	2.77E-02 2.04%	2.77E-02 2.04%	2.77E-02 2.04%	2.80E-02 2.03%	5.80E-02 1.79%
KR 89	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.81E-05 0.0 %	6.58E-05 0.0 %
KR 83M	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	3.23E-05 0.0 %	1.17E-04 0.0 %
XE137	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	1.03E-05 0.0 %	1.61E-04 0.0 %
XE133M	2.45E-03 0.18%	2.45E-03 0.18%	2.45E-03 0.18%	2.45E-03 0.18%	2.45E-03 0.18%	2.45E-03 0.18%	2.74E-03 0.20%	2.30E-02 0.71%
XE131M	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.92E-04 0.02%	2.90E-03 0.09%
TOTAL	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.36E+00	1.38E+00	3.24E+00

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	6.45E-05 3.00%	7.83E-05 3.10%
I 133	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.54E-06 0.07%	1.87E-06 0.07%
SR 89	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	2.30E-09 0.0 %
CS134	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	3.95E-05 1.84%	4.61E-05 1.83%
CS137	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	6.74E-04 31.32%	7.86E-04 31.13%
BA140	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	5.29E-05 2.46%	6.04E-05 2.39%
I 131	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	4.17E-08 0.0 %
CC 58	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	9.29E-07 0.04%	1.09E-06 0.04%
CO 60	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.31E-03 60.81%	1.54E-03 60.96%
MN 54	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	9.61E-06 0.45%	1.13E-05 0.45%
I 131	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	4.44E-07 0.02%	5.39E-07 0.02%
TOTAL	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.15E-03	2.52E-03

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.90E-05 47.49%	1.50E-05 7.75%	8.03E-05 8.72%	1.04E-04 78.64%	1.77E-04 89.58%	3.43E-02 96.11%	0.0 0.0 %	0.0 0.0 %
I 133	2.28E-06 1.83%	3.63E-06 1.88%	4.51E-06 0.49%	7.08E-06 5.35%	1.22E-05 6.20%	1.10E-03 3.07%	0.0 0.0 %	0.0 0.0 %
SR 89	2.85E-07 0.23%	8.53E-06 4.41%	9.93E-06 1.08%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	4.40E-05 2.74%	0.0 0.0 %
SR 90	4.81E-05 38.72%	5.09E-06 2.63%	7.76E-04 84.32%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.72E-05 5.43%	0.0 0.0 %
CS134	2.74E-06 2.21%	4.06E-08 0.02%	1.94E-06 0.21%	4.03E-06 3.05%	1.35E-06 0.69%	0.0 0.0 %	4.76E-07 0.03%	0.0 0.0 %
CS137	8.02E-06 6.46%	1.68E-07 0.09%	1.28E-05 1.39%	1.52E-05 11.45%	5.38E-06 2.73%	0.0 0.0 %	1.90E-06 0.12%	0.0 0.0 %
BA140	2.17E-06 1.75%	1.44E-04 74.63%	3.42E-05 3.72%	3.92E-08 0.03%	1.32E-08 0.0 %	0.0 0.0 %	1.05E-03 65.21%	0.0 0.0 %
I 131	1.08E-07 0.09%	2.75E-08 0.01%	1.47E-07 0.02%	1.91E-07 0.14%	3.24E-07 0.16%	6.29E-05 0.18%	0.0 0.0 %	0.0 0.0 %
CO 58	6.03E-09 0.0 %	2.37E-07 0.12%	0.0 0.0 %	4.29E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	2.58E-06 0.16%	0.0 0.0 %
CO 60	1.07E-06 0.86%	1.58E-05 8.16%	0.0 0.0 %	7.77E-07 0.59%	0.0 0.0 %	0.0 0.0 %	4.12E-04 25.65%	0.0 0.0 %
MN 54	5.03E-08 0.04%	4.70E-07 0.24%	0.0 0.0 %	2.94E-07 0.22%	7.22E-08 0.04%	0.0 0.0 %	1.06E-05 0.66%	0.0 0.0 %
I 131	3.94E-07 0.32%	1.00E-07 0.05%	5.36E-07 0.06%	6.95E-07 0.53%	1.18E-06 0.60%	2.29E-04 0.64%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.24E-04	1.93E-04	9.21E-04	1.32E-04	1.97E-04	3.57E-02	1.61E-03	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.32E-03 15.68%	7.73E-04 8.71%	3.33E-03 5.52%	4.09E-03 59.51%	6.91E-03 87.85%	1.33E+00 99.27%	0.0 0.0 %	0.0 0.0 %
I 133	7.30E-10 0.0 %	1.51E-09 0.0 %	1.46E-09 0.0 %	2.19E-09 0.0 %	3.76E-09 0.0 %	3.52E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.03E-04 1.38%	6.98E-04 7.87%	7.11E-03 11.78%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.07E-02 72.33%	1.02E-03 11.52%	4.31E-02 71.47%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.36E-04 0.92%	3.07E-06 0.03%	1.20E-04 0.20%	2.45E-04 3.56%	7.80E-05 0.99%	0.0 0.0 %	2.71E-05 8.53%	0.0 0.0 %
CS137	1.04E-03 7.04%	3.38E-05 0.38%	2.10E-03 3.47%	2.46E-03 35.75%	8.23E-04 10.46%	0.0 0.0 %	2.88E-04 90.56%	0.0 0.0 %
BA140	2.82E-04 1.90%	5.82E-03 65.57%	4.54E-03 7.52%	4.89E-06 0.07%	1.63E-06 0.02%	0.0 0.0 %	2.91E-06 0.91%	0.0 0.0 %
I 131	1.15E-06 0.0 %	3.85E-07 0.0 %	1.66E-06 0.0 %	2.04E-06 0.03%	3.44E-06 0.04%	6.60E-04 0.05%	0.0 0.0 %	0.0 0.0 %
CO 58	9.37E-07 0.0 %	5.37E-06 0.06%	0.0 0.0 %	3.71E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	9.11E-05 0.62%	4.97E-04 5.59%	0.0 0.0 %	3.69E-05 0.54%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.78E-06 0.01%	1.80E-05 0.20%	0.0 0.0 %	8.21E-06 0.12%	2.40E-06 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.60E-05 0.11%	5.33E-06 0.06%	2.29E-05 0.04%	2.82E-05 0.41%	4.76E-05 0.61%	9.14E-03 0.68%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.48E-02	8.87E-03	6.03E-02	6.88E-03	7.87E-03	1.34E+00	3.18E-04	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.34E-03 56.87%	1.34E-03 62.27%	6.41E-03 37.80%	7.68E-03 60.43%	1.29E-02 88.06%	2.49E+00 99.23%	0.0 0.0 %	0.0 0.0 %
I 133	1.84E-06 0.02%	3.54E-06 0.16%	3.71E-06 0.02%	5.43E-06 0.04%	9.28E-06 0.06%	8.87E-04 0.04%	0.0 0.0 %	0.0 0.0 %
SR 89	2.51E-05 0.33%	7.78E-05 3.61%	8.78E-04 5.17%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.25E-03 16.40%	1.14E-04 5.27%	5.03E-03 29.67%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.24E-04 2.93%	5.13E-06 0.24%	2.23E-04 1.31%	4.44E-04 3.49%	1.41E-04 0.96%	0.0 0.0 %	4.94E-05 8.49%	0.0 0.0 %
CS137	1.72E-03 22.52%	5.74E-05 2.66%	3.95E-03 23.31%	4.52E-03 35.54%	1.51E-03 10.27%	0.0 0.0 %	5.32E-04 91.47%	0.0 0.0 %
BA140	2.53E-05 0.33%	4.78E-04 22.15%	4.12E-04 2.43%	4.32E-07 0.0 %	1.44E-07 0.0 %	0.0 0.0 %	2.58E-07 0.04%	0.0 0.0 %
I 131	2.11E-06 0.03%	6.53E-07 0.03%	3.12E-06 0.02%	3.74E-06 0.03%	6.29E-06 0.04%	1.21E-03 0.05%	0.0 0.0 %	0.0 0.0 %
CO 58	1.36E-07 0.0 %	7.00E-07 0.03%	0.0 0.0 %	5.25E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.38E-05 0.18%	6.77E-05 3.13%	0.0 0.0 %	5.46E-06 0.04%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	6.63E-08 0.0 %	5.99E-07 0.03%	0.0 0.0 %	2.98E-07 0.0 %	8.67E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.99E-05 0.39%	9.26E-06 0.43%	4.42E-05 0.26%	5.30E-05 0.42%	8.91E-05 0.61%	1.71E-02 0.68%	0.0 0.0 %	0.0 0.0 %
TOTAL	7.64E-03	2.16E-03	1.70E-02	1.27E-02	1.47E-02	2.51E+00	5.82E-04	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.65E-04 19.43%	1.04E-04 5.65%	3.55E-04 9.02%	4.67E-04 34.60%	7.93E-04 73.40%	1.52E-01 99.27%	0.0 0.0 %	0.0 0.0 %
I 133	1.09E-12 0.0 %	2.68E-12 0.0 %	2.13E-12 0.0 %	3.42E-12 0.0 %	5.91E-12 0.0 %	5.27E-10 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	6.86E-06 0.50%	2.96E-05 1.61%	2.39E-04 6.08%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	5.09E-04 37.26%	5.41E-05 2.95%	2.06E-03 52.43%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	5.20E-05 3.81%	1.14E-06 0.06%	3.52E-05 0.90%	7.73E-05 5.73%	2.48E-05 2.29%	0.0 0.0 %	8.46E-06 8.74%	0.0 0.0 %
CS137	4.00E-04 29.25%	1.24E-05 0.67%	6.06E-04 15.41%	7.61E-04 56.45%	2.56E-04 23.72%	0.0 0.0 %	8.79E-05 90.82%	0.0 0.0 %
BA140	4.02E-05 2.95%	1.02E-03 55.36%	6.33E-04 16.10%	7.30E-07 0.05%	2.46E-07 0.02%	0.0 0.0 %	4.28E-07 0.44%	0.0 0.0 %
I 131	1.31E-07 0.0 %	5.13E-08 0.0 %	1.76E-07 0.0 %	2.31E-07 0.02%	3.93E-07 0.04%	7.50E-05 0.05%	0.0 0.0 %	0.0 0.0 %
CO 58	7.62E-07 0.06%	5.47E-06 0.30%	0.0 0.0 %	3.19E-07 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	9.01E-05 6.60%	6.11E-04 33.29%	0.0 0.0 %	3.85E-05 2.85%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.04E-07 0.0 %	1.32E-06 0.07%	0.0 0.0 %	5.08E-07 0.04%	1.50E-07 0.01%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.83E-06 0.13%	7.15E-07 0.04%	2.44E-06 0.06%	3.22E-06 0.24%	5.47E-06 0.51%	1.04E-03 0.68%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.37E-03	1.84E-03	3.93E-03	1.35E-03	1.08E-03	1.53E-01	9.68E-05	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	9.89E-05 0.0 %	3.29E-04 0.02%	1.66E-02 0.51%
KR 85M	3.38E-02 2.45%	3.38E-02 2.46%	3.38E-02 2.35%	3.38E-02 2.45%	3.38E-02 2.45%	3.38E-02 0.63%	3.49E-02 2.52%	1.24E-01 3.82%
KR 87	1.07E-01 7.75%	1.07E-01 7.81%	1.07E-01 7.44%	1.07E-01 7.77%	1.07E-01 7.75%	1.07E-01 1.99%	1.11E-01 7.98%	4.76E-01 14.69%
KR 88	7.47E-01 54.02%	7.47E-01 54.45%	7.47E-01 51.84%	7.47E-01 54.13%	7.47E-01 54.03%	7.47E-01 13.86%	7.50E-01 54.03%	1.10E+00 33.88%
XE133	1.47E-01 10.63%	1.47E-01 10.72%	1.47E-01 10.20%	1.47E-01 10.66%	1.47E-01 10.63%	1.47E-01 2.73%	1.57E-01 11.34%	5.02E-01 15.49%
XE135	2.89E-01 20.90%	2.89E-01 21.06%	2.89E-01 20.05%	2.89E-01 20.94%	2.89E-01 20.90%	2.89E-01 5.36%	2.97E-01 21.37%	9.34E-01 28.82%
XE135M	2.19E-03 0.16%	2.19E-03 0.16%	2.19E-03 0.15%	2.19E-03 0.16%	2.19E-03 0.16%	2.19E-03 0.04%	2.20E-03 0.16%	3.62E-03 0.11%
XE138	2.77E-02 2.01%	2.77E-02 2.02%	2.77E-02 1.92%	2.77E-02 2.01%	2.77E-02 2.01%	2.77E-02 0.51%	2.80E-02 2.02%	5.80E-02 1.79%
KR 89	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.77E-05 0.0 %	2.81E-05 0.0 %	6.58E-05 0.0 %
KR 83M	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	4.14E-07 0.0 %	3.23E-05 0.0 %	1.17E-04 0.0 %
XE137	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	8.74E-06 0.0 %	1.03E-05 0.0 %	1.61E-04 0.0 %
XE133M	2.45E-03 0.18%	2.45E-03 0.18%	2.45E-03 0.17%	2.45E-03 0.18%	2.45E-03 0.18%	2.45E-03 0.05%	2.74E-03 0.20%	2.30E-02 0.71%
XE131M	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.02%	2.35E-04 0.0 %	2.92E-04 0.02%	2.90E-03 0.09%
I 131	7.05E-03 0.51%	2.30E-03 0.17%	1.02E-02 0.71%	1.24E-02 0.90%	2.09E-02 1.51%	4.00E+00 74.21%	6.45E-05 0.0 %	7.83E-05 0.0 %

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	5.65E-06 0.0 %	8.71E-06 0.0 %	9.76E-06 0.0 %	1.40E-05 0.0 %	2.31E-05 0.0 %	1.98E-03 0.04%	1.54E-06 0.0 %	1.87E-06 0.0 %
SR 89	2.36E-04 0.02%	8.14E-04 0.06%	8.23E-03 0.57%	1.98E-09 0.0 %	1.98E-09 0.0 %	1.98E-09 0.0 %	4.40E-05 0.0 %	2.30E-09 0.0 %
SR 90	1.25E-02 0.91%	1.19E-03 0.09%	5.10E-02 3.54%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.72E-05 0.0 %	0.0 0.0 %
CS134	4.54E-04 0.03%	4.89E-05 0.0 %	4.19E-04 0.03%	8.10E-04 0.06%	2.84E-04 0.02%	3.95E-05 0.0 %	1.25E-04 0.0 %	4.61E-05 0.0 %
CS137	3.84E-03 0.28%	7.77E-04 0.06%	7.34E-03 0.51%	8.43E-03 0.61%	3.27E-03 0.24%	6.74E-04 0.01%	1.58E-03 0.11%	7.86E-04 0.02%
BA140	4.02E-04 0.03%	7.51E-03 0.55%	5.67E-03 0.39%	5.90E-05 0.0 %	5.49E-05 0.0 %	5.29E-05 0.0 %	1.10E-03 0.08%	6.04E-05 0.0 %
I 131	3.54E-06 0.0 %	1.15E-06 0.0 %	5.13E-06 0.0 %	6.23E-06 0.0 %	1.05E-05 0.0 %	2.01E-03 0.04%	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	2.77E-06 0.0 %	1.27E-05 0.0 %	9.29E-07 0.0 %	1.68E-06 0.0 %	9.29E-07 0.0 %	9.29E-07 0.0 %	3.51E-06 0.0 %	1.09E-06 0.0 %
CO 60	1.50E-03 0.11%	2.50E-03 0.18%	1.31E-03 0.09%	1.39E-03 0.10%	1.31E-03 0.09%	1.31E-03 0.02%	1.72E-03 0.12%	1.54E-03 0.05%
MN 54	1.16E-05 0.0 %	3.00E-05 0.0 %	9.61E-06 0.0 %	1.89E-05 0.0 %	1.23E-05 0.0 %	9.61E-06 0.0 %	2.02E-05 0.0 %	1.13E-05 0.0 %
I 131	4.86E-05 0.0 %	1.59E-05 0.0 %	7.06E-05 0.0 %	8.55E-05 0.0 %	1.44E-04 0.01%	2.76E-02 0.51%	4.44E-07 0.0 %	5.39E-07 0.0 %
TOTAL	1.38E+00	1.37E+00	1.44E+00	1.38E+00	1.38E+00	5.39E+00	1.39E+00	3.24E+00

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.69E-01 88.22%	1.69E-01 92.78%	1.69E-01 85.29%	1.69E-01 81.72%	1.69E-01 89.23%	1.69E-01 16.42%	1.74E-01 93.75%	4.74E-01 98.34%
GROUND	6.82E-03 3.56%	6.82E-03 3.74%	6.82E-03 3.44%	6.82E-03 3.30%	6.82E-03 3.60%	6.82E-03 0.66%	6.82E-03 3.67%	8.00E-03 1.66%
INHAL	1.20E-04 0.06%	8.22E-05 0.05%	1.47E-04 0.07%	1.97E-04 0.10%	1.09E-04 0.06%	1.01E-02 0.98%	1.61E-03 0.87%	0.0 0.0 %
VEGET	5.42E-03 2.83%	2.80E-03 1.54%	7.80E-03 3.94%	1.01E-02 4.86%	4.42E-03 2.33%	2.83E-01 27.48%	1.02E-03 0.55%	0.0 0.0 %
COW MILK	8.10E-03 4.22%	7.95E-04 0.44%	1.25E-02 6.31%	1.77E-02 8.55%	7.96E-03 4.20%	5.28E-01 51.32%	1.84E-03 0.99%	0.0 0.0 %
MEAT	2.11E-03 1.10%	2.66E-03 1.46%	1.88E-03 0.95%	3.06E-03 1.48%	1.09E-03 0.57%	3.23E-02 3.14%	3.14E-04 0.17%	0.0 0.0 %
TOTAL	1.92E-01	1.82E-01	1.98E-01	2.07E-01	1.89E-01	1.03E+00	1.86E-01	4.82E-01

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	3.20E-04 0.19%	3.20E-04 0.19%	3.20E-04 0.19%	3.20E-04 0.19%	3.20E-04 0.19%	3.20E-04 0.19%	1.06E-03 0.61%	5.36E-02 11.30%
KR 85M	1.18E-02 6.95%	1.18E-02 6.95%	1.18E-02 6.95%	1.18E-02 6.95%	1.18E-02 6.95%	1.18E-02 6.95%	1.21E-02 6.97%	4.30E-02 9.08%
KR 87	8.10E-03 4.79%	8.10E-03 4.79%	8.10E-03 4.79%	8.10E-03 4.79%	8.10E-03 4.79%	8.10E-03 4.79%	8.38E-03 4.81%	3.60E-02 7.59%
KR 88	8.41E-02 49.74%	8.41E-02 49.74%	8.41E-02 49.74%	8.41E-02 49.74%	8.41E-02 49.74%	8.41E-02 49.74%	8.45E-02 48.52%	1.24E-01 26.08%
XE133	3.24E-02 19.18%	3.24E-02 19.18%	3.24E-02 19.18%	3.24E-02 19.18%	3.24E-02 19.18%	3.24E-02 19.18%	3.47E-02 19.96%	1.11E-01 23.35%
XE135	3.02E-02 17.87%	3.02E-02 17.87%	3.02E-02 17.87%	3.02E-02 17.87%	3.02E-02 17.87%	3.02E-02 17.87%	3.10E-02 17.82%	9.77E-02 20.60%
XE135M	1.14E-04 0.07%	1.14E-04 0.07%	1.14E-04 0.07%	1.14E-04 0.07%	1.14E-04 0.07%	1.14E-04 0.07%	1.15E-04 0.07%	1.89E-04 0.04%
XE138	1.45E-03 0.86%	1.45E-03 0.86%	1.45E-03 0.86%	1.45E-03 0.86%	1.45E-03 0.86%	1.45E-03 0.86%	1.46E-03 0.84%	3.03E-03 0.64%
KR 89	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.14E-06 0.0 %	1.20E-05 0.0 %
KR 83M	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	2.72E-06 0.0 %	9.88E-06 0.0 %
XE137	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.63E-06 0.0 %	2.55E-05 0.0 %
XE133M	3.05E-04 0.18%	3.05E-04 0.18%	3.05E-04 0.18%	3.05E-04 0.18%	3.05E-04 0.18%	3.05E-04 0.18%	3.40E-04 0.20%	2.85E-03 0.60%
XE131M	2.73E-04 0.16%	2.73E-04 0.16%	2.73E-04 0.16%	2.73E-04 0.16%	2.73E-04 0.16%	2.73E-04 0.16%	3.38E-04 0.19%	3.36E-03 0.71%
TOTAL	1.69E-01	1.69E-01	1.69E-01	1.69E-01	1.69E-01	1.69E-01	1.74E-01	4.74E-01

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.07E-05 0.16%	1.30E-05 0.16%
I 133	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.08E-07 0.0 %	3.75E-07 0.0 %
SR 89	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	1.30E-10 0.0 %
CS134	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	6.79E-04 9.96%	7.92E-04 9.90%
CS137	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.21E-03 17.71%	1.41E-03 17.60%
BA140	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.14E-06 0.03%	2.45E-06 0.03%
I 131	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.73E-06 0.03%
CO 58	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	9.70E-06 0.14%	1.14E-05 0.14%
CO 60	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	4.84E-03 70.95%	5.69E-03 71.11%
MN 54	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	6.93E-05 1.02%	8.12E-05 1.01%
I 131	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	6.82E-03	6.82E-03	6.82E-03	6.82E-03	6.82E-03	6.82E-03	6.82E-03	8.00E-03

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.06E-05 8.80%	2.69E-06 3.28%	1.44E-05 9.80%	1.87E-05 9.50%	3.17E-05 28.99%	6.16E-03 60.88%	0.0 0.0 %	0.0 0.0 %
I 133	5.36E-07 0.45%	8.56E-07 1.04%	1.06E-06 0.72%	1.67E-06 0.85%	2.88E-06 2.63%	2.58E-04 2.55%	0.0 0.0 %	0.0 0.0 %
SR 89	2.84E-08 0.02%	8.50E-07 1.03%	9.90E-07 0.67%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	4.39E-06 0.27%	0.0 0.0 %
SR 90	8.38E-07 0.70%	8.86E-08 0.11%	1.35E-05 9.19%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.52E-06 0.09%	0.0 0.0 %
CS134	5.79E-05 48.12%	8.58E-07 1.04%	4.10E-05 27.84%	8.52E-05 43.30%	2.86E-05 26.10%	0.0 0.0 %	1.00E-05 0.62%	0.0 0.0 %
CS137	3.99E-05 33.14%	8.33E-07 1.01%	6.36E-05 43.24%	7.53E-05 38.30%	2.67E-05 24.43%	0.0 0.0 %	9.42E-06 0.58%	0.0 0.0 %
BA140	2.47E-07 0.21%	1.64E-05 19.96%	3.89E-06 2.64%	4.45E-09 0.0 %	1.50E-09 0.0 %	0.0 0.0 %	1.19E-04 7.38%	0.0 0.0 %
I 131	6.35E-06 5.28%	1.61E-06 1.97%	8.65E-06 5.88%	1.12E-05 5.70%	1.90E-05 17.38%	3.69E-03 36.50%	0.0 0.0 %	0.0 0.0 %
CO 58	5.65E-08 0.05%	2.22E-06 2.70%	0.0 0.0 %	4.02E-08 0.02%	0.0 0.0 %	0.0 0.0 %	2.42E-05 1.50%	0.0 0.0 %
CO 60	3.56E-06 2.96%	5.26E-05 64.04%	0.0 0.0 %	2.59E-06 1.32%	0.0 0.0 %	0.0 0.0 %	1.37E-03 85.16%	0.0 0.0 %
MN 54	3.35E-07 0.28%	3.13E-06 3.81%	0.0 0.0 %	1.96E-06 1.00%	4.81E-07 0.44%	0.0 0.0 %	7.06E-05 4.38%	0.0 0.0 %
I 131	1.25E-08 0.01%	3.19E-09 0.0 %	1.71E-08 0.01%	2.21E-08 0.01%	3.76E-08 0.03%	7.30E-06 0.07%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.20E-04	8.22E-05	1.47E-04	1.97E-04	1.09E-04	1.01E-02	1.61E-03	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.11E-04 7.59%	1.37E-04 4.89%	5.90E-04 7.56%	7.26E-04 7.22%	1.22E-03 27.73%	2.35E-01 83.15%	0.0 0.0 %	0.0 0.0 %
I 133	1.59E-10 0.0 %	3.29E-10 0.0 %	3.18E-10 0.0 %	4.78E-10 0.0 %	8.19E-10 0.0 %	7.68E-08 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	1.21E-05 0.22%	4.14E-05 1.48%	4.22E-04 5.40%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.18E-04 2.18%	1.13E-05 0.40%	4.76E-04 6.10%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.49E-03 45.94%	5.62E-05 2.01%	2.19E-03 28.04%	4.48E-03 44.58%	1.43E-03 32.28%	0.0 0.0 %	4.96E-04 48.59%	0.0 0.0 %
CS137	1.90E-03 35.02%	6.16E-05 2.20%	3.82E-03 48.94%	4.48E-03 44.56%	1.50E-03 33.94%	0.0 0.0 %	5.25E-04 51.40%	0.0 0.0 %
BA140	1.17E-05 0.22%	2.43E-04 8.66%	1.89E-04 2.42%	2.04E-07 0.0 %	6.81E-08 0.0 %	0.0 0.0 %	1.21E-07 0.01%	0.0 0.0 %
I 131	8.28E-05 1.53%	2.76E-05 0.99%	1.19E-04 1.52%	1.46E-04 1.45%	2.47E-04 5.58%	4.74E-02 16.74%	0.0 0.0 %	0.0 0.0 %
CO 58	1.07E-05 0.20%	6.16E-05 2.20%	0.0 0.0 %	4.25E-06 0.04%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	3.70E-04 6.83%	2.02E-03 72.10%	0.0 0.0 %	1.50E-04 1.49%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.41E-05 0.26%	1.42E-04 5.06%	0.0 0.0 %	6.48E-05 0.64%	1.89E-05 0.43%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.26E-07 0.0 %	1.75E-07 0.0 %	7.55E-07 0.0 %	9.28E-07 0.0 %	1.57E-06 0.04%	3.01E-04 0.11%	0.0 0.0 %	0.0 0.0 %
TOTAL	5.42E-03	2.80E-03	7.80E-03	1.01E-02	4.42E-03	2.83E-01	1.02E-03	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.71E-04 9.52%	2.38E-04 29.97%	1.14E-03 9.09%	1.36E-03 7.70%	2.29E-03 28.80%	4.41E-01 83.45%	0.0 0.0 %	0.0 0.0 %
I 133	4.01E-07 0.0 %	7.72E-07 0.10%	8.10E-07 0.0 %	1.18E-06 0.0 %	2.03E-06 0.03%	1.94E-04 0.04%	0.0 0.0 %	0.0 0.0 %
SR 89	1.48E-06 0.02%	4.57E-06 0.58%	5.16E-05 0.41%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.36E-05 0.17%	1.24E-06 0.16%	5.48E-05 0.44%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	4.06E-03 50.10%	9.30E-05 11.69%	4.03E-03 32.23%	8.04E-03 45.46%	2.55E-03 32.00%	0.0 0.0 %	8.94E-04 48.72%	0.0 0.0 %
CS137	3.04E-03 37.57%	1.02E-04 12.76%	6.99E-03 55.89%	7.99E-03 45.17%	2.67E-0[illegible] 33.47%	0.0 0.0 %	9.41E-04 51.28%	0.0 0.0 %
BA140	1.04E-06 0.01%	1.95E-05 2.45%	1.68E-05 0.13%	1.76E-08 0.0 %	5.88E-09 0.0 %	0.0 0.0 %	1.06E-08 0.0 %	0.0 0.0 %
I 131	1.51E-04 1.87%	4.69E-05 5.89%	2.24E-04 1.79%	2.68E-04 1.51%	4.51E-04 5.66%	8.67E-02 16.40%	0.0 0.0 %	0.0 0.0 %
CO 58	1.56E-06 0.02%	8.06E-06 1.01%	0.0 0.0 %	6.05E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	5.63E-05 0.70%	2.77E-04 34.76%	0.0 0.0 %	2.23E-05 0.13%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	5.25E-07 0.0 %	4.74E-06 0.60%	0.0 0.0 %	2.36E-06 0.01%	6.87E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	9.86E-07 0.0[illegible]	3.05E-07 0.04%	1.46E-06 0.01%	1.74E-06 0.0 %	2.94E-06 0.04%	5.64E-04 0.11%	0.0 0.0 %	0.0 0.0 %
TOTAL	8.1[illegible]	7.95E-04	1.25E-02	1.77E-02	7.96E-03	5.28E-01	1.84E-03	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.70E-05 2.23%	1.84E-05 0.69%	6.29E-05 3.34%	8.27E-05 2.71%	1.41E-04 12.92%	2.69E-02 83.24%	0.0 0.0 %	0.0 0.0 %
I 133	2.38E-13 0.0 %	5.84E-13 0.0 %	4.65E-13 0.0 %	7.45E-13 0.0 %	1.29E-12 0.0 %	1.15E-10 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	4.06E-07 0.02%	1.75E-06 0.07%	1.42E-05 0.75%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	5.61E-06 0.27%	5.96E-07 0.02%	2.27E-05 1.21%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	9.48E-04 44.87%	2.09E-05 0.78%	6.42E-04 34.13%	1.41E-03 46.13%	4.52E-04 41.54%	0.0 0.0 %	1.54E-04 49.11%	0.0 0.0 %
CS137	7.26E-04 34.36%	2.25E-05 0.85%	1.10E-03 58.50%	1.38E-03 45.27%	4.66E-04 42.83%	0.0 0.0 %	1.60E-04 50.88%	0.0 0.0 %
BA140	1.67E-06 0.08%	4.22E-05 1.59%	2.63E-05 1.40%	3.03E-08 0.0 %	1.02E-08 0.0 %	0.0 0.0 %	1.78E-08 0.0 %	0.0 0.0 %
I 131	9.41E-06 0.45%	3.68E-06 0.14%	1.26E-05 0.67%	1.65E-05 0.54%	2.81E-05 2.59%	5.38E-03 16.66%	0.0 0.0 %	0.0 0.0 %
CO 58	8.72E-06 0.41%	6.25E-05 2.35%	0.0 0.0 %	3.65E-06 0.12%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	3.65E-04 17.28%	2.48E-03 93.13%	0.0 0.0 %	1.56E-04 5.10%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	8.16E-07 0.04%	1.03E-05 0.39%	0.0 0.0 %	3.99E-06 0.13%	1.18E-06 0.11%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	6.02E-08 0.0 %	2.35E-08 0.0 %	8.04E-08 0.0 %	1.06E-07 0.0 %	1.80E-07 0.02%	3.44E-05 0.11%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.11E-03	2.66E-03	1.88E-03	3.06E-03	1.09E-03	3.23E-02	3.14E-04	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	3.20E-04 0.17%	3.20E-04 0.18%	3.20E-04 0.16%	3.20E-04 0.15%	3.20E-04 0.17%	3.20E-04 0.03%	1.06E-03 0.57%	5.36E-02 11.12%
KR 85M	1.18E-02 6.13%	1.18E-02 6.45%	1.18E-02 5.93%	1.18E-02 5.68%	1.18E-02 6.20%	1.18E-02 1.14%	1.21E-02 6.54%	4.30E-02 8.93%
KR 87	8.10E-03 4.23%	8.10E-03 4.45%	8.10E-03 4.09%	8.10E-03 3.92%	8.10E-03 4.28%	8.10E-03 0.79%	8.38E-03 4.51%	3.60E-02 7.47%
KR 88	8.41E-02 43.89%	8.41E-02 46.15%	8.41E-02 42.43%	8.41E-02 40.65%	8.41E-02 44.39%	8.41E-02 8.17%	8.45E-02 45.49%	1.24E-01 25.64%
XE133	3.24E-02 16.92%	3.24E-02 17.80%	3.24E-02 16.36%	3.24E-02 15.68%	3.24E-02 17.12%	3.24E-02 3.15%	3.47E-02 18.71%	1.11E-01 22.97%
XE135	3.02E-02 15.77%	3.02E-02 16.58%	3.02E-02 15.24%	3.02E-02 14.60%	3.02E-02 15.95%	3.02E-02 2.93%	3.10E-02 16.71%	9.77E-02 20.26%
XE135M	1.14E-04 0.06%	1.14E-04 0.06%	1.14E-04 0.06%	1.14E-04 0.06%	1.14E-04 0.06%	1.14E-04 0.01%	1.15E-04 0.06%	1.89E-04 0.04%
XE138	1.45E-03 0.76%	1.45E-03 0.80%	1.45E-03 0.73%	1.45E-03 0.70%	1.45E-03 0.76%	1.45E-03 0.14%	1.46E-03 0.79%	3.03E-03 0.63%
KR 89	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.07E-06 0.0 %	5.14E-06 0.0 %	1.20E-05 0.0 %
KR 83M	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	3.49E-08 0.0 %	2.72E-06 0.0 %	9.88E-06 0.0 %
XE137	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.63E-06 0.0 %	2.55E-05 0.0 %
XE133M	3.05E-04 0.16%	3.05E-04 0.17%	3.05E-04 0.15%	3.05E-04 0.15%	3.05E-04 0.16%	3.05E-04 0.03%	3.40E-04 0.18%	2.85E-03 0.59%
XE131M	2.73E-04 0.14%	2.73E-04 0.15%	2.73E-04 0.14%	2.73E-04 0.13%	2.73E-04 0.14%	2.73E-04 0.03%	3.38E-04 0.18%	3.36E-03 0.70%
I 131	1.25E-03 0.65%	4.07E-04 0.22%	1.82E-03 0.92%	2.20E-03 1.06%	3.70E-03 1.95%	7.09E-01 68.89%	1.07E-05 0.0 %	1.30E-05 0.0 %

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	1.25E-06 0.0 %	1.94E-06 0.0 %	2.18E-06 0.0 %	3.16E-06 0.0 %	5.22E-06 0.0 %	4.52E-04 0.04%	3.08E-07 0.0 %	3.75E-07 0.0 %
SR 89	1.40E-05 0.0 %	4.86E-05 0.03%	4.88E-04 0.25%	1.12E-10 0.0 %	1.12E-10 0.0 %	1.12E-10 0.0 %	4.39E-06 0.0 %	1.30E-10 0.0 %
SR 90	1.38E-04 0.07%	1.32E-05 0.0 %	5.67E-04 0.29%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.52E-06 0.0 %	0.0 0.0 %
CS134	8.23E-03 4.29%	8.50E-04 0.47%	7.58E-03 3.83%	1.47E-02 7.11%	5.13E-03 2.71%	6.79E-04 0.07%	2.23E-03 1.20%	7.92E-04 0.16%
CS137	6.91E-03 3.61%	1.39E-03 0.77%	1.32E-02 6.65%	1.51E-02 7.32%	5.86E-03 3.10%	1.21E-03 0.12%	2.84E-03 1.53%	1.41E-03 0.29%
BA140	1.68E-05 0.0 %	3.23E-04 0.18%	2.38E-04 0.12%	2.40E-06 0.0 %	2.23E-06 0.0 %	2.14E-06 0.0 %	1.21E-04 0.07%	2.45E-06 0.0 %
I 131	2.52E-04 0.13%	8.20E-05 0.04%	3.66E-04 0.18%	4.44E-04 0.21%	7.47E-04 0.39%	1.43E-01 13.90%	2.25E-06 0.0 %	2.73E-06 0.0 %
CO 58	3.08E-05 0.02%	1.44E-04 0.08%	9.70E-06 0.0 %	1.82E-05 0.0 %	9.70E-06 0.0 %	9.70E-06 0.0 %	3.39E-05 0.02%	1.14E-05 0.0 %
CO 60	5.63E-03 2.94%	9.66E-03 5.30%	4.84E-03 2.44%	5.17E-03 2.50%	4.84E-03 2.55%	4.84E-03 0.47%	6.21E-03 3.34%	5.69E-03 1.18%
MN 54	8.50E-05 0.04%	2.29E-04 0.13%	6.93E-05 0.03%	1.42E-04 0.07%	9.05E-05 0.05%	6.93E-05 0.0 %	1.40E-04 0.08%	8.12E-05 0.02%
I 131	1.60E-06 0.0 %	5.21E-07 0.0 %	2.32E-06 0.0 %	2.81E-06 0.0 %	4.73E-06 0.0 %	9.07E-04 0.09%	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	1.92E-01	1.82E-01	1.98E-01	2.07E-01	1.89E-01	1.03E+00	1.86E-01	4.82E-01

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.53E+00 96.91%	1.53E+00 98.18%	1.53E+00 93.08%	1.53E+00 96.15%	1.53E+00 97.05%	1.53E+00 23.76%	1.56E+00 98.96%	3.71E+00 99.72%
GROUND	8.97E-03 0.57%	8.97E-03 0.58%	8.97E-03 0.55%	8.97E-03 0.57%	8.97E-03 0.57%	8.97E-03 0.14%	8.97E-03 0.57%	1.05E-02 0.28%
INHAL	2.44E-04 0.02%	2.76E-04 0.02%	1.07E-03 0.07%	3.29E-04 0.02%	3.07E-04 0.02%	4.58E-02 0.71%	3.22E-03 0.20%	0.0 0.0 %
VEGET	2.02E-02 1.28%	1.17E-02 0.75%	6.81E-02 4.16%	1.69E-02 1.07%	1.23E-02 0.78%	1.62E+00 25.24%	1.34E-03 0.09%	0.0 0.0 %
COW MILK	1.57E-02 1.00%	2.95E-03 0.19%	2.95E-02 1.80%	3.04E-02 1.92%	2.26E-02 1.44%	3.03E+00 47.27%	2.42E-03 0.15%	0.0 0.0 %
MEAT	3.48E-03 0.22%	4.50E-03 0.29%	5.81E-03 0.35%	4.40E-03 0.28%	2.17E-03 0.14%	1.85E-01 2.88%	4.11E-04 0.03%	0.0 0.0 %
TOTAL	1.57E+00	1.55E+00	1.64E+00	1.59E+00	1.57E+00	6.42E+00	1.57E+00	3.72E+00

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	1.39E-03 0.09%	7.02E-02 1.89%
KR 85M	4.56E-02 2.99%	4.56E-02 2.99%	4.56E-02 2.99%	4.56E-02 2.99%	4.56E-02 2.99%	4.56E-02 2.99%	4.71E-02 3.02%	1.67E-01 4.49%
KR 87	1.15E-01 7.56%	1.15E-01 7.56%	1.15E-01 7.56%	1.15E-01 7.56%	1.15E-01 7.56%	1.15E-01 7.56%	1.19E-01 7.65%	5.12E-01 13.80%
KR 88	8.31E-01 54.47%	8.31E-01 54.47%	8.31E-01 54.47%	8.31E-01 54.47%	8.31E-01 54.47%	8.31E-01 54.47%	8.35E-01 53.58%	1.22E+00 32.91%
XE133	1.79E-01 11.76%	1.79E-01 11.76%	1.79E-01 11.76%	1.79E-01 11.76%	1.79E-01 11.76%	1.79E-01 11.76%	1.92E-01 12.34%	6.13E-01 16.50%
XE135	3.19E-01 20.92%	3.19E-01 20.92%	3.19E-01 20.92%	3.19E-01 20.92%	3.19E-01 20.92%	3.19E-01 20.92%	3.28E-01 21.04%	1.03E+00 27.79%
XE135M	2.30E-03 0.15%	2.30E-03 0.15%	2.30E-03 0.15%	2.30E-03 0.15%	2.30E-03 0.15%	2.30E-03 0.15%	2.32E-03 0.15%	3.80E-03 0.10%
XE138	2.92E-02 1.91%	2.92E-02 1.91%	2.92E-02 1.91%	2.92E-02 1.91%	2.92E-02 1.91%	2.92E-02 1.91%	2.95E-02 1.89%	6.11E-02 1.64%
KR 89	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.32E-05 0.0 %	7.78E-05 0.0 %
KR 83M	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	3.50E-05 0.0 %	1.27E-04 0.0 %
XE137	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.19E-05 0.0 %	1.86E-04 0.0 %
XE133M	2.76E-03 0.18%	2.76E-03 0.18%	2.76E-03 0.18%	2.76E-03 0.18%	2.76E-03 0.18%	2.76E-03 0.18%	3.08E-03 0.20%	2.58E-02 0.70%
XE131M	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	6.31E-04 0.04%	6.25E-03 0.17%
TOTAL	1.53E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00	1.56E+00	3.71E+00

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	7.52E-05 0.84%	9.13E-05 0.87%
I 133	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	1.85E-06 0.02%	2.25E-06 0.02%
SR 89	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	2.43E-09 0.0 %
CS134	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	7.19E-04 8.01%	8.38E-04 7.96%
CS137	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	1.88E-03 20.97%	2.19E-03 20.85%
BA140	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	5.50E-05 0.61%	6.29E-05 0.60%
I 131	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.06E-05 0.12%	1.24E-05 0.12%
CO 60	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	6.15E-03 68.52%	7.23E-03 68.68%
MN 54	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	7.89E-05 0.88%	9.25E-05 0.88%
I 131	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.25E-06 0.03%	2.73E-06 0.03%
I 131	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	8.97E-03	8.97E-03	8.97E-03	8.97E-03	8.97E-03	8.97E-03	8.97E-03	1.05E-02

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	6.96E-05 28.45%	1.77E-05 6.42%	9.48E-05 8.87%	1.23E-04 37.31%	2.08E-04 67.95%	4.04E-02 88.33%	0.0 0.0 %	0.0 0.0 %
I 133	2.81E-06 1.15%	4.49E-06 1.63%	5.57E-06 0.52%	8.74E-06 2.66%	1.51E-05 4.93%	1.35E-03 2.96%	0.0 0.0 %	0.0 0.0 %
SR 89	3.13E-07 0.13%	9.38E-06 3.40%	1.09E-05 1.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	4.84E-05 1.51%	0.0 0.0 %
SR 90	4.89E-05 20.01%	5.17E-06 1.88%	7.90E-04 73.97%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.87E-05 2.76%	0.0 0.0 %
CS134	6.06E-05 24.80%	8.98E-07 0.33%	4.29E-05 4.02%	8.92E-05 27.11%	2.99E-05 9.76%	0.0 0.0 %	1.05E-05 0.33%	0.0 0.0 %
CS137	4.79E-05 19.59%	1.00E-06 0.36%	7.64E-05 7.16%	9.05E-05 27.50%	3.21E-05 10.47%	0.0 0.0 %	1.13E-05 0.35%	0.0 0.0 %
BA140	2.42E-06 0.99%	1.61E-04 58.33%	3.81E-05 3.57%	4.36E-08 0.01%	1.47E-08 0.0 %	0.0 0.0 %	1.17E-03 36.25%	0.0 0.0 %
I 131	1.08E-07 0.04%	2.75E-08 0.0 %	1.47E-07 0.01%	1.91E-07 0.06%	3.24E-07 0.11%	6.29E-05 0.14%	0.0 0.0 %	0.0 0.0 %
CO 58	6.25E-08 0.03%	2.46E-06 0.89%	0.0 0.0 %	4.45E-08 0.01%	0.0 0.0 %	0.0 0.0 %	2.68E-05 0.83%	0.0 0.0 %
CO 60	4.63E-06 1.89%	6.84E-05 24.82%	0.0 0.0 %	3.37E-06 1.02%	0.0 0.0 %	0.0 0.0 %	1.78E-03 55.45%	0.0 0.0 %
MN 54	3.86E-07 0.16%	3.60E-06 1.31%	0.0 0.0 %	2.25E-06 0.68%	5.53E-07 0.18%	0.0 0.0 %	8.12E-05 2.52%	0.0 0.0 %
I 131	3.94E-07 0.16%	1.00E-07 0.04%	5.36E-07 0.05%	6.95E-07 0.21%	1.18E-06 0.38%	2.29E-04 0.50%	0.0 0.0 %	0.0 0.0 %
I 131	6.35E-06 2.60%	1.61E-06 0.59%	8.65E-06 0.81%	1.12E-05 3.41%	1.90E-05 6.20%	3.69E-03 8.06%	0.0 0.0 %	0.0 0.0 %
I 131	1.25E-08 0.0 %	3.19E-09 0.0 %	1.71E-08 0.0 %	2.21E-08 0.0 %	3.76E-08 0.01%	7.30E-06 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.44E-04	2.76E-04	1.07E-03	3.29E-04	3.07E-04	4.58E-02	3.22E-03	0.0

COOPER NUCLEAR STATION ; SECOND SEMIANNUAL PERIOD 1982 ; COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.73E-03 13.51%	9.10E-04 7.80%	3.92E-03 5.75%	4.82E-03 28.46%	8.14E-03 66.23%	1.56E+00 96.45%	0.0 0.0 %	0.0 0.0 %
I 133	8.89E-10 0.0 %	1.84E-09 0.0 %	1.78E-09 0.0 %	2.67E-09 0.0 %	4.58E-09 0.0 %	4.29E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.16E-04 1.07%	7.39E-04 6.33%	7.53E-03 11.05%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.08E-02 53.53%	1.03E-03 8.85%	4.36E-02 63.98%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.63E-03 12.99%	5.92E-05 0.51%	2.31E-03 3.39%	4.73E-03 27.92%	1.50E-03 12.24%	0.0 0.0 %	5.23E-04 39.07%	0.0 0.0 %
CS137	2.94E-03 14.54%	9.54E-05 0.82%	5.91E-03 8.68%	6.94E-03 40.98%	2.32E-03 18.90%	0.0 0.0 %	8.13E-04 60.70%	0.0 0.0 %
BA140	2.93E-04 1.45%	6.06E-03 51.92%	4.73E-03 6.94%	5.09E-06 0.03%	1.70E-06 0.01%	0.0 0.0 %	3.03E-06 0.23%	0.0 0.0 %
I 131	1.15E-06 0.0 %	3.85E-07 0.0 %	1.66E-06 0.0 %	2.04E-06 0.01%	3.44E-06 0.03%	6.60E-04 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	1.17E-05 0.06%	6.70E-05 0.57%	0.0 0.0 %	4.62E-06 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	4.61E-04 2.28%	2.52E-03 21.55%	0.0 0.0 %	1.87E-04 1.10%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.58E-05 0.08%	1.60E-04 1.37%	0.0 0.0 %	7.30E-05 0.43%	2.13E-05 0.17%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.60E-05 0.08%	5.33E-06 0.05%	2.29E-05 0.03%	2.82E-05 0.17%	4.76E-05 0.39%	9.14E-03 0.56%	0.0 0.0 %	0.0 0.0 %
I 131	8.28E-05 0.41%	2.76E-05 0.24%	1.19E-04 0.17%	1.46E-04 0.86%	2.47E-04 2.01%	4.74E-02 2.92%	0.0 0.0 %	0.0 0.0 %
I 131	5.26E-07 0.0 %	1.75E-07 0.0 %	7.55E-07 0.0 %	9.28E-07 0.0 %	1.57E-06 0.01%	3.01E-04 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.02E-02	1.17E-02	6.81E-02	1.69E-02	1.23E-02	1.62E+00	1.34E-03	0.0

COOPER NUCLEAR STATION ; SECOND SEMIANNUAL PERIOD 1982 ; COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.12E-03 32.51%	1.58E-03 53.57%	7.55E-03 25.62%	9.05E-03 29.75%	1.52E-02 67.22%	2.93E+00 96.48%	0.0 0.0 %	0.0 0.0 %
I 133	2.24E-06 0.01%	4.31E-06 0.15%	4.52E-06 0.02%	6.61E-06 0.02%	1.13E-05 0.05%	1.08E-03 0.04%	0.0 0.0 %	0.0 0.0 %
SR 89	2.66E-05 0.17%	8.24E-05 2.79%	9.29E-04 3.15%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.27E-03 8.05%	1.15E-04 3.89%	5.09E-03 17.26%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	4.28E-03 27.20%	9.81E-05 3.32%	4.26E-03 14.44%	8.49E-03 27.91%	2.69E-03 11.88%	0.0 0.0 %	9.44E-04 39.04%	0.0 0.0 %
CS137	4.76E-03 30.26%	1.59E-04 5.38%	1.09E-02 37.14%	1.25E-02 41.14%	4.17E-03 18.42%	0.0 0.0 %	1.47E-03 60.95%	0.0 0.0 %
BA140	2.64E-05 0.17%	4.98E-04 16.84%	4.29E-04 1.45%	4.50E-07 0.0 %	1.50E-07 0.0 %	0.0 0.0 %	2.69E-07 0.01%	0.0 0.0 %
I 131	2.11E-06 0.01%	6.53E-07 0.02%	3.12E-06 0.01%	3.74E-06 0.01%	6.29E-06 0.03%	1.21E-03 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	1.70E-06 0.01%	8.76E-06 0.30%	0.0 0.0 %	6.57E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	7.00E-05 0.45%	3.44E-04 11.65%	0.0 0.0 %	2.78E-05 0.09%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	5.91E-07 0.0 %	5.34E-06 0.18%	0.0 0.0 %	2.66E-06 0.0 %	7.73E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.99E-05 0.19%	9.26E-06 0.31%	4.42E-05 0.15%	5.30E-05 0.17%	8.91E-05 0.39%	1.71E-02 0.56%	0.0 0.0 %	0.0 0.0 %
I 131	1.51E-04 0.96%	4.69E-05 1.59%	2.24E-04 0.76%	2.68E-04 0.88%	4.51E-04 1.99%	8.67E-02 2.86%	0.0 0.0 %	0.0 0.0 %
I 131	9.86E-07 0.0 %	3.05E-07 0.01%	1.46E-06 0.0 %	1.74E-06 0.0 %	2.94E-06 0.01%	5.64E-04 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.57E-02	2.95E-03	2.95E-02	3.04E-02	2.26E-02	3.03E+00	2.42E-03	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.12E-04 8.98%	1.22E-04 2.71%	4.18E-04 7.18%	5.49E-04 12.47%	9.34E-04 43.06%	1.78E-01 96.47%	0.0 0.0 %	0.0 0.0 %
I 133	1.33E-12 0.0 %	3.26E-12 0.0 %	2.60E-12 0.0 %	4.16E-12 0.0 %	7.20E-12 0.0 %	6.42E-10 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	7.26E-06 0.21%	3.14E-05 0.70%	2.53E-04 4.36%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	5.15E-04 14.79%	5.47E-05 1.22%	2.08E-03 35.85%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.00E-03 28.75%	2.20E-05 0.49%	6.78E-04 11.65%	1.49E-03 33.76%	4.77E-04 21.98%	0.0 0.0 %	1.63E-04 39.60%	0.0 0.0 %
CS137	1.13E-03 32.35%	3.49E-05 0.78%	1.71E-03 29.35%	2.14E-03 48.69%	7.22E-04 33.31%	0.0 0.0 %	2.48E-04 60.30%	0.0 0.0 %
BA140	4.19E-05 1.20%	1.06E-03 23.55%	6.60E-04 11.34%	7.61E-07 0.02%	2.56E-07 0.01%	0.0 0.0 %	4.46E-07 0.11%	0.0 0.0 %
I 131	1.31E-07 0.0 %	5.13E-08 0.0 %	1.76E-07 0.0 %	2.31E-07 0.0 %	3.93E-07 0.02%	7.50E-05 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	9.48E-06 0.27%	6.80E-05 1.51%	0.0 0.0 %	3.97E-06 0.09%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	4.55E-04 13.09%	3.09E-03 68.69%	0.0 0.0 %	1.94E-04 4.41%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	9.20E-07 0.03%	1.17E-05 0.26%	0.0 0.0 %	4.50E-06 0.10%	1.33E-06 0.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.83E-06 0.05%	7.15E-07 0.02%	2.44E-06 0.04%	3.22E-06 0.07%	5.47E-06 0.25%	1.04E-03 0.56%	0.0 0.0 %	0.0 0.0 %
I 131	9.41E-06 0.27%	3.68E-06 0.08%	1.26E-05 0.22%	1.65E-05 0.38%	2.81E-05 1.30%	5.38E-03 2.91%	0.0 0.0 %	0.0 0.0 %
I 131	6.02E-08 0.0 %	2.35E-08 0.0 %	8.04E-08 0.0 %	1.06E-07 0.0 %	1.80E-07 0.0 %	3.44E-05 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	3.48E-03	4.50E-03	5.81E-03	4.40E-03	2.17E-03	1.85E-01	4.11E-04	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.03%	4.19E-04 0.0 %	1.39E-03 0.09%	7.02E-02 1.89%
KR 85M	4.56E-02 2.89%	4.56E-02 2.93%	4.56E-02 2.78%	4.56E-02 2.87%	4.56E-02 2.90%	4.56E-02 0.71%	4.71E-02 2.99%	1.67E-01 4.48%
KR 87	1.15E-01 7.32%	1.15E-01 7.42%	1.15E-01 7.03%	1.15E-01 7.26%	1.15E-01 7.33%	1.15E-01 1.80%	1.19E-01 7.57%	5.12E-01 13.76%
KR 88	8.31E-01 52.79%	8.31E-01 53.48%	8.31E-01 50.70%	8.31E-01 52.38%	8.31E-01 52.86%	8.31E-01 12.94%	8.35E-01 53.02%	1.22E+00 32.81%
XE133	1.79E-01 11.40%	1.79E-01 11.55%	1.79E-01 10.95%	1.79E-01 11.31%	1.79E-01 11.42%	1.79E-01 2.80%	1.92E-01 12.21%	6.13E-01 16.46%
XE135	3.19E-01 20.27%	3.19E-01 20.54%	3.19E-01 19.47%	3.19E-01 20.11%	3.19E-01 20.30%	3.19E-01 4.97%	3.28E-01 20.82%	1.03E+00 27.71%
XE135M	2.30E-03 0.15%	2.30E-03 0.15%	2.30E-03 0.14%	2.30E-03 0.15%	2.30E-03 0.15%	2.30E-03 0.04%	2.32E-03 0.15%	3.80E-03 0.10%
XE138	2.92E-02 1.85%	2.92E-02 1.88%	2.92E-02 1.78%	2.92E-02 1.84%	2.92E-02 1.86%	2.92E-02 0.45%	2.95E-02 1.87%	6.11E-02 1.64%
KR 89	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.28E-05 0.0 %	3.32E-05 0.0 %	7.78E-05 0.0 %
KR 83M	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	4.49E-07 0.0 %	3.50E-05 0.0 %	1.27E-04 0.0 %
XE137	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.01E-05 0.0 %	1.19E-05 0.0 %	1.86E-04 0.0 %
XE133M	2.76E-03 0.18%	2.76E-03 0.18%	2.76E-03 0.17%	2.76E-03 0.17%	2.76E-03 0.18%	2.76E-03 0.04%	3.08E-03 0.20%	2.58E-02 0.69%
XE131M	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.03%	5.08E-04 0.0 %	6.31E-04 0.04%	6.25E-03 0.17%
I 131	8.30E-03 0.53%	2.71E-03 0.17%	1.21E-02 0.74%	1.46E-02 0.92%	2.46E-02 1.56%	4.71E+00 73.36%	7.52E-05 0.0 %	9.13E-05 0.0 %

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	6.90E-06 0.0 %	1.06E-05 0.0 %	1.19E-05 0.0 %	1.72E-05 0.0 %	2.83E-05 0.0 %	2.44E-03 0.04%	1.85E-06 0.0 %	2.25E-06 0.0 %
SR 89	2.50E-04 0.02%	8.63E-04 0.06%	8.72E-03 0.53%	2.10E-09 0.0 %	2.10E-09 0.0 %	2.10E-09 0.0 %	4.84E-05 0.0 %	2.43E-09 0.0 %
SR 90	1.27E-02 0.80%	1.21E-03 0.08%	5.16E-02 3.15%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.87E-05 0.0 %	0.0 0.0 %
CS134	8.68E-03 0.55%	8.99E-04 0.06%	8.00E-03 0.49%	1.55E-02 0.98%	5.42E-03 0.34%	7.19E-04 0.01%	2.36E-03 0.15%	8.38E-04 0.02%
CS137	1.08E-02 0.68%	2.17E-03 0.14%	2.05E-02 1.25%	2.36E-02 1.49%	9.13E-03 0.58%	1.88E-03 0.03%	4.43E-03 0.28%	2.19E-03 0.06%
BA140	4.19E-04 0.03%	7.83E-03 0.50%	5.91E-03 0.36%	6.14E-05 0.0 %	5.71E-05 0.0 %	5.50E-05 0.0 %	1.23E-03 0.08%	6.29E-05 0.0 %
I 131	3.54E-06 0.0 %	1.15E-06 0.0 %	5.13E-06 0.0 %	6.23E-06 0.0 %	1.05E-05 0.0 %	2.01E-03 0.03%	3.43E-08 0.0 %	4.17E-08 0.0 %
CO 58	3.35E-05 0.0 %	1.57E-04 0.01%	1.06E-05 0.0 %	1.99E-05 0.0 %	1.06E-05 0.0 %	1.06E-05 0.0 %	3.74E-05 0.0 %	1.24E-05 0.0 %
CO 60	7.14E-03 0.45%	1.22E-02 0.78%	6.15E-03 0.38%	6.56E-03 0.41%	6.15E-03 0.39%	6.15E-03 0.10%	7.93E-03 0.50%	7.23E-03 0.19%
MN 54	9.66E-05 0.0 %	2.59E-04 0.02%	7.89E-05 0.0 %	1.61E-04 0.01%	1.03E-04 0.0 %	7.89E-05 0.0 %	1.60E-04 0.01%	9.25E-05 0.0 %
I 131	4.86E-05 0.0 %	1.59E-05 0.0 %	7.06E-05 0.0 %	8.55E-05 0.0 %	1.44E-04 0.0 %	2.76E-02 0.43%	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	2.52E-04 0.02%	8.20E-05 0.0 %	3.66E-04 0.02%	4.44E-04 0.03%	7.47E-04 0.05%	1.43E-01 2.23%	2.25E-06 0.0 %	2.73E-06 0.0 %
I 131	1.60E-06 0.0 %	5.21E-07 0.0 %	2.32E-06 0.0 %	2.81E-06 0.0 %	4.73E-06 0.0 %	9.07E-04 0.01%	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	1.57E+00	1.55E+00	1.64E+00	1.59E+00	1.57E+00	6.42E+00	1.57E+00	3.72E+00

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.74E+00 96.78%	1.74E+00 98.10%	1.74E+00 92.53%	1.74E+00 96.26%	1.74E+00 97.14%	1.74E+00 25.11%	1.78E+00 98.93%	4.26E+00 99.69%
GROUND	1.12E-02 0.62%	1.12E-02 0.63%	1.12E-02 0.59%	1.12E-02 0.62%	1.12E-02 0.62%	12E-02 0.16%	1.12E-02 0.62%	1.31E-02 0.31%
INHAL	2.68E-04 0.01%	2.97E-04 0.02%	1.28E-03 0.07%	3.49E-04 0.02%	3.28E-04 0.02%	4.88E-02 0.70%	3.55E-03 0.20%	0.0 0.0 %
VEGET	2.51E-02 1.39%	1.34E-02 0.76%	8.77E-02 4.66%	1.83E-02 1.01%	1.31E-02 0.73%	1.72E+00 24.78%	1.46E-03 0.08%	0.0 0.0 %
COW MILK	1.74E-02 0.97%	3.29E-03 0.19%	3.35E-02 1.78%	3.29E-02 1.82%	2.42E-02 1.35%	3.22E+00 46.41%	2.63E-03 0.15%	0.0 0.0 %
MEAT	4.03E-03 0.22%	5.60E-03 0.32%	6.92E-03 0.37%	4.83E-03 0.27%	2.34E-03 0.13%	1.96E-01 2.83%	4.47E-04 0.02%	0.0 0.0 %
TOTAL	1.80E+00	1.77E+00	1.88E+00	1.81E+00	1.79E+00	6.93E+00	1.80E+00	4.28E+00

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	1.99E-03 0.11%	1.00E-01 2.35%
KR 85M	5.23E-02 3.01%	5.23E-02 3.01%	5.23E-02 3.01%	5.23E-02 3.01%	5.23E-02 3.01%	5.23E-02 3.01%	5.41E-02 3.04%	1.92E-01 4.50%
KR 87	1.30E-01 7.49%	1.30E-01 7.49%	1.30E-01 7.49%	1.30E-01 7.49%	1.30E-01 7.49%	1.30E-01 7.49%	1.35E-01 7.58%	5.79E-01 13.58%
KR 88	9.42E-01 54.13%	9.42E-01 54.13%	9.42E-01 54.13%	9.42E-01 54.13%	9.42E-01 54.13%	9.42E-01 54.13%	9.47E-01 53.22%	1.39E+00 32.48%
XE133	2.11E-01 12.14%	2.11E-01 12.14%	2.11E-01 12.14%	2.11E-01 12.14%	2.11E-01 12.14%	2.11E-01 12.14%	2.26E-01 12.73%	7.22E-01 16.92%
XE135	3.62E-01 20.82%	3.62E-01 20.82%	3.62E-01 20.82%	3.62E-01 20.82%	3.62E-01 20.82%	3.62E-01 20.82%	3.72E-01 20.93%	1.17E+00 27.46%
XE135M	2.71E-03 0.16%	2.71E-03 0.16%	2.71E-03 0.16%	2.71E-03 0.16%	2.71E-03 0.16%	2.71E-03 0.16%	2.73E-03 0.15%	4.48E-03 0.11%
XE138	3.48E-02 2.00%	3.48E-02 2.00%	3.48E-02 2.00%	3.48E-02 2.00%	3.48E-02 2.00%	3.48E-02 2.00%	3.52E-02 1.98%	7.28E-02 1.71%
KR 89	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.86E-05 0.0 %	2.08E-04 0.0 %
KR 83M	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	3.95E-05 0.0 %	1.44E-04 0.0 %
XE137	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.89E-05 0.0 %	4.52E-04 0.01%
XE133M	3.18E-03 0.18%	3.18E-03 0.18%	3.18E-03 0.18%	3.18E-03 0.18%	3.18E-03 0.18%	3.18E-03 0.18%	3.55E-03 0.20%	2.98E-02 0.70%
XE131M	6.23E-04 0.04%	6.23E-04 0.04%	6.23E-04 0.04%	6.23E-04 0.04%	6.23E-04 0.04%	6.23E-04 0.04%	7.72E-04 0.04%	7.66E-03 0.18%
TOTAL	1.74E+00	1.74E+00	1.74E+00	1.74E+00	1.74E+00	1.74E+00	1.78E+00	4.26E+00

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	7.97E-05 0.71%	9.67E-05 0.74%
I 133	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	2.59E-06 0.02%	3.15E-06 0.02%
SR 89	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	3.17E-09 0.0 %
CS134	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	7.80E-04 6.98%	9.10E-04 6.94%
CS137	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.04E-03 18.27%	2.38E-03 18.15%
BA140	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	5.64E-05 0.50%	6.45E-05 0.49%
I 131	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.20E-05 0.11%	1.41E-05 0.11%
CO 60	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	8.10E-03 72.45%	9.52E-03 72.60%
MN 54	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.03E-04 0.92%	1.21E-04 0.92%
I 131	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.01E-07 0.0 %	6.92E-07 0.0 %
I 131	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CR 51	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	3.46E-07 0.0 %
I 131	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	3.43E-08 0.0 %	4.17E-08 0.0 %
I 131	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.25E-06 0.02%	2.73E-06 0.02%
I 131	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.31E-02

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.38E-05 27.58%	1.88E-05 6.32%	1.01E-04 7.85%	1.30E-04 37.35%	2.21E-04 67.38%	4.29E-02 87.91%	0.0 0.0 %	0.0 0.0 %
I 133	3.86E-06 1.44%	6.16E-06 2.07%	7.64E-06 0.60%	1.20E-05 3.44%	2.07E-05 6.32%	1.86E-03 3.80%	0.0 0.0 %	0.0 0.0 %
SR 89	3.88E-07 0.15%	1.16E-05 3.91%	1.35E-05 1.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	6.00E-05 1.69%	0.0 0.0 %
SR 90	6.11E-05 22.81%	6.46E-06 2.17%	9.86E-04 76.95%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.11E-04 3.12%	0.0 0.0 %
CS134	6.30E-05 23.54%	9.33E-07 0.31%	4.46E-05 3.48%	9.27E-05 26.57%	3.11E-05 9.47%	0.0 0.0 %	1.09E-05 0.31%	0.0 0.0 %
CS137	5.03E-05 18.79%	1.05E-06 0.35%	8.03E-05 6.26%	9.50E-05 27.24%	3.37E-05 10.28%	0.0 0.0 %	1.19E-05 0.33%	0.0 0.0 %
BA140	2.49E-06 0.93%	1.66E-04 55.71%	3.92E-05 3.06%	4.49E-08 0.01%	1.52E-08 0.0 %	0.0 0.0 %	1.20E-03 33.81%	0.0 0.0 %
I 131	3.43E-08 0.01%	8.72E-09 0.0 %	4.67E-08 0.0 %	6.05E-08 0.02%	1.03E-07 0.03%	1.99E-05 0.04%	0.0 0.0 %	0.0 0.0 %
CO 58	6.61E-08 0.02%	2.60E-06 0.87%	0.0 0.0 %	4.71E-08 0.01%	0.0 0.0 %	0.0 0.0 %	2.83E-05 0.80%	0.0 0.0 %
CO 60	5.28E-06 1.97%	7.81E-05 26.28%	0.0 0.0 %	3.84E-06 1.10%	0.0 0.0 %	0.0 0.0 %	2.04E-03 57.33%	0.0 0.0 %
MN 54	4.38E-07 0.16%	4.10E-06 1.38%	0.0 0.0 %	2.56E-06 0.73%	6.29E-07 0.19%	0.0 0.0 %	9.23E-05 2.60%	0.0 0.0 %
I 131	1.71E-09 0.0 %	4.34E-10 0.0 %	2.33E-09 0.0 %	3.01E-09 0.0 %	5.11E-09 0.0 %	9.93E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.52E-08 0.02%	1.40E-08 0.0 %	7.52E-08 0.0 %	9.74E-08 0.03%	1.65E-07 0.05%	3.21E-05 0.07%	0.0 0.0 %	0.0 0.0 %
ZN 65	1.83E-08 0.0 %	1.60E-08 0.0 %	1.22E-08 0.0 %	3.78E-08 0.01%	2.49E-08 0.0 %	0.0 0.0 %	3.24E-07 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.75E-09 0.0 %	9.53E-10 0.0 %	5.11E-09 0.0 %	6.62E-09 0.0 %	1.12E-08 0.0 %	2.18E-06 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	1.81E-09 0.0 %	4.60E-08 0.02%	0.0 0.0 %	0.0 0.0 %	3.82E-10 0.0 %	1.05E-09 0.0 %	2.49E-07 0.0 %	0.0 0.0 %
I 131	1.08E-07 0.04%	2.75E-08 0.0 %	1.47E-07 0.01%	1.91E-07 0.05%	3.24E-07 0.10%	6.29E-05 0.13%	0.0 0.0 %	0.0 0.0 %
I 131	3.94E-07 0.15%	1.00E-07 0.03%	5.36E-07 0.04%	6.95E-07 0.20%	1.18E-06 0.36%	2.29E-04 0.47%	0.0 0.0 %	0.0 0.0 %
I 131	6.35E-06 2.37%	1.61E-06 0.54%	8.65E-06 0.68%	1.12E-05 3.21%	1.90E-05 5.80%	3.69E-03 7.56%	0.0 0.0 %	0.0 0.0 %
I 131	1.25E-08 0.0 %	3.19E-09 0.0 %	1.71E-08 0.0 %	2.21E-08 0.0 %	3.76E-08 0.01%	7.30E-06 0.01%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.68E-04	2.97E-04	1.28E-03	3.49E-04	3.28E-04	4.88E-02	3.55E-03	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.90E-03 11.56%	9.67E-04 7.20%	4.16E-03 4.75%	5.12E-03 27.90%	8.64E-03 65.76%	1.66E+00 96.56%	0.0 0.0 %	0.0 0.0 %
I 133	1.27E-09 0.0 %	2.63E-09 0.0 %	2.54E-09 0.0 %	3.81E-09 0.0 %	6.54E-09 0.0 %	6.13E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.87E-04 1.14%	9.83E-04 7.32%	1.00E-02 11.42%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.48E-02 58.97%	1.41E-03 10.52%	5.96E-02 67.94%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.85E-03 11.38%	6.44E-05 0.48%	2.51E-03 2.86%	5.14E-03 28.02%	1.63E-03 12.44%	0.0 0.0 %	5.69E-04 39.08%	0.0 0.0 %
CS137	3.20E-03 12.74%	1.04E-04 0.77%	6.43E-03 7.33%	7.55E-03 41.13%	2.52E-03 19.21%	0.0 0.0 %	8.83E-04 60.70%	0.0 0.0 %
BA140	3.01E-04 1.20%	6.22E-03 46.39%	4.85E-03 5.54%	5.23E-06 0.03%	1.75E-06 0.01%	0.0 0.0 %	3.11E-06 0.21%	0.0 0.0 %
I 131	9.70E-07 0.0 %	3.23E-07 0.0 %	1.39E-06 0.0 %	1.71E-06 0.0 %	2.89E-06 0.02%	5.55E-04 0.03%	0.0 0.0 %	0.0 0.0 %
CO 58	1.32E-05 0.05%	7.58E-05 0.56%	0.0 0.0 %	5.23E-06 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	6.12E-04 2.44%	3.34E-03 24.88%	0.0 0.0 %	2.48E-04 1.35%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	2.08E-05 0.08%	2.09E-04 1.56%	0.0 0.0 %	9.56E-05 0.52%	2.79E-05 0.21%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.92E-08 0.0 %	2.97E-08 0.0 %	1.28E-07 0.0 %	1.57E-07 0.0 %	2.66E-07 0.0 %	5.10E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.51E-06 0.0 %	5.02E-07 0.0 %	2.16E-06 0.0 %	2.66E-06 0.01%	4.49E-06 0.03%	8.62E-04 0.05%	0.0 0.0 %	0.0 0.0 %
ZN 65	2.30E-06 0.0 %	2.02E-06 0.02%	1.49E-06 0.0 %	4.50E-06 0.02%	2.93E-06 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.75E-07 0.0 %	5.84E-08 0.0 %	2.52E-07 0.0 %	3.09E-07 0.0 %	5.22E-07 0.0 %	1.00E-04 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	2.85E-08 0.0 %	4.54E-06 0.03%	0.0 0.0 %	0.0 0.0 %	5.47E-09 0.0 %	1.64E-08 0.0 %	3.45E-08 0.0 %	0.0 0.0 %
I 131	1.15E-06 0.0 %	3.85E-07 0.0 %	1.66E-06 0.0 %	2.04E-06 0.01%	3.44E-06 0.03%	6.60E-04 0.04%	0.0 0.0 %	0.0 0.0 %
I 131	1.60E-05 0.06%	5.33E-06 0.04%	2.29E-05 0.03%	2.82E-05 0.15%	4.76E-05 0.36%	9.14E-03 0.53%	0.0 0.0 %	0.0 0.0 %
I 131	8.28E-05 0.33%	2.76E-05 0.21%	1.19E-04 0.14%	1.46E-04 0.80%	2.47E-04 1.88%	4.74E-02 2.76%	0.0 0.0 %	0.0 0.0 %
I 131	5.26E-07 0.0 %	1.75E-07 0.0 %	7.55E-07 0.0 %	9.28E-07 0.0 %	1.57E-06 0.01%	3.01E-04 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	2.51E-02	1.34E-02	8.77E-02	1.83E-02	1.31E-02	1.72E+00	1.46E-03	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.43E-03 31.27%	1.68E-03 51.07%	8.02E-03 23.93%	9.61E-03 29.22%	1.62E-02 66.71%	3.11E+00 96.58%	0.0 0.0 %	0.0 0.0 %
I 133	3.19E-06 0.02%	6.15E-06 0.19%	6.45E-06 0.02%	9.44E-06 0.03%	1.61E-05 0.07%	1.54E-03 0.05%	0.0 0.0 %	0.0 0.0 %
SR 89	3.54E-05 0.20%	1.10E-04 3.33%	1.24E-03 3.69%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.73E-03 9.97%	1.57E-04 4.78%	6.96E-03 20.78%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	4.66E-03 26.84%	1.07E-04 3.25%	4.64E-03 13.84%	9.24E-03 28.12%	2.93E-03 12.09%	0.0 0.0 %	1.03E-03 39.06%	0.0 0.0 %
CS137	5.18E-03 29.83%	1.73E-04 5.26%	1.19E-02 35.56%	1.36E-02 41.41%	4.54E-03 18.74%	0.0 0.0 %	1.60E-03 60.93%	0.0 0.0 %
BA140	2.71E-05 0.16%	5.11E-04 15.53%	4.40E-04 1.31%	4.62E-07 0.0 %	1.54E-07 0.0 %	0.0 0.0 %	2.76E-07 0.01%	0.0 0.0 %
I 131	1.80E-06 0.01%	5.58E-07 0.02%	2.66E-06 0.0 %	3.19E-06 0.0 %	5.36E-06 0.02%	1.03E-03 0.03%	0.0 0.0 %	0.0 0.0 %
CO 58	1.93E-06 0.01%	9.94E-06 0.30%	0.0 0.0 %	7.46E-07 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	9.35E-05 0.54%	4.59E-04 13.96%	0.0 0.0 %	3.71E-05 0.11%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	7.79E-07 0.0 %	7.03E-06 0.21%	0.0 0.0 %	3.50E-06 0.01%	1.02E-06 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.67E-07 0.0 %	5.18E-08 0.0 %	2.47E-07 0.0 %	2.96E-07 0.0 %	4.98E-07 0.0 %	9.58E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.79E-06 0.02%	8.63E-07 0.03%	4.12E-06 0.01%	4.93E-06 0.02%	8.30E-06 0.03%	1.60E-03 0.05%	0.0 0.0 %	0.0 0.0 %
ZN 65	1.24E-05 0.07%	9.78E-06 0.30%	7.93E-06 0.02%	2.37E-05 0.07%	1.54E-05 0.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.28E-07	1.02E-07	4.84E-07	5.80E-07	9.77E-07	1.88E-04	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
CR 51	1.03E-08	1.47E-06	0.0	0.0	1.92E-09	5.86E-09	1.22E-08	0.0
	0.0 %	0.04%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
I 131	2.11E-06	6.53E-07	3.12E-06	3.74E-06	6.29E-06	1.21E-03	0.0	0.0
	0.01%	0.02%	0.0 %	0.01%	0.03%	0.04%	0.0 %	0.0 %
I 131	2.99E-05	9.26E-06	4.42E-05	5.30E-05	8.91E-05	1.71E-02	0.0	0.0
	0.17%	0.28%	0.13%	0.16%	0.37%	0.53%	0.0 %	0.0 %
I 131	1.51E-04	4.69E-05	2.24E-04	2.68E-04	4.51E-04	8.67E-02	0.0	0.0
	0.87%	1.42%	0.67%	0.81%	1.86%	2.69%	0.0 %	0.0 %
I 131	9.86E-07	3.05E-07	1.46E-06	1.74E-06	2.94E-06	5.64E-04	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.01%	0.02%	0.0 %	0.0 %
TOTAL	1.74E-02	3.29E-03	3.35E-02	3.29E-02	2.42E-02	3.22E+00	2.63E-03	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.32E-04	1.30E-04	4.43E-04	5.83E-04	9.92E-04	1.90E-01	0.0	0.0
	8.23%	2.32%	6.41%	12.07%	42.41%	96.58%	0.0 %	0.0 %
I 133	1.90E-12	4.65E-12	3.71E-12	5.94E-12	1.03E-11	9.16E-10	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
SR 89	9.65E-06	4.17E-05	3.37E-04	0.0	0.0	0.0	0.0	0.0
	0.24%	0.74%	4.87%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
SR 90	7.03E-04	7.48E-05	2.85E-03	0.0	0.0	0.0	0.0	0.0
	17.44%	1.34%	41.18%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
CS134	1.09E-03	2.39E-05	7.37E-04	1.62E-03	5.18E-04	0.0	1.77E-04	0.0
	26.98%	0.43%	10.65%	33.48%	22.17%	0.0 %	39.61%	0.0 %
CS137	1.22E-03	3.79E-05	1.86E-03	2.33E-03	7.85E-04	0.0	2.69E-04	0.0
	30.35%	0.68%	26.83%	48.26%	33.58%	0.0 %	60.29%	0.0 %
BA140	4.30E-05	1.09E-03	6.77E-04	7.81E-07	2.63E-07	0.0	4.58E-07	0.0
	1.07%	19.42%	9.79%	0.02%	0.01%	0.0 %	0.10%	0.0 %
I 131	1.11E-07	4.33E-08	1.48E-07	1.95E-07	3.31E-07	6.33E-05	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.01%	0.03%	0.0 %	0.0 %
CO 58	1.07E-05	7.70E-05	0.0	4.49E-06	0.0	0.0	0.0	0.0
	0.27%	1.37%	0.0 %	0.09%	0.0 %	0.0 %	0.0 %	0.0 %
CO 60	6.04E-04	4.10E-03	0.0	2.58E-04	0.0	0.0	0.0	0.0
	14.99%	73.25%	0.0 %	5.34%	0.0 %	0.0 %	0.0 %	0.0 %
MN 54	1.21E-06	1.53E-05	0.0	5.90E-06	1.74E-06	0.0	0.0	0.0
	0.03%	0.27%	0.0 %	0.12%	0.07%	0.0 %	0.0 %	0.0 %
I 131	1.02E-08	3.99E-09	1.36E-08	1.79E-08	3.05E-08	5.83E-06	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
I 131	1.72E-07	6.72E-08	2.30E-07	3.02E-07	5.14E-07	9.83E-05	0.0	0.0
	0.0 %	0.0 %	0.0 %	0.0 %	0.02%	0.05%	0.0 %	0.0 %
ZN 65	4.49E-06	4.96E-06	3.00E-06	9.31E-06	6.14E-06	0.0	0.0	0.0
	0.11%	0.09%	0.04%	0.19%	0.26%	0.0 %	0.0 %	0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.00E-08 0.0 %	7.83E-09 0.0 %	2.68E-08 0.0 %	3.52E-08 0.0 %	5.99E-08 0.0 %	1.14E-05 0.0 %	0.0 0.0 %	0.0 0.0 %
CR 51	3.63E-09 0.0 %	7.23E-07 0.01%	0.0 0.0 %	0.0 0.0 %	7.43E-10 0.0 %	2.12E-09 0.0 %	4.60E-09 0.0 %	0.0 0.0 %
I 131	1.31E-07 0.0 %	5.13E-08 0.0 %	1.76E-07 0.0 %	2.31E-07 0.0 %	3.93E-07 0.02%	7.50E-05 0.04%	0.0 0.0 %	0.0 0.0 %
I 131	1.83E-06 0.05%	7.15E-07 0.01%	2.44E-06 0.04%	3.22E-06 0.07%	5.47E-06 0.23%	1.04E-03 0.53%	0.0 0.0 %	0.0 0.0 %
I 131	9.41E-06 0.23%	3.68E-06 0.07%	1.26E-05 0.18%	1.65E-05 0.34%	2.81E-05 1.20%	5.38E-03 2.74%	0.0 0.0 %	0.0 0.0 %
I 131	6.02E-08 0.0 %	2.35E-08 0.0 %	8.04E-08 0.0 %	1.06E-07 0.0 %	1.80E-07 0.0 %	3.44E-05 0.02%	0.0 0.0 %	0.0 0.0 %
TOTAL	4.03E-03	5.60E-03	6.92E-03	4.83E-03	2.34E-03	1.96E-01	4.47E-04	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.03%	5.98E-04 0.0 %	1.99E-03 0.11%	1.00E-01 2.34%
KR 85M	5.23E-02 2.91%	5.23E-02 2.95%	5.23E-02 2.78%	5.23E-02 2.89%	5.23E-02 2.92%	5.23E-02 0.76%	5.41E-02 3.01%	1.92E-01 4.48%
KR 87	1.30E-01 7.25%	1.30E-01 7.35%	1.30E-01 6.93%	1.30E-01 7.21%	1.30E-01 7.27%	1.30E-01 1.88%	1.35E-01 7.50%	5.79E-01 13.54%
KR 88	9.42E-01 52.39%	9.42E-01 53.10%	9.42E-01 50.09%	9.42E-01 52.11%	9.42E-01 52.59%	9.42E-01 13.59%	9.47E-01 52.66%	1.39E+00 32.38%
XE133	2.11E-01 11.75%	2.11E-01 11.91%	2.11E-01 11.23%	2.11E-01 11.69%	2.11E-01 11.79%	2.11E-01 3.05%	2.26E-01 12.59%	7.22E-01 16.87%
XE135	3.62E-01 20.15%	3.62E-01 20.42%	3.62E-01 19.26%	3.62E-01 20.04%	3.62E-01 20.22%	3.62E-01 5.23%	3.72E-01 20.70%	1.17E+00 27.38%
XE135M	2.71E-03 0.15%	2.71E-03 0.15%	2.71E-03 0.14%	2.71E-03 0.15%	2.71E-03 0.15%	2.71E-03 0.04%	2.73E-03 0.15%	4.48E-03 0.10%
XE138	3.48E-02 1.93%	3.48E-02 1.96%	3.48E-02 1.85%	3.48E-02 1.92%	3.48E-02 1.94%	3.48E-02 0.50%	3.52E-02 1.96%	7.28E-02 1.70%
KR 89	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.74E-05 0.0 %	8.86E-05 0.0 %	2.08E-04 0.0 %
KR 83M	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	5.07E-07 0.0 %	3.95E-05 0.0 %	1.44E-04 0.0 %
XE137	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.46E-05 0.0 %	2.89E-05 0.0 %	4.52E-04 0.01%
XE133M	3.18E-03 0.18%	3.18E-03 0.18%	3.18E-03 0.17%	3.18E-03 0.18%	3.18E-03 0.18%	3.18E-03 0.05%	3.55E-03 0.20%	2.98E-02 0.70%
XE131M	6.23E-04 0.03%	6.23E-04 0.04%	6.23E-04 0.03%	6.23E-04 0.03%	6.23E-04 0.03%	6.23E-04 0.0 %	7.72E-04 0.04%	7.66E-03 0.18%
I 131	8.82E-03 0.49%	2.87E-03 0.16%	1.28E-02 0.68%	1.55E-02 0.86%	2.61E-02 1.46%	5.00E+00 72.11%	7.97E-05 0.0 %	9.67E-05 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	9.64E-06 0.0 %	1.49E-05 0.0 %	1.67E-05 0.0 %	2.40E-05 0.0 %	3.95E-05 0.0 %	3.40E-03 0.05%	2.59E-06 0.0 %	3.15E-06 0.0 %
SR 89	3.32E-04 0.02%	1.15E-03 0.06%	1.16E-02 0.62%	2.73E-09 0.0 %	2.73E-09 0.0 %	2.73E-09 0.0 %	6.00E-05 0.0 %	3.17E-09 0.0 %
SR 90	1.73E-02 0.96%	1.65E-03 0.09%	7.04E-02 3.74%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.11E-04 0.0 %	0.0 0.0 %
CS134	9.45E-03 0.53%	9.76E-04 0.06%	8.70E-03 0.46%	1.69E-02 0.93%	5.89E-03 0.33%	7.80E-04 0.01%	2.56E-03 0.14%	9.10E-04 0.02%
CS137	1.17E-02 0.65%	2.36E-03 0.13%	2.23E-02 1.19%	2.56E-02 1.42%	9.92E-03 0.55%	2.04E-03 0.03%	4.81E-03 0.27%	2.38E-03 0.06%
BA140	4.30E-04 0.02%	8.04E-03 0.45%	6.07E-03 0.32%	6.29E-05 0.0 %	5.86E-05 0.0 %	5.64E-05 0.0 %	1.26E-03 0.07%	6.45E-05 0.0 %
I 131	2.94E-06 0.0 %	9.58E-07 0.0 %	4.27E-06 0.0 %	5.18E-06 0.0 %	8.71E-06 0.0 %	1.67E-03 0.02%	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	3.79E-05 0.0 %	1.77E-04 0.0 %	1.20E-05 0.0 %	2.25E-05 0.0 %	1.20E-05 0.0 %	1.20E-05 0.0 %	4.03E-05 0.0 %	1.41E-05 0.0 %
CO 60	9.41E-03 0.52%	1.61E-02 0.91%	8.10E-03 0.43%	8.64E-03 0.46%	8.10E-03 0.45%	8.10E-03 0.12%	1.01E-02 0.56%	9.52E-03 0.22%
MN 54	1.26E-04 0.0 %	3.38E-04 0.02%	1.03E-04 0.0 %	2.10E-04 0.01%	1.34E-04 0.0 %	1.03E-04 0.0 %	1.95E-04 0.01%	1.21E-04 0.0 %
I 131	2.71E-07 0.0 %	8.82E-08 0.0 %	3.93E-07 0.0 %	4.77E-07 0.0 %	8.02E-07 0.0 %	1.54E-04 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	4.56E-06 0.0 %	1.49E-06 0.0 %	6.62E-06 0.0 %	8.03E-06 0.0 %	1.35E-05 0.0 %	2.59E-03 0.04%	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	1.98E-05 0.0 %	1.74E-05 0.0 %	1.30E-05 0.0 %	3.81E-05 0.0 %	2.51E-05 0.0 %	6.01E-07 0.0 %	9.25E-07 0.0 %	6.92E-07 0.0 %
I 131	5.32E-07 0.0 %	1.73E-07 0.0 %	7.73E-07 0.0 %	9.36E-07 0.0 %	1.57E-06 0.0 %	3.02E-04 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL* (CONTINUED)

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CR 51	3.37E-07 0.0 %	7.07E-06 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	3.01E-07 0.0 %	3.18E-07 0.0 %	5.93E-07 0.0 %	3.46E-07 0.0 %
I 131	3.54E-06 0.0 %	1.15E-06 0.0 %	5.13E-06 0.0 %	6.23E-06 0.0 %	1.05E-05 0.0 %	2.01E-03 0.03%	3.43E-08 0.0 %	4.17E-08 0.0 %
I 131	4.86E-05 0.0 %	1.59E-05 0.0 %	7.06E-05 0.0 %	8.55E-05 0.0 %	1.44E-04 0.0 %	2.76E-02 0.40%	4.44E-07 0.0 %	5.39E-07 0.0 %
I 131	2.52E-04 0.01%	8.20E-05 0.0 %	3.66E-04 0.02%	4.44E-04 0.02%	7.47E-04 0.04%	1.43E-01 2.06%	2.25E-06 0.0 %	2.73E-06 0.0 %
I 131	1.60E-06 0.0 %	5.21E-07 0.0 %	2.32E-06 0.0 %	2.81E-06 0.0 %	4.73E-06 0.0 %	9.07E-04 0.01%	1.37E-08 0.0 %	1.66E-08 0.0 %
TOTAL	1.80E+00	1.77E+00	1.88E+00	1.81E+00	1.79E+00	6.93E+00	1.80E+00	4.28E+00

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 4.23E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 6.90E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.64E+00	4.64E+00	4.64E+00	4.64E+00	4.64E+00	4.64E+00	4.68E+00	8.95E+00
GROUND	2.00E-02	2.00E-02	2.00E-02	2.00E-02	2.00E-02	2.00E-02	2.00E-02	2.35E-02
VEGET								
ADULT	3.32E-02	1.12E-02	1.27E-01	8.74E-03	6.24E-03	7.87E-01	7.02E-04	0.0
TEEN	4.06E-02	1.16E-02	1.66E-01	1.24E-02	7.34E-03	6.71E-01	1.31E-03	0.0
CHILD	6.62E-02	8.53E-03	2.94E-01	2.03E-02	1.07E-02	1.04E+00	1.98E-03	0.0
MEAT								
ADULT	8.81E-04	1.27E-03	2.30E-03	7.98E-04	6.50E-04	9.24E-02	5.57E-05	0.0
TEEN	5.30E-04	7.50E-04	1.68E-03	6.44E-04	5.29E-04	6.69E-02	5.25E-05	0.0
CHILD	6.21E-04	4.32E-04	2.64E-03	8.50E-04	6.72E-04	1.01E-01	6.14E-05	0.0
COW MILK								
ADULT	8.50E-03	3.15E-03	1.42E-02	1.20E-02	1.48E-02	2.55E+00	4.70E-04	0.0
TEEN	1.10E-02	4.21E-03	2.38E-02	2.12E-02	2.63E-02	4.03E+00	9.67E-04	0.0
CHILD	1.88E-02	3.30E-03	5.25E-02	3.68E-02	4.37E-02	7.97E+00	1.48E-03	0.0
INFANT	3.13E-02	3.25E-03	9.13E-02	8.37E-02	7.55E-02	1.94E+01	2.67E-03	0.0
GOATMILK								
ADULT	1.63E-02	3.32E-03	2.68E-02	2.19E-02	2.03E-02	3.06E+00	1.41E-03	0.0
TEEN	2.04E-02	4.44E-03	4.46E-02	3.87E-02	3.61E-02	4.84E+00	2.90E-03	0.0
CHILD	2.86E-02	3.49E-03	9.75E-02	6.70E-02	5.99E-02	9.56E+00	4.44E-03	0.0
INFANT	4.36E-02	3.44E-03	1.59E-01	1.45E-01	1.02E-01	2.32E+01	8.01E-03	0.0
INHAL								
ADULT	3.65E-04	7.54E-04	2.55E-03	3.91E-04	5.96E-04	1.07E-01	4.55E-03	0.0
TEEN	4.25E-04	7.86E-04	2.90E-03	5.37E-04	8.18E-04	1.32E-01	7.21E-03	0.0
CHILD	4.17E-04	3.49E-04	2.96E-03	5.25E-04	7.67E-04	1.48E-01	6.16E-03	0.0
INFANT	2.50E-04	1.31E-04	1.47E-03	4.71E-04	5.03E-04	1.35E-01	5.36E-03	0.0

COOPER NUCLEAR STATION : THIRD QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SSW

ANNUAL BETA AIR DOSE = 1.74E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 2.86E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.92E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00	1.94E+00	3.69E+00
GROUND	8.92E-03	8.92E-03	8.92E-03	8.92E-03	8.92E-03	8.92E-03	8.92E-03	1.05E-02
VEGET								
ADULT	1.27E-02	4.32E-03	4.84E-02	3.25E-03	2.28E-03	2.83E-01	2.62E-04	0.0
TEEN	1.56E-02	4.52E-03	6.33E-02	4.63E-03	2.69E-03	2.41E-01	4.88E-04	0.0
CHILD	2.54E-02	3.31E-03	1.12E-01	7.58E-03	3.91E-03	3.72E-01	7.40E-04	0.0
MEAT								
ADULT	3.37E-04	5.14E-04	8.65E-04	2.97E-04	2.36E-04	3.32E-02	2.09E-05	0.0
TEEN	2.03E-04	3.01E-04	6.28E-04	2.40E-04	1.92E-04	2.40E-02	1.96E-05	0.0
CHILD	2.40E-04	1.72E-04	9.83E-04	3.16E-04	2.44E-04	3.63E-02	2.30E-05	0.0
COW MILK								
ADULT	3.13E-03	1.15E-03	5.25E-03	4.37E-03	5.33E-03	9.17E-01	1.76E-04	0.0
TEEN	4.35E-03	1.53E-03	8.78E-03	7.74E-03	9.50E-03	1.45E+00	3.62E-04	0.0
CHILD	6.85E-03	1.20E-03	1.93E-02	1.34E-02	1.58E-02	2.86E+00	5.54E-04	0.0
INFANT	1.14E-02	1.18E-03	3.34E-02	3.04E-02	2.72E-02	6.96E+00	9.98E-04	0.0
GOATMILK								
ADULT	6.06E-03	1.21E-03	1.00E-02	8.07E-03	7.35E-03	1.10E+00	5.28E-04	0.0
TEEN	7.57E-03	1.61E-03	1.66E-02	1.42E-02	1.31E-02	1.74E+00	1.08E-03	0.0
CHILD	1.05E-02	1.27E-03	3.61E-02	2.46E-02	2.17E-02	3.44E+00	1.66E-03	0.0
INFANT	1.59E-02	1.25E-03	5.87E-02	5.31E-02	3.71E-02	8.35E+00	2.99E-03	0.0
INHAL								
ADULT	2.04E-04	3.39E-04	1.78E-03	1.70E-04	2.41E-04	4.24E-02	2.67E-03	0.0
TEEN	2.30E-04	3.48E-04	2.00E-03	2.33E-04	3.30E-04	5.23E-02	4.14E-03	0.0
CHILD	2.21E-04	1.52E-04	1.97E-03	2.27E-04	3.10E-04	5.84E-02	3.48E-03	0.0
INFANT	1.22E-04	5.65E-05	9.06E-04	2.00E-04	2.03E-04	5.34E-02	2.79E-03	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 6.85E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.11E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.46E-01	7.46E-01	7.46E-01	7.46E-01	7.46E-01	7.46E-01	7.53E-01	1.42E+00
GROUND	6.50E-02	6.50E-02	6.50E-02	6.50E-02	6.50E-02	6.50E-02	6.50E-02	7.63E-02
VEGET								
ADULT	1.54E-02	7.55E-03	1.31E-02	2.00E-02	7.27E-03	1.82E-01	2.08E-03	0.0
TEEN	1.40E-02	7.97E-03	2.05E-02	3.11E-02	1.08E-02	1.55E-01	3.79E-03	0.0
CHILD	1.23E-02	5.24E-03	4.69E-02	5.12E-02	1.70E-02	2.40E-01	5.65E-03	0.0
MEAT								
ADULT	1.36E-03	1.75E-03	9.54E-04	1.68E-03	6.17E-04	2.14E-02	1.68E-04	0.0
TEEN	6.81E-04	9.48E-04	7.78E-04	1.34E-03	4.91E-04	1.55E-02	1.54E-04	0.0
CHILD	5.63E-04	4.82E-04	1.41E-03	1.70E-03	6.10E-04	2.34E-02	1.77E-04	0.0
COW MILK								
ADULT	1.07E-02	1.13E-03	8.79E-03	1.48E-02	7.40E-03	5.90E-01	1.43E-03	0.0
TEEN	1.10E-02	1.42E-03	1.57E-02	2.58E-02	1.30E-02	9.33E-01	2.86E-03	0.0
CHILD	1.01E-02	1.05E-03	3.73E-02	4.34E-02	2.12E-02	1.84E+00	4.31E-03	0.0
INFANT	1.24E-02	9.93E-04	6.25E-02	8.52E-02	3.48E-02	4.48E+00	7.66E-03	0.0
GOATMILK								
ADULT	3.01E-02	1.36E-03	2.40E-02	4.11E-02	1.66E-02	7.08E-01	4.29E-03	0.0
TEEN	2.97E-02	1.75E-03	4.28E-02	7.17E-02	2.89E-02	1.12E+00	8.59E-03	0.0
CHILD	2.41E-02	1.32E-03	1.02E-01	1.20E-01	4.70E-02	2.21E+00	1.29E-02	0.0
INFANT	2.56E-02	1.27E-03	1.66E-01	2.31E-01	7.55E-02	5.37E+00	2.30E-02	0.0
INHAL								
ADULT	4.15E-04	2.88E-04	3.87E-04	5.55E-04	3.23E-04	3.11E-02	4.48E-03	0.0
TEEN	3.45E-04	2.73E-04	5.24E-04	7.50E-04	4.37E-04	3.83E-02	6.59E-03	0.0
CHILD	1.98E-04	1.08E-04	6.82E-04	7.05E-04	4.03E-04	4.28E-02	5.37E-03	0.0
INFANT	9.85E-05	3.75E-05	4.32E-04	5.31E-04	2.53E-04	3.91E-02	3.57E-03	0.0

COOPER NUCLEAR STATION : FOURTH QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SW

ANNUAL BETA AIR DOSE = 2.34E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 3.82E-01 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.57E-01	2.57E-01	2.57E-01	2.57E-01	2.57E-01	2.57E-01	2.60E-01	4.88E-01
GROUND	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.38E-02	1.62E-02
VEGET								
ADULT	3.21E-03	1.58E-03	2.63E-03	4.18E-03	1.45E-03	2.06E-02	4.42E-04	0.0
TEEN	2.92E-03	1.67E-03	4.16E-03	6.54E-03	2.20E-03	1.75E-02	8.03E-04	0.0
CHILD	2.54E-03	1.09E-03	9.57E-03	1.08E-02	3.49E-03	2.71E-02	1.20E-03	0.0
MEAT								
ADULT	2.85E-04	3.70E-04	1.96E-04	3.50E-04	1.20E-04	2.41E-03	3.56E-05	0.0
TEEN	1.41E-04	2.00E-04	1.60E-04	2.78E-04	9.51E-05	1.75E-03	3.26E-05	0.0
CHILD	1.15E-04	1.01E-04	2.89E-04	3.54E-04	1.18E-04	2.64E-03	3.76E-05	0.0
COW MILK								
ADULT	2.16E-03	1.90E-04	1.73E-03	2.96E-03	1.26E-03	6.67E-02	3.03E-04	0.0
TEEN	2.17E-03	2.37E-04	3.09E-03	5.16E-03	2.20E-03	1.05E-01	6.07E-04	0.0
CHILD	1.83E-03	1.71E-04	7.34E-03	8.65E-03	3.58E-03	2.08E-01	9.15E-04	0.0
INFANT	2.03E-03	1.60E-04	1.21E-02	1.67E-02	5.79E-03	5.06E-01	1.62E-03	0.0
GOATMILK								
ADULT	6.25E-03	2.29E-04	4.92E-03	8.51E-03	3.16E-03	8.00E-02	9.10E-04	0.0
TEEN	6.10E-03	2.93E-04	8.78E-03	1.48E-02	5.48E-03	1.27E-01	1.82E-03	0.0
CHILD	4.74E-03	2.19E-04	2.08E-02	2.48E-02	8.88E-03	2.50E-01	2.74E-03	0.0
INFANT	4.70E-03	2.10E-04	3.37E-02	4.73E-02	1.41E-02	6.07E-01	4.87E-03	0.0
INHAL								
ADULT	2.19E-04	1.53E-04	1.95E-04	2.86E-04	1.35E-04	8.71E-03	2.51E-03	0.0
TEEN	1.75E-04	1.45E-04	2.63E-04	3.85E-04	1.82E-04	1.07E-02	3.70E-03	0.0
CHILD	9.11E-05	5.65E-05	3.43E-04	3.61E-04	1.66E-04	1.20E-02	3.01E-03	0.0
INFANT	4.06E-05	1.95E-05	2.12E-04	2.65E-04	1.02E-04	1.09E-02	1.99E-03	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 4.91E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 8.00E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.39E+00	5.39E+00	5.39E+00	5.39E+00	5.39E+00	5.39E+00	5.44E+00	1.04E+01
GROUND	8.50E-02	8.50E-02	8.50E-02	8.50E-02	8.50E-02	8.50E-02	8.50E-02	9.97E-02
VEGET								
ADULT	4.86E-02	1.87E-02	1.40E-01	2.87E-02	1.35E-02	9.69E-01	2.79E-03	0.0
TEEN	5.46E-02	1.96E-02	1.86E-01	4.35E-02	1.81E-02	8.26E-01	5.09E-03	0.0
CHILD	7.85E-02	1.38E-02	3.41E-01	7.15E-02	2.77E-02	1.27E+00	7.63E-03	0.0
MEAT								
ADULT	2.24E-03	3.02E-03	3.26E-03	2.48E-03	1.27E-03	1.14E-01	2.23E-04	0.0
TEEN	1.21E-03	1.70E-03	2.46E-03	1.98E-03	1.02E-03	8.24E-02	2.06E-04	0.0
CHILD	1.18E-03	9.14E-04	4.05E-03	2.55E-03	1.28E-03	1.24E-01	2.39E-04	0.0
COW MILK								
ADULT	1.92E-02	4.28E-03	2.30E-02	2.68E-02	2.22E-02	3.14E+00	1.90E-03	0.0
TEEN	2.29E-02	5.63E-03	3.95E-02	4.71E-02	3.93E-02	4.97E+00	3.83E-03	0.0
CHILD	2.89E-02	4.35E-03	8.99E-02	8.02E-02	6.49E-02	9.81E+00	5.79E-03	0.0
INFANT	4.37E-02	4.25E-03	1.54E-01	1.69E-01	1.10E-01	2.38E+01	1.03E-02	0.0
GOATMILK								
ADULT	4.63E-02	4.68E-03	5.08E-02	6.30E-02	3.69E-02	3.77E+00	5.70E-03	0.0
TEEN	5.02E-02	6.19E-03	8.74E-02	1.10E-01	6.50E-02	5.96E+00	1.15E-02	0.0
CHILD	5.27E-02	4.81E-03	1.99E-01	1.87E-01	1.07E-01	1.18E+01	1.74E-02	0.0
INFANT	6.91E-02	4.71E-03	3.25E-01	3.75E-01	1.78E-01	2.86E+01	3.10E-02	0.0
INHAL								
ADULT	7.80E-04	1.04E-03	2.93E-03	9.47E-04	9.19E-04	1.38E-01	9.03E-03	0.0
TEEN	7.71E-04	1.06E-03	3.43E-03	1.29E-03	1.25E-03	1.71E-01	1.38E-02	0.0
CHILD	6.15E-04	4.57E-04	3.64E-03	1.23E-03	1.17E-03	1.91E-01	1.15E-02	0.0
INFANT	3.49E-04	1.69E-04	1.90E-03	1.00E-03	7.56E-04	1.74E-01	8.93E-03	0.0

COOPER NUCLEAR STATION : SECOND SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SSW

ANNUAL BETA AIR DOSE = 1.96E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 3.22E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.17E+00	2.17E+00	2.17E+00	2.17E+00	2.17E+00	2.17E+00	2.19E+00	4.15E+00
GROUND	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	4.30E-02
VEGET								
ADULT	1.92E-02	7.50E-03	5.37E-02	1.17E-02	5.22E-03	3.30E-01	1.15E-03	0.0
TEEN	2.15E-02	7.88E-03	7.17E-02	1.78E-02	7.14E-03	2.82E-01	2.10E-03	0.0
CHILD	3.05E-02	5.51E-03	1.31E-01	2.93E-02	1.10E-02	4.35E-01	3.15E-03	0.0
MEAT								
ADULT	9.11E-04	1.26E-03	1.26E-03	1.00E-03	4.81E-04	3.88E-02	9.23E-05	0.0
TEEN	4.89E-04	7.03E-04	9.50E-04	8.01E-04	3.86E-04	2.81E-02	8.52E-05	0.0
CHILD	4.73E-04	3.76E-04	1.57E-03	1.03E-03	4.84E-04	4.24E-02	9.85E-05	0.0
COW MILK								
ADULT	7.52E-03	1.55E-03	8.77E-03	1.04E-02	7.97E-03	1.07E+00	7.86E-04	0.0
TEEN	8.76E-03	2.03E-03	1.51E-02	1.82E-02	1.41E-02	1.69E+00	1.58E-03	0.0
CHILD	1.06E-02	1.56E-03	3.43E-02	3.10E-02	2.33E-02	3.34E+00	2.39E-03	0.0
INFANT	1.56E-02	1.52E-03	5.80E-02	6.45E-02	3.94E-02	8.13E+00	4.26E-03	0.0
GOATMILK								
ADULT	1.87E-02	1.69E-03	2.00E-02	2.52E-02	1.38E-02	1.28E+00	2.36E-03	0.0
TEEN	1.99E-02	2.23E-03	3.43E-02	4.42E-02	2.43E-02	2.03E+00	4.75E-03	0.0
CHILD	2.02E-02	1.73E-03	7.82E-02	7.47E-02	3.99E-02	4.01E+00	7.18E-03	0.0
INFANT	2.56E-02	1.69E-03	1.27E-01	1.49E-01	6.61E-02	9.75E+00	1.28E-02	0.0
INHAL								
ADULT	4.26E-04	4.94E-04	1.98E-03	4.62E-04	3.83E-04	5.24E-02	5.20E-03	0.0
TEEN	4.09E-04	4.95E-04	2.27E-03	6.26E-04	5.22E-04	6.45E-02	7.86E-03	0.0
CHILD	3.16E-04	2.09E-04	2.32E-03	5.95E-04	4.65E-04	7.21E-02	6.52E-03	0.0
INFANT	1.65E-04	7.63E-05	1.12E-03	4.72E-04	3.11E-04	6.59E-02	4.80E-03	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 5.61E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 9.14E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.15E+00	6.21E+00	1.18E+01
GROUND	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.02E-01	1.19E-01
VEGET								
ADULT	5.55E-02	2.18E-02	1.64E-01	3.06E-02	1.43E-02	1.01E+00	2.97E-03	0.0
TEEN	6.30E-02	2.30E-02	2.18E-01	4.64E-02	1.92E-02	8.58E-01	5.42E-03	0.0
CHILD	9.21E-02	1.61E-02	3.96E-01	7.63E-02	2.93E-02	1.32E+00	8.12E-03	0.0
MEAT								
ADULT	2.47E-03	3.58E-03	3.63E-03	2.65E-03	1.34E-03	1.18E-01	2.38E-04	0.0
TEEN	1.35E-03	2.00E-03	2.72E-03	2.12E-03	1.08E-03	8.55E-02	2.20E-04	0.0
CHILD	1.35E-03	1.07E-03	4.44E-03	2.73E-03	1.35E-03	1.29E-01	2.54E-04	0.0
COW MILK								
ADULT	2.05E-02	4.58E-03	2.49E-02	2.83E-02	2.32E-02	3.26E+00	2.02E-03	0.0
TEEN	2.44E-02	6.02E-03	4.27E-02	4.97E-02	4.11E-02	5.16E+00	4.08E-03	0.0
CHILD	3.07E-02	4.64E-03	9.66E-02	8.47E-02	6.79E-02	1.02E+01	6.17E-03	0.0
INFANT	4.62E-02	4.57E-03	1.64E-01	1.78E-01	1.15E-01	2.48E+01	1.10E-02	0.0
GOATMILK								
ADULT	4.95E-02	4.97E-03	5.53E-02	6.68E-02	3.88E-02	3.91E+00	6.07E-03	0.0
TEEN	5.36E-02	6.57E-03	9.48E-02	1.17E-01	6.83E-02	6.19E+00	1.22E-02	0.0
CHILD	5.64E-02	5.11E-03	2.15E-01	1.98E-01	1.12E-01	1.22E+01	1.85E-02	0.0
INFANT	7.35E-02	5.02E-03	3.49E-01	3.97E-01	1.87E-01	2.97E+01	3.30E-02	0.0
INHAL								
ADULT	8.47E-04	1.11E-03	3.52E-03	9.99E-04	9.72E-04	1.45E-01	1.00E-02	0.0
TEEN	8.41E-04	1.13E-03	4.08E-03	1.36E-03	1.33E-03	1.79E-01	1.53E-02	0.0
CHILD	6.78E-04	4.86E-04	4.28E-03	1.30E-03	1.24E-03	2.01E-01	1.27E-02	0.0
INFANT	3.80E-04	1.79E-04	2.18E-03	1.06E-03	8.00E-04	1.83E-01	9.75E-03	0.0

COOPER NUCLEAR STATION : ANNUAL PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SSW

ANNUAL BETA AIR DOSE = 2.35E+00 MILLRADS
ANNUAL GAMMA AIR DOSE = 3.85E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.59E+00	2.59E+00	2.59E+00	2.59E+00	2.59E+00	2.59E+00	2.61E+00	4.96E+00
GROUND	4.62E-02	4.62E-02	4.62E-02	4.62E-02	4.62E-02	4.62E-02	4.62E-02	5.42E-02
VEGET								
ADULT	2.43E-02	9.46E-03	7.26E-02	1.28E-02	5.67E-03	3.50E-01	1.26E-03	0.0
TEEN	2.78E-02	1.01E-02	9.64E-02	1.96E-02	7.79E-03	2.98E-01	2.31E-03	0.0
CHILD	4.09E-02	7.06E-03	1.74E-01	3.23E-02	1.20E-02	4.60E-01	3.46E-03	0.0
MEAT								
ADULT	1.06E-03	1.58E-03	1.54E-03	1.11E-03	5.22E-04	4.10E-02	1.01E-04	0.0
TEEN	5.79E-04	8.79E-04	1.14E-03	8.87E-04	4.19E-04	2.97E-02	9.35E-05	0.0
CHILD	5.80E-04	4.66E-04	1.85E-03	1.14E-03	5.25E-04	4.49E-02	1.08E-04	0.0
COW MILK								
ADULT	8.33E-03	1.73E-03	1.02E-02	1.13E-02	8.55E-03	1.13E+00	8.63E-04	0.0
TEEN	9.71E-03	2.26E-03	1.73E-02	1.98E-02	1.51E-02	1.79E+00	1.74E-03	0.0
CHILD	1.18E-02	1.74E-03	3.88E-02	3.37E-02	2.49E-02	3.54E+00	2.63E-03	0.0
INFANT	1.72E-02	1.72E-03	6.48E-02	6.99E-02	4.22E-02	8.61E+00	4.68E-03	0.0
GOATMILK								
ADULT	2.07E-02	1.87E-03	2.31E-02	2.76E-02	1.49E-02	1.36E+00	2.59E-03	0.0
TEEN	2.21E-02	2.47E-03	3.94E-02	4.82E-02	2.62E-02	2.15E+00	5.21E-03	0.0
CHILD	2.26E-02	1.92E-03	8.88E-02	8.15E-02	4.31E-02	4.25E+00	7.88E-03	0.0
INFANT	2.84E-02	1.89E-03	1.42E-01	1.62E-01	7.13E-02	1.03E+01	1.40E-02	0.0
INHAL								
ADULT	4.68E-04	5.42E-04	2.35E-03	4.94E-04	4.14E-04	5.63E-02	5.88E-03	0.0
TEEN	4.53E-04	5.41E-04	2.67E-03	6.70E-04	5.64E-04	6.95E-02	8.88E-03	0.0
CHILD	3.54E-04	2.28E-04	2.71E-03	6.37E-04	5.24E-04	7.78E-02	7.35E-03	0.0
INFANT	1.83E-04	8.31E-05	1.29E-03	5.06E-04	3.37E-04	7.11E-02	5.36E-03	0.0

APPENDIX D

X/Q AND DOSE CALCULATION MODELS AND ASSUMPTIONS

1.0 INTRODUCTION

The transport and dilution of radioactive materials in the form of aerosols, vapors, or gases released into the atmosphere from a nuclear power station are a function of the state of the atmosphere along the plume path, the topography of the region, and the characteristics of the effluents themselves. For a routine airborne release, the concentration of radioactive material in the surrounding region depends on the amount of effluent released, the height of the release, the momentum and buoyancy of the emitted plume, the wind speed, atmospheric stability, and airflow patterns of the site.

In order to evaluate the impact of a nuclear power station under normal operating conditions in a year of "typical" weather conditions, the routine diffusion estimates of effluent relative concentrations (X/Q) within a radius of 50 miles from the station are required. The method of evaluating atmospheric dispersion of gaseous effluents, based on the U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide 1.111 (1976), is described here.

2.0 METEOROLOGICAL DATA

Basic meterological parameters influencing effluent dispersion in the atmosphere are wind speed, wind direction, and atmospheric stability. The following guidelines are used in the categorization of meterological data.

2.1 WIND SPEED

Wind speeds representing the conditions at the actual release height are used when the release is considered to be elevated. Wind speeds measured at the 10-meter level are used when the effluent plume is considered to be a ground release.

2.2 WIND DIRECTION

Wind direction, defined as the direction from which the wind is blowing, is grouped into 16 compass-point sectors corresponding to 22.5-degree sectors.

2.3 ATMOSPHERIC STABILITY

Atmospheric stability is divided into seven categories to represent Pasquill stability classes A (extremely unstable) through G (extremely stable). The method for evaluating the atmospheric stability is based on vertical temperature difference between the release point and the 10-meter level. Criteria for classifying atmospheric stability in terms of Pasquill stability classes A through G are presented as follows:

Stability Classification	Pasquill Category	(degrees)	(°C/100m)
Extremely unstable	A	$\theta \geq 22.5$	$\Delta T \leq -1.9$
Moderately unstable	B	$22.5 > \theta \geq 17.5$	$-1.9 < \Delta T \leq -1.7$
Slightly unstable	C	$17.5 > \theta \geq 12.5$	$-1.7 < \Delta T \leq -1.5$
Neutral	D	$12.5 > \theta \geq 3.8$	$-1.5 < \Delta T \leq -0.5$
Slightly stable	E	$7.5 > \theta \geq 2.1$	$-0.5 < \Delta T \leq 1.5$
Moderately stable	F	$3.8 > \theta \geq$	$1.5 < \Delta T \leq 4.0$
Extremely stable	G	$2.1 > \theta$	$4.0 < \Delta T$

2.4 JOINT FREQUENCY DISTRIBUTION

Joint frequency distributions of wind direction and wind speed by atmospheric stability class are used as meteorological data input for routine diffusion estimates. The compilation of joint frequency distributions is done on quarterly, semi-annual, and annual basis. Wind speeds are grouped according to the Beaufort wind scale (i.e., calm, 1-4, 4-8, 8-13, 13-19, 19-25, 25-32, 32-39, 39-45 and greater than 45 mph). Wind directions are divided into 16 compass-point directions (22.5-degree sectors).

3.0 RELEASE MODE

For nuclear power stations, most gaseous effluents are released through tall stacks, through vents located near the tops of buildings, or through combinations of the two. They are dispersed by variations of wind direction and speed, and by turbulence (mixing action) of the atmosphere. Gaseous effluents released from tall stacks generally produce peak ground-level concentrations near or beyond the site boundary, whereas near-ground level releases produce monotonically decreasing concentrations from the release point to all locations downwind. Under certain conditions, the effluent plume may become entrained in the aerodynamic wake of a building and mix rapidly down to the ground level.

Methods have been developed to estimate the effective release height, which is defined as the sum of the physical height of the release point and the rise of the plume above the stacks, for calculations of effluent concentrations at all downwind locations. The important parameters in these methods include the initial release height, the location of the release point in relation to obstructions, size and shape of the release point, the initial vertical velocity of the effluent, the heat content of the effluent, ambient wind speed and temperature, and atmospheric stability.

The acceptable method that is used to determine the release mode is described below.

3.1 EFFLUENT RELEASE MODE

For effluents exhausted from release points that are higher than twice the height of adjacent solid structures, the effective release height (h_e) is determined from

$$h_e = h_s + h_{pr} - h_t \tag{3-1}$$

where h_s = physical height of the release point above the ground;
h_{pr} = rise of the plume above the release point; and
h_t = minimum terrain height above the stack base between the release point and the point for which the calculation is made (h_t) must be greater than or equal to zero).

For effluents released from points less than or equal to the height of adjacent solid structures, a ground-level release is assumed ($h_e = 0$).

For effluents released from vents or other points that are less than twice the height of adjacent solid structures, the effluent plume is considered as an elevated release whenever the vertical exit velocity (W_0) of the plume is at least five times the horizontal wind speed (U) at the height of release, i.e., $W_0/U \geq 5.0$. If W_0/U is less than 1.0, or unknown, a ground-level release is assumed ($h_e = 0$).

For cases where the ratio of plume exit velocity to horizontal wind speed is between one and five, a mixed release mode is assumed, in which the plume is considered as an elevated release during part of the time and as a ground-level release ($h_e = 0$) during the remainder of the time. An entrainment coefficient, E_t, is determined for such cases from the following relations:

$$E_t = 2.58 - 1.58\ (W_o/U) \text{ for } 1 < W_o/U \leq 1.5 \quad (3\text{-}2)$$

and

$$E_t = 0.3 - 0.06\ (W_o/U) \text{ for } 1.5 < W_o/U \leq 5.0 \quad (3\text{-}3)$$

The release is considered to occur as an elevated release 100 ($1-E_t$) percent of the time, as a ground release $100E_t$ percent of the time. Each of these cases is evaluated separately and the concentration is calculated according to the fraction of time each type of release occurs.

3.2 PLUME RISE CALCULATION

Nuclear power stations generally have cold plumes, so that the plume rise is calculated from Briggs' (1969) momentum rise formulae. For neutral or unstable atmosphere, the smaller value of h_{pr} calculated from the following equations is used:

$$h_{pr} = 1.44\ (W_o/U)^{2/3}\ (x/D)^{1/3}\ D \quad (3\text{-}4)$$

and

$$h_{pr} = 3\ (W_o/U)\ D \quad (3\text{-}5)$$

where D = inside diameter of the stack or other release points;
W_o = vertical exit velocity of the plume;
U = mean wind speed at the height of release; and
x = downwind distance from the release point.

For stable atmosphere, the results from Equations (3-4) and (3-5) are compared with the results from the following equations:

$$h_{pr} = 4\ (F_m/S)^{1/4} \quad (3\text{-}6)$$

and

$$h_{pr} = 1.5\ (F_m/U)^{1/3}\ S^{-1/6} \quad (3\text{-}7)$$

and the smallest value for h_{pr} is used. In the foregoing relations

$F_m = W_o^2 D^2/4$ = momentum flux parameter;

$S = \frac{g}{T_a}\ \frac{\delta\theta}{\delta Z}$ = stability parameter

g = acceleration of gravity; and

T_a = ambient air temperature

The quality $\delta\theta/\delta Z$ represents the vertical potential temperature gradient given by:

Stability Class	$\delta\theta/\delta Z$ (°K/m)
A	-0.020
B	-0.018
C	-0.016
D	-0.010
E	0.020
F	0.035
G	0.050

When the vertical exit velocity of the plume is less than 1.5 times the horizontal mean wind speed, a height correction for aerodynamic downwash C, given by

$$C = 3(1.5 - W_o/U)D \tag{3-8}$$

is subtracted from Equation (3-1)

3.3 DIFFUSION MODEL

The Gaussian straight-line trajectory model, which assumes that the air flow transports and diffuses effluents along a straight line through the entire region of interest in the airflow direction, is modified to account for various modes of effluent releases. In the case of an elevated release, plume rise due to momentum or buoyancy effects is incorporated into the calculation. For those effluents that are entrained into the wake cavity region of a building, mixing of effluent into the wake cavity is usually assumed. The mixing zone can constitute a plume with an initial cross section of one-half or more of the cross-sectional area of the building.

The mathematical equation used in the Gaussion straight-line trajectory model is:

$$\left[\frac{X}{Q}\right]_i = 2.032 \sum_j \sum_k \frac{f_{ijk}}{xU_{jk}\Sigma_{zk}} \exp\left[-\frac{1}{2}\frac{h_e^2}{\sigma_{zk}^2}\right] \tag{3-9}$$

$$\Sigma_{zk} = (\sigma_{zk}^2 + 0.5\, D_z^2/\pi)^{1/2} \leq \sqrt{3\sigma_{zk}} \tag{3-10}$$

where
- i = index identifying downwind direction section;
- j = index identifying wind speed class;
- k = index identifying atmospheric stability class;
- $\left[\frac{X}{Q}\right]$ = average effluent concentration normalized by source strength at the specific downwind distance;
- f = joint frequency distribution of wind direction, wind speed class, and atmospheric stability class;
- x = distance from the release point to a receptor;
- U = wind speed;
- Σ_z = vertical plume spread with a volumetric building wake correction for a release within the building wake cavity;
- σ_z = vertical plume spread without volumetric building wake correction; and
- D_z = maximum adjacent building height either up or downwind of the release point.

The term Σ_{zk} given in Equations (3-9) and (3-10) is used for ground-level release (h_e = 0) within the building wake cavity. For an elevated release, no volumetric building wake correction needs to be considered, i.e., $\Sigma_{zk} = \sigma_{zk}$.

The X/Q dose calculations were performed by means of a computer program XOQDOQ (U.S. NRC 1977).

4.0 GASEOUS EFFLUENT DOSE CALCULATION MODELS AND ASSUMPTIONS

Calculations of dose ratios through gaseous pathways are performed by means of a computer program called GASPAR, (U.S. NRC 1977) which has been formulated according to the requirements of U.S. NRC Regulatory Guide 1.109. The pathways used in the program's calculations are direct plume, ground level deposition, inhalation, ingestion of vegetation contaminated by radioiodine deposition, ingestion of milk from cows which consume the contaminated vegetation, and ingestion of meat from beef that consume the contaminated vegetation.

GASPAR computes both individual doses and population doses. For each case, both building vent releases and elevated stack releases are taken into account when computing the doses. The doses from the building vent releases and elevated stack releases are added together to obtain total dose. The dose calculations for individuals are performed considering four different age groups: infant (0-1 years age), child (1-11 years age), teenager (12-18 years age), and adult (over 18 years age). For each age group and each pathway, radiation doses are calculated for total body, GI-tract, bone, liver, kidney, thyroid, lung and skin.

The analytical methods employed in GASPAR for computing individual and population doses are described in U.S. NRC Regulatory Guide 1.109.