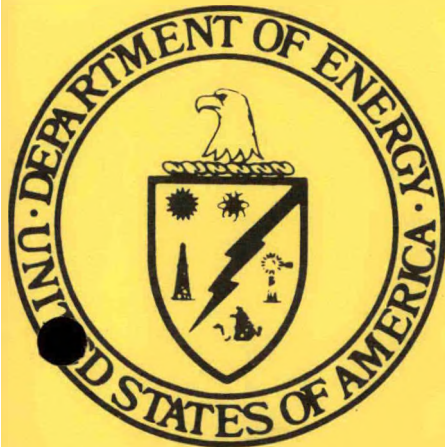


MASTER

**Environmental Data
for Sites in the
National Solar Data Network**

February 1980



U.S. DEPARTMENT OF ENERGY

NATIONAL SOLAR DATA PROGRAM

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FEBRUARY 1980 ENVIRONMENTAL DATA

FOR SITES IN THE
NATIONAL SOLAR DATA NETWORK

PREPARED FOR

U. S. DEPARTMENT OF ENERGY
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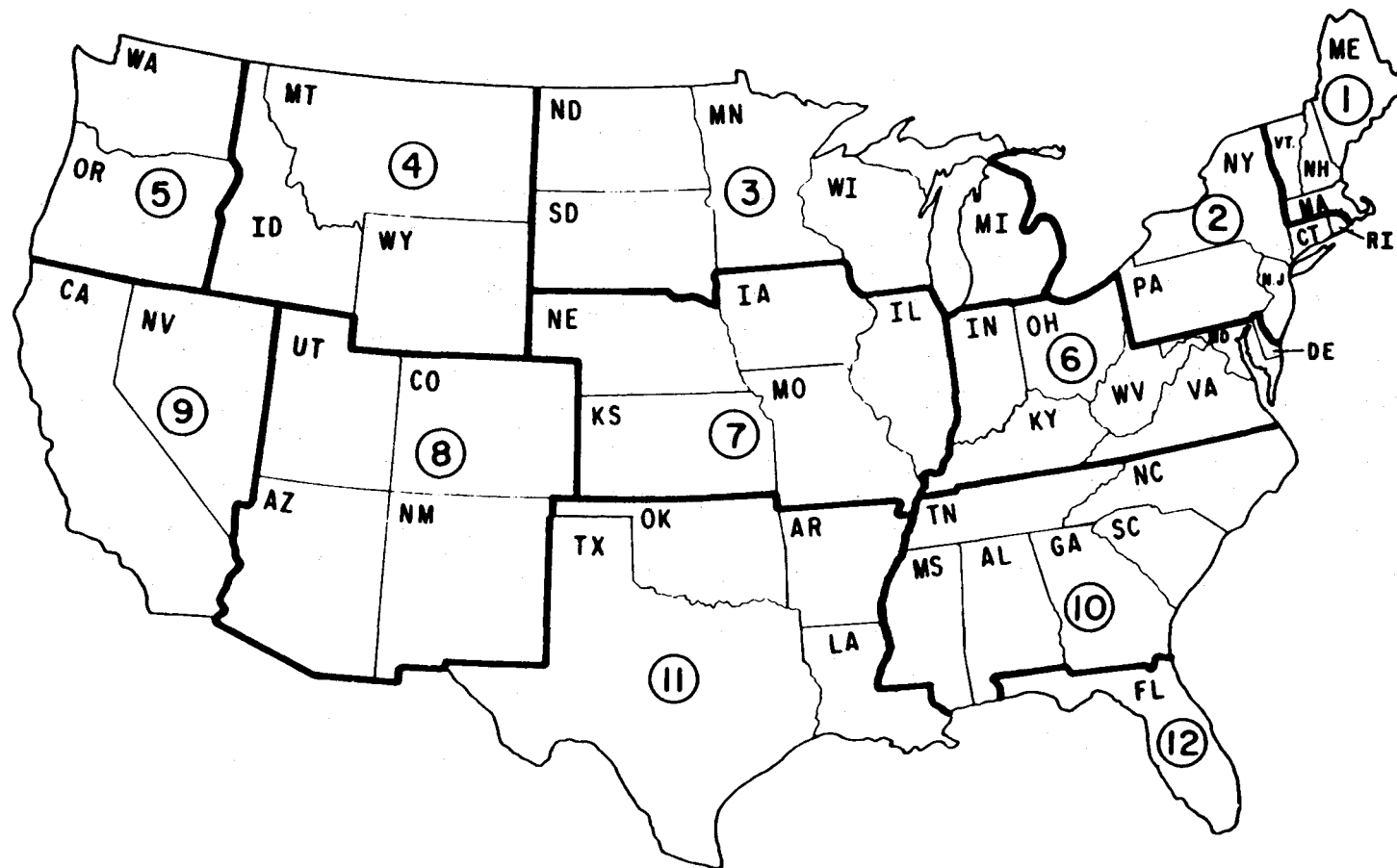


Figure 1. National Solar Data Program Zones

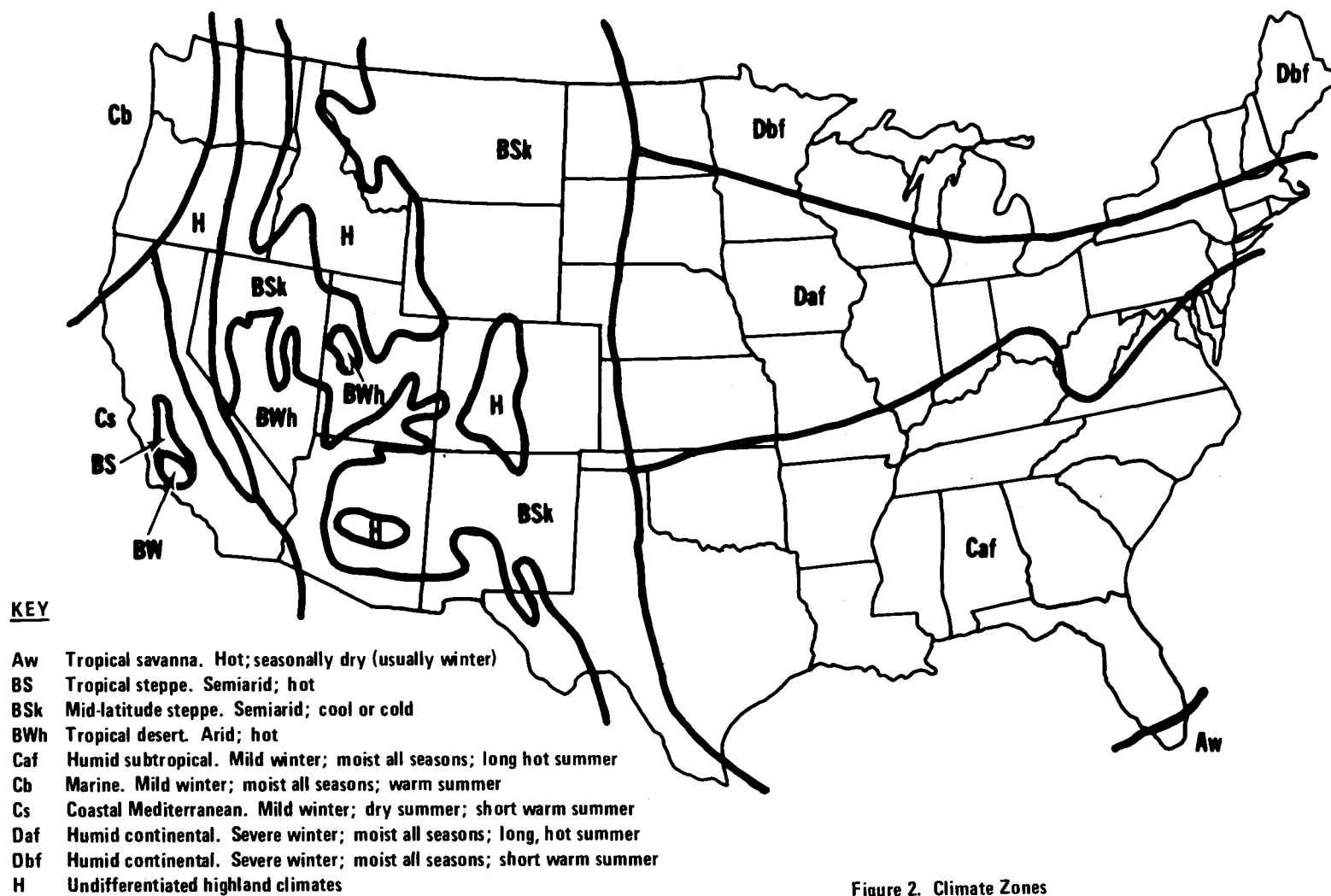


Figure 2. Climate Zones

Trewartha, G.T. *The Earth's Problem Climates*. University Wisconsin Press, Madison, WI, 1961.

ENVIRONMENTAL DATA
FOR
SITES IN THE NATIONAL SOLAR DATA NETWORK

INTRODUCTION

The Department of Energy's National Solar Data Program established solar energy systems in residential and commercial buildings across the United States. These solar sites are linked to Vitro Laboratories Division's computer in the National Solar Data Network (NSDN). Vitro collects and analyzes data from this network to determine the thermal performance of each of the solar systems.

The network consists of: (1) sensors which measure key performance parameters at a selected site; (2) a Site Data Acquisition System (SDAS); (3) telephone transmission circuits; and (4) a Central Data Processing System (CDPS). Sensor data are collected and stored on a cassette tape in the SDAS. The CDPS collects and processes the information at Vitro and performs the required computations.

For the majority of parameters, raw data is collected approximately every five minutes. Solar insolation and certain other parameters, which are subject to rapid variance, are sampled every 32 seconds. The CDPS interrogates each SDAS on a daily basis and retrieves all accumulated data. At the conclusion of data retrieval, the SDAS cassette is reset by command from the CDPS for continuing data collection.

This report presents environmental information collected at the sites for the reporting month. Only those sites for which the data are found to be valid are reported.

Organization of the Data

The environmental data for the National Solar Data Program are presented in the form of tables for each solar site. The solar sites are grouped into 12 zones, each of which consists of several adjacent states (as shown in Figure 1). The solar energy sites are in alphabetical sequence within each zone.

The tables provide temperature and insolation data for each of the sites in the NSDP that is included, as follows:

- o Insolation. The insolation table presents the total, diffuse, direct, maximum, and extra-terrestrial radiation for the solar site. It also shows the ratio of total extra-terrestrial radiation, as a percent.
- o Temperature. The temperature table gives the average, daytime, nighttime, maximum, minimum and inlet-water temperatures for the solar site.

Additional tables are presented for some of these NSDP sites, supplying either wind or relative humidity data, or both.

- o Wind. All of the passive and some of the active solar sites are equipped with wind sensors. These provide information for two wind tables. The first furnishes wind speed and direction. The second table correlates wind speed with time (hours for a range of speeds) for each day.
- o Humidity. The humidity table provides relative humidity values for day and night. It also gives values for the maximum and minimum humidity for each day.

A technical discussion of the instruments and measurements used to obtain these data tables follows.

A map illustrating the climate zones is provided in Figure 2.

SENSOR TECHNOLOGY

Temperature Sensors

Temperatures are measured by a Minco Products S53P platinum Resistance Temperature Detector (RTD). Because the resistance of platinum wire varies as a function of temperature, measurement of the resistance of a calibrated length of platinum wire can be used to accurately determine the temperature of the wire. This is the principle of the platinum RTD which utilizes a tiny coil of platinum wire encased in a copper-tipped probe to measure temperature. The probes are designed to have a normal resistance of 100 Ohms at 32°F.

Ambient temperature sensors are housed in a WeatherMeasure Radiation Shield in order to protect the probe from solar radiation. Care is taken to locate the sensor away from extraneous heat sources which could produce erroneous temperature readings. Temperature probes mounted in ducts or pipes are installed in stainless steel thermowells for physical protection of the sensor and to allow easy removal and replacement of the sensors. A thermally conductive grease is used between the probe and the thermowell to assure faster temperature response.

The RTDs are connected in a Wheatstone bridge arrangement to yield an output signal of 0-100 millivolts, which is measured by the SDAS. Different resistance values are used in the bridge, depending on the temperature range the sensor must measure. A third wire brought out from the sensor and connected into the bridge to compensate for the resistance of the lead wires between the sensor and the SDAS.

The RTDs are individually calibrated to National Bureau of Standards traceable standards at the factory. In addition, a five-point check is done at the site in an attempt to take into account any deviation of the measurement system from nominal values.

The data-processing software takes these checks and calibrations into account, using a third-order polynomial curve fit to relate SDAS output to temperature.

Wind Sensors

Wind speed and direction are measured by a Model W101-P-DC/540 (or W102-P-DC/540) sensor made by the WeatherMeasure Corporation. This sensor is rugged, reliable and accurate and will withstand severe environments such as icing and hurricane winds.

Wind speed is measured by a four-bladed propeller vehicle coupled to a D. C. generator. The balanced propeller is fabricated from a special low-density, fiberglass-reinforced plastic to yield maximum sensitivity and strength. The D. C. generator has excellent linearity but somewhat higher threshold due to brush friction.

Dual-wiper, precious-metal slip rings are used to bring the wind speed signals (15 Volts D.C. at 100 miles per hour) to the base of the sensor. These generally provide trouble-free use for several years.

Wind direction is measured by means of a dual-wiper 1000-Ohm long-life conductive plastic potentiometer housed in the base of the sensor (0-540°). It is attached to the stainless steel shaft which supports and rotates with the upper body assembly.

The potentiometer is of high commercial grade and has sealed bearings. The conductive plastic resistance element has infinite resolution and a lifetime about 10 times that of wire-wound potentiometers. The base is of aluminum, and corrosion-resistant materials are used in the construction.

Humidity Sensors

Relative humidity is measured by a WeatherMeasure Corporation Model HM111-P/HM114-P sensor. This measurement is of particular importance in monitoring atmospheric corrosion at solar sites.

This solid-state sensor measures relative humidity over the full range of 0-100%. Response of the sensing element is linear within approximately 1%, from 0-80% relative humidity, with small hysteresis and negligible temperature dependence.

The sensor is based upon the capacitance change of a polymer thin-film capacitor. A one-micron thick dielectric polymer layer absorbs water molecules through a thin metal electrode and causes capacitance change proportional to relative humidity. The thin polymer layer reacts very quickly and, therefore, the response time is very short (one second to 90% humidity change at 68°F).

The polymer material is resistant to most chemicals. Because the sensor response is based on "bulk" effect, under normal conditions dust and dirt do not easily influence its operation. For use outdoors, a sintered filter is used because sulphur dioxide absorbed on small particles can corrode the thin film electrodes of the sensor. The smaller the pore size of the filter, the greater the protection. The response time, however, is increased.

The sensor is mounted in a small probe which contains all the electronics necessary to provide a millivolt output. The output of the probe electronics is linear from 0-100% relative humidity. Because the capacitance change of the sensor is sensitive only to ambient water vapor, temperature compensation is not required in most situations.

Insolation Sensors

Eppley pyranometers and shadow-band pyranometers are used to measure the amount of radiant energy incident on a surface. A standard pyranometer measures the total amount of solar energy available, including both the direct beam component and the diffuse component, while the shadow-band instrument is designed to measure the diffuse component only. The instruments are calibrated in the horizontal position, with an Eppley thermopile used as the signal generator of the sensor. The heating of the thermopile by the radiation of the sun generates the signal, with the response being linear over the operating range. Measurements are in BTU/ft²-hr.

The addition of a shadow band to a pyranometer enables the instrument to record only the diffuse portion of the sunlight by shielding the sensor from the direct rays of the sun (the beam component). The amount of beam radiation available is readily calculated by subtracting the diffuse radiation measurement from the total radiation measured by the unshaded standard pyranometer. This beam radiation measurement is useful when working with focusing solar collectors. When using the shadow-band pyranometer, the accuracy of its measurement depends on the correct adjustment of the shadow band to be certain that the sensor is shielded from the direct rays of the sun.

The pyranometer includes a circular multi-junction thermopile of the wire-wound type. The thermopile has the advantage of withstanding some mechanical vibration and shock. The receiver is circular, and coated with Parsons black lacquer. The instrument has a pair of removable precision ground and polished hemispheres of Schott optical glass. It also has a spirit level and a desiccator that can be readily inspected. The clear glass is transparent from a wavelength of about 285 to 2,800 nanometers. The temperature dependence is $\pm 1\%$ over the range of -4°F to 104°F . It has a fairly fast response time of one second and a linearity of $\pm 5\%$ over the range of the instrument.

MEASUREMENT OF THE DATA

Temperature

The temperature sensors and supporting data acquisition systems in the National Solar Data Program (NSDP) have rapid time response and sufficient accuracy to resolve temperatures to $\pm 1^{\circ}\text{F}$ over the monthly reporting period. This feature provides good accuracy of the monthly values to the user.

The on-site ambient temperature sensor is mounted near the collector array or solar structure and records temperatures in the SDAS that are considered representative of the microclimate temperature near the solar equipment, e.g.,

collector array, passive structure aperture or mounting location of concentrating collectors.

Average monthly temperature is computed on the basis of all data values for temperature.

Daytime temperature average is computed on the basis of temperatures monitored from 30 minutes prior to sunrise to 30 minutes after sunset.

Nighttime temperatures are computed on the basis of remaining data acquired outside the daytime time parameters.

Maximum and minimum temperatures are obtained at a sampling point, meaning that they reflect a temperature value (Max or Min) which could have occurred for as short a time as a five-minute interval during the month. These temperature data reflect microclimate thermal variance at the site.

System cold-water inlet temperatures are provided for sites with domestic hot water systems. These data are most representative under flow conditions. Some elevation of this temperature can be expected if the sensor is mounted near the hot water heating equipment or in the outdoor environment. These temperatures represent average daily values of DHW cold-water inlet temperature, not necessarily the ground-water temperature provided by municipalities or private wells to the system.

Insolation

Total insolation in the wavelength bank of approximately 285 to 2,800 nanometers at the site-specific collector tilt angle is given. In some sites the pyranometer is shaded during certain times of the day, varying with the season, or there may be snow, dust or rain on some pyranometers. Figure 3 illustrates insolation and its measurement.

For sites with concentrating or evacuated tube collectors, diffuse insolation is also measured. Diffuse radiation is measured in the mean plane of tilt of the collectors with a shadow band pyranometer. The diffuse radiation readings have not been corrected for sky radiation blocked by the band. Maladjustment of the shadow band may, in some cases, cause erroneous readings.

Direct insolation is computed by subtracting the diffuse insolation from the total insolation value. The maximum value of total insolation and its time of occurrence in local standard time are also given for each day of the month.

Extraterrestrial radiation values are computed¹ for each site and given for each day of the month. The ratio of total insolation on a tilted surface to extraterrestrial radiation on a parallel surface is given in the last column of the data sheet. This parameter quantifies the effects of cloudiness and atmospheric transmission on the insolation received at the earth's surface for each site.

¹See TRNSYS, A Transient Simulation Program, Engineering Experiment Station Report #38, Solar Energy Laboratory, University of Wisconsin, Madison, 1975.

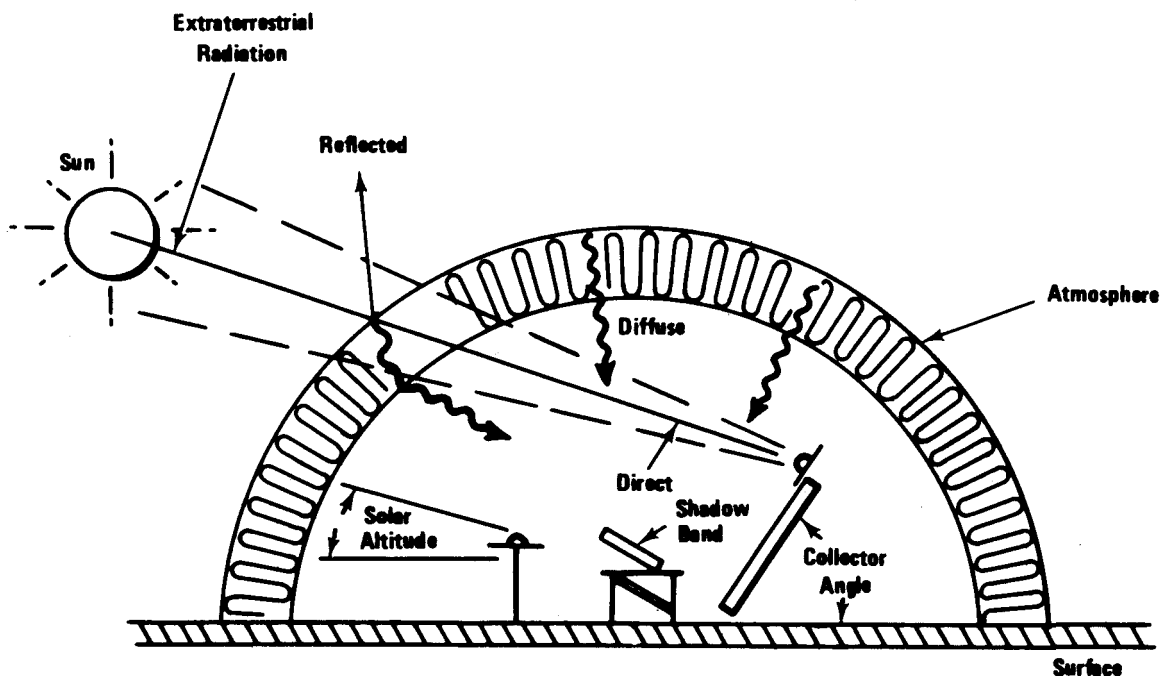


Figure 3. Incoming Solar Radiation

Wind

The wind data are presented as averages of speed and direction for the 24-hour period, averages of speed and direction for the daytime, and maximum speed for the 24-hour period, with corresponding direction and time of occurrence.

The daytime wind data are tabulated over the period from 30 minutes prior to sunrise to 30 minutes after sunset. Wind speed is in miles per hour and wind direction is expressed in common convention used by the National Weather Service (NWS), where the angle or compass heading refers to the direction from which the wind is blowing. Thus, a tabular entry of 315° indicates that the wind is blowing from the northwest.

The second page of wind data presents a frequency distribution of wind speeds, giving the number of hours in each velocity interval. Wind speed and direction data are collected once every 5 minutes and 20 seconds.

The anemometers in the NSDP are placed to measure the wind at the collector array and thus may not be representative of regional wind because some sensors may be in the turbulent wake of an object or otherwise shielded from the wind.

Relative Humidity

Relative humidity is measured at some of the solar sites because this is one of the parameters used in studies of atmospheric corrosion. Site selection was based on the availability of SDAS channels, rather than on environmental factors.

These relative humidity data are presented for those sites for which data is available.

OTHER PUBLICATIONS

These environmental data reports will be issued monthly and will include all sites which are transmitting valid data at the time of publication.

The data are also available on tape in the SOLMET System from the National Oceanographic and Atmospheric Administration Environmental Data and Information Service, National Climatic Center, Federal Building, Asheville, N. C., 28801.

Previous reports are:

SOLAR/0010-78/09, September 1978
SOLAR/0010-78/10, October 1978
SOLAR/0010-78/11, November 1978
SOLAR/0010-78/12, December 1978
SOLAR/0010-79/01, January 1979
SOLAR/0010-79/02, February 1979
SOLAR/0010-79/03, March 1979
SOLAR/0010-79/04, April 1979
SOLAR/0010-79/05, May 1979
SOLAR/0010-79/06, June 1979
SOLAR/0010-79/07, July 1979
SOLAR/0010-79/08, August 1979
SOLAR/0010-79/09, September 1979
SOLAR/0010-79/10, October 1979
SOLAR/0010-79/11, November 1979
SOLAR/0010-80/01, December 1979
SOLAR/0010-80/01, January 1980

NATIONAL SOLAR DATA NETWORK

ENVIRONMENTAL DATA TABLES

* denotes data missing due to sensor failure or transmission problems.
N.A. denotes data for this parameter not measured at this site.

ZONE 1



ENVIRONMENTAL SUMMARY REPORT

SITE: CONCORD LIGHT PLANT
CONCORD, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 189

LATITUDE: 42.47 DEG NORTH
LONGITUDE: 71.35 DEG WEST

AZIMUTH: -14 DEG
PYRANOMETER TILT: 57 DEG

TIME ZONE: EASTERN
ALTITUDE: 125 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	15.	20.	10.	29.	15:21	3.	6: 9	N.A.
2	16.	21.	13.	26.	14:14	10.	2:16	N.A.
3	16.	21.	13.	27.	14: 4	5.	6:46	N.A.
4	17.	22.	14.	33.	15:40	3.	7:13	N.A.
5	18.	21.	16.	29.	14:41	9.	23:56	N.A.
6	19.	24.	15.	35.	14:26	2.	6:26	N.A.
7	27.	27.	26.	29.	15:37	22.	0:25	N.A.
8	26.	31.	24.	40.	16: 4	19.	7:13	N.A.
9	17.	20.	15.	32.	11:44	9.	7:17	N.A.
10	*	*	*	*	*:*	*	*:*	N.A.
11	27.	34.	21.	38.	14:16	17.	21:19	N.A.
12	26.	31.	23.	38.	14:18	16.	7: 6	N.A.
13	24.	31.	19.	39.	15: 5	10.	6:22	N.A.
14	29.	35.	25.	41.	14:27	14.	1: 0	N.A.
15	28.	32.	25.	38.	14:41	18.	23:18	N.A.
16	23.	24.	22.	25.	10:41	17.	23:50	N.A.
17	17.	21.	13.	26.	16: 6	6.	7: 2	N.A.
18	18.	25.	13.	35.	15:34	-1.	5:20	N.A.
19	32.	40.	25.	50.	15:39	14.	6:46	N.A.
20	31.	39.	24.	50.	12:47	15.	6:39	N.A.
21	36.	43.	31.	52.	13:17	24.	3:20	N.A.
22	27.	27.	27.	32.	23:16	21.	4:58	N.A.
23	34.	37.	30.	42.	12:49	27.	22:31	N.A.
24	33.	36.	31.	41.	13: 5	28.	20: 7	N.A.
25	33.	37.	29.	48.	15:57	22.	6:41	N.A.
26	22.	25.	20.	28.	2: 4	7.	23:54	N.A.
27	18.	23.	14.	29.	14:56	4.	3:22	N.A.
28	22.	25.	19.	30.	14:48	13.	23:53	N.A.
MEAN	24.	29.	21.					N.A.
STANDARD DEVIATION	6.5	7.1	6.4					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: CONCORD LIGHT PLANT
CONCORD, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 189

LATITUDE: 42.47 DEG NORTH
LONGITUDE: 71.35 DEG WEST

AZIMUTH: -14 DEG
PYRANOMETER TILT: 57 DEG

TIME ZONE: EASTERN
ALTITUDE: 125 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2014.	N.A.	N.A.	321.	11:20	3133.	64.
2	1993.	N.A.	N.A.	327.	11:20	3134.	64.
3	2034.	N.A.	N.A.	321.	11:29	3143.	65.
4	2006.	N.A.	N.A.	318.	11:13	3152.	64.
5	2026.	N.A.	N.A.	321.	11:18	3162.	64.
6	1287.	N.A.	N.A.	315.	11: 8	3171.	41.
7	85.	N.A.	N.A.	34.	11:31	3166.	3.
8	*	N.A.	N.A.	*	*:*	3175.	*
9	*	N.A.	N.A.	*	*:*	3183.	*
10	*	N.A.	N.A.	*	*:*	3186.	*
11	*	N.A.	N.A.	*	*:*	3195.	*
12	1393.	N.A.	N.A.	312.	12: 4	3203.	43.
13	2031.	N.A.	N.A.	324.	11: 5	3210.	63.
14	636.	N.A.	N.A.	252.	11:35	3205.	20.
15	1778.	N.A.	N.A.	315.	11:35	3212.	55.
16	107.	N.A.	N.A.	25.	11:34	3219.	3.
17	2351.	N.A.	N.A.	361.	11:39	3221.	73.
18	2130.	N.A.	N.A.	330.	11:13	3228.	66.
19	1563.	N.A.	N.A.	318.	12:54	3234.	48.
20	1801.	N.A.	N.A.	327.	11: 0	3240.	56.
21	1077.	N.A.	N.A.	308.	12:13	3240.	33.
22	135.	N.A.	N.A.	31.	10:45	3246.	4.
23	791.	N.A.	N.A.	302.	12:44	3239.	24.
24	478.	N.A.	N.A.	187.	11:29	3240.	15.
25	1769.	N.A.	N.A.	343.	11:51	3250.	54.
26	1771.	N.A.	N.A.	333.	11: 8	3249.	54.
27	805.	N.A.	N.A.	218.	12:16	3242.	25.
28	1977.	N.A.	N.A.	340.	10:48	3251.	61.
MEAN	1418.	N.A.	N.A.			3205.	
STANDARD DEVIATION	720.	N.A.	N.A.			38.	

ENVIRONMENTAL SUMMARY REPORT

SITE: GREENMOSS
WAITSFIELD, VERMONT

REPORT PERIOD: 80/ 2
SITE NUMBER: 53

LATITUDE: 44.00 DEG NORTH
LONGITUDE: 73.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 89 DEG

TIME ZONE: EASTERN
ALTITUDE: 330 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	408.	N.A.	N.A.	96.	9:55	2938.	14.
2	251.	N.A.	N.A.	81.	13:37	2939.	9.
3	605.	N.A.	N.A.	222.	9:37	2940.	21.
4	412.	N.A.	N.A.	126.	10: 9	2940.	14.
5	659.	N.A.	N.A.	321.	12: 7	2929.	22.
6	1571.	N.A.	N.A.	294.	12:35	2936.	54.
7	1199.	N.A.	N.A.	273.	12:42	2925.	41.
8	1739.	N.A.	N.A.	294.	11:27	2923.	59.
9	1598.	N.A.	N.A.	294.	11:34	2922.	55.
10	1660.	N.A.	N.A.	288.	11:45	2920.	57.
11	1328.	N.A.	N.A.	276.	12: 1	2917.	46.
12	554.	N.A.	N.A.	216.	12:28	2911.	19.
13	672.	N.A.	N.A.	204.	13:26	2907.	23.
14	384.	N.A.	N.A.	165.	9:52	2894.	13.
15	1369.	N.A.	N.A.	273.	11:10	2896.	47.
16	118.	N.A.	N.A.	33.	14:34	2882.	4.
17	1481.	N.A.	N.A.	324.	12:48	2877.	51.
18	1591.	N.A.	N.A.	339.	12:14	2868.	55.
19	272.	N.A.	N.A.	147.	10:12	2862.	10.
20	969.	N.A.	N.A.	282.	11:25	2855.	34.
21	20.	N.A.	N.A.	12.	16: 8	2844.	1.
22	110.	N.A.	N.A.	33.	11:33	2837.	4.
23	204.	N.A.	N.A.	90.	15: 7	2825.	7.
24	287.	N.A.	N.A.	333.	12:11	2817.	10.
25	1038.	N.A.	N.A.	303.	10:40	2804.	37.
26	1722.	N.A.	N.A.	318.	12:16	2795.	62.
27	284.	N.A.	N.A.	75.	11:53	2781.	10.
28	801.	N.A.	N.A.	318.	12: 3	2770.	29.
MEAN	832.	N.A.	N.A.			2880.	
STANDARD DEVIATION	585.	N.A.	N.A.			53.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 2
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG TIME ZONE: EASTERN
ALTITUDE: 500 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	14.	21.	14.	21. 16:42	11. 22:27	N.A.
2	17.	23.	12.	33. 13:20	9. 22:35	N.A.
3	17.	24.	12.	33. 13:57	9. 0: 5	N.A.
4	21.	29.	15.	41. 13:41	7. 7: 7	N.A.
5	24.	32.	16.	37. 13:30	12. 23:55	N.A.
6	22.	29.	16.	45. 13:31	6. 5:47	N.A.
7	26.	28.	24.	32. 14:12	20. 1:44	N.A.
8	28.	36.	23.	47. 12:54	17. 6:57	N.A.
9	27.	32.	23.	45. 13:18	15. 6:48	N.A.
10	28.	33.	21.	45. 13:45	15. 23:58	N.A.
11	25.	33.	20.	46. 12:20	9. 6:49	N.A.
12	28.	36.	23.	48. 13:50	14. 7: 5	N.A.
13	27.	36.	21.	47. 13:31	11. 6: 9	N.A.
14	28.	35.	20.	45. 13:14	15. 2: 7	N.A.
15	30.	38.	26.	45. 13:23	22. 23:59	N.A.
16	23.	24.	22.	26. 12:53	15. 23:54	N.A.
17	18.	23.	13.	30. 12:48	7. 6:29	N.A.
18	21.	28.	16.	38. 15: 9	0. 4:53	N.A.
19	31.	38.	26.	55. 14:21	7. 5:55	N.A.
20	36.	46.	29.	59. 12:14	19. 5:45	N.A.
21	37.	44.	32.	56. 10:38	24. 23:55	N.A.
22	24.	24.	24.	30. 20:18	19. 5: 5	N.A.
23	32.	37.	28.	45. 13:59	23. 6:52	N.A.
24	34.	36.	32.	40. 16:12	29. 6:42	N.A.
25	35.	43.	29.	55. 13:43	23. 22:31	N.A.
26	21.	26.	17.	33. 13:43	6. 23:46	N.A.
27	15.	19.	12.	25. 16:23	2. 1:38	N.A.
28	22.	28.	17.	40. 12:23	11. 5:54	N.A.
MEAN	25.	32.	21.			N.A.
STANDARD DEVIATION	6.4	7.1	6.1			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 2
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG TIME ZONE: EASTERN
ALTITUDE: 500 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	2938.	*
2	1604.	N.A.	N.A.	280.	13: 4	2939.	55.
3	1723.	N.A.	N.A.	271.	12: 0	2927.	59.
4	1746.	N.A.	N.A.	264.	11:55	2927.	60.
5	*	N.A.	N.A.	*	*:*	2926.	*
6	1349.	N.A.	N.A.	261.	12:49	2925.	46.
7	46.	N.A.	N.A.	16.	13: 3	2923.	2.
8	1843.	N.A.	N.A.	268.	11:50	2911.	63.
9	1366.	N.A.	N.A.	261.	11:53	2915.	47.
10	1559.	N.A.	N.A.	268.	12:14	2902.	54.
11	1826.	N.A.	N.A.	268.	12: 9	2899.	63.
12	1329.	N.A.	N.A.	248.	12: 9	2895.	46.
13	1770.	N.A.	N.A.	261.	12: 6	2891.	61.
14	805.	N.A.	N.A.	206.	10:18	2886.	28.
15	*	N.A.	N.A.	*	*:*	2878.	*
16	97.	N.A.	N.A.	26.	12: 5	2872.	3.
17	1985.	N.A.	N.A.	293.	11:44	2857.	69.
18	1769.	N.A.	N.A.	271.	12: 3	2850.	62.
19	1048.	N.A.	N.A.	238.	12:56	2840.	37.
20	1402.	N.A.	N.A.	255.	11:42	2833.	50.
21	509.	N.A.	N.A.	242.	10:54	2825.	18.
22	83.	N.A.	N.A.	23.	12:38	2813.	3.
23	703.	N.A.	N.A.	193.	13:48	2804.	25.
24	218.	N.A.	N.A.	52.	9:48	2794.	8.
25	1603.	N.A.	N.A.	268.	11:56	2781.	58.
26	1608.	N.A.	N.A.	255.	12: 2	2770.	58.
27	463.	N.A.	N.A.	142.	11:40	2756.	17.
28	1241.	N.A.	N.A.	264.	12: 7	2745.	45.
MEAN	1188.	N.A.	N.A.			2865.	
STANDARD DEVIATION	632.	N.A.	N.A.			60.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 2
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 500 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	WIND DIRECTION	TIME HR:MN
1	146.	7.	148.	8.	14.	140.	17:25
2	139.	8.	133.	9.	15.	129.	16:32
3	139.	7.	134.	8.	15.	102.	11:28
4	143.	3.	136.	4.	8.	132.	0:11
5	140.	4.	137.	5.	10.	102.	14:13
6	*	1.	*	1.	4.	*	8:11
7	172.	2.	173.	4.	7.	188.	13:35
8	148.	5.	145.	6.	12.	131.	13:37
9	*	2.	*	3.	6.	*	9:44
10	147.	3.	151.	3.	8.	142.	15:48
11	*	1.	*	2.	7.	*	10:44
12	126.	3.	125.	5.	13.	107.	12:36
13	117.	3.	118.	6.	13.	122.	14:57
14	108.	3.	108.	4.	12.	110.	12: 4
15	145.	2.	146.	5.	9.	152.	15:30
16	146.	2.	192.	2.	13.	119.	23:38
17	117.	6.	116.	9.	14.	119.	12:21
18	70.	2.	76.	4.	9.	72.	14: 5
19	*	1.	*	2.	9.	*	16:40
20	*	0.	*	1.	4.	*	12:25
21	143.	3.	139.	4.	12.	122.	12:41
22	*	1.	*	2.	6.	*	9:58
23	141.	2.	140.	3.	11.	114.	15:30
24	*	1.	*	0.	7.	*	22:58
25	*	2.	*	3.	8.	*	1:22
26	146.	6.	144.	8.	15.	104.	15:24
27	*	1.	*	2.	7.	*	0: 2
28	115.	5.	118.	7.	14.	100.	10:31
MEAN	134.	3.	136.	4.			
STANDARD DEVIATION	21.8	2.1	24.5	2.6			

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 2
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG
TIME ZONE: EASTERN
ALTITUDE: 500 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	0	6	3	0	0	0	0	0	15
2	1	13	10	0	0	0	0	0	0
3	1	16	7	0	0	0	0	0	0
4	17	6	0	0	0	0	0	0	1
5	6	8	0	0	0	0	0	0	10
6	24	0	0	0	0	0	0	0	0
7	17	7	0	0	0	0	0	0	0
8	8	14	1	0	0	0	0	0	1
9	17	2	0	0	0	0	0	0	5
10	16	4	0	0	0	0	0	0	4
11	23	1	0	0	0	0	0	0	0
12	15	7	2	0	0	0	0	0	0
13	14	8	2	0	0	0	0	0	0
14	10	5	0	0	0	0	0	0	9
15	9	3	0	0	0	0	0	0	12
16	18	4	2	0	0	0	0	0	0
17	8	6	10	0	0	0	0	0	0
18	17	7	0	0	0	0	0	0	0
19	20	4	0	0	0	0	0	0	0
20	24	0	0	0	0	0	0	0	0
21	15	8	1	0	0	0	0	0	0
22	24	0	0	0	0	0	0	0	0
23	19	5	0	0	0	0	0	0	0
24	22	2	0	0	0	0	0	0	0
25	20	4	0	0	0	0	0	0	0
26	7	13	4	0	0	0	0	0	0
27	24	0	0	0	0	0	0	0	0
28	9	8	5	0	0	0	0	0	2
AVERAGE	14.5	5.8	1.7	0.0	0.0	0.0	0.0	0.0	2.1
TOTAL	405	161	47	0	0	0	0	0	59

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL #36
NEEDHAM, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 83

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 58 DEG ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	14.	21.	10.	32.	14:20	3.	6:41	63.
2	16.	20.	13.	27.	14:30	9.	7: 5	64.
3	17.	22.	13.	32.	15:34	8.	3:40	64.
4	19.	25.	15.	40.	15: 8	7.	5:48	61.
5	20.	24.	17.	36.	13:41	12.	23:55	67.
6	24.	31.	19.	47.	13:31	6.	5:42	60.
7	27.	27.	27.	29.	16:30	25.	23:48	62.
8	29.	34.	25.	48.	14:49	19.	7:48	66.
9	25.	30.	22.	41.	12:12	16.	5:50	63.
10	26.	33.	21.	45.	14:55	16.	1: 9	57.
11	24.	29.	20.	39.	16:15	12.	6:50	60.
12	27.	31.	24.	40.	14:17	21.	23:47	64.
13	26.	31.	22.	41.	14: 1	15.	6:59	61.
14	30.	35.	27.	41.	15:17	21.	0:11	60.
15	29.	32.	26.	42.	14:52	21.	7: 8	63.
16	25.	27.	23.	30.	11:53	16.	23:48	65.
17	17.	21.	13.	29.	15:21	9.	6:38	66.
18	21.	27.	17.	39.	13:21	8.	6:17	59.
19	33.	40.	26.	51.	15: 7	17.	3:18	62.
20	36.	47.	27.	68.	14:53	18.	6:53	62.
21	38.	44.	32.	58.	15: 6	24.	0:58	62.
22	29.	29.	28.	33.	10:49	23.	6:33	65.
23	34.	38.	31.	44.	12:31	29.	23: 0	67.
24	34.	36.	32.	39.	11:59	28.	6:34	65.
25	34.	40.	30.	58.	14:18	25.	23:22	60.
26	23.	27.	20.	35.	15:49	10.	23:59	63.
27	18.	22.	15.	29.	15: 5	6.	3:27	62.
28	21.	24.	19.	31.	13:23	13.	23:58	61.
MEAN	26.	30.	22.					63.
STANDARD DEVIATION	6.4	7.1	6.3					2.5

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL #36
NEEDHAM, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 83

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 58 DEG TIME ZONE: EASTERN
ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2105.	N.A.	N.A.	332.	11:29	3220.	65.
2	2132.	N.A.	N.A.	335.	11:26	3229.	66.
3	2204.	N.A.	N.A.	332.	11:45	3237.	68.
4	2145.	N.A.	N.A.	329.	11:29	3244.	66.
5	2169.	N.A.	N.A.	332.	11:38	3252.	67.
6	1633.	N.A.	N.A.	332.	11:50	3250.	50.
7	108.	N.A.	N.A.	25.	10:49	3257.	3.
8	2173.	N.A.	N.A.	339.	11:37	3264.	67.
9	1727.	N.A.	N.A.	345.	11:45	3271.	53.
10	2187.	N.A.	N.A.	329.	11:33	3278.	67.
11	1536.	N.A.	N.A.	292.	13: 9	3275.	47.
12	1725.	N.A.	N.A.	313.	11:53	3282.	53.
13	2208.	N.A.	N.A.	335.	11:21	3288.	67.
14	950.	N.A.	N.A.	276.	10:29	3293.	29.
15	1944.	N.A.	N.A.	326.	11:24	3295.	59.
16	118.	N.A.	N.A.	22.	10:34	3301.	4.
17	2480.	N.A.	N.A.	367.	11:26	3306.	75.
18	2374.	N.A.	N.A.	357.	11:29	3302.	72.
19	2154.	N.A.	N.A.	370.	11:29	3307.	65.
20	2078.	N.A.	N.A.	339.	10:53	3307.	63.
21	1066.	N.A.	N.A.	351.	12:15	3311.	32.
22	158.	N.A.	N.A.	50.	10:44	3315.	5.
23	1225.	N.A.	N.A.	317.	12:15	3318.	37.
24	413.	N.A.	N.A.	125.	11:54	3317.	12.
25	1550.	N.A.	N.A.	345.	12:15	3320.	47.
26	1932.	N.A.	N.A.	342.	10:45	3322.	58.
27	854.	N.A.	N.A.	276.	11: 6	3320.	26.
28	1848.	N.A.	N.A.	354.	12: 8	3321.	56.
MEAN	1614.	N.A.	N.A.			3286.	
STANDARD DEVIATION	723.	N.A.	N.A.			31.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL #73
NEEDHAM, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 84

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	19.	28.	13.	36. 12: 6	4. 6:46	55.
2	20.	28.	14.	39. 11:21	10. 6:59	55.
3	21.	31.	14.	38. 11:42	9. 3: 5	57.
4	22.	33.	15.	41. 10:11	4. 6:54	58.
5	23.	32.	18.	40. 11:56	10. 23:55	58.
6	23.	32.	15.	45. 12:16	1. 5:52	56.
7	28.	28.	28.	30. 16:27	26. 0: 0	58.
8	30.	38.	24.	47. 12: 4	18. 23:55	59.
9	22.	34.	17.	42. 13:27	9. 6:25	57.
10	25.	33.	19.	44. 12:24	12. 0:35	57.
11	24.	36.	15.	47. 10: 0	5. 6:43	55.
12	30.	38.	24.	45. 10:56	17. 23:59	56.
13	27.	39.	18.	48. 10:45	8. 6:23	57.
14	32.	41.	26.	51. 11:11	15. 0:15	58.
15	31.	41.	24.	49. 11:17	18. 22:32	56.
16	25.	27.	23.	30. 12: 9	18. 23:53	56.
17	20.	29.	13.	38. 10: 1	7. 23:42	55.
18	24.	34.	16.	43. 10:26	5. 6:38	54.
19	34.	45.	25.	54. 10:26	16. 2:20	57.
20	34.	47.	23.	61. 10:39	14. 6:23	56.
21	37.	44.	32.	58. 12:21	21. 0:31	58.
22	28.	28.	28.	32. 23:24	23. 6: 0	57.
23	37.	45.	30.	54. 10:46	24. 21:42	60.
24	34.	39.	30.	45. 12:22	24. 3: 8	57.
25	34.	43.	27.	54. 11: 8	21. 23:34	57.
26	25.	30.	21.	40. 11: 7	12. 23:43	57.
27	20.	25.	16.	33. 12:15	7. 3:27	56.
28	25.	32.	20.	41. 10:37	13. 23:28	57.
MEAN	27.	35.	21.			57.
STANDARD DEVIATION	5.5	6.3	5.8			1.4

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL #73
NEEDHAM, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 84

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1877.	N.A.	N.A.	320.	11:50	3065.	61.
2	2015.	N.A.	N.A.	326.	11:58	3077.	65.
3	2075.	N.A.	N.A.	323.	11:53	3088.	67.
4	2030.	N.A.	N.A.	317.	11:58	3099.	66.
5	2100.	N.A.	N.A.	320.	11:45	3110.	68.
6	1524.	N.A.	N.A.	320.	11:50	3112.	49.
7	100.	N.A.	N.A.	27.	10:45	3124.	3.
8	2245.	N.A.	N.A.	329.	11:59	3134.	72.
9	*	N.A.	N.A.	*	*:*	3145.	*
10	2014.	N.A.	N.A.	317.	12:46	3156.	64.
11	1453.	N.A.	N.A.	287.	13: 7	3158.	46.
12	1619.	N.A.	N.A.	311.	12:53	3169.	51.
13	2079.	N.A.	N.A.	323.	11:33	3179.	65.
14	884.	N.A.	N.A.	262.	11:11	3190.	28.
15	1813.	N.A.	N.A.	314.	12:32	3196.	57.
16	48.	N.A.	N.A.	18.	11:42	3206.	1.
17	2248.	N.A.	N.A.	341.	11:58	3216.	70.
18	2180.	N.A.	N.A.	335.	11:51	3218.	68.
19	1977.	N.A.	N.A.	344.	11:14	3228.	61.
20	1886.	N.A.	N.A.	317.	11: 6	3233.	58.
21	1020.	N.A.	N.A.	326.	12:21	3243.	31.
22	98.	N.A.	N.A.	45.	10:42	3251.	3.
23	1098.	N.A.	N.A.	290.	10:46	3260.	34.
24	381.	N.A.	N.A.	103.	11:56	3265.	12.
25	1472.	N.A.	N.A.	341.	12:17	3273.	45.
26	1791.	N.A.	N.A.	335.	11:50	3281.	55.
27	880.	N.A.	N.A.	256.	11: 5	3285.	27.
28	1576.	N.A.	N.A.	329.	10:37	3293.	48.
MEAN	1499.	N.A.	N.A.			3188.	
STANDARD DEVIATION	696.	N.A.	N.A.			69.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL #77
NEEDHAM, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 85

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 38 DEG
TIME ZONE: EASTERN
ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	16.	22.	12.	31.	15:25	4.	6:47	50.
2	17.	22.	14.	29.	13:47	11.	7: 8	51.
3	18.	23.	15.	32.	14:56	10.	3: 7	51.
4	20.	25.	16.	40.	15:18	3.	6:35	52.
5	21.	25.	18.	36.	15: 4	10.	23:55	50.
6	21.	30.	15.	47.	13:15	0.	6: 8	69.
7	28.	28.	27.	29.	16:25	25.	0: 3	53.
8	29.	34.	26.	46.	14:23	21.	7:43	51.
9	23.	31.	19.	43.	11:36	10.	6:33	61.
10	25.	32.	20.	46.	14:53	12.	0:18	62.
11	22.	29.	17.	39.	13:17	4.	6:53	51.
12	28.	32.	26.	42.	14:23	17.	7:27	52.
13	26.	32.	20.	43.	14: 5	8.	7:14	52.
14	31.	36.	27.	42.	15:17	18.	0:16	52.
15	29.	34.	26.	43.	13:22	19.	23:16	53.
16	25.	27.	23.	30.	11:49	18.	23:59	51.
17	18.	22.	14.	30.	15:22	9.	23:49	47.
18	22.	28.	18.	39.	15:10	6.	6:39	49.
19	33.	41.	27.	52.	15:37	17.	6:54	69.
20	33.	47.	23.	71.	14:18	13.	6:40	68.
21	37.	45.	30.	58.	15: 6	20.	0:26	66.
22	29.	29.	28.	34.	10:53	23.	5:23	52.
23	35.	40.	31.	46.	13:21	26.	21:26	53.
24	34.	37.	32.	41.	14:14	26.	3:24	51.
25	35.	41.	29.	60.	13:37	22.	23:16	53.
26	24.	27.	22.	31.	11:11	11.	23:44	69.
27	18.	22.	15.	28.	12:53	7.	4:37	70.
28	23.	26.	20.	32.	13:27	15.	23:34	55.
MEAN	26.	31.	22.					56.
STANDARD DEVIATION	6.2	7.1	6.0					7.4

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL #77
NEEDHAM, MASSACHUSETTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 85

LATITUDE: 42.00 DEG NORTH
LONGITUDE: 71.00 DEG WEST

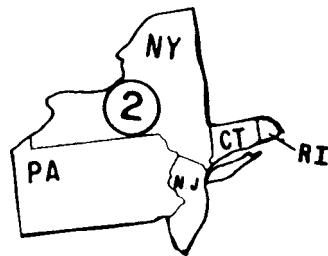
AZIMUTH: 0 DEG
PYRANOMETER TILT: 38 DEG

TIME ZONE: EASTERN
ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1762.	N.A.	N.A.	295.	11:51	2916.	60.
2	1792.	N.A.	N.A.	298.	11:35	2929.	61.
3	1855.	N.A.	N.A.	295.	11:34	2942.	63.
4	1812.	N.A.	N.A.	292.	11:28	2954.	61.
5	1836.	N.A.	N.A.	295.	11:25	2967.	62.
6	1416.	N.A.	N.A.	301.	11:50	2972.	48.
7	63.	N.A.	N.A.	24.	10:49	2984.	2.
8	1860.	N.A.	N.A.	304.	11:27	2997.	62.
9	1729.	N.A.	N.A.	310.	11:36	3010.	57.
10	1866.	N.A.	N.A.	298.	11:25	3023.	62.
11	1341.	N.A.	N.A.	264.	9:54	3028.	44.
12	1561.	N.A.	N.A.	289.	12: 4	3040.	51.
13	1952.	N.A.	N.A.	310.	11:30	3053.	64.
14	884.	N.A.	N.A.	261.	11:12	3065.	29.
15	1730.	N.A.	N.A.	301.	11:25	3074.	56.
16	56.	N.A.	N.A.	18.	11:27	3087.	2.
17	2542.	N.A.	N.A.	386.	11:33	3099.	82.
18	1989.	N.A.	N.A.	322.	11:16	3104.	64.
19	1914.	N.A.	N.A.	343.	10:22	3116.	61.
20	1815.	N.A.	N.A.	313.	11: 6	3125.	58.
21	939.	N.A.	N.A.	313.	12:16	3136.	30.
22	111.	N.A.	N.A.	52.	10:43	3148.	4.
23	1120.	N.A.	N.A.	319.	10:46	3159.	35.
24	405.	N.A.	N.A.	109.	11:56	3167.	13.
25	1427.	N.A.	N.A.	325.	12:17	3178.	45.
26	1727.	N.A.	N.A.	322.	10:49	3189.	54.
27	877.	N.A.	N.A.	277.	11: 6	3197.	27.
28	1721.	N.A.	N.A.	343.	12:13	3207.	54.
MEAN	1432.	N.A.	N.A.			3067.	
STANDARD DEVIATION	643.	N.A.	N.A.			88.	

ZONE 2



ENVIRONMENTAL SUMMARY REPORT

SITE: BELL OF PENNSYLVANIA
WEST CHESTER, PENNSYLVANIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 20

LATITUDE: 39.90 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 75.70 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 5 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	17.	19.	16.	23. 15:46	12. 3:35	N.A.
2	19.	20.	18.	25. 16:45	12. 7:34	N.A.
3	21.	23.	20.	29. 15:57	14. 7: 4	N.A.
4	26.	27.	24.	32. 15: 4	19. 5: 1	N.A.
5	26.	26.	26.	33. 16:14	18. 7: 5	N.A.
6	26.	27.	26.	30. 14:52	21. 7: 2	N.A.
7	30.	32.	29.	37. 14:42	26. 1:17	N.A.
8	31.	32.	31.	38. 15:36	24. 6:54	N.A.
9	29.	29.	29.	34. 14: 9	23. 7:52	N.A.
10	25.	*	25.	27. 0: 1	22. 5:53	N.A.
11	34.	36.	34.	36. 17: 5	33. 23:40	N.A.
12	29.	29.	29.	33. 15:24	24. 7:46	N.A.
13	30.	31.	29.	37. 16:46	22. 7:26	N.A.
14	36.	39.	34.	47. 14:57	25. 7: 3	N.A.
15	36.	37.	36.	41. 14:10	33. 6:21	N.A.
16	34.	37.	31.	39. 9:11	25. 23:46	N.A.
17	23.	23.	22.	25. 14:42	19. 23:51	N.A.
18	26.	28.	25.	36. 17: 1	18. 7:19	N.A.
19	36.	39.	33.	48. 16:29	27. 6:21	N.A.
20	41.	45.	38.	53. 14:18	28. 6:23	N.A.
21	47.	51.	43.	56. 15: 5	39. 5:39	N.A.
22	41.	42.	40.	42. 9:13	38. 22: 0	N.A.
23	44.	46.	43.	51. 13:21	36. 6:32	N.A.
24	45.	46.	44.	50. 15:40	40. 23:34	N.A.
25	40.	42.	39.	46. 15:40	34. 23:52	N.A.
26	28.	28.	28.	34. 0:24	23. 22:54	N.A.
27	30.	32.	28.	36. 13:13	24. 0: 4	N.A.
28	25.	26.	24.	27. 13:17	19. 23:57	N.A.
MEAN	31.	33.	30.			N.A.
STANDARD DEVIATION	7.9	8.6	7.5			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: BELL OF PENNSYLVANIA
WEST CHESTER, PENNSYLVANIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 20

LATITUDE: 39.90 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 75.70 DEG WEST PYRANOMETER TILT: 55 DEG
TIME ZONE: EASTERN
ALTITUDE: 5 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1789.	N.A.	N.A.	284.	13:59	3255.	55.
2	2137.	N.A.	N.A.	330.	11:55	3253.	66.
3	2105.	N.A.	N.A.	327.	11:57	3260.	65.
4	1958.	N.A.	N.A.	330.	11:57	3267.	60.
5	2093.	N.A.	N.A.	320.	11:37	3274.	64.
6	224.	N.A.	N.A.	103.	8:17	3275.	7.
7	1162.	N.A.	N.A.	275.	13:22	3282.	35.
8	2064.	N.A.	N.A.	327.	11:58	3289.	63.
9	644.	N.A.	N.A.	242.	12:54	3295.	20.
10	*	N.A.	N.A.	*	*:*	3292.	*
11	*	N.A.	N.A.	*	*:*	3298.	*
12	2064.	N.A.	N.A.	320.	12:18	3303.	62.
13	2010.	N.A.	N.A.	305.	12:30	3309.	61.
14	1266.	N.A.	N.A.	287.	12:12	3314.	38.
15	979.	N.A.	N.A.	305.	12:13	3310.	30.
16	137.	N.A.	N.A.	97.	14:47	3315.	4.
17	1705.	N.A.	N.A.	357.	13: 6	3320.	51.
18	2032.	N.A.	N.A.	336.	12: 2	3324.	61.
19	1417.	N.A.	N.A.	281.	11:14	3327.	43.
20	1556.	N.A.	N.A.	314.	11:27	3323.	47.
21	1563.	N.A.	N.A.	305.	11:42	3327.	47.
22	40.	N.A.	N.A.	12.	11: 0	3330.	1.
23	907.	N.A.	N.A.	317.	12:17	3332.	27.
24	589.	N.A.	N.A.	190.	15: 2	3335.	18.
25	869.	N.A.	N.A.	333.	12:33	3330.	26.
26	2202.	N.A.	N.A.	333.	12: 2	3331.	66.
27	742.	N.A.	N.A.	327.	12:30	3329.	22.
28	366.	N.A.	N.A.	106.	13: 7	3331.	11.
MEAN	1332.	N.A.	N.A.			3305.	
STANDARD DEVIATION	711.	N.A.	N.A.			26.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HAMDEN APARTMENTS
HAMDEN, CONNECTICUT

REPORT PERIOD: 80/ 2
SITE NUMBER: 124

LATITUDE: 40.23 DEG NORTH
LONGITUDE: 72.54 DEG WEST

AZIMUTH: 7 DEG
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN
ALTITUDE: 60 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	15.	20.	12.	28.	13:22	8.	3:30	58.
2	18.	21.	16.	29.	14:35	12.	7:17	57.
3	22.	27.	18.	34.	14:46	13.	0:11	59.
4	20.	26.	15.	34.	12:54	5.	7: 2	59.
5	21.	27.	17.	36.	14:14	12.	7: 2	58.
6	24.	27.	22.	36.	12:50	12.	6:58	62.
7	31.	32.	30.	35.	15:21	27.	3:21	59.
8	31.	35.	28.	42.	14:20	21.	7:18	60.
9	28.	32.	24.	40.	12:49	18.	3: 3	60.
10	27.	32.	24.	39.	14:15	18.	6:57	62.
11	26.	31.	22.	38.	11:20	9.	6: 4	61.
12	30.	33.	27.	41.	12:45	17.	23:58	63.
13	25.	35.	19.	43.	12:14	11.	6:27	62.
14	34.	40.	30.	48.	13:36	17.	0:11	59.
15	32.	35.	30.	42.	14: 6	24.	0:18	60.
16	28.	29.	27.	32.	0:37	20.	23:57	64.
17	19.	24.	14.	32.	15:14	7.	23:46	58.
18	22.	26.	19.	34.	15:41	8.	0: 2	62.
19	30.	38.	23.	48.	14:42	12.	5:33	63.
20	32.	41.	24.	53.	12:25	17.	5:18	63.
21	39.	46.	34.	58.	13:34	25.	5:44	62.
22	33.	31.	34.	40.	0:13	28.	8:45	60.
23	39.	43.	36.	50.	14: 1	32.	0:18	62.
24	37.	41.	33.	47.	16:41	29.	23:10	61.
25	35.	40.	30.	46.	15:47	26.	23: 9	62.
26	26.	29.	24.	33.	2:58	13.	23:57	60.
27	24.	26.	22.	31.	16: 8	12.	0:50	58.
28	25.	27.	23.	30.	9:56	17.	23:59	60.
MEAN	28.	32.	24.					61.
STANDARD DEVIATION	6.3	6.8	6.4					1.9

ENVIRONMENTAL SUMMARY REPORT

SITE: HAMDEN APARTMENTS
HAMDEN, CONNECTICUT

REPORT PERIOD: 80/ 2
SITE NUMBER: 124

LATITUDE: 40.23 DEG NORTH
LONGITUDE: 72.54 DEG WEST

AZIMUTH: 7 DEG
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN
ALTITUDE: 60 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1741.	N.A.	N.A.	300.	12:18	3015.	58.
2	1814.	N.A.	N.A.	332.	11:49	3026.	60.
3	1830.	N.A.	N.A.	298.	11:55	3037.	60.
4	1824.	N.A.	N.A.	295.	12:11	3047.	60.
5	1886.	N.A.	N.A.	300.	12: 0	3055.	62.
6	1113.	N.A.	N.A.	295.	12:50	3065.	36.
7	290.	N.A.	N.A.	68.	14:11	3076.	9.
8	1874.	N.A.	N.A.	309.	12:17	3081.	61.
9	1284.	N.A.	N.A.	289.	12:44	3091.	42.
10	1932.	N.A.	N.A.	303.	13: 5	3102.	62.
11	1453.	N.A.	N.A.	312.	12:30	3112.	47.
12	1415.	N.A.	N.A.	292.	12:35	3123.	45.
13	1891.	N.A.	N.A.	303.	12: 3	3127.	60.
14	1049.	N.A.	N.A.	286.	12:32	3138.	33.
15	1280.	N.A.	N.A.	258.	11: 4	3148.	41.
16	75.	N.A.	N.A.	20.	12:56	3158.	2.
17	1956.	N.A.	N.A.	400.	12: 8	3168.	62.
18	1968.	N.A.	N.A.	320.	11:57	3172.	62.
19	1869.	N.A.	N.A.	289.	12:34	3182.	59.
20	1506.	N.A.	N.A.	286.	12:25	3192.	47.
21	1277.	N.A.	N.A.	309.	11:42	3201.	40.
22	64.	N.A.	N.A.	26.	13:22	3210.	2.
23	1080.	N.A.	N.A.	300.	13:45	3214.	34.
24	479.	N.A.	N.A.	218.	12:25	3223.	15.
25	930.	N.A.	N.A.	329.	12:41	3229.	29.
26	1946.	N.A.	N.A.	317.	12:18	3238.	60.
27	534.	N.A.	N.A.	142.	9:54	3246.	16.
28	872.	N.A.	N.A.	232.	9:56	3254.	27.
MEAN	1330.	N.A.	N.A.			3140.	
STANDARD DEVIATION	605.	N.A.	N.A.			73.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LUTZ-SOTIRE
STAMFORD, CONNECTICUT

REPORT PERIOD: 80/ 2
SITE NUMBER: 127

LATITUDE: 41.10 DEG NORTH
LONGITUDE: 73.08 DEG WEST

AZIMUTH: 5 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN
ALTITUDE: 7 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	14.	18.	11.	26.	15: 4	6.	6:42	N.A.
2	17.	21.	14.	27.	15:40	12.	6:21	N.A.
3	20.	25.	17.	32.	14:41	12.	0:17	N.A.
4	19.	24.	15.	32.	15:35	5.	6:20	N.A.
5	21.	26.	17.	34.	14:42	12.	7: 8	N.A.
6	21.	24.	19.	31.	12: 4	8.	5:56	N.A.
7	29.	29.	29.	32.	16: 6	26.	4:11	N.A.
8	29.	33.	26.	40.	14:39	19.	7:11	N.A.
9	26.	31.	23.	39.	14:16	12.	6:39	N.A.
10	25.	29.	21.	35.	14:22	14.	23:26	N.A.
11	24.	30.	19.	38.	14:54	9.	5:44	N.A.
12	28.	31.	26.	37.	12:56	18.	6:27	N.A.
13	27.	33.	23.	39.	16:17	16.	7: 3	N.A.
14	32.	39.	26.	47.	15: 3	17.	1:27	N.A.
15	31.	33.	29.	41.	14:40	26.	6:45	N.A.
16	27.	31.	25.	35.	12:50	17.	23:51	N.A.
17	19.	22.	16.	27.	15:24	13.	2:52	N.A.
18	20.	25.	18.	33.	15: 1	11.	5:39	N.A.
19	25.	27.	25.	39.	17:14	11.	5:51	N.A.
20	32.	41.	25.	50.	14: 4	16.	6:41	N.A.
21	39.	47.	33.	56.	14:47	27.	5:11	N.A.
22	32.	30.	33.	36.	2:35	28.	8: 6	N.A.
23	39.	43.	36.	50.	14: 9	32.	1:10	N.A.
24	38.	41.	36.	49.	11:56	32.	4:38	N.A.
25	34.	38.	31.	47.	13:26	26.	23:59	N.A.
26	24.	27.	22.	30.	3:22	12.	23:29	N.A.
27	23.	26.	20.	32.	16:12	12.	0: 7	N.A.
28	23.	25.	21.	29.	14:12	17.	23:55	N.A.
MEAN	26.	30.	24.					N.A.
STANDARD DEVIATION	6.6	7.0	6.6					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: LUTZ-SOTIRE
STAMFORD, CONNECTICUT

REPORT PERIOD: 80/ 2
SITE NUMBER: 127

LATITUDE: 41.10 DEG NORTH AZIMUTH: 5 DEG TIME ZONE: EASTERN
LONGITUDE: 73.08 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 7 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1948.	987.	962.	336.	12:29	3217.	61.
2	2105.	987.	1118.	327.	12:29	3225.	65.
3	2066.	935.	1131.	321.	12:17	3232.	64.
4	1925.	777.	1148.	321.	12:28	3235.	60.
5	2073.	879.	1195.	324.	12:34	3243.	64.
6	1205.	209.	995.	312.	12: 9	3250.	37.
7	231.	182.	49.	74.	10:40	3249.	7.
8	2049.	746.	1302.	330.	12:31	3256.	63.
9	1359.	465.	894.	315.	11:43	3263.	42.
10	2124.	806.	1318.	327.	12:35	3270.	65.
11	1682.	672.	1010.	324.	12:30	3276.	51.
12	1750.	662.	1088.	330.	12:35	3275.	53.
13	2015.	700.	1315.	321.	12:49	3282.	61.
14	1242.	702.	540.	286.	11:35	3287.	38.
15	1234.	410.	824.	286.	14: 2	3293.	37.
16	65.	45.	20.	68.	16:28	3298.	2.
17	2146.	645.	1501.	351.	12:34	3297.	65.
18	2057.	594.	1462.	330.	12:31	3305.	62.
19	*	*	*	*	*:*	3304.	*
20	1515.	699.	816.	306.	13:48	3308.	46.
21	1343.	228.	1114.	309.	13: 6	3312.	41.
22	32.	27.	5.	27.	12:33	3316.	1.
23	1192.	675.	516.	357.	12:22	3319.	36.
24	463.	281.	182.	280.	11:50	3319.	14.
25	998.	501.	496.	327.	13:21	3322.	30.
26	2008.	628.	1380.	336.	12:26	3319.	61.
27	374.	289.	84.	124.	14:36	3321.	11.
28	731.	555.	176.	194.	10:33	3320.	22.
MEAN	1405.	566.	839.			3283.	
STANDARD DEVIATION	695.	275.	486.			33.	

ENVIRONMENTAL SUMMARY REPORT

SITE: M. F. SMITH
JAMESTOWN, RHODE ISLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 160

LATITUDE: 41.44 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.26 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 110 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	18.	22.	15.	31.	14:19	9.	4:49	59.
2	18.	22.	15.	28.	14:17	12.	5: 9	53.
3	20.	25.	17.	31.	14:22	12.	4:46	61.
4	21.	24.	19.	30.	13: 7	12.	7:26	52.
5	23.	26.	20.	32.	14:41	17.	4:54	60.
6	25.	29.	22.	37.	12:42	14.	4:10	56.
7	29.	29.	29.	34.	8:53	26.	16:53	51.
8	29.	33.	27.	40.	14:28	22.	7: 5	60.
9	27.	31.	25.	38.	12:50	20.	6:40	55.
10	27.	31.	24.	37.	14:48	18.	6:59	47.
11	26.	29.	24.	33.	12:14	18.	5:28	56.
12	31.	34.	28.	39.	13:37	24.	23:52	58.
13	29.	33.	25.	39.	13:44	22.	6:32	55.
14	33.	38.	29.	43.	13:53	21.	0: 6	65.
15	31.	34.	29.	42.	13:37	25.	7:19	67.
16	31.	35.	28.	42.	14:57	22.	23:56	56.
17	20.	23.	18.	27.	13:43	15.	6:36	50.
18	24.	27.	21.	31.	13: 9	15.	4: 1	56.
19	34.	39.	30.	43.	13:52	24.	2:40	68.
20	35.	41.	30.	49.	12:20	25.	6:34	58.
21	39.	45.	35.	55.	14:40	27.	2:18	61.
22	32.	31.	32.	36.	21:45	28.	4: 7	58.
23	37.	42.	33.	47.	13:21	30.	21:21	58.
24	36.	38.	34.	43.	14: 9	31.	0: 1	54.
25	34.	36.	32.	41.	12:55	26.	6: 5	63.
26	27.	30.	25.	34.	12:52	14.	23:59	68.
27	21.	24.	18.	29.	15:11	10.	4:47	68.
28	25.	27.	24.	30.	14:58	20.	23:59	51.
MEAN	28.	31.	25.					58.
STANDARD DEVIATION	6.0	6.3	5.8					5.7

ENVIRONMENTAL SUMMARY REPORT

SITE: M. F. SMITH
JAMESTOWN, RHODE ISLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 160

LATITUDE: 41.44 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 71.26 DEG WEST PYRANOMETER TILT: 45 DEG TIME ZONE: EASTERN
ALTITUDE: 110 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1882.	N.A.	N.A.	320.	12:11	3091.	61.
2	2053.	N.A.	N.A.	322.	12:16	3096.	66.
3	2041.	N.A.	N.A.	320.	12: 9	3107.	66.
4	1972.	N.A.	N.A.	320.	12:14	3118.	63.
5	1818.	N.A.	N.A.	320.	12: 1	3120.	58.
6	1648.	N.A.	N.A.	320.	12:42	3130.	53.
7	140.	N.A.	N.A.	37.	12:27	3141.	4.
8	2114.	N.A.	N.A.	334.	11:58	3152.	67.
9	1552.	N.A.	N.A.	325.	11:55	3162.	49.
10	1670.	N.A.	N.A.	305.	11:41	3164.	53.
11	1206.	N.A.	N.A.	277.	11:26	3174.	38.
12	1704.	N.A.	N.A.	305.	11:50	3184.	54.
13	2061.	N.A.	N.A.	322.	12:13	3194.	65.
14	1519.	N.A.	N.A.	300.	11:45	3204.	47.
15	1923.	N.A.	N.A.	320.	12:23	3206.	60.
16	72.	N.A.	N.A.	17.	13: 5	3216.	2.
17	2293.	N.A.	N.A.	348.	12:17	3222.	71.
18	2135.	N.A.	N.A.	337.	12: 5	3231.	66.
19	2048.	N.A.	N.A.	334.	12:21	3240.	63.
20	1817.	N.A.	N.A.	305.	12: 4	3249.	56.
21	894.	N.A.	N.A.	291.	14: 2	3257.	27.
22	120.	N.A.	N.A.	48.	10:15	3259.	4.
23	1335.	N.A.	N.A.	351.	12:49	3270.	41.
24	768.	N.A.	N.A.	269.	14: 9	3271.	23.
25	514.	N.A.	N.A.	190.	12:50	3279.	16.
26	1941.	N.A.	N.A.	337.	12:20	3287.	59.
27	909.	N.A.	N.A.	286.	10:23	3291.	28.
28	1790.	N.A.	N.A.	317.	11:36	3298.	54.
MEAN	1498.	N.A.	N.A.			3200.	
STANDARD DEVIATION	663.	N.A.	N.A.			65.	

ENVIRONMENTAL SUMMARY REPORT

SITE: STEWART-TEELE-MITCHELL
MALTA, NEW YORK

REPORT PERIOD: 80/ 2
SITE NUMBER: 62

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 74.00 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 277 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	9.	12.	7.	22.	13:36	-1.	5: 4	63.
2	11.	13.	9.	21.	13: 0	3.	7:26	60.
3	13.	17.	10.	22.	12:44	3.	23:56	62.
4	13.	17.	9.	24.	13:22	-0.	2:47	59.
5	13.	18.	9.	25.	14:16	4.	23:12	63.
6	14.	18.	11.	31.	14:19	-2.	5:52	61.
7	21.	25.	19.	32.	12:59	11.	23:46	60.
8	19.	24.	15.	37.	14:20	5.	7:40	62.
9	19.	23.	16.	29.	15: 9	6.	7:10	59.
10	18.	23.	14.	31.	14: 0	6.	7: 4	58.
11	20.	26.	16.	34.	12:29	6.	0:18	62.
12	23.	28.	19.	37.	13:37	-18.	13:32	62.
13	21.	26.	17.	36.	12:35	11.	6:59	61.
14	26.	28.	24.	34.	15:59	18.	2:44	60.
15	24.	32.	20.	32.	13: 4	19.	20:53	62.
16	19.	19.	18.	23.	16:11	17.	6:19	59.
17	10.	17.	6.	26.	14:19	-4.	4:21	60.
18	16.	22.	11.	30.	14:40	3.	23:49	62.
19	22.	29.	16.	49.	14:29	-0.	5:52	63.
20	29.	32.	26.	53.	14:27	15.	4:40	59.
21	38.	43.	33.	49.	14:42	23.	23:54	63.
22	21.	20.	22.	27.	23:33	18.	5: 9	63.
23	32.	35.	30.	38.	13:19	26.	0: 5	63.
24	32.	34.	31.	39.	13:51	28.	2:28	62.
25	30.	34.	26.	42.	14:49	18.	7: 0	64.
26	16.	19.	14.	26.	14: 0	3.	22: 4	64.
27	17.	20.	14.	26.	14:15	2.	1:11	64.
28	15.	20.	11.	25.	13:19	-1.	23:37	63.
MEAN	20.	24.	17.					62.
STANDARD DEVIATION	7.3	7.4	7.4					1.6

ENVIRONMENTAL SUMMARY REPORT

SITE: STEWART-TEELE-MITCHELL
MALTA, NEW YORK

REPORT PERIOD: 80/ 2
SITE NUMBER: 62

LATITUDE: 43.00 DEG NORTH
LONGITUDE: 74.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN
ALTITUDE: 277 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1030.	N.A.	N.A.	336.	11:55	3038.	34.
2	1632.	N.A.	N.A.	330.	13: 0	3049.	54.
3	1114.	N.A.	N.A.	373.	12:18	3052.	36.
4	1853.	N.A.	N.A.	308.	11:51	3064.	60.
5	1296.	N.A.	N.A.	345.	12:40	3076.	42.
6	1459.	N.A.	N.A.	311.	12:16	3088.	47.
7	1038.	N.A.	N.A.	308.	12:27	3099.	33.
8	1950.	N.A.	N.A.	314.	12:23	3102.	63.
9	1245.	N.A.	N.A.	289.	11: 0	3119.	40.
10	1933.	N.A.	N.A.	314.	11:20	3122.	62.
11	1360.	N.A.	N.A.	339.	12:29	3133.	43.
12	893.	N.A.	N.A.	299.	12:28	3145.	28.
13	1542.	N.A.	N.A.	327.	12:25	3156.	49.
14	*	N.A.	N.A.	*	*:*	3167.	*
15	*	N.A.	N.A.	*	*:*	3174.	*
16	*	N.A.	N.A.	*	*:*	3185.	*
17	1379.	N.A.	N.A.	364.	11:55	3188.	43.
18	1912.	N.A.	N.A.	333.	11:55	3198.	60.
19	2125.	N.A.	N.A.	323.	12:53	3205.	66.
20	*	N.A.	N.A.	*	*:*	3215.	*
21	461.	N.A.	N.A.	249.	14:42	3225.	14.
22	*	N.A.	N.A.	*	*:*	3231.	*
23	788.	N.A.	N.A.	311.	13:19	3241.	24.
24	269.	N.A.	N.A.	174.	13:51	3250.	8.
25	1649.	N.A.	N.A.	355.	12:57	3256.	51.
26	1712.	N.A.	N.A.	358.	12:56	3264.	52.
27	614.	N.A.	N.A.	159.	12: 7	3270.	19.
28	2233.	N.A.	N.A.	355.	11: 6	3278.	68.
MEAN	1369.	N.A.	N.A.			3164.	
STANDARD DEVIATION	535.	N.A.	N.A.			74.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SUMMERWOOD
OLD SAYBROOK, CONNECTICUT

REPORT PERIOD: 80/ 2
SITE NUMBER: 226

LATITUDE: 41.00 DEG NORTH AZIMUTH: 12 DEG TIME ZONE: EASTERN
LONGITUDE: 73.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 100 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	15.	20.	12.	26. 12:57	7. 4:36	49.
2	18.	22.	15.	26. 12:24	11. 7: 9	49.
3	21.	27.	16.	33. 12: 4	9. 6: 2	51.
4	21.	28.	16.	35. 11:11	6. 7: 6	53.
5	21.	26.	18.	33. 12:47	14. 6:50	53.
6	24.	28.	22.	38. 11:17	12. 6:50	53.
7	30.	31.	30.	33. 11: 0	28. 1:13	52.
8	31.	35.	27.	40. 12:20	22. 7: 0	52.
9	27.	34.	22.	44. 11:32	13. 6:23	53.
10	27.	31.	23.	36. 12:47	19. 23:37	54.
11	27.	34.	22.	44. 11: 0	10. 6:44	53.
12	30.	35.	26.	42. 10:11	20. 23:18	54.
13	27.	36.	20.	46. 11:13	15. 2:30	54.
14	32.	40.	26.	46. 11:54	16. 1: 9	55.
15	31.	34.	28.	41. 11:32	23. 0:47	54.
16	30.	34.	26.	40. 12:56	20. 23:57	*
17	20.	26.	16.	32. 12:24	10. 6:43	50.
18	24.	29.	20.	35. 11: 4	10. 6:43	54.
19	33.	42.	26.	50. 12:34	19. 5:27	54.
20	27.	36.	23.	43. 12:54	20. 3:15	55.
21	27.	33.	24.	40. 8:55	23. 2:34	57.
22	33.	*	33.	34. 22:27	33. 21:12	51.
23	40.	46.	35.	54. 10:43	33. 21: 5	52.
24	36.	40.	32.	48. 13:16	29. 21:11	51.
25	34.	37.	31.	43. 13: 5	27. 5:27	50.
26	26.	29.	24.	35. 9:51	12. 23: 7	48.
27	24.	29.	20.	35. 11: 7	10. 4:53	49.
28	26.	29.	22.	34. 11:30	18. 23:59	48.
MEAN	27.	32.	23.			52.
STANDARD DEVIATION	5.7	6.0	5.9			2.3

ENVIRONMENTAL SUMMARY REPORT

SITE: SUMMERWOOD
OLD SAYBROOK, CONNECTICUT

REPORT PERIOD: 80/ 2
SITE NUMBER: 226

LATITUDE: 41.00 DEG NORTH AZIMUTH: 12 DEG TIME ZONE: EASTERN
LONGITUDE: 73.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 100 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1811.	N.A.	N.A.	320.	12:36	3130.	58.
2	1989.	N.A.	N.A.	320.	12:18	3138.	63.
3	1953.	N.A.	N.A.	317.	12:26	3147.	62.
4	1916.	N.A.	N.A.	317.	12:26	3150.	61.
5	1957.	N.A.	N.A.	317.	12:42	3158.	62.
6	1420.	N.A.	N.A.	313.	12:16	3167.	45.
7	133.	N.A.	N.A.	37.	13:56	3172.	4.
8	1946.	N.A.	N.A.	320.	12:14	3180.	61.
9	1321.	N.A.	N.A.	301.	11:22	3188.	41.
10	1951.	N.A.	N.A.	310.	12:25	3196.	61.
11	1524.	N.A.	N.A.	289.	11:59	3204.	48.
12	1271.	N.A.	N.A.	317.	12:51	3206.	40.
13	1948.	N.A.	N.A.	313.	12:17	3214.	61.
14	1247.	N.A.	N.A.	298.	12:15	3221.	39.
15	1519.	N.A.	N.A.	307.	11:48	3226.	47.
16	19.	N.A.	N.A.	19.	14:27	3233.	1.
17	1850.	N.A.	N.A.	341.	12:19	3240.	57.
18	2116.	N.A.	N.A.	329.	12:24	3246.	65.
19	1856.	N.A.	N.A.	301.	11:30	3248.	57.
20	1308.	N.A.	N.A.	317.	13:36	3254.	40.
21	*	N.A.	N.A.	*	*:*	3260.	*
22	*	N.A.	N.A.	*	*:*	3265.	*
23	1432.	N.A.	N.A.	348.	12:53	3269.	44.
24	485.	N.A.	N.A.	248.	12:49	3274.	15.
25	585.	N.A.	N.A.	140.	13: 0	3278.	18.
26	2039.	N.A.	N.A.	332.	12:41	3280.	62.
27	600.	N.A.	N.A.	174.	11: 1	3284.	18.
28	993.	N.A.	N.A.	223.	10:37	3286.	30.
MEAN	1430.	N.A.	N.A.			3218.	
STANDARD DEVIATION	617.	N.A.	N.A.			49.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SUNTECH
CHESTER, NEW YORK

REPORT PERIOD: 80/ 2
SITE NUMBER: 71

LATITUDE: 41.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 74.00 DEG WEST PYRANOMETER TILT: 60 DEG
TIME ZONE: EASTERN
ALTITUDE: 400 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	13.	17.	10.	24. 12:59	6. 3:50	49.
2	15.	19.	13.	25. 13:37	9. 6:58	45.
3	18.	24.	15.	30. 13:58	11. 0: 1	46.
4	20.	25.	16.	32. 13:16	9. 7: 8	46.
5	20.	27.	13.	34. 14:32	10. 6: 0	47.
6	19.	24.	16.	32. 12:31	4. 5:56	46.
7	28.	31.	23.	36. 15:11	21. 2:55	49.
8	25.	*	25.	27. 21:32	22. 23:50	48.
9	26.	33.	21.	44. 13:26	11. 6:52	45.
10	24.	30.	19.	38. 15:18	8. 7: 7	47.
11	28.	34.	23.	41. 14:19	14. 5:31	48.
12	27.	31.	22.	36. 11:49	17. 23: 2	48.
13	26.	33.	21.	40. 13:53	16. 0:44	47.
14	32.	39.	24.	52. 12:36	16. 6:39	46.
15	30.	33.	28.	42. 14:12	21. 6:12	48.
16	24.	27.	23.	33. 14:33	15. 23:53	46.
17	16.	22.	10.	27. 13: 8	2. 23:26	45.
18	17.	24.	14.	40. 14:32	3. 4: 4	46.
19	30.	44.	19.	58. 12:16	5. 3:50	51.
20	33.	45.	24.	61. 15: 0	10. 6:34	49.
21	40.	49.	31.	58. 10:50	28. 23:19	48.
22	31.	32.	30.	35. 14:36	28. 1:59	46.
23	38.	42.	35.	47. 12:56	32. 0: 2	45.
24	39.	44.	35.	52. 13:28	32. 5:49	45.
25	37.	40.	31.	47. 15: 4	27. 6:16	49.
26	26.	25.	28.	30. 2: 2	18. 17:19	49.
27	23.	*	23.	27. 20:43	21. 23:50	45.
28	22.	26.	18.	32. 14:56	12. 23:59	46.
MEAN	26.	32.	22.			47.
STANDARD DEVIATION	7.4	8.6	6.9			1.6

ENVIRONMENTAL SUMMARY REPORT

SITE: SUNTECH
CHESTER, NEW YORK

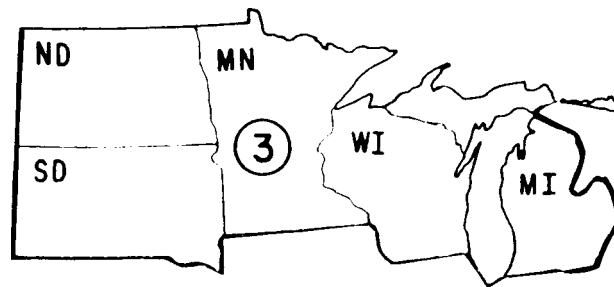
REPORT PERIOD: 80/ 2
SITE NUMBER: 71

LATITUDE: 41.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 74.00 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 400 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1590.	N.A.	N.A.	328.	12:43	3253.	49.
2	2097.	N.A.	N.A.	325.	12: 2	3260.	64.
3	1969.	N.A.	N.A.	316.	11:40	3267.	60.
4	2063.	N.A.	N.A.	316.	11:45	3263.	63.
5	2243.	N.A.	N.A.	316.	11:41	3270.	69.
6	1265.	N.A.	N.A.	322.	11:37	3276.	39.
7	192.	N.A.	N.A.	62.	14:13	3276.	6.
8	*	N.A.	N.A.	*	*:*	3282.	*
9	1245.	N.A.	N.A.	293.	11:29	3287.	38.
10	2063.	N.A.	N.A.	316.	12: 6	3292.	63.
11	1689.	N.A.	N.A.	313.	11:34	3297.	51.
12	1052.	N.A.	N.A.	313.	11:55	3293.	32.
13	1903.	N.A.	N.A.	352.	12:12	3298.	58.
14	1093.	N.A.	N.A.	298.	11:27	3302.	33.
15	824.	N.A.	N.A.	213.	11:53	3302.	25.
16	183.	N.A.	N.A.	130.	14:33	3306.	6.
17	2091.	N.A.	N.A.	375.	11:37	3309.	63.
18	*	N.A.	N.A.	*	*:*	3312.	*
19	2081.	N.A.	N.A.	337.	12:38	3307.	63.
20	1860.	N.A.	N.A.	328.	11: 6	3310.	56.
21	1863.	N.A.	N.A.	325.	10:44	3312.	56.
22	74.	N.A.	N.A.	33.	11:56	3314.	2.
23	534.	N.A.	N.A.	304.	12:56	3312.	16.
24	398.	N.A.	N.A.	183.	14:37	3313.	12.
25	2054.	N.A.	N.A.	328.	11:41	3313.	62.
26	2029.	N.A.	N.A.	337.	11:38	3307.	61.
27	*	N.A.	N.A.	*	*:*	3307.	*
28	1123.	N.A.	N.A.	310.	9:52	3303.	34.
MEAN	1423.	N.A.	N.A.			3294.	
STANDARD DEVIATION	709.	N.A.	N.A.			19.	

ZONE 3



ENVIRONMENTAL SUMMARY REPORT

SITE: BISMARCK POWER
BISMARCK, NORTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 174

LATITUDE: 46.70 DEG NORTH AZIMUTH: 15 DEG
LONGITUDE: 100.80 DEG WEST PYRANOMETER TILT: 67 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 1850 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	8.	12.	5.	19. 14:21	-4. 1:44	N.A.
2	14.	14.	14.	22. 13:49	1. 7:31	N.A.
3	19.	19.	19.	21. 16:24	17. 8:13	N.A.
4	24.	27.	22.	32. 12:50	19. 0: 2	N.A.
5	25.	29.	23.	33. 15:41	16. 23:17	N.A.
6	13.	13.	13.	21. 11:22	3. 8:10	N.A.
7	18.	21.	17.	24. 14:55	15. 23:46	N.A.
8	20.	26.	17.	34. 15:51	14. 3:14	N.A.
9	22.	28.	18.	43. 12: 3	12. 4:58	N.A.
10	13.	14.	12.	18. 0: 3	8. 23:47	N.A.
11	10.	10.	9.	16. 15:57	3. 8:13	N.A.
12	13.	18.	10.	28. 12:33	2. 5:47	N.A.
13	10.	13.	8.	22. 14: 6	2. 5:18	N.A.
14	4.	5.	4.	11. 0: 7	-1. 7:30	N.A.
15	3.	6.	2.	11. 14:57	-4. 7:35	N.A.
16	7.	10.	4.	20. 15:50	-3. 7:43	N.A.
17	14.	18.	10.	33. 14:35	-6. 6:57	N.A.
18	21.	25.	18.	36. 12:49	8. 7:39	N.A.
19	23.	24.	22.	31. 14:25	18. 8:23	N.A.
20	22.	23.	21.	26. 1:18	14. 23:37	N.A.
21	20.	22.	19.	28. 16:20	13. 0:41	N.A.
22	17.	20.	14.	24. 12:37	4. 23:53	N.A.
23	18.	24.	13.	33. 14:49	0. 4: 9	N.A.
24	16.	20.	12.	24. 13:50	-2. 23: 5	N.A.
25	9.	11.	7.	23. 23:58	-9. 7:31	N.A.
26	26.	32.	22.	37. 14:22	15. 23:26	N.A.
27	19.	24.	15.	34. 15:42	12. 23:53	N.A.
28	2.	4.	-0.	11. 0: 3	-16. 23:39	N.A.
MEAN	15.	18.	13.			N.A.
STANDARD DEVIATION	6.9	7.6	6.7			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: BISMARCK POWER
BISMARCK, NORTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 174

LATITUDE: 46.70 DEG NORTH
LONGITUDE: 100.80 DEG WEST

AZIMUTH: 15 DEG
PYRANOMETER TILT: 67 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 1850 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	278.	N.A.	N.A.	79.	15:31	3058.	9.
2	303.	N.A.	N.A.	79.	13:44	3066.	10.
3	76.	N.A.	N.A.	22.	13: 6	3073.	2.
4	139.	N.A.	N.A.	38.	11:30	3081.	5.
5	1247.	N.A.	N.A.	339.	14:26	3089.	40.
6	444.	N.A.	N.A.	195.	11:22	3095.	14.
7	178.	N.A.	N.A.	44.	12:31	3103.	6.
8	1318.	N.A.	N.A.	361.	13:43	3110.	42.
9	1150.	N.A.	N.A.	336.	11:57	3116.	37.
10	663.	N.A.	N.A.	248.	11:41	3123.	21.
11	1726.	N.A.	N.A.	346.	12:51	3128.	55.
12	425.	N.A.	N.A.	207.	12: 1	3134.	14.
13	1234.	N.A.	N.A.	302.	13:40	3139.	39.
14	532.	N.A.	N.A.	101.	15:46	3144.	17.
15	815.	N.A.	N.A.	223.	14:47	3148.	26.
16	2143.	N.A.	N.A.	339.	12:38	3154.	68.
17	1906.	N.A.	N.A.	346.	12: 6	3157.	60.
18	1343.	N.A.	N.A.	333.	12:49	3160.	42.
19	454.	N.A.	N.A.	116.	12:55	3164.	14.
20	207.	N.A.	N.A.	50.	13:34	3167.	7.
21	247.	N.A.	N.A.	60.	14:22	3170.	8.
22	716.	N.A.	N.A.	210.	12:21	3172.	23.
23	1504.	N.A.	N.A.	368.	12: 9	3174.	47.
24	636.	N.A.	N.A.	254.	14:17	3176.	20.
25	1926.	N.A.	N.A.	339.	14:22	3177.	61.
26	2261.	N.A.	N.A.	339.	13: 7	3174.	71.
27	585.	N.A.	N.A.	239.	14:59	3172.	18.
28	1818.	N.A.	N.A.	364.	13:34	3173.	57.
MEAN	938.	N.A.	N.A.			3136.	
STANDARD DEVIATION	679.	N.A.	N.A.			38.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FIRST BAPTIST CHURCH
ABERDEEN, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 153

LATITUDE: 45.27 DEG NORTH
LONGITUDE: 98.26 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 58 DEG

TIME ZONE: CENTRAL
ALTITUDE: 1296 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	5.	8.	2.	20.	16:45	-13.	5:22	56.
2	17.	19.	15.	26.	13:34	10.	1:34	56.
3	19.	20.	18.	23.	14:22	15.	1:56	54.
4	22.	22.	22.	27.	19:10	18.	0:14	54.
5	24.	26.	22.	31.	14:42	19.	6:36	59.
6	22.	23.	21.	25.	10:19	19.	23:27	59.
7	18.	20.	17.	29.	12:52	14.	8:31	59.
8	8.	15.	3.	25.	14:43	-6.	23:27	71.
9	8.	9.	7.	28.	20:13	-11.	4:26	62.
10	15.	17.	14.	21.	14:43	6.	5:39	57.
11	10.	15.	7.	22.	14:11	-5.	22:31	58.
12	7.	12.	4.	27.	14:36	-10.	3: 3	63.
13	13.	16.	10.	22.	15:12	7.	23: 0	61.
14	10.	15.	6.	28.	14:22	-3.	5:29	58.
15	7.	10.	5.	17.	14:12	-1.	7:32	64.
16	5.	11.	1.	24.	16:37	-8.	7: 9	57.
17	5.	9.	3.	24.	16:21	-14.	6:29	60.
18	18.	20.	16.	36.	14:16	3.	6:29	65.
19	26.	28.	25.	33.	14:54	22.	0: 8	73.
20	27.	29.	25.	31.	13:17	22.	22:21	65.
21	29.	30.	27.	33.	14:26	22.	0: 8	59.
22	24.	25.	24.	31.	0: 3	13.	23:39	62.
23	19.	21.	18.	37.	17: 1	-2.	6:51	63.
24	18.	23.	14.	29.	12:50	1.	23:46	60.
25	3.	8.	-1.	19.	14:37	-8.	5:49	64.
26	26.	32.	20.	45.	15:54	9.	0: 0	77.
27	18.	18.	18.	29.	16:45	11.	7: 9	70.
28	8.	11.	5.	17.	0: 4	-11.	23:46	66.
MEAN	15.	18.	13.					62.
STANDARD DEVIATION	7.9	7.1	8.6					5.6

ENVIRONMENTAL SUMMARY REPORT

SITE: FIRST BAPTIST CHURCH
ABERDEEN, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 153

LATITUDE: 45.27 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.26 DEG WEST PYRANOMETER TILT: 58 DEG ALTITUDE: 1296 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	646.	N.A.	N.A.	212.	11:36	3141.	21.
2	467.	N.A.	N.A.	141.	13:22	3152.	15.
3	294.	N.A.	N.A.	64.	11:10	3163.	9.
4	256.	N.A.	N.A.	64.	13:56	3173.	8.
5	415.	N.A.	N.A.	84.	14:31	3173.	13.
6	341.	N.A.	N.A.	64.	12:27	3183.	11.
7	1041.	N.A.	N.A.	316.	12:31	3189.	33.
8	1542.	N.A.	N.A.	289.	12:45	3199.	48.
9	1132.	N.A.	N.A.	276.	10:50	3209.	35.
10	848.	N.A.	N.A.	259.	10:37	3215.	26.
11	1494.	N.A.	N.A.	282.	12:19	3224.	46.
12	942.	N.A.	N.A.	215.	11:35	3233.	29.
13	767.	N.A.	N.A.	168.	13: 9	3238.	24.
14	817.	N.A.	N.A.	185.	14:22	3247.	25.
15	1602.	N.A.	N.A.	299.	13:40	3251.	49.
16	1988.	N.A.	N.A.	299.	12:27	3259.	61.
17	1883.	N.A.	N.A.	323.	13: 9	3267.	58.
18	1200.	N.A.	N.A.	299.	13:44	3271.	37.
19	419.	N.A.	N.A.	91.	12:51	3278.	13.
20	298.	N.A.	N.A.	67.	12:45	3282.	9.
21	212.	N.A.	N.A.	54.	13:33	3289.	6.
22	368.	N.A.	N.A.	94.	14:32	3291.	11.
23	913.	N.A.	N.A.	282.	14:32	3294.	28.
24	586.	N.A.	N.A.	172.	12:45	3300.	18.
25	1934.	N.A.	N.A.	343.	13:38	3302.	59.
26	2029.	N.A.	N.A.	306.	12:32	3307.	61.
27	507.	N.A.	N.A.	108.	13:27	3308.	15.
28	2010.	N.A.	N.A.	313.	12:31	3312.	61.
MEAN	963.	N.A.	N.A.			3241.	
STANDARD DEVIATION	616.	N.A.	N.A.			53.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FIRST BAPTIST CHURCH
ABERDEEN, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 153

LATITUDE: 45.27 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.26 DEG WEST PYRANOMETER TILT: 58 DEG ALTITUDE: 1296 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	2.	*	2.	8.	*	16:56
2	294.	2.	277.	2.	6.	258.	10:27
3	340.	6.	339.	6.	14.	337.	22:33
4	360.	6.	9.	6.	14.	339.	2:22
5	*	1.	*	0.	7.	*	2:42
6	352.	3.	6.	4.	10.	45.	11:44
7	299.	2.	272.	3.	7.	346.	2:34
8	*	1.	*	2.	6.	*	11:15
9	41.	4.	30.	6.	11.	26.	11:32
10	79.	5.	79.	5.	16.	112.	15:20
11	*	2.	*	2.	8.	*	13: 1
12	*	1.	*	2.	5.	*	11: 8
13	*	0.	*	0.	3.	*	15: 1
14	*	0.	*	0.	4.	*	12:46
15	*	2.	*	3.	12.	*	13:24
16	*	2.	*	3.	12.	*	12: 5
17	8.	2.	0.	3.	8.	346.	16: 0
18	*	1.	*	1.	6.	*	22: 6
19	*	2.	*	1.	12.	*	3:47
20	232.	6.	237.	7.	19.	235.	14:58
21	*	1.	*	0.	8.	*	2:42
22	*	1.	*	1.	5.	*	15:20
23	54.	2.	59.	4.	12.	68.	14:37
24	*	2.	*	2.	10.	*	15:41
25	4.	2.	12.	1.	9.	356.	21:52
26	45.	5.	77.	5.	14.	110.	14: 2
27	267.	5.	305.	4.	15.	250.	21: 8
28	211.	2.	210.	2.	15.	211.	22:58
MEAN	185.	2.	136.	3.			
STANDARD DEVIATION	138.5	1.8	128.4	2.0			

ENVIRONMENTAL SUMMARY REPORT

SITE: FIRST BAPTIST CHURCH
ABERDEEN, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 153

LATITUDE: 45.27 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.26 DEG WEST PYRANOMETER TILT: 58 DEG ALTITUDE: 1296 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	21	3	0	0	0	0	0	0	0
2	22	2	0	0	0	0	0	0	0
3	8	10	6	0	0	0	0	0	0
4	7	14	3	0	0	0	0	0	0
5	24	0	0	0	0	0	0	0	0
6	12	12	0	0	0	0	0	0	0
7	19	5	0	0	0	0	0	0	0
8	23	1	0	0	0	0	0	0	0
9	10	11	3	0	0	0	0	0	0
10	8	16	0	0	0	0	0	0	0
11	24	0	0	0	0	0	0	0	0
12	24	0	0	0	0	0	0	0	0
13	24	0	0	0	0	0	0	0	0
14	24	0	0	0	0	0	0	0	0
15	22	2	0	0	0	0	0	0	0
16	20	4	0	0	0	0	0	0	0
17	20	4	0	0	0	0	0	0	0
18	23	1	0	0	0	0	0	0	0
19	22	0	2	0	0	0	0	0	0
20	10	8	4	2	0	0	0	0	0
21	24	0	0	0	0	0	0	0	0
22	24	0	0	0	0	0	0	0	0
23	19	4	1	0	0	0	0	0	0
24	22	2	0	0	0	0	0	0	0
25	18	6	0	0	0	0	0	0	0
26	11	9	4	0	0	0	0	0	0
27	13	8	2	1	0	0	0	0	0
28	17	6	0	0	0	0	0	0	1
AVERAGE	18.4	4.6	0.9	0.1	0.0	0.0	0.0	0.0	0.0
TOTAL	515	128	25	3	0	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: HARNEY LUMBER
RAPID CITY, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 147

LATITUDE: 44.30 DEG NORTH AZIMUTH: 16 DEG
LONGITUDE: 103.40 DEG WEST PYRANOMETER TILT: 50 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 3162 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	21.	27.	14.	39.	14:35	7.	4:43	50.
2	41.	46.	38.	48.	13:14	35.	22: 2	52.
3	37.	36.	38.	46.	21: 3	32.	8:52	52.
4	44.	45.	42.	48.	12:10	39.	5:51	52.
5	31.	35.	31.	36.	16: 3	28.	23:50	54.
6	30.	33.	26.	41.	12:38	20.	6:41	53.
7	*	*	*	*	*:*	*	*:*	*
8	*	*	*	*	*:*	*	*:*	*
9	39.	47.	33.	53.	12:51	27.	23:58	53.
10	25.	28.	22.	31.	12: 8	17.	23:20	53.
11	20.	24.	15.	31.	14:43	8.	7:15	53.
12	*	*	*	*	*:*	*	*:*	*
13	16.	17.	16.	17.	16:59	15.	23:54	51.
14	12.	12.	12.	16.	13: 4	9.	17: 9	51.
15	*	*	*	*	*:*	*	*:*	*
16	*	*	*	*	*:*	*	*:*	*
17	*	*	*	*	*:*	*	*:*	*
18	46.	47.	45.	54.	14:59	42.	16: 8	55.
19	45.	48.	42.	53.	13:55	37.	5:34	56.
20	*	*	*	*	*:*	*	*:*	*
21	*	*	*	*	*:*	*	*:*	*
22	*	*	*	*	*:*	*	*:*	*
23	37.	40.	33.	42.	13: 4	30.	22:40	59.
24	32.	38.	27.	46.	12:54	16.	23:44	58.
25	*	*	*	*	*:*	*	*:*	*
26	*	*	*	*	*:*	*	*:*	*
27	*	*	*	*	*:*	*	*:*	*
28	*	*	*	*	*:*	*	*:*	*
MEAN	32.	35.	29.					53.
STANDARD DEVIATION	10.9	11.4	11.1					2.4

ENVIRONMENTAL SUMMARY REPORT

SITE: HARNEY LUMBER
RAPID CITY, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 147

LATITUDE: 44.30 DEG NORTH AZIMUTH: 16 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 103.40 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 3162 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MM	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	438.	N.A.	N.A.	186.	14:30	2995.	15.
2	1278.	N.A.	N.A.	306.	13: 8	3006.	43.
3	299.	N.A.	N.A.	78.	10:12	3011.	10.
4	1417.	N.A.	N.A.	326.	12:10	3022.	47.
5	*	N.A.	N.A.	*	*:*	3033.	*
6	1167.	N.A.	N.A.	283.	12:38	3044.	38.
7	*	N.A.	N.A.	*	*:*	3052.	*
8	*	N.A.	N.A.	*	*:*	3063.	*
9	1602.	N.A.	N.A.	342.	13:18	3073.	52.
10	1368.	N.A.	N.A.	322.	11:52	3079.	44.
11	2002.	N.A.	N.A.	316.	12: 3	3089.	65.
12	*	N.A.	N.A.	*	*:*	3097.	*
13	*	N.A.	N.A.	*	*:*	3107.	*
14	167.	N.A.	N.A.	46.	12:16	3117.	5.
15	*	N.A.	N.A.	*	*:*	3125.	*
16	*	N.A.	N.A.	*	*:*	3134.	*
17	*	N.A.	N.A.	*	*:*	3143.	*
18	1631.	N.A.	N.A.	313.	13:39	3151.	52.
19	1572.	N.A.	N.A.	345.	11:47	3159.	50.
20	*	N.A.	N.A.	*	*:*	3166.	*
21	*	N.A.	N.A.	*	*:*	3175.	*
22	*	N.A.	N.A.	*	*:*	3180.	*
23	2212.	N.A.	N.A.	339.	13: 4	3186.	69.
24	1403.	N.A.	N.A.	342.	13:10	3191.	44.
25	*	N.A.	N.A.	*	*:*	3194.	*
26	*	N.A.	N.A.	*	*:*	3202.	*
27	*	N.A.	N.A.	*	*:*	3205.	*
28	*	N.A.	N.A.	*	*:*	3212.	*
MEAN	1273.	N.A.	N.A.			3115.	
STANDARD DEVIATION	623.	N.A.	N.A.			68.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HOUSTON CONSTRUCTION
EDEN PRAIRIE, MINNESOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 57

LATITUDE: 45.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 93.00 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 809 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	2.	5.	0.	14.	14:49	-10.	6:25	62.
2	7.	8.	7.	17.	15:11	0.	7:22	48.
3	6.	8.	6.	17.	15:53	-1.	8: 4	54.
4	14.	16.	12.	22.	13:45	3.	3:31	50.
5	20.	22.	18.	24.	14: 1	15.	23:39	57.
6	10.	8.	11.	23.	16:31	3.	23:59	47.
7	4.	6.	2.	14.	15:27	-4.	3:27	61.
8	3.	2.	3.	18.	16: 7	-7.	7:51	58.
9	6.	8.	4.	16.	23:41	-3.	3: 3	53.
10	16.	15.	17.	19.	4:23	13.	8: 7	44.
11	11.	18.	11.	19.	16:19	4.	23:58	50.
12	7.	7.	7.	18.	15:36	-5.	6:59	46.
13	20.	23.	18.	27.	12:51	14.	23:46	46.
14	16.	17.	14.	24.	14:15	7.	7:56	64.
15	10.	12.	9.	15.	0: 9	2.	22:12	44.
16	3.	5.	1.	11.	16:20	-5.	7: 0	54.
17	7.	8.	6.	18.	15: 0	-8.	7: 0	55.
18	26.	27.	25.	32.	21:16	16.	0:15	54.
19	33.	33.	33.	35.	15:51	31.	0: 2	56.
20	36.	36.	35.	39.	13: 9	33.	4:21	51.
21	35.	36.	34.	37.	12:34	33.	23:59	52.
22	33.	35.	31.	38.	12:15	23.	23:33	46.
23	21.	20.	23.	29.	23:35	13.	7:39	47.
24	21.	22.	21.	29.	0: 2	15.	7:19	44.
25	6.	5.	7.	17.	0: 2	1.	8: 2	52.
26	18.	23.	14.	35.	15:33	1.	1: 4	59.
27	17.	18.	16.	24.	13:44	10.	7: 9	58.
28	10.	12.	9.	16.	0: 2	1.	23:55	56.
MEAN	15.	16.	14.					52.
STANDARD DEVIATION	10.2	10.4	10.2					5.7

ENVIRONMENTAL SUMMARY REPORT

SITE: HOUSTON CONSTRUCTION
EDEN PRAIRIE, MINNESOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 57

LATITUDE: 45.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 93.00 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 809 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1837.	N.A.	N.A.	342.	12:30	3170.	58.
2	*	N.A.	N.A.	*	*:*	3169.	*
3	*	N.A.	N.A.	*	*:*	3179.	*
4	499.	N.A.	N.A.	130.	10:33	3188.	16.
5	715.	N.A.	N.A.	235.	12: 9	3198.	22.
6	*	N.A.	N.A.	*	*:*	3204.	*
7	1553.	N.A.	N.A.	339.	12:53	3213.	48.
8	*	N.A.	N.A.	*	*:*	3222.	*
9	1273.	N.A.	N.A.	295.	14: 5	3220.	40.
10	*	N.A.	N.A.	*	*:*	3235.	*
11	*	N.A.	N.A.	*	*:*	3234.	*
12	1608.	N.A.	N.A.	321.	12: 8	3242.	50.
13	1054.	N.A.	N.A.	310.	12:57	3246.	32.
14	811.	N.A.	N.A.	217.	12:44	3254.	25.
15	2186.	N.A.	N.A.	365.	13:25	3262.	67.
16	2265.	N.A.	N.A.	371.	12:47	3265.	69.
17	2340.	N.A.	N.A.	359.	12:47	3272.	72.
18	806.	N.A.	N.A.	290.	11:30	3275.	25.
19	*	N.A.	N.A.	*	*:*	3281.	*
20	212.	N.A.	N.A.	41.	12:48	3284.	6.
21	204.	N.A.	N.A.	43.	11:36	3289.	6.
22	346.	N.A.	N.A.	67.	11:22	3291.	11.
23	2245.	N.A.	N.A.	350.	12:39	3296.	68.
24	1865.	N.A.	N.A.	362.	12:23	3297.	57.
25	2378.	N.A.	N.A.	350.	13:11	3302.	72.
26	1463.	N.A.	N.A.	345.	12:37	3302.	44.
27	1002.	N.A.	N.A.	313.	11:57	3306.	30.
28	2591.	N.A.	N.A.	365.	11:46	3306.	78.
MEAN	1393.	N.A.	N.A.			3250.	
STANDARD DEVIATION	776.	N.A.	N.A.			44.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HOWARDS GROVE SCHOOL
HOWARDS GROVE, WISCONSIN TTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 154

LATITUDE: 43.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 89.20 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 858 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	9.	17.	5.	17. 13:42	4. 23:19	N.A.
2	11.	16.	8.	23. 14:36	2. 5:22	N.A.
3	14.	16.	12.	19. 14:15	8. 20:29	N.A.
4	15.	19.	14.	28. 15:40	9. 0: 8	N.A.
5	23.	25.	22.	28. 10:44	19. 0: 9	N.A.
6	22.	24.	20.	27. 13:23	12. 22: 1	N.A.
7	18.	21.	16.	27. 14:49	12. 18:45	N.A.
8	21.	26.	18.	31. 13:51	11. 3: 1	N.A.
9	16.	21.	13.	27. 14:39	2. 23:27	N.A.
10	15.	20.	12.	25. 13:35	3. 3:21	N.A.
11	15.	16.	15.	21. 15: 5	10. 7: 5	N.A.
12	15.	19.	11.	26. 12:21	6. 6:45	N.A.
13	17.	*	17.	18. 4: 0	15. 0:32	N.A.
14	*	*	*	* *:*	* *:*	N.A.
15	*	*	*	* *:*	* *:*	N.A.
16	*	*	*	* *:*	* *:*	N.A.
17	*	*	*	* *:*	* *:*	N.A.
18	*	*	*	* *:*	* *:*	N.A.
19	*	*	*	* *:*	* *:*	N.A.
20	*	*	*	* *:*	* *:*	N.A.
21	*	*	*	* *:*	* *:*	N.A.
22	*	*	*	* *:*	* *:*	N.A.
23	*	*	*	* *:*	* *:*	N.A.
24	*	*	*	* *:*	* *:*	N.A.
25	19.	19.	0.	19. 15:20	19. 15:17	N.A.
26	21.	20.	21.	24. 13:43	18. 17:19	N.A.
27	20.	19.	20.	25. 1:35	12. 6:44	N.A.
28	15.	19.	12.	22. 14:24	-0. 23:51	N.A.
MEAN	17.	20.	15.			N.A.
STANDARD DEVIATION	3.8	3.0	4.8			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: HOWARDS GROVE SCHOOL
HOWARDS GROVE, WISCONSIN TTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 154

LATITUDE: 43.80 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 89.20 DEG WEST PYRANOMETER TILT: 55 DEG
TIME ZONE: CENTRAL
ALTITUDE: 858 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	3160.	*
2	1943.	N.A.	N.A.	317.	11:51	3160.	61.
3	2065.	N.A.	N.A.	321.	11:40	3171.	65.
4	*	N.A.	N.A.	*	*:*	3181.	*
5	196.	N.A.	N.A.	50.	12:52	3190.	6.
6	601.	N.A.	N.A.	252.	13:12	3200.	19.
7	1147.	N.A.	N.A.	325.	12:19	3200.	36.
8	1208.	N.A.	N.A.	339.	11:38	3216.	38.
9	1858.	N.A.	N.A.	371.	11:43	3215.	58.
10	850.	N.A.	N.A.	249.	14: 7	3225.	26.
11	2170.	N.A.	N.A.	346.	11:59	3234.	67.
12	2299.	N.A.	N.A.	339.	11:49	3242.	71.
13	*	N.A.	N.A.	*	*:*	3247.	*
14	*	N.A.	N.A.	*	*:*	3256.	*
15	*	N.A.	N.A.	*	*:*	3264.	*
16	*	N.A.	N.A.	*	*:*	3268.	*
17	*	N.A.	N.A.	*	*:*	3276.	*
18	*	N.A.	N.A.	*	*:*	3275.	*
19	*	N.A.	N.A.	*	*:*	3286.	*
20	*	N.A.	N.A.	*	*:*	3285.	*
21	*	N.A.	N.A.	*	*:*	3292.	*
22	*	N.A.	N.A.	*	*:*	3295.	*
23	*	N.A.	N.A.	*	*:*	3301.	*
24	*	N.A.	N.A.	*	*:*	3303.	*
25	*	N.A.	N.A.	*	*:*	3309.	*
26	*	N.A.	N.A.	*	*:*	3310.	*
27	2018.	N.A.	N.A.	357.	11:54	3315.	61.
28	1663.	N.A.	N.A.	364.	13:25	3320.	50.
MEAN	1501.	N.A.	N.A.			3250.	
STANDARD DEVIATION	685.	N.A.	N.A.			50.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HOWARDS GROVE SCHOOL
HOWARDS GROVE, WISCONSIN TTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 154

LATITUDE: 43.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 89.20 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 858 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	0.	*	0.	1.	*	13:42
2	*	0.	*	0.	8.	*	14:41
3	*	2.	*	5.	12.	*	10:15
4	*	1.	*	0.	8.	*	0:40
5	270.	5.	297.	6.	14.	291.	14:44
6	195.	7.	184.	8.	13.	193.	11:31
7	155.	2.	153.	2.	13.	137.	7:26
8	*	1.	*	2.	9.	*	10: 2
9	*	1.	*	3.	8.	*	9:58
10	42.	5.	40.	8.	14.	50.	12: 4
11	98.	8.	102.	11.	19.	116.	10:44
12	74.	6.	78.	6.	13.	55.	21: 4
13	46.	6.	*	0.	13.	60.	1:52
14	*	*	*	*	*	*	*:*
15	*	*	*	*	*	*	*:*
16	*	*	*	*	*	*	*:*
17	*	*	*	*	*	*	*:*
18	*	*	*	*	*	*	*:*
19	*	*	*	*	*	*	*:*
20	*	*	*	*	*	*	*:*
21	*	*	*	*	*	*	*:*
22	*	*	*	*	*	*	*:*
23	*	*	*	*	*	*	*:*
24	*	*	*	*	*	*	*:*
25	178.	16.	178.	16.	20.	178.	15:17
26	52.	13.	42.	15.	25.	54.	15:23
27	137.	6.	141.	8.	17.	133.	3: 6
28	176.	7.	172.	9.	18.	182.	23:40
MEAN	129.	5.	139.	6.			
STANDARD DEVIATION	73.5	4.5	77.5	5.0			

ENVIRONMENTAL SUMMARY REPORT

SITE: HOWARDS GROVE SCHOOL
HOWARDS GROVE, WISCONSIN TTS

REPORT PERIOD: 80/ 2
SITE NUMBER: 154

LATITUDE: 43.80 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 89.20 DEG WEST PYRANOMETER TILT: 55 DEG
TIME ZONE: CENTRAL
ALTITUDE: 858 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	4	0	0	0	0	0	0	0	20
2	24	0	0	0	0	0	0	0	0
3	18	5	1	0	0	0	0	0	0
4	18	0	0	0	0	0	0	0	6
5	9	7	8	0	0	0	0	0	0
6	2	17	5	0	0	0	0	0	0
7	19	5	0	0	0	0	0	0	0
8	20	4	0	0	0	0	0	0	0
9	20	4	0	0	0	0	0	0	0
10	9	11	4	0	0	0	0	0	0
11	3	8	11	2	0	0	0	0	0
12	5	17	2	0	0	0	0	0	0
13	0	3	1	0	0	0	0	0	20
14	0	0	0	0	0	0	0	0	24
15	0	0	0	0	0	0	0	0	24
16	0	0	0	0	0	0	0	0	24
17	0	0	0	0	0	0	0	0	24
18	0	0	0	0	0	0	0	0	24
19	0	0	0	0	0	0	0	0	24
20	0	0	0	0	0	0	0	0	24
21	0	0	0	0	0	0	0	0	24
22	0	0	0	0	0	0	0	0	24
23	0	0	0	0	0	0	0	0	24
24	0	0	0	0	0	0	0	0	24
25	0	0	0	1	0	0	0	0	23
26	0	0	6	6	0	0	0	0	12
27	8	7	9	0	0	0	0	0	0
28	5	4	12	2	0	0	0	0	1
AVERAGE	5.9	3.3	2.1	0.4	0.0	0.0	0.0	0.0	12.4
TOTAL	164	92	59	11	0	0	0	0	346

ENVIRONMENTAL SUMMARY REPORT

SITE: SOUTH DAKOTA SCHOOL OF MINES
KEYSTONE, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 15

LATITUDE: 43.90 DEG NORTH AZIMUTH: -19 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 103.50 DEG WEST PYRANOMETER TILT: 46 DEG ALTITUDE: 5265 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	35.	41.	30.	48.	14: 6	25.	2: 1	N.A.
2	32.	*	32.	34.	18: 7	28.	23:32	N.A.
3	41.	44.	41.	44.	16:36	39.	22:55	N.A.
4	27.	*	27.	27.	23:42	26.	23:15	N.A.
5	27.	32.	24.	39.	11:58	20.	22:32	N.A.
6	29.	35.	26.	40.	13:33	23.	23:58	N.A.
7	11.	*	11.	13.	17:56	8.	23:59	N.A.
8	21.	24.	18.	37.	11:59	3.	5:56	N.A.
9	33.	43.	27.	49.	13:12	19.	2: 0	N.A.
10	20.	28.	14.	33.	11: 9	12.	23:41	N.A.
11	16.	22.	12.	30.	12:56	9.	20:52	N.A.
12	30.	37.	24.	46.	12:30	15.	0:30	N.A.
13	15.	16.	14.	21.	11:44	10.	20:56	N.A.
14	8.	11.	6.	16.	12:24	2.	23:39	N.A.
15	4.	6.	2.	11.	12:22	-2.	18:45	N.A.
16	16.	23.	10.	32.	10: 2	-3.	5: 4	N.A.
17	36.	46.	29.	56.	11: 6	21.	0:58	N.A.
18	45.	51.	40.	62.	13:21	33.	0: 4	N.A.
19	44.	50.	40.	63.	11:40	35.	3:51	N.A.
20	42.	50.	36.	60.	11:21	27.	23:27	N.A.
21	32.	35.	30.	39.	13:51	26.	3:11	N.A.
22	29.	29.	29.	34.	0:47	24.	23:51	N.A.
23	29.	36.	25.	46.	11:27	21.	2:42	N.A.
24	27.	34.	22.	40.	12:10	13.	23:59	N.A.
25	28.	36.	22.	44.	12:42	8.	1:46	N.A.
26	43.	48.	39.	56.	12:55	34.	5:17	N.A.
27	51.	57.	47.	64.	12: 9	43.	0:46	N.A.
28	24.	24.	25.	45.	0: 0	9.	23:54	N.A.
MEAN	28.	34.	25.					N.A.
STANDARD DEVIATION	11.7	13.1	11.3					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: SOUTH DAKOTA SCHOOL OF MINES
KEYSTONE, SOUTH DAKOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 15

LATITUDE: 43.90 DEG NORTH
LONGITUDE: 103.50 DEG WEST

AZIMUTH: -19 DEG
PYRANOMETER TILT: 46 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 5265 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	484.	N.A.	N.A.	234.	14: 1	2912.	17.
2	*	N.A.	N.A.	*	*: *	2912.	*
3	*	N.A.	N.A.	*	*: *	2925.	*
4	*	N.A.	N.A.	*	*: *	2938.	*
5	1416.	N.A.	N.A.	332.	12:30	2951.	48.
6	*	N.A.	N.A.	*	*: *	2964.	*
7	*	N.A.	N.A.	*	*: *	2964.	*
8	1756.	N.A.	N.A.	322.	11:32	2977.	59.
9	1905.	N.A.	N.A.	329.	13:55	2990.	64.
10	*	N.A.	N.A.	*	*: *	2998.	*
11	1873.	N.A.	N.A.	325.	12:24	3011.	62.
12	786.	N.A.	N.A.	245.	10:33	3023.	26.
13	281.	N.A.	N.A.	91.	11:28	3036.	9.
14	178.	N.A.	N.A.	56.	12:13	3043.	6.
15	294.	N.A.	N.A.	80.	15:13	3047.	10.
16	889.	N.A.	N.A.	157.	13:14	3062.	29.
17	1719.	N.A.	N.A.	343.	12:47	3065.	56.
18	1209.	N.A.	N.A.	336.	13: 0	3079.	39.
19	1064.	N.A.	N.A.	360.	11:40	3082.	35.
20	1170.	N.A.	N.A.	339.	13:18	3096.	38.
21	342.	N.A.	N.A.	66.	13:51	3098.	11.
22	207.	N.A.	N.A.	63.	11:43	3112.	7.
23	1400.	N.A.	N.A.	336.	14: 7	3114.	45.
24	1621.	N.A.	N.A.	339.	12:42	3116.	52.
25	1786.	N.A.	N.A.	346.	12:42	3129.	57.
26	2001.	N.A.	N.A.	325.	12:55	3131.	64.
27	1464.	N.A.	N.A.	329.	12:25	3144.	47.
28	269.	N.A.	N.A.	59.	12:48	3145.	9.
MEAN	1096.	N.A.	N.A.			3038.	
STANDARD DEVIATION	644.	N.A.	N.A.			75.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH
LONGITUDE: 94.25 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: CENTRAL
ALTITUDE: 1150 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	2.	6.	-0.	16.	13:32	-12.	1:10	64.
2	10.	13.	8.	20.	13:45	3.	23:21	61.
3	10.	15.	6.	25.	11:32	-2.	7:37	61.
4	14.	16.	13.	20.	13:56	5.	0:25	63.
5	18.	20.	16.	22.	13:44	9.	23:57	63.
6	16.	19.	13.	26.	12:35	8.	0:45	64.
7	10.	12.	8.	24.	11:26	3.	7:47	64.
8	8.	14.	3.	21.	13:45	-3.	22:15	66.
9	9.	13.	6.	18.	14:55	-1.	2: 4	65.
10	16.	19.	13.	25.	15:27	9.	7:16	65.
11	10.	13.	7.	19.	14: 7	-2.	23:47	67.
12	10.	13.	9.	25.	15:52	-7.	6:16	67.
13	21.	24.	18.	28.	12:23	16.	0:55	69.
14	17.	18.	16.	24.	13:50	6.	7:15	68.
15	10.	12.	9.	16.	0:29	1.	23:36	67.
16	5.	7.	3.	14.	15:16	-4.	7:10	66.
17	12.	16.	9.	26.	14:39	-2.	7:27	65.
18	25.	28.	23.	33.	12:17	14.	0:26	68.
19	33.	34.	32.	36.	13:10	31.	6:51	68.
20	33.	33.	32.	34.	12:42	32.	20:18	68.
21	33.	34.	33.	36.	10:58	31.	18:40	66.
22	31.	33.	29.	35.	12:43	22.	23:48	67.
23	23.	23.	23.	28.	19:32	16.	7:32	66.
24	24.	24.	23.	29.	0:36	16.	23:54	68.
25	7.	7.	7.	16.	0: 4	1.	7:48	65.
26	21.	26.	17.	39.	14:56	2.	0: 0	66.
27	19.	20.	19.	28.	12:36	13.	7: 5	67.
28	12.	14.	11.	20.	0:40	-1.	23:42	67.
MEAN	16.	19.	15.					66.
STANDARD DEVIATION	8.9	8.2	9.4					2.1

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH
LONGITUDE: 94.25 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: CENTRAL
ALTITUDE: 1150 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1662.	N.A.	N.A.	325.	13:48	3149.	53.
2	1199.	N.A.	N.A.	322.	11:48	3159.	38.
3	1907.	N.A.	N.A.	331.	12:46	3169.	60.
4	265.	N.A.	N.A.	81.	13:24	3179.	8.
5	534.	N.A.	N.A.	122.	12:46	3179.	17.
6	585.	N.A.	N.A.	190.	15:31	3196.	18.
7	787.	N.A.	N.A.	225.	11:31	3196.	25.
8	1820.	N.A.	N.A.	350.	12:25	3205.	57.
9	1008.	N.A.	N.A.	278.	14:39	3215.	31.
10	2120.	N.A.	N.A.	347.	12:15	3224.	66.
11	1655.	N.A.	N.A.	337.	12:52	3233.	51.
12	1531.	N.A.	N.A.	300.	14: 0	3239.	47.
13	1297.	N.A.	N.A.	322.	12:12	3247.	40.
14	1127.	N.A.	N.A.	290.	13: 7	3247.	35.
15	1606.	N.A.	N.A.	334.	12:34	3260.	49.
16	2104.	N.A.	N.A.	372.	12:42	3260.	65.
17	2315.	N.A.	N.A.	347.	11:54	3268.	71.
18	739.	N.A.	N.A.	343.	12:17	3272.	23.
19	207.	N.A.	N.A.	62.	13:15	3279.	6.
20	141.	N.A.	N.A.	34.	12:47	3286.	4.
21	55.	N.A.	N.A.	19.	12:24	3289.	2.
22	184.	N.A.	N.A.	41.	12:32	3296.	6.
23	1485.	N.A.	N.A.	318.	11:48	3299.	45.
24	787.	N.A.	N.A.	284.	10:55	3305.	24.
25	2071.	N.A.	N.A.	350.	12:20	3307.	63.
26	1280.	N.A.	N.A.	309.	11:23	3312.	39.
27	972.	N.A.	N.A.	325.	12:36	3314.	29.
28	2425.	N.A.	N.A.	356.	12:29	3318.	73.
MEAN	1210.	N.A.	N.A.			3246.	
STANDARD DEVIATION	711.	N.A.	N.A.			52.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 94.25 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 1150 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED DIRECTION	TIME HR:MN	
1	304.	4.	344.	4.	12.	270.	20:42
2	255.	6.	251.	8.	17.	240.	9:51
3	268.	3.	270.	4.	11.	263.	12:41
4	278.	14.	286.	16.	25.	311.	20:39
5	200.	11.	167.	12.	27.	272.	2:52
6	138.	3.	143.	2.	9.	140.	3:15
7	*	0.	*	0.	4.	*	15: 4
8	*	0.	*	1.	5.	*	14:39
9	18.	3.	17.	2.	18.	21.	22:55
10	76.	11.	81.	12.	24.	82.	15:43
11	101.	8.	106.	12.	21.	103.	13:24
12	352.	5.	359.	5.	18.	10.	14: 5
13	89.	6.	101.	6.	12.	133.	18:27
14	164.	5.	178.	6.	12.	165.	20:19
15	124.	10.	123.	12.	20.	115.	16:18
16	100.	9.	99.	10.	19.	74.	16:42
17	46.	6.	49.	7.	15.	44.	15:16
18	16.	12.	19.	13.	25.	13.	7:16
19	334.	4.	324.	6.	17.	34.	0: 6
20	264.	4.	285.	5.	15.	233.	21:28
21	199.	9.	201.	10.	16.	201.	10:10
22	117.	6.	111.	5.	18.	124.	22:55
23	98.	11.	100.	11.	20.	96.	12:26
24	113.	9.	108.	8.	21.	138.	23:27
25	119.	12.	119.	15.	24.	115.	10:55
26	64.	13.	51.	17.	35.	25.	10: 3
27	146.	7.	150.	4.	29.	121.	0: 9
28	140.	9.	131.	10.	18.	127.	16:13
MEAN	159.	7.	160.	8.			
STANDARD DEVIATION	96.1	3.7	99.8	4.5			

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 2
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH
LONGITUDE: 94.25 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: CENTRAL
ALTITUDE: 1150 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	11	10	3	0	0	0	0	0	0
2	7	7	10	0	0	0	0	0	0
3	11	13	0	0	0	0	0	0	0
4	0	2	5	15	2	0	0	0	0
5	2	6	10	5	1	0	0	0	0
6	19	5	0	0	0	0	0	0	0
7	24	0	0	0	0	0	0	0	0
8	24	0	0	0	0	0	0	0	0
9	14	7	1	2	0	0	0	0	0
10	0	5	15	4	0	0	0	0	0
11	6	4	11	3	0	0	0	0	0
12	9	8	7	0	0	0	0	0	0
13	1	23	0	0	0	0	0	0	0
14	7	16	1	0	0	0	0	0	0
15	0	3	16	5	0	0	0	0	0
16	0	6	16	2	0	0	0	0	0
17	9	7	8	0	0	0	0	0	0
18	0	2	17	5	0	0	0	0	0
19	12	11	1	0	0	0	0	0	0
20	9	10	5	0	0	0	0	0	0
21	0	5	19	0	0	0	0	0	0
22	9	6	6	3	0	0	0	0	0
23	0	3	18	3	0	0	0	0	0
24	3	6	11	4	0	0	0	0	0
25	4	2	3	15	0	0	0	0	0
26	1	4	6	9	4	0	0	0	0
27	5	13	5	1	0	0	0	0	0
28	0	4	19	0	0	0	0	0	1
AVERAGE	6.7	6.7	7.6	2.7	0.3	0.0	0.0	0.0	0.0
TOTAL	187	188	213	76	7	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: ZEIN MECHANICAL
MILWAUKEE, WISCONSIN

REPORT PERIOD: 80/ 2
SITE NUMBER: 184

LATITUDE: 43.00 DEG NORTH
LONGITUDE: 88.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 53 DEG

TIME ZONE: CENTRAL
ALTITUDE: 750 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	9.	14.	5.	22.	14:15	0.	7: 3	41.
2	13.	20.	8.	30.	14:36	-2.	6:45	41.
3	14.	19.	11.	22.	14:52	7.	21:27	41.
4	17.	23.	13.	33.	12:39	8.	0:28	41.
5	23.	25.	22.	27.	19:55	15.	0: 3	41.
6	23.	25.	22.	27.	12:49	16.	21:20	41.
7	21.	24.	18.	29.	13:52	15.	19:14	41.
8	22.	26.	20.	31.	11:30	16.	1:12	41.
9	18.	23.	15.	29.	14:52	7.	23:35	41.
10	15.	18.	12.	22.	14:58	5.	4: 7	41.
11	15.	17.	14.	23.	13:59	8.	7:14	41.
12	15.	20.	11.	25.	13:54	6.	5:22	41.
13	21.	23.	19.	26.	14: 3	14.	0: 0	41.
14	22.	25.	19.	32.	12:16	14.	7: 1	41.
15	20.	23.	17.	25.	14:31	13.	23:56	41.
16	10.	12.	8.	16.	15:16	3.	23:53	41.
17	8.	11.	5.	18.	14:44	-3.	6:23	41.
18	21.	23.	20.	33.	14:48	9.	6:33	41.
19	23.	22.	24.	37.	10:19	16.	19:14	41.
20	30.	35.	26.	39.	13: 0	16.	0: 1	41.
21	35.	36.	34.	37.	12:41	32.	18:48	41.
22	33.	32.	33.	33.	3:20	32.	7: 4	41.
23	32.	35.	30.	37.	10:34	24.	23:43	41.
24	29.	33.	26.	36.	13:46	21.	23:48	41.
25	18.	19.	17.	23.	13:51	10.	23:39	41.
26	14.	16.	13.	23.	23:58	4.	6:19	41.
27	22.	22.	22.	26.	14:14	17.	6:43	49.
28	18.	21.	15.	25.	12:33	4.	23:56	55.
MEAN	20.	23.	18.					42.
STANDARD DEVIATION	7.1	6.7	7.6					3.0

ENVIRONMENTAL SUMMARY REPORT

SITE: ZEIN MECHANICAL
MILWAUKEE, WISCONSIN

REPORT PERIOD: 80/ 2
SITE NUMBER: 184

LATITUDE: 43.00 DEG NORTH
LONGITUDE: 88.00 DEG WEST

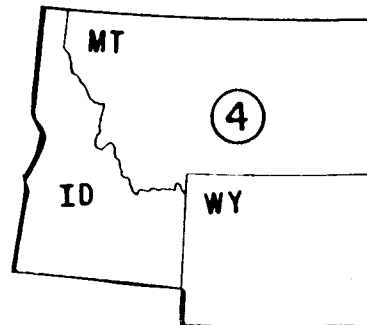
AZIMUTH: 0 DEG
PYRANOMETER TILT: 53 DEG

TIME ZONE: CENTRAL
ALTITUDE: 750 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2109.	N.A.	N.A.	329.	11:51	3159.	67.
2	2075.	N.A.	N.A.	326.	11:49	3169.	65.
3	1315.	N.A.	N.A.	326.	11:35	3169.	42.
4	1058.	N.A.	N.A.	302.	12: 7	3179.	33.
5	255.	N.A.	N.A.	79.	14:33	3189.	8.
6	364.	N.A.	N.A.	170.	12:49	3199.	11.
7	1071.	N.A.	N.A.	358.	12:11	3208.	33.
8	799.	N.A.	N.A.	276.	11:30	3208.	25.
9	2023.	N.A.	N.A.	341.	11:56	3223.	63.
10	916.	N.A.	N.A.	332.	12:28	3223.	28.
11	2117.	N.A.	N.A.	355.	11:35	3232.	66.
12	2181.	N.A.	N.A.	341.	11:40	3241.	67.
13	270.	N.A.	N.A.	70.	10:46	3249.	8.
14	1657.	N.A.	N.A.	338.	11:55	3258.	51.
15	297.	N.A.	N.A.	70.	12:34	3262.	9.
16	2495.	N.A.	N.A.	396.	11:53	3270.	76.
17	2388.	N.A.	N.A.	358.	11:59	3270.	73.
18	1743.	N.A.	N.A.	358.	11:58	3277.	53.
19	859.	N.A.	N.A.	123.	16:50	3281.	26.
20	598.	N.A.	N.A.	188.	7:40	3288.	18.
21	168.	N.A.	N.A.	50.	11: 0	3295.	5.
22	108.	N.A.	N.A.	26.	13:18	3298.	3.
23	186.	N.A.	N.A.	70.	10:28	3304.	6.
24	1659.	N.A.	N.A.	349.	11: 6	3310.	50.
25	1264.	N.A.	N.A.	341.	12:58	3312.	38.
26	1578.	N.A.	N.A.	385.	12: 0	3317.	48.
27	*	N.A.	N.A.	*	*:*	3319.	*
28	1634.	N.A.	N.A.	364.	11:55	3323.	49.
MEAN	1229.	N.A.	N.A.			3251.	
STANDARD DEVIATION	772.	N.A.	N.A.			51.	

ZONE 4



ENVIRONMENTAL SUMMARY REPORT

SITE: BILLINGS SHIPPING
BILLINGS, MONTANA

REPORT PERIOD: 80/ 2
SITE NUMBER: 195

LATITUDE: 45.48 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 108.32 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 3567 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	34.	37.	32.	45. 15:10	21. 1:28	N.A.
2	39.	43.	36.	54. 14:59	30. 5:38	N.A.
3	41.	44.	39.	48. 12:46	36. 0: 3	N.A.
4	41.	45.	38.	49. 14: 1	31. 23:57	N.A.
5	34.	39.	30.	49. 15:20	25. 7:15	N.A.
6	34.	38.	32.	44. 13:14	28. 1: 8	N.A.
7	24.	22.	26.	32. 0: 5	21. 11:49	N.A.
8	25.	28.	23.	35. 14:15	17. 5:43	N.A.
9	31.	35.	29.	44. 12:22	24. 2:53	N.A.
10	26.	29.	24.	40. 15:24	18. 23:40	N.A.
11	25.	29.	22.	43. 14:30	10. 7: 2	N.A.
12	29.	31.	27.	36. 11:14	22. 23:47	N.A.
13	16.	18.	14.	22. 0: 8	3. 23:44	N.A.
14	1.	2.	1.	8. 14:19	-1. 7:17	N.A.
15	3.	7.	1.	12. 11:56	-4. 23:42	N.A.
16	4.	11.	-1.	30. 15:10	-9. 6:38	N.A.
17	22.	26.	19.	42. 15: 5	0. 4:41	N.A.
18	38.	43.	34.	54. 11:29	26. 6:43	N.A.
19	38.	46.	31.	62. 15:35	23. 3:56	N.A.
20	33.	37.	30.	47. 11:36	28. 3:20	N.A.
21	35.	40.	32.	50. 13:10	28. 2:14	N.A.
22	35.	39.	32.	48. 13:42	28. 22:28	N.A.
23	36.	41.	33.	50. 14:52	28. 22:52	N.A.
24	35.	42.	29.	50. 13:27	24. 23:56	N.A.
25	37.	43.	33.	54. 15:19	21. 6:31	N.A.
26	46.	51.	42.	61. 14:39	33. 6:55	N.A.
27	54.	59.	49.	67. 14:12	42. 3:48	N.A.
28	32.	31.	33.	44. 0:17	21. 23:52	N.A.
MEAN	30.	34.	27.			N.A.
STANDARD DEVIATION	12.3	13.0	11.9			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: BILLINGS SHIPPING
BILLINGS, MONTANA

REPORT PERIOD: 80/ 2
SITE NUMBER: 195

LATITUDE: 45.48 DEG NORTH
LONGITUDE: 108.32 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 50 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 3567 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	959.	N.A.	N.A.	308.	11:42	3041.	32.
2	1492.	N.A.	N.A.	308.	11:51	3053.	49.
3	193.	N.A.	N.A.	109.	12:35	3056.	6.
4	863.	N.A.	N.A.	299.	12: 9	3068.	28.
5	1681.	N.A.	N.A.	312.	11:47	3081.	55.
6	276.	N.A.	N.A.	122.	11:38	3090.	9.
7	172.	N.A.	N.A.	53.	11:17	3102.	6.
8	1401.	N.A.	N.A.	324.	12:28	3114.	45.
9	786.	N.A.	N.A.	262.	11: 4	3126.	25.
10	568.	N.A.	N.A.	178.	15:18	3135.	18.
11	1713.	N.A.	N.A.	327.	11:29	3146.	54.
12	267.	N.A.	N.A.	84.	11:46	3155.	8.
13	405.	N.A.	N.A.	81.	12:51	3166.	13.
14	800.	N.A.	N.A.	265.	14:24	3169.	25.
15	899.	N.A.	N.A.	221.	12:18	3185.	28.
16	1818.	N.A.	N.A.	327.	12:25	3188.	57.
17	695.	N.A.	N.A.	259.	15: 5	3203.	22.
18	675.	N.A.	N.A.	252.	11:45	3206.	21.
19	1813.	N.A.	N.A.	321.	12: 1	3221.	56.
20	587.	N.A.	N.A.	256.	12:40	3223.	18.
21	1242.	N.A.	N.A.	321.	12:11	3237.	38.
22	1395.	N.A.	N.A.	374.	12:12	3240.	43.
23	1909.	N.A.	N.A.	327.	11:56	3253.	59.
24	2253.	N.A.	N.A.	337.	12: 2	3259.	69.
25	1575.	N.A.	N.A.	349.	12:12	3268.	48.
26	1719.	N.A.	N.A.	321.	12:25	3273.	53.
27	997.	N.A.	N.A.	302.	11:32	3282.	30.
28	135.	N.A.	N.A.	28.	11: 3	3287.	4.
MEAN	1046.	N.A.	N.A.			3172.	
STANDARD DEVIATION	617.	N.A.	N.A.			77.	

ENVIRONMENTAL SUMMARY REPORT

SITE: DESIGN CONSTRUCTION
BIG FORK, MONTANA

REPORT PERIOD: 80/ 2
SITE NUMBER: 76

LATITUDE: 48.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 107.00 DEG WEST PYRANOMETER TILT: 45 DEG TIME ZONE: MOUNTAIN
ALTITUDE: 2284 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	14.	16.	14.	16.	8: 6	13.	0:12	73.
2	*	*	*	*	*:*	*	*:*	*
3	*	*	*	*	*:*	*	*:*	*
4	35.	36.	31.	41.	15:35	25.	23:56	63.
5	25.	27.	24.	31.	12:44	19.	5:48	61.
6	29.	29.	29.	31.	21:19	27.	4:37	62.
7	31.	32.	30.	36.	12:58	28.	8:15	54.
8	31.	31.	31.	33.	13:31	30.	6:56	59.
9	30.	31.	30.	33.	13:59	29.	6:53	64.
10	30.	31.	29.	33.	14:47	28.	23: 8	67.
11	29.	30.	28.	33.	15:40	26.	23:26	58.
12	27.	28.	26.	30.	12:30	23.	22:29	57.
13	17.	18.	16.	25.	0:21	6.	23:44	43.
14	7.	8.	6.	13.	15:28	4.	6:40	50.
15	12.	14.	10.	21.	14:12	6.	3:27	50.
16	17.	20.	15.	26.	12:56	11.	1:53	60.
17	22.	23.	21.	30.	9:40	14.	6:17	60.
18	29.	30.	28.	37.	13: 9	23.	1:34	48.
19	40.	43.	37.	50.	16:21	32.	19:54	49.
20	34.	36.	33.	40.	16:27	28.	23:46	53.
21	32.	38.	28.	47.	14: 5	25.	21: 5	49.
22	32.	36.	28.	47.	13:48	24.	23: 0	55.
23	28.	34.	23.	43.	12: 1	17.	6:54	59.
24	25.	30.	22.	43.	13:48	15.	6:52	68.
25	30.	32.	29.	36.	15:29	23.	0:23	70.
26	34.	35.	34.	39.	14:52	30.	3:29	68.
27	39.	42.	37.	54.	14:45	34.	7: 1	68.
28	37.	39.	36.	47.	9:17	32.	3:20	63.
MEAN	28.	30.	26.					59.
STANDARD DEVIATION	8.3	8.5	8.1					7.8

ENVIRONMENTAL SUMMARY REPORT

SITE: DESIGN CONSTRUCTION
BIG FORK, MONTANA

REPORT PERIOD: 80/ 2
SITE NUMBER: 76

LATITUDE: 48.00 DEG NORTH
LONGITUDE: 107.00 DEG WEST

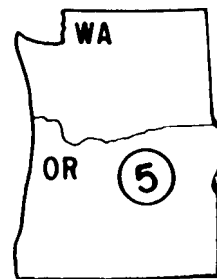
AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 2284 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*: *	2846.	*
2	*	N.A.	N.A.	*	*: *	2862.	*
3	*	N.A.	N.A.	*	*: *	2877.	*
4	386.	N.A.	N.A.	299.	12:54	2889.	13.
5	227.	N.A.	N.A.	92.	13: 0	2904.	8.
6	0.	N.A.	N.A.	0.	6:45	2916.	0.
7	165.	N.A.	N.A.	102.	13:46	2931.	6.
8	66.	N.A.	N.A.	20.	11:44	2943.	2.
9	111.	N.A.	N.A.	37.	13:59	2958.	4.
10	117.	N.A.	N.A.	48.	12:17	2970.	4.
11	106.	N.A.	N.A.	31.	11: 3	2982.	4.
12	101.	N.A.	N.A.	31.	12:19	2997.	3.
13	1259.	N.A.	N.A.	316.	12:11	3009.	42.
14	221.	N.A.	N.A.	85.	11:28	3024.	7.
15	819.	N.A.	N.A.	265.	11:43	3035.	27.
16	1242.	N.A.	N.A.	302.	11:47	3046.	41.
17	333.	N.A.	N.A.	245.	10:54	3057.	11.
18	508.	N.A.	N.A.	302.	12: 5	3072.	17.
19	1129.	N.A.	N.A.	309.	12:53	3083.	37.
20	238.	N.A.	N.A.	190.	15:50	3101.	8.
21	875.	N.A.	N.A.	278.	11: 3	3112.	28.
22	1085.	N.A.	N.A.	333.	12: 7	3126.	35.
23	1934.	N.A.	N.A.	309.	12:55	3136.	62.
24	1511.	N.A.	N.A.	319.	12:12	3146.	48.
25	68.	N.A.	N.A.	27.	15:13	3156.	2.
26	120.	N.A.	N.A.	34.	10:47	3166.	4.
27	463.	N.A.	N.A.	255.	15: 1	3182.	15.
28	420.	N.A.	N.A.	248.	10:27	3188.	13.
MEAN	563.	N.A.	N.A.			3026.	
STANDARD DEVIATION	536.	N.A.	N.A.			105.	

ZONE 5



ENVIRONMENTAL SUMMARY REPORT

SITE: LANDURA CORPORATION
STAYTON, OREGON

REPORT PERIOD: 80/ 2
SITE NUMBER: 156

LATITUDE: 45.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 123.00 DEG WEST PYRANOMETER TILT: 89 DEG
TIME ZONE: PACIFIC
ALTITUDE: 1000 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	46.	49.	45.	50.	13: 6	36.	1:27	*
2	48.	49.	48.	57.	12:45	46.	0:34	*
3	47.	50.	45.	55.	14:21	41.	23:57	*
4	40.	42.	40.	47.	15:47	36.	23:25	*
5	42.	42.	43.	54.	23: 2	36.	8: 3	*
6	45.	46.	45.	50.	14: 9	42.	23:57	68.
7	42.	45.	40.	50.	13:17	32.	23:50	68.
8	36.	40.	33.	50.	15:56	28.	6: 4	67.
9	36.	41.	34.	49.	12:10	27.	7:21	66.
10	39.	45.	36.	51.	16:37	31.	23:49	67.
11	36.	43.	32.	50.	14:50	25.	7: 6	67.
12	36.	42.	33.	52.	16:24	24.	7: 4	67.
13	36.	38.	33.	47.	13:14	27.	7:38	67.
14	34.	36.	32.	39.	12:44	30.	23:58	65.
15	32.	34.	31.	36.	16:40	29.	1:44	66.
16	36.	39.	33.	44.	13:22	30.	0:25	66.
17	39.	40.	38.	45.	12: 7	32.	0:12	67.
18	50.	53.	48.	57.	10:32	40.	0: 7	68.
19	46.	48.	45.	54.	14:19	43.	7:55	68.
20	43.	46.	42.	54.	14:32	38.	23:40	69.
21	37.	38.	36.	43.	16:28	30.	3:45	68.
22	42.	44.	41.	49.	10: 4	36.	6: 4	68.
23	45.	47.	44.	53.	12:52	39.	6:47	68.
24	49.	54.	46.	62.	14:39	42.	2: 7	68.
25	48.	48.	48.	52.	23:40	43.	7:16	68.
26	57.	60.	55.	63.	13:11	50.	3:13	70.
27	53.	55.	52.	60.	11: 9	49.	22:41	70.
28	48.	50.	46.	57.	16: 1	41.	23:27	70.
MEAN	43.	45.	41.					68.
STANDARD DEVIATION	6.4	6.2	6.7					1.2

ENVIRONMENTAL SUMMARY REPORT

SITE: LANDURA CORPORATION
STAYTON, OREGON

REPORT PERIOD: 80/ 2
SITE NUMBER: 156

LATITUDE: 45.00 DEG NORTH
LONGITUDE: 123.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 89 DEG

TIME ZONE: PACIFIC
ALTITUDE: 1000 FEET

DAY	TOTAL GLOBAL INSOLATION BTU/FT2	PYRANOMETER TILT 89 DEG INSOLATION BTU/FT2	INSOLATION MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	85.	20.	52.	12:50	2947.	3.
2	51.	13.	23.	12:13	2937.	2.
3	493.	844.	155.	11: 4	2939.	17.
4	397.	410.	113.	10:27	2940.	13.
5	136.	36.	36.	10:37	2941.	5.
6	268.	208.	120.	13:32	2938.	9.
7	394.	379.	110.	13:33	2938.	13.
8	473.	559.	136.	13:16	2938.	16.
9	443.	336.	162.	12:10	2926.	15.
10	634.	976.	178.	13: 3	2932.	22.
11	718.	1253.	152.	11:54	2920.	25.
12	700.	1221.	155.	12: 3	2918.	24.
13	472.	497.	152.	13:24	2913.	16.
14	461.	315.	175.	13:48	2910.	16.
15	232.	65.	78.	12:35	2906.	8.
16	444.	353.	117.	10:15	2899.	15.
17	213.	78.	107.	11:56	2895.	7.
18	296.	136.	165.	12:43	2887.	10.
19	335.	125.	104.	10:51	2881.	12.
20	510.	337.	217.	11:46	2872.	18.
21	234.	64.	55.	13:16	2866.	8.
22	345.	242.	107.	10: 4	2856.	12.
23	595.	436.	172.	10:28	2849.	21.
24	553.	320.	165.	12:20	2838.	19.
25	107.	24.	32.	13:56	2829.	4.
26	160.	48.	58.	10: 9	2817.	6.
27	207.	69.	87.	10:59	2808.	7.
28	587.	489.	230.	12:59	2795.	21.
MEAN	377.	352.			2894.	
STANDARD DEVIATION	189.	348.			46.	

ENVIRONMENTAL SUMMARY REPORT

SITE: OLYMPIC ENGINEERING
RICHLAND, WASHINGTON

REPORT PERIOD: 80/ 2
SITE NUMBER: 6

LATITUDE: 46.20 DEG NORTH
LONGITUDE: 118.20 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 56 DEG

TIME ZONE: PACIFIC
ALTITUDE: 949 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	28.	31.	27.	39.	15:16	22.	0:10	49.
2	31.	31.	30.	33.	21:52	28.	3:17	67.
3	34.	40.	30.	54.	13:52	26.	21: 9	60.
4	31.	37.	28.	44.	12:37	23.	6: 3	48.
5	36.	38.	35.	41.	14:21	31.	5:38	48.
6	34.	*	34.	35.	19:32	32.	22:54	49.
7	37.	41.	37.	41.	16:40	34.	23:31	58.
8	37.	38.	35.	41.	12:24	34.	8:19	48.
9	36.	39.	36.	39.	16:32	34.	23:44	71.
10	37.	40.	36.	41.	13:46	35.	22:34	61.
11	35.	37.	34.	40.	14:34	33.	22:40	50.
12	34.	36.	33.	38.	15: 2	32.	22:48	55.
13	32.	32.	31.	34.	10:53	28.	23:52	49.
14	24.	25.	24.	29.	14: 0	21.	7:26	48.
15	26.	28.	25.	30.	14:33	23.	0:41	51.
16	31.	33.	30.	38.	12:23	27.	0: 1	61.
17	34.	37.	32.	40.	13: 1	30.	3:14	*
18	36.	37.	35.	40.	23:51	32.	2:21	60.
19	42.	46.	40.	51.	11:35	37.	6:20	55.
20	44.	50.	39.	59.	15:42	33.	23:56	55.
21	37.	45.	31.	53.	12:54	25.	5: 5	50.
22	35.	38.	32.	44.	12:19	23.	5:33	50.
23	41.	48.	36.	55.	12: 4	33.	7: 0	64.
24	42.	46.	38.	55.	13:13	34.	6:55	60.
25	43.	48.	39.	56.	12:41	33.	3:37	51.
26	42.	44.	42.	46.	12: 6	39.	4:11	52.
27	44.	46.	43.	49.	13:44	41.	5:55	51.
28	48.	53.	43.	61.	14:18	40.	23:58	52.
MEAN	36.	39.	34.					55.
STANDARD DEVIATION	5.6	6.9	5.1					6.5

ENVIRONMENTAL SUMMARY REPORT

SITE: OLYMPIC ENGINEERING
RICHLAND, WASHINGTON

REPORT PERIOD: 80/ 2
SITE NUMBER: 6

LATITUDE: 46.20 DEG NORTH
LONGITUDE: 118.20 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 56 DEG

TIME ZONE: PACIFIC
ALTITUDE: 949 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	458.	N.A.	N.A.	195.	11:43	3094.	15.
2	98.	N.A.	N.A.	27.	11: 0	3102.	3.
3	1358.	N.A.	N.A.	279.	12:16	3114.	44.
4	1749.	N.A.	N.A.	297.	12:27	3126.	56.
5	279.	N.A.	N.A.	114.	10:53	3137.	9.
6	*	N.A.	N.A.	*	*:*	3145.	*
7	*	N.A.	N.A.	*	*:*	3156.	*
8	205.	N.A.	N.A.	30.	11:15	3167.	6.
9	*	N.A.	N.A.	*	*:*	3175.	*
10	*	N.A.	N.A.	*	*:*	3186.	*
11	118.	N.A.	N.A.	24.	12:37	3193.	4.
12	109.	N.A.	N.A.	21.	12: 0	3203.	3.
13	128.	N.A.	N.A.	30.	10:48	3204.	4.
14	552.	N.A.	N.A.	213.	14: 0	3220.	17.
15	422.	N.A.	N.A.	90.	12:25	3220.	13.
16	313.	N.A.	N.A.	81.	13:49	3235.	10.
17	364.	N.A.	N.A.	81.	11:35	3241.	11.
18	176.	N.A.	N.A.	36.	11:46	3250.	5.
19	954.	N.A.	N.A.	288.	10:36	3256.	29.
20	1186.	N.A.	N.A.	285.	10:33	3264.	36.
21	1428.	N.A.	N.A.	285.	11: 8	3269.	44.
22	457.	N.A.	N.A.	210.	11:15	3277.	14.
23	1889.	N.A.	N.A.	318.	11:53	3281.	58.
24	792.	N.A.	N.A.	261.	11:48	3285.	24.
25	695.	N.A.	N.A.	306.	10:55	3292.	21.
26	183.	N.A.	N.A.	57.	12: 6	3296.	6.
27	207.	N.A.	N.A.	60.	10:59	3299.	6.
28	804.	N.A.	N.A.	330.	12: 4	3301.	24.
MEAN	622.	N.A.	N.A.			3214.	
STANDARD DEVIATION	540.	N.A.	N.A.			65.	

ENVIRONMENTAL SUMMARY REPORT

SITE: WASHINGTON NAT GAS
SEATTLE, WASHINGTON

REPORT PERIOD: 80/ 2
SITE NUMBER: 64

LATITUDE: 47.50 DEG NORTH
LONGITUDE: 122.30 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 57 DEG

TIME ZONE: PACIFIC
ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	45.	49.	43.	54.	14:49	35.	0: 3	51.
2	47.	48.	46.	50.	15:32	43.	1: 8	48.
3	47.	49.	46.	53.	14:34	44.	7:32	48.
4	45.	48.	44.	54.	14:22	42.	8: 4	53.
5	46.	49.	45.	50.	13:35	42.	1:39	53.
6	46.	46.	46.	48.	15:15	44.	0: 4	52.
7	45.	47.	44.	50.	13:33	42.	23:50	47.
8	41.	42.	40.	49.	14: 5	36.	23:47	47.
9	39.	41.	38.	51.	14:38	33.	7:57	54.
10	37.	40.	36.	46.	15:32	32.	7: 0	52.
11	38.	40.	36.	49.	15:23	33.	7:21	53.
12	37.	39.	36.	47.	15:34	34.	8:43	48.
13	38.	40.	37.	45.	13:37	34.	1:52	48.
14	34.	36.	33.	40.	11:26	29.	23:18	48.
15	32.	32.	31.	34.	14: 3	28.	1:31	48.
16	39.	41.	37.	46.	13:59	32.	1:54	56.
17	42.	42.	42.	46.	16:39	36.	6: 9	50.
18	47.	48.	47.	50.	14:49	44.	0: 7	55.
19	47.	49.	45.	53.	13:13	43.	23:52	45.
20	43.	44.	42.	49.	16:25	38.	23:53	49.
21	39.	42.	38.	49.	14:30	32.	8: 9	51.
22	39.	41.	38.	52.	12:55	34.	7:13	61.
23	45.	48.	43.	59.	15:34	33.	6:43	54.
24	52.	52.	52.	57.	16: 1	46.	8:27	56.
25	50.	52.	48.	60.	11:34	45.	7:13	49.
26	51.	52.	51.	54.	11: 2	48.	0:43	50.
27	53.	54.	52.	55.	11:39	51.	4:58	54.
28	49.	51.	48.	56.	13:30	46.	22:10	55.
MEAN	43.	45.	42.					
STANDARD DEVIATION	5.5	5.3	5.7					

ENVIRONMENTAL SUMMARY REPORT

SITE: WASHINGTON NAT GAS
SEATTLE, WASHINGTON

REPORT PERIOD: 80/ 2
SITE NUMBER: 64

LATITUDE: 47.50 DEG NORTH
LONGITUDE: 122.30 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 57 DEG

TIME ZONE: PACIFIC
ALTITUDE: 200 FEET

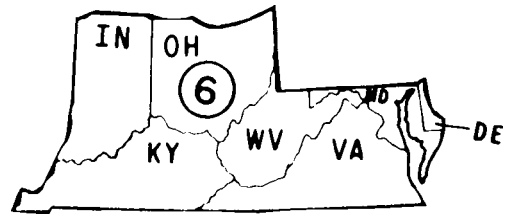
INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MM	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	208.	N.A.	N.A.	204.	14:44	3068.	7.
2	37.	N.A.	N.A.	18.	15: 6	3081.	1.
3	421.	N.A.	N.A.	261.	14:18	3090.	14.
4	1124.	N.A.	N.A.	261.	12:42	3102.	36.
5	75.	N.A.	N.A.	27.	14:23	3111.	2.
6	52.	N.A.	N.A.	18.	12:47	3123.	2.
7	216.	N.A.	N.A.	158.	13:12	3125.	7.
8	652.	N.A.	N.A.	252.	12:43	3143.	21.
9	992.	N.A.	N.A.	301.	12:52	3145.	32.
10	1607.	N.A.	N.A.	295.	12:25	3163.	51.
11	1403.	N.A.	N.A.	298.	12:20	3171.	44.
12	1011.	N.A.	N.A.	289.	12:21	3182.	32.
13	316.	N.A.	N.A.	283.	13:37	3190.	10.
14	526.	N.A.	N.A.	243.	11:21	3200.	16.
15	24.	N.A.	N.A.	9.	11:29	3207.	1.
16	493.	N.A.	N.A.	240.	12:39	3214.	15.
17	139.	N.A.	N.A.	58.	9:32	3224.	4.
18	81.	N.A.	N.A.	24.	13:13	3231.	3.
19	549.	N.A.	N.A.	213.	9:39	3237.	17.
20	272.	N.A.	N.A.	146.	16:14	3246.	8.
21	1520.	N.A.	N.A.	319.	12:30	3252.	47.
22	*	N.A.	N.A.	*	*:*	3257.	*
23	1641.	N.A.	N.A.	313.	12:17	3270.	50.
24	286.	N.A.	N.A.	161.	12: 6	3271.	9.
25	302.	N.A.	N.A.	258.	10:51	3283.	9.
26	72.	N.A.	N.A.	40.	10:56	3287.	2.
27	73.	N.A.	N.A.	15.	10: 2	3291.	2.
28	607.	N.A.	N.A.	328.	13:25	3294.	18.

MEAN 544. N.A. N.A. 3195.

STANDARD
DEVIATION 522. N.A. N.A. 70.

ZONE 6



ENVIRONMENTAL SUMMARY REPORT

SITE: COLUMBIA GAS
COLUMBUS, OHIO

REPORT PERIOD: 80/ 2
SITE NUMBER: 176

LATITUDE: 40.00 DEG NORTH
LONGITUDE: 83.00 DEG WEST

AZIMUTH: -5 DEG
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN
ALTITUDE: 755 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	14.	17.	11.	24.	14:38	5.	7:26	*
2	17.	20.	15.	27.	15:17	10.	0:26	*
3	18.	23.	16.	30.	10:56	9.	2: 3	*
4	17.	22.	14.	31.	12:27	7.	6:40	*
5	21.	24.	19.	31.	15:23	8.	6:40	*
6	27.	30.	26.	35.	13:17	22.	23:53	*
7	24.	26.	22.	33.	14: 1	16.	23:15	*
8	24.	27.	21.	37.	13:55	12.	5:34	*
9	28.	31.	26.	37.	13:47	19.	23:55	*
10	22.	24.	20.	30.	16:33	13.	5:21	*
11	24.	27.	21.	33.	12:49	15.	23:59	*
12	19.	24.	16.	34.	14:17	8.	7:43	*
13	24.	28.	21.	37.	14:28	11.	4:52	*
14	34.	37.	32.	40.	14:55	27.	1:35	*
15	34.	34.	34.	38.	16:22	29.	23:55	*
16	23.	25.	21.	29.	0: 0	15.	22:29	*
17	16.	18.	13.	24.	12:53	10.	4:27	*
18	22.	26.	19.	36.	16: 3	8.	4:11	*
19	38.	42.	35.	50.	12:56	26.	1:18	*
20	40.	40.	40.	42.	0:33	38.	6:35	*
21	42.	43.	41.	48.	14:41	37.	3:50	*
22	46.	48.	44.	53.	9:10	41.	23:28	*
23	40.	40.	39.	45.	13:37	38.	12:12	*
24	35.	35.	35.	40.	13:43	30.	23:29	*
25	32.	34.	30.	38.	14:41	21.	23:55	*
26	19.	19.	19.	26.	15:55	10.	7:23	*
27	28.	31.	25.	36.	11:35	23.	0: 2	*
28	24.	29.	21.	36.	11:36	15.	23: 7	*

MEAN 27. 29. 25. 0.

STANDARD DEVIATION 8.8 8.1 9.4 *****

ENVIRONMENTAL SUMMARY REPORT

SITE: COLUMBIA GAS
COLUMBUS, OHIO

REPORT PERIOD: 80/ 2
SITE NUMBER: 176

LATITUDE: 40.00 DEG NORTH AZIMUTH: -5 DEG TIME ZONE: EASTERN
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 755 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2006.	225.	1781.	314.	12:57	3033.	66.
2	553.	426.	127.	262.	14:24	3035.	18.
3	988.	381.	607.	310.	11:23	3046.	32.
4	1390.	332.	1058.	317.	13: 9	3061.	45.
5	572.	447.	125.	115.	13:15	3063.	19.
6	317.	287.	31.	109.	13: 1	3074.	10.
7	896.	531.	366.	301.	12:14	3086.	29.
8	740.	475.	265.	272.	12:41	3097.	24.
9	606.	486.	120.	150.	10: 0	3108.	20.
10	343.	313.	30.	122.	16:27	3114.	11.
11	608.	456.	152.	330.	12:43	3125.	19.
12	1837.	448.	1389.	323.	13:13	3136.	59.
13	2020.	309.	1711.	320.	13: 3	3138.	64.
14	349.	332.	16.	102.	11:32	3148.	11.
15	113.	114.	*	29.	13:10	3159.	4.
16	1474.	502.	971.	346.	12: 0	3169.	46.
17	1597.	664.	933.	362.	12:43	3180.	50.
18	2163.	281.	1882.	320.	11:58	3182.	68.
19	1271.	582.	689.	333.	11:42	3192.	40.
20	100.	102.	*	32.	11:45	3198.	3.
21	306.	280.	27.	128.	12:44	3208.	10.
22	278.	234.	44.	134.	9: 5	3217.	9.
23	195.	188.	7.	118.	13: 5	3226.	6.
24	604.	462.	142.	282.	13:43	3235.	19.
25	316.	297.	19.	74.	12:44	3237.	10.
26	1981.	305.	1676.	336.	11:33	3246.	61.
27	704.	513.	191.	298.	11:35	3254.	22.
28	1537.	490.	1047.	381.	13:28	3263.	47.
MEAN	924.	374.	593.			3151.	
STANDARD DEVIATION	668.	138.	647.			71.	

ENVIRONMENTAL SUMMARY REPORT

SITE: DAMASCUS LAND
DAMASCUS, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 141

LATITUDE: 39.11 DEG NORTH
LONGITUDE: 76.40 DEG WEST

AZIMUTH: 10 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN
ALTITUDE: 148 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1726.	N.A.	N.A.	301.	13: 1	3235.	53.
2	1833.	N.A.	N.A.	294.	12:31	3242.	57.
3	1848.	N.A.	N.A.	290.	12:14	3241.	57.
4	1725.	N.A.	N.A.	283.	12:30	3250.	53.
5	1845.	N.A.	N.A.	294.	12:38	3255.	57.
6	219.	N.A.	N.A.	42.	11:29	3255.	7.
7	1423.	N.A.	N.A.	336.	11:55	3260.	44.
8	1726.	N.A.	N.A.	290.	13: 9	3266.	53.
9	492.	N.A.	N.A.	129.	10:48	3267.	15.
10	996.	N.A.	N.A.	192.	15:49	3272.	30.
11	1365.	N.A.	N.A.	276.	11: 1	3277.	42.
12	1904.	N.A.	N.A.	301.	12:37	3282.	58.
13	1904.	N.A.	N.A.	297.	12:32	3286.	58.
14	1496.	N.A.	N.A.	297.	11:52	3285.	46.
15	595.	N.A.	N.A.	227.	13:50	3288.	18.
16	747.	N.A.	N.A.	255.	14:27	3292.	23.
17	1995.	N.A.	N.A.	315.	12:41	3295.	61.
18	2009.	N.A.	N.A.	318.	12:41	3298.	61.
19	1434.	N.A.	N.A.	308.	14: 4	3296.	44.
20	1710.	N.A.	N.A.	329.	13:15	3299.	52.
21	1670.	N.A.	N.A.	301.	12:41	3301.	51.
22	221.	N.A.	N.A.	52.	12: 6	3303.	7.
23	781.	N.A.	N.A.	346.	12:11	3304.	24.
24	1323.	N.A.	N.A.	318.	12:40	3302.	40.
25	711.	N.A.	N.A.	252.	10:21	3303.	22.
26	1728.	N.A.	N.A.	336.	13:10	3303.	52.
27	515.	N.A.	N.A.	136.	10:57	3304.	16.
28	148.	N.A.	N.A.	28.	11: 5	3303.	4.
MEAN	1289.	N.A.	N.A.			3281.	
STANDARD DEVIATION	613.	N.A.	N.A.			22.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FOREST CITY DILLON
WASHINGTON, D.C.

REPORT PERIOD: 80/ 2
SITE NUMBER: 125

LATITUDE: 39.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 77.00 DEG WEST PYRANOMETER TILT: 40 DEG
TIME ZONE: EASTERN
ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	20.	23.	18.	28. 14:35	14. 6:12	48.
2	21.	25.	19.	30. 14:35	15. 3:39	47.
3	24.	27.	21.	33. 15: 6	16. 7: 0	47.
4	26.	29.	24.	36. 15:48	21. 6: 7	47.
5	30.	33.	27.	42. 14:44	21. 7:10	46.
6	26.	27.	25.	30. 0: 1	23. 6: 9	46.
7	30.	33.	28.	40. 15:27	23. 1:40	45.
8	33.	36.	31.	42. 14:52	25. 6:21	45.
9	31.	33.	30.	37. 11:49	28. 22: 9	45.
10	29.	30.	28.	36. 16:12	22. 7: 8	46.
11	33.	38.	29.	43. 15:18	21. 6:20	46.
12	31.	33.	30.	37. 14:40	24. 7:12	45.
13	32.	38.	28.	45. 14: 9	23. 6: 9	46.
14	42.	48.	37.	59. 13:19	26. 7: 0	46.
15	37.	38.	36.	44. 14:39	34. 3:34	46.
16	34.	39.	31.	44. 14:23	25. 23:59	47.
17	25.	28.	23.	34. 14:48	19. 23:58	47.
18	30.	35.	26.	43. 14:39	18. 0:30	47.
19	38.	45.	33.	57. 14:38	27. 3:33	49.
20	38.	38.	39.	52. 10:20	30. 4: 4	49.
21	46.	42.	46.	54. 18:30		51.
22	43.	43.	43.	47. 0:28	39. 9:16	48.
23	49.	53.	45.	61. 10:52	40. 4:39	49.
24	50.	55.	46.	63. 13:58	42. 5:16	50.
25	38.	38.	38.	46. 0: 6	32. 6:35	50.
26	31.	33.	30.	36. 12: 3	25. 20:51	51.
27	33.	36.	31.	43. 12:30	25. 3:47	50.
28	27.	27.	27.	29. 0: 2	24. 23:45	51.
MEAN	33.	36.	31.			48.
STANDARD DEVIATION	7.7	8.0	7.8			2.0

ENVIRONMENTAL SUMMARY REPORT

SITE: FOREST CITY DILLON
WASHINGTON, D.C.

REPORT PERIOD: 80/ 2
SITE NUMBER: 125

LATITUDE: 39.00 DEG NORTH
LONGITUDE: 77.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN
ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1908.	N.A.	N.A.	314.	12:32	3068.	62.
2	1983.	N.A.	N.A.	305.	11:55	3082.	64.
3	1991.	N.A.	N.A.	308.	12:10	3084.	65.
4	1731.	N.A.	N.A.	300.	12:10	3095.	56.
5	1897.	N.A.	N.A.	308.	12:14	3105.	61.
6	199.	N.A.	N.A.	42.	13:37	3111.	6.
7	1756.	N.A.	N.A.	303.	12:42	3121.	56.
8	1873.	N.A.	N.A.	303.	12:18	3132.	60.
9	330.	N.A.	N.A.	82.	11:28	3142.	11.
10	1702.	N.A.	N.A.	385.	12:28	3152.	54.
11	1736.	N.A.	N.A.	300.	12:38	3158.	55.
12	2049.	N.A.	N.A.	311.	12:21	3167.	65.
13	1989.	N.A.	N.A.	303.	12:28	3177.	63.
14	1729.	N.A.	N.A.	314.	13:13	3180.	54.
15	478.	N.A.	N.A.	209.	14:34	3189.	15.
16	585.	N.A.	N.A.	246.	14:33	3199.	18.
17	2120.	N.A.	N.A.	328.	12:24	3208.	66.
18	1934.	N.A.	N.A.	317.	11:54	3217.	60.
19	1578.	N.A.	N.A.	334.	12:46	3219.	49.
20	*	N.A.	N.A.	*	*:*	3228.	*
21	*	N.A.	N.A.	*	*:*	3237.	*
22	189.	N.A.	N.A.	45.	12:28	3245.	6.
23	778.	N.A.	N.A.	311.	11: 2	3254.	24.
24	1512.	N.A.	N.A.	317.	12:10	3255.	46.
25	401.	N.A.	N.A.	153.	12: 0	3263.	12.
26	1634.	N.A.	N.A.	368.	12:41	3271.	50.
27	904.	N.A.	N.A.	331.	12: 3	3279.	28.
28	213.	N.A.	N.A.	37.	10: 8	3286.	6.
MEAN	1354.	N.A.	N.A.			3183.	
STANDARD DEVIATION	698.	N.A.	N.A.			66.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HOGATES RESTAURANT
WASHINGTON, DC

REPORT PERIOD: 80/ 2
SITE NUMBER: 42

LATITUDE: 38.90 DEG NORTH
LONGITUDE: 77.00 DEG WEST

AZIMUTH: 45 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN
ALTITUDE: 10 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	21.	23.	20.	28.	15:25	16.	5:49	40.
2	22.	25.	21.	30.	16: 2	16.	3:24	39.
3	24.	26.	23.	33.	15:35	17.	7:30	38.
4	27.	29.	26.	37.	15:14	22.	5:27	37.
5	30.	32.	29.	41.	14:47	23.	7: 8	37.
6	28.	28.	27.	30.	4:56	25.	23:39	37.
7	31.	33.	30.	41.	14:57	24.	7: 7	37.
8	33.	35.	32.	41.	15:16	26.	6:23	36.
9	32.	34.	31.	37.	11:31	29.	20:28	37.
10	30.	30.	30.	37.	16:28	24.	7:24	37.
11	32.	35.	30.	41.	13:11	21.	6: 9	38.
12	31.	31.	31.	37.	14:33	26.	7:21	39.
13	32.	36.	29.	45.	14: 6	22.	6:54	39.
14	40.	44.	38.	57.	14:11	23.	6:53	39.
15	40.	41.	40.	48.	14:31	37.	23:55	39.
16	36.	39.	34.	43.	14:52	26.	23:45	40.
17	26.	28.	25.	34.	16:17	21.	7: 2	40.
18	30.	33.	28.	42.	15:18	17.	6:57	40.
19	38.	41.	36.	53.	14:29	26.	6:40	40.
20	45.	51.	42.	62.	13:36	31.	2: 2	40.
21	51.	54.	49.	63.	14:44	41.	5:45	41.
22	45.	42.	46.	113.	17:54	41.	4:22	43.
23	47.	48.	47.	59.	11:57	40.	6:58	44.
24	51.	54.	49.	61.	12: 4	41.	6:54	45.
25	39.	38.	40.	47.	0: 4	35.	7:10	46.
26	32.	34.	32.	37.	0:51	26.	20:51	47.
27	34.	35.	33.	43.	12: 8	26.	2:27	46.
28	28.	28.	28.	31.	0: 2	25.	23:44	45.
MEAN	34.	36.	33.					40.
STANDARD DEVIATION	8.1	8.4	8.0					3.2

ENVIRONMENTAL SUMMARY REPORT

SITE: HOGATES RESTAURANT
WASHINGTON, DC

REPORT PERIOD: 80/ 2
SITE NUMBER: 42

LATITUDE: 38.90 DEG NORTH
LONGITUDE: 77.00 DEG WEST

AZIMUTH: 45 DEG
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN
ALTITUDE: 10 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1561.	N.A.	N.A.	305.	14:16	2608.	60.
2	1584.	N.A.	N.A.	302.	13:38	2614.	61.
3	1578.	N.A.	N.A.	299.	13:54	2621.	60.
4	1523.	N.A.	N.A.	290.	14:10	2631.	58.
5	1479.	N.A.	N.A.	302.	14:20	2638.	56.
6	114.	N.A.	N.A.	30.	13:44	2644.	4.
7	1485.	N.A.	N.A.	293.	13:58	2651.	56.
8	1500.	N.A.	N.A.	299.	14:17	2661.	56.
9	253.	N.A.	N.A.	101.	12:28	2668.	9.
10	1008.	N.A.	N.A.	305.	14: 4	2678.	38.
11	1312.	N.A.	N.A.	296.	14: 4	2684.	49.
12	1611.	N.A.	N.A.	302.	13:56	2691.	60.
13	1553.	N.A.	N.A.	299.	13:45	2698.	58.
14	1332.	N.A.	N.A.	284.	13:17	2707.	49.
15	437.	N.A.	N.A.	240.	14:31	2714.	16.
16	564.	N.A.	N.A.	302.	15: 8	2720.	21.
17	1632.	N.A.	N.A.	323.	14:14	2730.	60.
18	1407.	N.A.	N.A.	332.	14:56	2736.	51.
19	1210.	N.A.	N.A.	343.	14:19	2745.	44.
20	1454.	N.A.	N.A.	293.	14:24	2752.	53.
21	1492.	N.A.	N.A.	311.	14:44	2758.	54.
22	*	N.A.	N.A.	*	*:*	2767.	*
23	402.	N.A.	N.A.	195.	10:58	2773.	15.
24	925.	N.A.	N.A.	305.	13:45	2778.	33.
25	245.	N.A.	N.A.	124.	12:19	2787.	9.
26	1430.	N.A.	N.A.	326.	14: 6	2793.	51.
27	622.	N.A.	N.A.	284.	12:24	2798.	22.
28	107.	N.A.	N.A.	30.	11:30	2806.	4.
MEAN	1104.	N.A.	N.A.			2709.	
STANDARD DEVIATION	538.	N.A.	N.A.			61.	

ENVIRONMENTAL SUMMARY REPORT

SITE: J.D. EVANS
COLUMBIA, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 56

LATITUDE: 39.14 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 76.52 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 350 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	19.	21.	17.	27.	13:24	13.	5:51	57.
2	19.	22.	17.	29.	13:48	13.	3:37	57.
3	21.	23.	19.	31.	14: 4	14.	6:52	56.
4	24.	27.	22.	34.	13:54	19.	2:47	59.
5	25.	28.	24.	37.	14:28	17.	7:10	57.
6	23.	25.	22.	27.	11:52	17.	4:19	58.
7	28.	31.	26.	38.	13:44	22.	4: 8	55.
8	30.	32.	23.	38.	14:27	23.	5:17	59.
9	30.	32.	28.	36.	13:53	26.	7:16	56.
10	25.	26.	24.	32.	14:31	17.	7:35	52.
11	*	*	*	*	*:*	*	*:*	*
12	*	*	*	*	*:*	*	*:*	*
13	*	*	*	*	*:*	*	*:*	*
14	*	*	*	*	*:*	*	*:*	*
15	*	*	*	*	*:*	*	*:*	*
16	*	*	*	*	*:*	*	*:*	*
17	*	*	*	*	*:*	*	*:*	*
18	*	*	*	*	*:*	*	*:*	*
19	30.	*	30.	32.	20:36	28.	23:15	51.
20	31.	51.	30.	51.	17:17	24.	3:36	63.
21	*	*	*	*	*:*	*	*:*	*
22	*	*	*	*	*:*	*	*:*	*
23	*	*	*	*	*:*	*	*:*	*
24	*	*	*	*	*:*	*	*:*	*
25	*	*	*	*	*:*	*	*:*	*
26	28.	30.	26.	32.	14: 0	22.	20:29	61.
27	30.	33.	28.	37.	14:16	22.	0: 2	60.
28	25.	26.	24.	30.	14:45	20.	23:34	63.
MEAN	26.	29.	24.					58.
STANDARD DEVIATION	4.0	7.3	4.3					3.4

ENVIRONMENTAL SUMMARY REPORT

SITE: J.D. EVANS
COLUMBIA, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 56

LATITUDE: 39.14 DEG NORTH
LONGITUDE: 76.52 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN
ALTITUDE: 350 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1956.	N.A.	N.A.	335.	13: 3	3159.	62.
2	2017.	N.A.	N.A.	317.	12:44	3168.	64.
3	2004.	N.A.	N.A.	317.	12:39	3169.	63.
4	1763.	N.A.	N.A.	308.	12:44	3181.	55.
5	1978.	N.A.	N.A.	317.	12:25	3191.	62.
6	154.	N.A.	N.A.	27.	10:22	3191.	5.
7	1803.	N.A.	N.A.	311.	12:50	3200.	56.
8	1905.	N.A.	N.A.	308.	13:18	3213.	59.
9	353.	N.A.	N.A.	93.	14:47	3213.	11.
10	1840.	N.A.	N.A.	395.	12:23	3222.	57.
11	*	N.A.	N.A.	*	*:*	3230.	*
12	*	N.A.	N.A.	*	*:*	3239.	*
13	*	N.A.	N.A.	*	*:*	3247.	*
14	*	N.A.	N.A.	*	*:*	3247.	*
15	*	N.A.	N.A.	*	*:*	3255.	*
16	*	N.A.	N.A.	*	*:*	3263.	*
17	*	N.A.	N.A.	*	*:*	3271.	*
18	*	N.A.	N.A.	*	*:*	3278.	*
19	*	N.A.	N.A.	*	*:*	3278.	*
20	*	N.A.	N.A.	*	*:*	3285.	*
21	*	N.A.	N.A.	*	*:*	3292.	*
22	*	N.A.	N.A.	*	*:*	3298.	*
23	*	N.A.	N.A.	*	*:*	3305.	*
24	*	N.A.	N.A.	*	*:*	3304.	*
25	*	N.A.	N.A.	*	*:*	3310.	*
26	2168.	N.A.	N.A.	389.	12:13	3316.	65.
27	739.	N.A.	N.A.	244.	11:20	3321.	22.
28	454.	N.A.	N.A.	109.	11:22	3326.	14.
MEAN	1472.	N.A.	N.A.			3249.	
STANDARD DEVIATION	744.	N.A.	N.A.			52.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDON COUNTY
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH
LONGITUDE: 77.60 DEG WEST

AZIMUTH: 15 DEG
PYRANOMETER TILT: 37 DEG

TIME ZONE: EASTERN
ALTITUDE: 400 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	18.	21.	17.	26.	14:36	13.	7: 8	53.
2	20.	23.	17.	28.	15: 1	14.	1:22	65.
3	21.	24.	19.	31.	15:12	14.	5:52	65.
4	25.	28.	22.	34.	14:51	18.	6:35	54.
5	27.	31.	24.	38.	15: 9	19.	5:39	54.
6	24.	26.	23.	28.	10:56	19.	23:57	57.
7	28.	31.	25.	38.	15:52	18.	0:35	58.
8	31.	34.	29.	40.	15:55	23.	7:17	59.
9	30.	32.	29.	36.	11: 5	27.	23:54	64.
10	27.	29.	25.	36.	15:38	20.	7:17	68.
11	29.	34.	26.	42.	14:34	15.	4:31	55.
12	28.	30.	27.	36.	14: 8	21.	7:12	50.
13	29.	35.	23.	44.	15:54	15.	6:29	54.
14	37.	45.	31.	56.	15:13	17.	4:12	53.
15	37.	40.	35.	47.	14:11	29.	1:28	57.
16	33.	37.	31.	42.	13:52	22.	23:44	65.
17	23.	26.	20.	31.	14:14	18.	22:14	64.
18	27.	34.	21.	43.	16: 4	10.	4:48	63.
19	34.	41.	29.	55.	15:53	15.	6:17	52.
20	42.	48.	37.	61.	15:46	24.	6:32	54.
21	48.	54.	44.	61.	13:59	39.	5: 6	52.
22	40.	41.	40.	44.	15:46	37.	8:55	54.
23	46.	53.	41.	58.	11: 9	34.	1:59	60.
24	47.	51.	43.	56.	13:28	40.	5:12	59.
25	41.	41.	40.	48.	13:33	35.	7: 9	51.
26	26.	30.	24.	32.	15:51	21.	20:39	51.
27	31.	34.	29.	38.	11:59	24.	3: 5	52.
28	26.	27.	24.	31.	14: 6	20.	22:44	59.
MEAN	31.	35.	28.					57.
STANDARD DEVIATION	8.3	9.0	7.9					5.2

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDON COUNTY
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH
LONGITUDE: 77.60 DEG WEST

AZIMUTH: 15 DEG
PYRANOMETER TILT: 37 DEG

TIME ZONE: EASTERN
ALTITUDE: 400 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1870.	N.A.	N.A.	311.	12:28	2945.	64.
2	1883.	N.A.	N.A.	308.	11:57	2955.	64.
3	1881.	N.A.	N.A.	308.	12:21	2961.	64.
4	1726.	N.A.	N.A.	308.	13:25	2974.	58.
5	1802.	N.A.	N.A.	299.	12:13	2985.	60.
6	201.	N.A.	N.A.	42.	13:58	2991.	7.
7	1801.	N.A.	N.A.	311.	11: 9	3001.	60.
8	1793.	N.A.	N.A.	308.	12:11	3012.	60.
9	366.	N.A.	N.A.	91.	12:31	3021.	12.
10	1708.	N.A.	N.A.	320.	12:21	3031.	56.
11	1512.	N.A.	N.A.	287.	11:38	3042.	50.
12	1969.	N.A.	N.A.	311.	12:27	3052.	65.
13	1922.	N.A.	N.A.	311.	13: 3	3062.	63.
14	1403.	N.A.	N.A.	314.	13:27	3069.	46.
15	667.	N.A.	N.A.	239.	14: 0	3079.	22.
16	868.	N.A.	N.A.	326.	13:36	3089.	28.
17	1993.	N.A.	N.A.	350.	12:38	3099.	64.
18	1852.	N.A.	N.A.	329.	13: 2	3109.	60.
19	1429.	N.A.	N.A.	314.	13:34	3116.	46.
20	1698.	N.A.	N.A.	326.	12:29	3125.	54.
21	1242.	N.A.	N.A.	341.	13:54	3135.	40.
22	134.	N.A.	N.A.	33.	14: 5	3141.	4.
23	881.	N.A.	N.A.	284.	11:15	3148.	28.
24	1294.	N.A.	N.A.	314.	13:12	3157.	41.
25	665.	N.A.	N.A.	308.	13:28	3163.	21.
26	*	N.A.	N.A.	*	*:*	3172.	*
27	333.	N.A.	N.A.	196.	11:27	3178.	10.
28	181.	N.A.	N.A.	45.	11:16	3187.	6.
MEAN	1299.	N.A.	N.A.			3071.	
STANDARD DEVIATION	643.	N.A.	N.A.			75.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDON COUNTY
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH AZIMUTH: 15 DEG TIME ZONE: EASTERN
LONGITUDE: 77.60 DEG WEST PYRANOMETER TILT: 37 DEG ALTITUDE: 400 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	120.	10.	122.	11.	27.	100.	15:35
2	112.	9.	114.	11.	26.	125.	10:53
3	109.	7.	105.	9.	18.	111.	7:12
4	113.	7.	110.	9.	17.	99.	3:44
5	108.	3.	106.	5.	17.	95.	3:25
6	204.	4.	222.	5.	11.	171.	19:20
7	120.	7.	125.	9.	23.	132.	23:55
8	123.	5.	123.	6.	16.	103.	0:53
9	*	2.	*	2.	9.	*	1:51
10	131.	4.	133.	8.	18.	118.	9: 3
11	11.	3.	352.	4.	11.	344.	11:17
12	100.	6.	96.	8.	17.	109.	11:23
13	*	2.	*	3.	10.	*	11:11
14	85.	3.	70.	5.	18.	119.	18:37
15	*	2.	*	3.	12.	*	14: 5
16	115.	5.	111.	6.	24.	135.	16: 6
17	110.	7.	110.	10.	26.	128.	7:18
18	33.	3.	24.	5.	13.	64.	12:14
19	*	1.	*	3.	11.	*	14: 6
20	*	2.	*	3.	12.	*	14:48
21	105.	3.	107.	5.	13.	112.	10:58
22	211.	2.	224.	3.	9.	229.	4: 2
23	128.	2.	132.	5.	14.	110.	9:28
24	110.	3.	106.	4.	13.	102.	21:17
25	189.	2.	207.	3.	9.	227.	11:41
26	109.	5.	113.	11.	23.	94.	16: 1
27	59.	7.	40.	7.	18.	121.	22:50
28	*	1.	*	1.	20.	*	0:31
MEAN	114.	4.	130.	6.			
STANDARD DEVIATION	46.3	2.5	69.2	3.0			

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDON COUNTY
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH AZIMUTH: 15 DEG TIME ZONE: EASTERN
LONGITUDE: 77.60 DEG WEST PYRANOMETER TILT: 37 DEG ALTITUDE: 400 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	0	5	16	3	0	0	0	0	0
2	0	5	18	1	0	0	0	0	0
3	4	10	10	0	0	0	0	0	0
4	3	12	9	0	0	0	0	0	0
5	13	11	0	0	0	0	0	0	0
6	13	11	0	0	0	0	0	0	0
7	1	8	15	0	0	0	0	0	0
8	11	8	5	0	0	0	0	0	0
9	21	3	0	0	0	0	0	0	0
10	14	6	4	0	0	0	0	0	0
11	16	8	0	0	0	0	0	0	0
12	11	6	7	0	0	0	0	0	0
13	19	5	0	0	0	0	0	0	0
14	15	5	4	0	0	0	0	0	0
15	20	4	0	0	0	0	0	0	0
16	9	7	8	0	0	0	0	0	0
17	4	9	11	0	0	0	0	0	0
18	17	7	0	0	0	0	0	0	0
19	21	3	0	0	0	0	0	0	0
20	19	5	0	0	0	0	0	0	0
21	16	8	0	0	0	0	0	0	0
22	19	5	0	0	0	0	0	0	0
23	18	6	0	0	0	0	0	0	0
24	15	9	0	0	0	0	0	0	0
25	13	3	0	0	0	0	0	0	8
26	5	3	2	1	0	0	0	0	13
27	4	9	10	0	0	0	0	0	1
28	22	1	0	0	0	0	0	0	1
AVERAGE	12.3	6.5	4.3	0.2	0.0	0.0	0.0	0.0	0.8
TOTAL	343	182	119	5	0	0	0	0	23

ENVIRONMENTAL SUMMARY REPORT

SITE: MOULDER
INDIANAPOLIS, INDIANA

REPORT PERIOD: 80/ 2
SITE NUMBER: 50

LATITUDE: 39.50 DEG NORTH AZIMUTH: 6 DEG TIME ZONE: CENTRAL
LONGITUDE: 86.25 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 700 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	12.	18.	8.	27. 12:43	1. 23:48	53.
2	10.	18.	4.	28. 14:29	-4. 5:35	56.
3	15.	22.	11.	30. 15:28	2. 0: 0	48.
4	14.	23.	9.	34. 13:25	0. 7:17	51.
5	21.	23.	20.	26. 13: 7	12. 0: 3	52.
6	28.	30.	26.	33. 10:56	20. 23:59	43.
7	17.	26.	11.	37. 13:51	-1. 6:50	51.
8	23.	26.	20.	32. 12:40	9. 0: 3	46.
9	26.	28.	25.	32. 12:41	21. 7:33	40.
10	19.	22.	18.	29. 15:42	10. 7: 5	46.
11	21.	25.	17.	31. 11:32	11. 23:14	48.
12	13.	20.	8.	29. 14:36	-0. 6: 4	53.
13	22.	26.	19.	34. 13:37	2. 1: 0	50.
14	34.	37.	33.	40. 11:52	25. 2:53	41.
15	34.	36.	32.	38. 13: 7	27. 23:25	37.
16	17.	18.	16.	26. 0: 2	4. 23:31	46.
17	10.	15.	6.	23. 14:11	-1. 6:33	49.
18	22.	30.	19.	38. 15:24	6. 0:41	52.
19	35.	37.	33.	41. 14:15	27. 3:51	43.
20	38.	39.	37.	44. 13:50	35. 6:44	37.
21	42.	42.	41.	49. 23:53	36. 0: 7	39.
22	43.	42.	43.	50. 0: 3	39. 23:22	34.
23	39.	40.	38.	42. 11:18	35. 23:40	37.
24	33.	34.	32.	37. 14:47	30. 20:33	47.
25	28.	31.	25.	35. 12:55	15. 23:55	48.
26	19.	21.	18.	27. 23:57	9. 6:35	63.
27	30.	32.	28.	34. 12:29	27. 0: 2	47.
28	27.	31.	24.	37. 12:37	16. 23:38	53.
MEAN	25.	28.	22.			47.
STANDARD DEVIATION	9.7	7.9	11.1			6.7

ENVIRONMENTAL SUMMARY REPORT

SITE: MOULDER
INDIANAPOLIS, INDIANA

REPORT PERIOD: 80/ 2
SITE NUMBER: 50

LATITUDE: 39.50 DEG NORTH
LONGITUDE: 86.25 DEG WEST

AZIMUTH: 6 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: CENTRAL
ALTITUDE: 700 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2269.	N.A.	N.A.	342.	12: 0	3133.	72.
2	1361.	N.A.	N.A.	290.	12: 5	3143.	43.
3	1518.	N.A.	N.A.	342.	12:43	3155.	48.
4	2190.	N.A.	N.A.	339.	12:16	3157.	69.
5	527.	N.A.	N.A.	86.	11: 4	3166.	17.
6	554.	N.A.	N.A.	119.	11: 7	3175.	17.
7	2025.	N.A.	N.A.	351.	12:47	3180.	64.
8	725.	N.A.	N.A.	128.	9:49	3189.	23.
9	647.	N.A.	N.A.	241.	13:40	3198.	20.
10	1325.	N.A.	N.A.	336.	11: 5	3206.	41.
11	1050.	N.A.	N.A.	306.	10:22	3215.	33.
12	2408.	N.A.	N.A.	348.	12:23	3217.	75.
13	1991.	N.A.	N.A.	339.	12: 1	3225.	62.
14	428.	N.A.	N.A.	73.	12:19	3233.	13.
15	282.	N.A.	N.A.	58.	11:21	3241.	9.
16	815.	N.A.	N.A.	171.	15:21	3249.	25.
17	2304.	N.A.	N.A.	437.	12:19	3251.	71.
18	*	N.A.	N.A.	*	*:*	3258.	*
19	428.	N.A.	N.A.	76.	12: 1	3265.	13.
20	390.	N.A.	N.A.	79.	12:52	3272.	12.
21	455.	N.A.	N.A.	296.	13:16	3279.	14.
22	314.	N.A.	N.A.	61.	11:39	3280.	10.
23	422.	N.A.	N.A.	110.	9:47	3287.	13.
24	741.	N.A.	N.A.	199.	13:21	3293.	22.
25	396.	N.A.	N.A.	119.	12:55	3299.	12.
26	1898.	N.A.	N.A.	348.	11:34	3304.	57.
27	936.	N.A.	N.A.	223.	12:29	3305.	28.
28	1519.	N.A.	N.A.	388.	12: 5	3310.	46.
MEAN	1108.	N.A.	N.A.			3232.	
STANDARD DEVIATION	727.	N.A.	N.A.			55.	

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA SCHOOL
COCKEYVILLE, MARYLAND

REPORT PERIOD: 80/ 2

SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH
LONGITUDE: 76.52 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: DEG

TIME ZONE: EASTERN
ALTITUDE: 350 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	19.	23.	17.	31.	14:58	12.	6:42	N.A.
2	20.	24.	17.	33.	15:27	12.	5: 2	N.A.
3	22.	25.	19.	34.	14:55	13.	7:32	N.A.
4	26.	30.	23.	39.	14:45	18.	6:44	N.A.
5	27.	31.	23.	43.	15:18	16.	7: 2	N.A.
6	23.	25.	21.	28.	14:39	15.	3:38	N.A.
7	29.	33.	27.	40.	15:43	22.	6: 2	N.A.
8	32.	35.	29.	43.	15: 1	23.	7: 1	N.A.
9	30.	32.	28.	36.	10:57	26.	3:50	N.A.
10	27.	30.	25.	37.	14:24	19.	7:23	N.A.
11	28.	32.	24.	39.	14:19	12.	6:51	N.A.
12	29.	31.	28.	38.	14:48	22.	7:31	N.A.
13	28.	33.	25.	41.	14:54	18.	7:10	N.A.
14	35.	42.	29.	52.	14:37	14.	6:37	N.A.
15	33.	35.	32.	41.	14:14	29.	3:23	N.A.
16	33.	36.	30.	41.	14:11	23.	23:58	N.A.
17	23.	26.	21.	32.	15: 4	17.	23:42	N.A.
18	26.	30.	23.	39.	15:38	13.	6:32	N.A.
19	34.	41.	29.	51.	13:25	21.	7:12	N.A.
20	39.	45.	33.	57.	10:54	20.	5: 7	N.A.
21	46.	54.	41.	62.	13:48	33.	4:34	N.A.
22	42.	42.	41.	46.	15: 7	37.	4:27	N.A.
23	45.	49.	41.	56.	13:51	34.	6:17	N.A.
24	45.	48.	42.	55.	15:54	37.	7:16	N.A.
25	38.	42.	35.	49.	13:51	28.	23:59	N.A.
26	29.	32.	27.	36.	14: 7	23.	21:53	N.A.
27	29.	32.	27.	37.	15:56	23.	1:10	N.A.
28	26.	28.	24.	35.	13:12	20.	5: 1	N.A.
MEAN	31.	34.	28.					N.A.
STANDARD DEVIATION	7.4	8.0	7.1					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA SCHOOL
COCKEYVILLE, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 76.52 DEG WEST PYRANOMETER TILT: DEG
TIME ZONE: EASTERN
ALTITUDE: 350 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1054.	143.	911.	190.	12:50	3159.	33.
2	1070.	100.	970.	179.	11:52	3168.	34.
3	1059.	116.	943.	181.	12:25	3169.	33.
4	999.	191.	807.	181.	12:37	3181.	31.
5	1101.	113.	988.	184.	12:38	3191.	34.
6	214.	229.	*	42.	10:23	3191.	7.
7	1001.	255.	746.	184.	11:43	3200.	31.
8	1035.	232.	803.	176.	12: 0	3213.	32.
9	429.	402.	27.	106.	11: 7	3213.	13.
10	603.	127.	475.	173.	14:13	3222.	19.
11	977.	312.	665.	184.	12:48	3230.	30.
12	1165.	169.	996.	193.	11:52	3239.	36.
13	1169.	157.	1013.	190.	12: 9	3247.	36.
14	943.	271.	673.	201.	13:23	3247.	29.
15	307.	292.	15.	126.	14:51	3255.	9.
16	371.	266.	105.	142.	14:11	3263.	11.
17	1250.	195.	1055.	220.	12:14	3271.	38.
18	1271.	192.	1079.	220.	12:30	3278.	39.
19	998.	426.	573.	193.	12:16	3278.	30.
20	1080.	336.	744.	212.	11:42	3285.	33.
21	963.	299.	665.	204.	11:51	3292.	29.
22	174.	177.	*	45.	10:51	3298.	5.
23	592.	469.	124.	184.	10:44	3305.	18.
24	577.	443.	134.	190.	13:56	3304.	17.
25	673.	570.	104.	212.	11: 0	3310.	20.
26	1294.	279.	1014.	248.	12: 4	3316.	39.
27	576.	512.	64.	240.	11:24	3321.	17.
28	237.	227.	10.	56.	10:37	3326.	7.
MEAN	828.	268.	604.			3249.	
STANDARD DEVIATION	353.	127.	392.			52.	

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA SCHOOL
COCKEYVILLE, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 76.52 DEG WEST PYRANOMETER TILT: DEG ALTITUDE: 350 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	138.	9.	139.	10.	22.	132.	13:32
2	128.	7.	132.	9.	21.	134.	15:48
3	127.	6.	128.	7.	22.	142.	10: 7
4	131.	5.	134.	6.	13.	140.	9:47
5	134.	3.	134.	5.	11.	141.	9: 5
6	*	2.	*	2.	8.	*	23:43
7	146.	5.	144.	8.	15.	130.	13:57
8	133.	4.	132.	5.	12.	147.	13:46
9	*	1.	*	1.	7.	*	14:40
10	142.	4.	143.	6.	14.	138.	10:45
11	33.	2.	25.	4.	14.	25.	11: 1
12	106.	5.	109.	6.	13.	96.	5:39
13	*	2.	*	3.	9.	*	13:13
14	95.	2.	80.	3.	14.	62.	14: 5
15	*	1.	*	1.	7.	*	16:33
16	126.	5.	126.	6.	18.	112.	12: 8
17	117.	5.	117.	6.	15.	140.	8:40
18	51.	3.	56.	5.	12.	58.	10:38
19	*	1.	*	3.	9.	*	14:29
20	*	1.	*	2.	9.	*	16:19
21	137.	2.	133.	4.	10.	119.	9:38
22	260.	2.	264.	2.	9.	247.	7: 2
23	*	1.	*	3.	13.	*	14:12
24	*	2.	*	3.	15.	*	11:59
25	*	1.	*	1.	6.	*	13:46
26	138.	6.	138.	10.	20.	118.	12:47
27	56.	6.	36.	7.	22.	122.	21:44
28	*	1.	*	0.	11.	*	0: 8
MEAN	122.	3.	121.	5.			
STANDARD DEVIATION	48.2	2.1	51.6	2.7			

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA SCHOOL
COCKEYVILLE, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 76.52 DEG WEST PYRANOMETER TILT: 0 DEG
TIME ZONE: EASTERN
ALTITUDE: 350 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	0	10	13	1	0	0	0	0	0
2	0	16	8	0	0	0	0	0	0
3	5	15	4	0	0	0	0	0	0
4	10	14	0	0	0	0	0	0	0
5	18	5	1	0	0	0	0	0	0
6	23	1	0	0	0	0	0	0	0
7	7	13	4	0	0	0	0	0	0
8	10	14	0	0	0	0	0	0	0
9	24	0	0	0	0	0	0	0	0
10	16	8	0	0	0	0	0	0	0
11	18	5	1	0	0	0	0	0	0
12	8	16	0	0	0	0	0	0	0
13	20	4	0	0	0	0	0	0	0
14	19	5	0	0	0	0	0	0	0
15	22	0	0	0	0	0	0	0	2
16	10	7	7	0	0	0	0	0	0
17	6	17	1	0	0	0	0	0	0
18	15	9	0	0	0	0	0	0	0
19	22	2	0	0	0	0	0	0	0
20	24	0	0	0	0	0	0	0	0
21	17	7	0	0	0	0	0	0	0
22	22	2	0	0	0	0	0	0	0
23	20	4	0	0	0	0	0	0	0
24	21	3	0	0	0	0	0	0	0
25	24	0	0	0	0	0	0	0	0
26	9	5	10	0	0	0	0	0	0
27	6	14	4	0	0	0	0	0	0
28	22	1	0	0	0	0	0	0	1
AVERAGE	14.9	7.0	1.9	0.0	0.0	0.0	0.0	0.0	0.1
TOTAL	418	197	53	1	0	0	0	0	3

ENVIRONMENTAL SUMMARY REPORT

SITE: PAGE JACKSON
CHARLESTOWN, WEST VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 46

LATITUDE: 40.80 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 82.53 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 812 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	14.	*	14.	14. 23:53	14. 23:32	115.
2	18.	21.	16.	25. 13:56	12. 7:10	116.
3	19.	22.	17.	28. 14: 7	11. 7:27	116.
4	23.	25.	21.	31. 15: 7	16. 7:11	114.
5	26.	29.	23.	37. 15:45	16. 6:30	118.
6	24.	25.	23.	27. 3:10	16. 22:55	117.
7	24.	29.	20.	36. 14:34	7. 4:20	114.
8	29.	31.	27.	38. 15: 4	16. 6:43	115.
9	29.	31.	27.	36. 13:34	24. 23:52	114.
10	25.	28.	23.	34. 14:54	17. 2:54	116.
11	28.	32.	24.	41. 14: 0	14. 5:44	114.
12	26.	28.	25.	32. 15: 0	16. 23:10	111.
13	27.	33.	23.	42. 16:20	15. 4:30	107.
14	35.	42.	30.	53. 14:29	19. 5:46	112.
15	37.	39.	34.	47. 14: 5	28. 1:39	106.
16	33.	35.	31.	40. 11:27	21. 23:24	94.
17	21.	23.	19.	28. 14: 4	14. 23:50	103.
18	26.	31.	23.	41. 16:45	11. 6:41	108.
19	36.	42.	32.	52. 15: 9	18. 6:37	114.
20	41.	45.	37.	59. 14:54	20. 7:10	117.
21	46.	50.	42.	56. 14: 2	38. 21:45	112.
22	41.	42.	40.	47. 15:42	38. 23:51	113.
23	44.	50.	40.	55. 12:57	34. 3:24	113.
24	44.	48.	42.	52. 13:35	38. 7:11	114.
25	40.	41.	38.	50. 15:11	32. 19:37	114.
26	28.	29.	26.	32. 2:24	21. 21: 6	116.
27	29.	32.	27.	36. 16:45	24. 1:11	117.
28	25.	27.	24.	31. 11:43	19. 23:21	117.
MEAN	30.	34.	27.			113.
STANDARD DEVIATION	8.5	8.6	8.0			5.1

ENVIRONMENTAL SUMMARY REPORT

SITE: PAGE JACKSON
CHARLESTOWN, WEST VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 46

LATITUDE: 40.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 82.53 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 812 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*: *	3104.	*
2	2027.	N.A.	N.A.	329.	11:42	3114.	65.
3	2092.	N.A.	N.A.	326.	11:32	3125.	67.
4	1670.	N.A.	N.A.	322.	11:33	3135.	53.
5	2002.	N.A.	N.A.	319.	11:23	3140.	64.
6	202.	N.A.	N.A.	42.	13:29	3150.	6.
7	1936.	N.A.	N.A.	326.	11:43	3160.	61.
8	1822.	N.A.	N.A.	316.	11:25	3170.	57.
9	405.	N.A.	N.A.	135.	13:50	3172.	13.
10	2098.	N.A.	N.A.	329.	11:42	3182.	66.
11	1421.	N.A.	N.A.	284.	13: 2	3192.	45.
12	2145.	N.A.	N.A.	329.	11:32	3201.	67.
13	2081.	N.A.	N.A.	319.	12:20	3211.	65.
14	1450.	N.A.	N.A.	342.	11:28	3212.	45.
15	713.	N.A.	N.A.	251.	12:40	3222.	22.
16	832.	N.A.	N.A.	309.	13:37	3231.	26.
17	2042.	N.A.	N.A.	361.	12: 6	3240.	63.
18	2030.	N.A.	N.A.	355.	12:13	3248.	62.
19	1494.	N.A.	N.A.	290.	12:13	3249.	46.
20	1689.	N.A.	N.A.	316.	12: 3	3261.	52.
21	924.	N.A.	N.A.	338.	10:45	3262.	28.
22	208.	N.A.	N.A.	52.	14:22	3270.	6.
23	617.	N.A.	N.A.	297.	11: 0	3278.	19.
24	1482.	N.A.	N.A.	306.	13: 8	3285.	45.
25	1256.	N.A.	N.A.	371.	12:15	3293.	38.
26	1812.	N.A.	N.A.	361.	11:34	3296.	55.
27	391.	N.A.	N.A.	132.	11:25	3303.	12.
28	274.	N.A.	N.A.	55.	11: 0	3303.	8.
MEAN	1375.	N.A.	N.A.			3215.	
STANDARD DEVIATION	683.	N.A.	N.A.			62.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RADEMAKER CORP
LOUISVILLE, KENTUCKY

REPORT PERIOD: 80/ 2
SITE NUMBER: 8

LATITUDE: 38.20 DEG NORTH
LONGITUDE: 85.70 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 53 DEG

TIME ZONE: EASTERN
ALTITUDE: 474 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	17.	24.	13.	36.	15:44	5.	22:39	87.
2	13.	*	13.	16.	21:23	10.	23:36	78.
3	14.	*	14.	15.	23:41	12.	23: 4	66.
4	18.	27.	12.	39.	16:29	2.	7:36	84.
5	31.	32.	30.	34.	11:59	29.	18:17	71.
6	29.	31.	29.	31.	16:46	29.	23:42	69.
7	31.	39.	24.	42.	15: 5	20.	20:44	96.
8	26.	28.	24.	33.	11:19	20.	1:21	74.
9	30.	32.	28.	39.	12:50	27.	0:13	68.
10	31.	36.	27.	47.	15:14	20.	23: 3	72.
11	27.	31.	24.	42.	15: 3	16.	4:44	72.
12	21.	29.	15.	42.	15:25	4.	7:15	84.
13	24.	33.	18.	50.	15:45	2.	6:57	93.
14	40.	46.	36.	58.	14:32	24.	0: 1	82.
15	43.	44.	42.	47.	13:53	37.	23:57	68.
16	27.	29.	25.	37.	0: 2	14.	23:58	69.
17	15.	20.	10.	33.	13:44	7.	6:54	74.
18	38.	41.	35.	50.	15:16	19.	8:31	93.
19	43.	48.	39.	55.	12:58	29.	2:12	76.
20	45.	47.	44.	50.	15:45	40.	1:11	67.
21	52.	54.	51.	62.	12:52	45.	4: 4	69.
22	56.	59.	54.	65.	3: 7	40.	22:32	74.
23	46.	49.	44.	60.	16: 2	39.	3:58	82.
24	41.	43.	40.	50.	13:33	35.	23:57	69.
25	29.	33.	25.	39.	11:57	22.	23:27	67.
26	26.	28.	23.	39.	15:27	14.	6:50	72.
27	37.	41.	33.	50.	15:52	29.	1:12	76.
28	37.	42.	32.	55.	12:17	26.	23:59	77.
MEAN	32.	37.	29.					76.
STANDARD DEVIATION	11.5	9.7	12.2					8.7

ENVIRONMENTAL SUMMARY REPORT

SITE: RADEMAKER CORP
LOUISVILLE, KENTUCKY

REPORT PERIOD: 80/ 2
SITE NUMBER: 8

LATITUDE: 38.20 DEG NORTH
LONGITUDE: 85.70 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 53 DEG

TIME ZONE: EASTERN
ALTITUDE: 474 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS EXT INS PERCENT
1	2133.	N.A.	N.A.	355.	12:11	3270.	65.
2	*	N.A.	N.A.	*	*: *	3280.	*
3	*	N.A.	N.A.	*	*: *	3287.	*
4	2099.	N.A.	N.A.	350.	12:51	3284.	64.
5	*	N.A.	N.A.	*	*: *	3294.	*
6	*	N.A.	N.A.	*	*: *	3300.	*
7	*	N.A.	N.A.	*	*: *	3297.	*
8	284.	N.A.	N.A.	142.	11: 8	3306.	9.
9	470.	N.A.	N.A.	279.	13: 6	3312.	14.
10	1521.	N.A.	N.A.	353.	13:38	3308.	46.
11	950.	N.A.	N.A.	350.	13:59	3314.	29.
12	2174.	N.A.	N.A.	330.	13:33	3319.	66.
13	2251.	N.A.	N.A.	338.	13:26	3319.	68.
14	503.	N.A.	N.A.	137.	12:56	3323.	15.
15	189.	N.A.	N.A.	57.	12: 1	3328.	6.
16	676.	N.A.	N.A.	279.	13:30	3332.	20.
17	*	N.A.	N.A.	*	*: *	3336.	*
18	.	N.A.	N.A.	341.	13:14	3331.	83.
19	520.	N.A.	N.A.	208.	12:47	3335.	16.
20	78.	N.A.	N.A.	26.	12:39	3338.	2.
21	490.	N.A.	N.A.	301.	12:42	3340.	15.
22	1651.	N.A.	N.A.	324.	12:59	3343.	49.
23	606.	N.A.	N.A.	250.	14:10	3338.	18.
24	548.	N.A.	N.A.	284.	13:22	3340.	16.
25	338.	N.A.	N.A.	91.	11:51	3341.	10.
26	2111.	N.A.	N.A.	355.	13:19	3342.	63.
27	1368.	N.A.	N.A.	327.	12:45	3343.	41.
28	1009.	N.A.	N.A.	358.	13:42	3337.	30.
MEAN	1125.	N.A.	N.A.			3319.	
STANDARD DEVIATION	824.	N.A.	N.A.			22.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SIR GALAHAD
VIRGINIA BEACH, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 75

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 76.00 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 26 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	23.	25.	22.	31.	15:47	17.	6:48	46.
2	24.	26.	22.	32.	15:35	18.	5:59	47.
3	24.	28.	20.	35.	16: 2	15.	23:30	49.
4	27.	29.	25.	33.	15:46	15.	0: 2	48.
5	29.	33.	26.	41.	15:53	23.	6:38	50.
6	29.	32.	26.	36.	10:52	20.	2:15	48.
7	31.	33.	29.	40.	16:13	26.	7:20	47.
8	32.	36.	28.	44.	16: 0	24.	20:25	51.
9	34.	37.	31.	44.	11:47	29.	0: 3	49.
10	29.	33.	26.	38.	16:18	14.	23:24	45.
11	27.	36.	20.	48.	15:19	8.	5:59	52.
12	30.	36.	25.	40.	14:54	14.	23:51	49.
13	27.	36.	18.	51.	15:24	11.	6:52	49.
14	35.	44.	28.	62.	15: 0	15.	4:57	52.
15	40.	45.	36.	55.	12:50	30.	3:51	57.
16	43.	46.	40.	52.	11:57	32.	23:52	53.
17	28.	31.	25.	36.	15:15	18.	23:57	49.
18	30.	40.	23.	52.	15:37	15.	5:49	53.
19	36.	43.	30.	55.	15:43	21.	4:25	53.
20	47.	54.	42.	65.	14:12	34.	6:55	57.
21	53.	59.	48.	70.	15:13	42.	7: 7	*
22	60.	65.	56.	74.	12:29	48.	0:34	*
23	57.	61.	54.	67.	15:18	47.	22:40	*
24	50.	56.	45.	65.	14:35	42.	23:18	*
25	40.	40.	40.	46.	6:24	36.	21:43	53.
26	36.	40.	34.	44.	14:52	25.	23:47	54.
27	35.	41.	24.	50.	14:43	21.	4:51	56.
28	38.	47.	36.	48.	15:43	32.	23:33	57.
MEAN	35.	40.	31.					51.
STANDARD DEVIATION	10.1	10.6	10.3					3.6

ENVIRONMENTAL SUMMARY REPORT

SITE: SIR GALAHAD
VIRGINIA BEACH, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 75

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 76.00 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 26 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	575.	N.A.	N.A.	122.	14:21	3221.	18.
2	2050.	N.A.	N.A.	334.	12: 2	3229.	64.
3	2101.	N.A.	N.A.	315.	11:46	3236.	65.
4	1255.	N.A.	N.A.	277.	12:13	3239.	39.
5	2132.	N.A.	N.A.	318.	12:20	3247.	66.
6	99.	N.A.	N.A.	35.	9:38	3249.	3.
7	992.	N.A.	N.A.	344.	13:17	3257.	30.
8	1937.	N.A.	N.A.	328.	12:16	3264.	59.
9	314.	N.A.	N.A.	71.	11:37	3267.	10.
10	1141.	N.A.	N.A.	405.	13:11	3274.	35.
11	2164.	N.A.	N.A.	334.	12:28	3281.	66.
12	2137.	N.A.	N.A.	331.	13: 2	3283.	65.
13	2056.	N.A.	N.A.	328.	11:51	3290.	62.
14	2022.	N.A.	N.A.	331.	12:31	3296.	61.
15	1320.	N.A.	N.A.	325.	11:57	3302.	40.
16	160.	N.A.	N.A.	106.	11:41	3304.	5.
17	2156.	N.A.	N.A.	341.	12:40	3310.	65.
18	2242.	N.A.	N.A.	334.	12:31	3316.	68.
19	1628.	N.A.	N.A.	331.	12: 9	3314.	49.
20	1617.	N.A.	N.A.	338.	13: 8	3319.	49.
21	2013.	N.A.	N.A.	309.	12:59	3324.	61.
22	990.	N.A.	N.A.	251.	11:14	3326.	30.
23	1462.	N.A.	N.A.	318.	11:44	3330.	44.
24	1961.	N.A.	N.A.	328.	12:48	3334.	59.
25	121.	N.A.	N.A.	87.	10: 8	3338.	4.
26	1316.	N.A.	N.A.	322.	13: 6	3342.	39.
27	1673.	N.A.	N.A.	344.	12:46	3339.	50.
28	*	N.A.	N.A.	*	*:*	3343.	*
MEAN	1468.	N.A.	N.A.			3292.	
STANDARD DEVIATION	704.	N.A.	N.A.			38.	

ENVIRONMENTAL SUMMARY REPORT

SITE: T D MOSELEY
LYNCHBURG, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 14

LATITUDE: 37.46 DEG NORTH
LONGITUDE: 70.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 50 DEG

TIME ZONE: EASTERN
ALTITUDE: 700 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	21.	25.	19.	30.	15: 8	16.	7:19	N.A.
2	20.	23.	18.	31.	15:58	14.	7: 4	N.A.
3	23.	27.	20.	34.	15: 5	13.	3:47	N.A.
4	24.	*	24.	24.	23:18	23.	23:44	N.A.
5	30.	*	30.	31.	22:10	29.	22:48	N.A.
6	28.	30.	25.	31.	12:40	21.	23:19	N.A.
7	33.	40.	32.	41.	16:35	28.	23:37	N.A.
8	36.	38.	34.	45.	15: 5	24.	6:38	N.A.
9	31.	32.	31.	33.	0: 3	29.	23:11	N.A.
10	31.	36.	28.	44.	15:43	19.	23:38	N.A.
11	30.	35.	26.	46.	16:37	12.	7:22	N.A.
12	33.	35.	31.	41.	15:31	22.	23:57	N.A.
13	28.	34.	23.	44.	15:41	12.	6:59	N.A.
14	38.	45.	33.	58.	16:23	18.	6:53	N.A.
15	41.	45.	39.	54.	15:32	32.	0:30	N.A.
16	39.	45.	35.	53.	11:23	25.	23:55	N.A.
17	26.	29.	24.	36.	16:11	18.	7:18	N.A.
18	29.	35.	23.	47.	16:24	12.	7:12	N.A.
19	34.	42.	28.	58.	15:57	16.	3:20	N.A.
20	45.	52.	40.	63.	15:12	29.	3:12	N.A.
21	52.	57.	48.	69.	16:17	36.	5:58	N.A.
22	58.	60.	56.	73.	15:12	47.	6:24	N.A.
23	57.	63.	52.	72.	12:57	45.	23:48	N.A.
24	50.	54.	47.	62.	15:16	38.	6:55	N.A.
25	39.	39.	39.	46.	1:56	32.	22:28	N.A.
26	31.	34.	28.	37.	16: 9	25.	22:34	N.A.
27	36.	39.	33.	107.	18:21	24.	5:35	N.A.
28	32.	32.	32.	38.	0: 9	27.	23:10	N.A.
MEAN	35.	39.	32.					N.A.
STANDARD DEVIATION	10.1	10.7	9.7					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: T D MOSELEY
LYNCHBURG, VIRGINIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 14

LATITUDE: 37.46 DEG NORTH
LONGITUDE: 70.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 50 DEG

TIME ZONE: EASTERN
ALTITUDE: 700 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2024.	N.A.	N.A.	357.	12:39	3262.	62.
2	1307.	N.A.	N.A.	282.	13:39	3269.	40.
3	2281.	N.A.	N.A.	351.	12:41	3270.	70.
4	*	N.A.	N.A.	*	*:*	3277.	*
5	*	N.A.	N.A.	*	*:*	3284.	*
6	*	N.A.	N.A.	*	*:*	3285.	*
7	*	N.A.	N.A.	*	*:*	3292.	*
8	1468.	N.A.	N.A.	321.	12:41	3298.	45.
9	134.	N.A.	N.A.	36.	13:14	3299.	4.
10	2266.	N.A.	N.A.	354.	12:10	3305.	69.
11	1741.	N.A.	N.A.	315.	11:54	3311.	53.
12	1827.	N.A.	N.A.	342.	11:47	3316.	55.
13	2197.	N.A.	N.A.	324.	12: 8	3317.	66.
14	2051.	N.A.	N.A.	318.	12:40	3322.	62.
15	680.	N.A.	N.A.	279.	14:12	3327.	20.
16	1194.	N.A.	N.A.	315.	12:54	3331.	36.
17	2283.	N.A.	N.A.	342.	12:43	3328.	69.
18	2280.	N.A.	N.A.	339.	12: 3	3332.	68.
19	1768.	N.A.	N.A.	339.	12:19	3340.	53.
20	1560.	N.A.	N.A.	324.	11:38	3336.	47.
21	1141.	N.A.	N.A.	327.	12:54	3340.	34.
22	854.	N.A.	N.A.	252.	14:34	3343.	26.
23	985.	N.A.	N.A.	300.	12:57	3346.	29.
24	1942.	N.A.	N.A.	321.	12:15	3348.	58.
25	171.	N.A.	N.A.	87.	14: 2	3344.	5.
26	2039.	N.A.	N.A.	360.	11:53	3346.	61.
27	1998.	N.A.	N.A.	351.	12:20	3347.	60.
28	168.	N.A.	N.A.	60.	14:18	3349.	5.
MEAN	1515.	N.A.	N.A.			3317.	
STANDARD DEVIATION	706.	N.A.	N.A.			28.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TROY OF MIAMI
TROY, OHIO

REPORT PERIOD: 80/ 2
SITE NUMBER: 32

LATITUDE: 40.10 DEG NORTH AZIMUTH: 28 DEG TIME ZONE: EASTERN
LONGITUDE: 84.40 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 850 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	11.	8.	11.	15. 19:15	7. 3:16	N.A.
2	17.	20.	15.	29. 13: 7	10. 23:57	N.A.
3	15.	19.	12.	30. 13:28	6. 4:18	N.A.
4	12.	9.	13.	22. 18:52	7. 7:52	N.A.
5	21.	25.	19.	34. 14:33	10. 4:23	N.A.
6	24.	23.	24.	26. 18:53	21. 23:57	N.A.
7	18.	11.	18.	24. 18: 0	11. 6:32	N.A.
8	23.	25.	21.	33. 12:46	12. 5:28	N.A.
9	26.	29.	25.	39. 13:19	20. 23:21	N.A.
10	24.	26.	23.	29. 12:30	19. 1:56	N.A.
11	22.	28.	20.	33. 13:11	12. 23:24	N.A.
12	16.	18.	14.	31. 15:49	6. 7:38	N.A.
13	17.	10.	19.	31. 17:57	8. 6:37	N.A.
14	32.	31.	32.	35. 19: 9	29. 0:16	N.A.
15	32.	32.	32.	35. 16:48	25. 23:55	N.A.
16	21.	23.	20.	29. 14: 1	10. 23:58	N.A.
17	11.	14.	10.	23. 15:21	5. 9:24	N.A.
18	17.	14.	18.	34. 17:47	9. 6:12	N.A.
19	32.	39.	28.	45. 12: 5	25. 2:35	N.A.
20	38.	39.	38.	41. 14:14	36. 4:32	N.A.
21	40.	42.	39.	47. 12:49	35. 3:43	N.A.
22	42.	44.	41.	49. 7: 3	38. 23:26	N.A.
23	39.	40.	38.	44. 13:39	36. 7:26	N.A.
24	34.	34.	34.	38. 16:19	31. 6:54	N.A.
25	30.	34.	28.	37. 10:39	18. 23:59	N.A.
26	18.	17.	18.	29. 15: 8	7. 7: 6	N.A.
27	28.	32.	26.	39. 14: 1	23. 0: 4	N.A.
28	21.	24.	20.	29. 10:56	15. 23: 6	N.A.
MEAN	24.	25.	23.			N.A.
STANDARD DEVIATION	9.1	10.5	8.9			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: TROY OF MIAMI
TROY, OHIOREPORT PERIOD: 80/ 2
SITE NUMBER: 32LATITUDE: 40.10 DEG NORTH
LONGITUDE: 84.40 DEG WESTAZIMUTH: 28 DEG
PYRANOMETER TILT: 40 DEGTIME ZONE: EASTERN
ALTITUDE: 850 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	*	*	*	*: *	2809.	*
2	1030.	*	*	321.	13: 7	2818.	37.
3	672.	*	*	321.	13:28	2829.	24.
4	*	*	*	*	*: *	2837.	*
5	410.	*	*	122.	14:33	2848.	14.
6	*	*	*	*	*: *	2856.	*
7	*	*	*	*	*: *	2865.	*
8	588.	*	*	228.	12: 3	2877.	20.
9	406.	*	*	180.	12:42	2885.	14.
10	529.	*	*	141.	12:25	2896.	18.
11	886.	*	*	292.	12:23	2904.	30.
12	1955.	*	*	305.	13:20	2913.	67.
13	*	*	*	*	*: *	2924.	*
14	*	*	*	*	*: *	2932.	*
15	*	*	*	*	*: *	2943.	*
16	1270.	*	*	399.	14: 1	2952.	43.
17	2033.	*	*	328.	13:45	2963.	69.
18	*	*	*	*	*: *	2971.	*
19	*	*	*	*	*: *	2979.	*
20	*	*	*	*	*: *	2990.	*
21	*	*	*	*	*: *	2998.	*
22	254.	*	*	93.	11:38	3009.	8.
23	255.	*	*	93.	10:59	3015.	8.
24	444.	*	*	167.	11:58	3026.	15.
25	303.	*	*	71.	10:29	3033.	10.
26	983.	*	*	341.	15:29	3044.	32.
27	897.	*	*	357.	13:56	3051.	29.
28	*	*	*	*	*: *	3062.	*
MEAN	807.	0.	0.			2937.	
STANDARD DEVIATION	553.	*****	*****			77.	

ENVIRONMENTAL SUMMARY REPORT

SITE: UPTON CENTER
BALTIMORE, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 36

LATITUDE: 39.20 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 76.60 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 172 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	21.	23.	19.	27.	15: 4	14.	6:21	47.
2	21.	24.	19.	29.	14:42	15.	5:55	60.
3	23.	26.	22.	31.	14:52	16.	6:20	61.
4	27.	29.	25.	34.	12:55	21.	7: 8	44.
5	29.	31.	27.	39.	12:44	20.	6:52	45.
6	26.	26.	26.	30.	0: 9	24.	6:49	43.
7	31.	34.	29.	42.	12:44	24.	7:14	43.
8	33.	36.	31.	43.	13: 6	26.	6:10	42.
9	32.	34.	30.	38.	12:30	29.	22:53	58.
10	29.	31.	28.	36.	13:44	22.	7:14	63.
11	33.	39.	28.	48.	11:30	21.	7: 4	45.
12	31.	33.	30.	39.	12:54	24.	7: 2	47.
13	32.	37.	27.	47.	13: 9	21.	5:25	43.
14	41.	48.	35.	59.	14:24	24.	5: 4	45.
15	37.	37.	36.	44.	14:12	34.	2:12	46.
16	34.	37.	32.	41.	14:14	25.	23:55	53.
17	25.	29.	22.	34.	12: 6	19.	23:55	61.
18	30.	37.	24.	48.	14:57	15.	5:42	47.
19	37.	43.	32.	51.	13:42	24.	5:58	45.
20	43.	48.	39.	57.	14:16	29.	2:43	45.
21	51.	57.	47.	66.	14:47	42.	5:11	48.
22	43.	42.	43.	46.	17:29	38.	4:20	47.
23	47.	51.	44.	60.	12:47	38.	5:34	57.
24	48.	51.	45.	60.	14:34	39.	7: 0	62.
25	40.	41.	39.	50.	13:51	34.	23:40	49.
26	32.	34.	29.	38.	10:57	25.	20:57	48.
27	32.	35.	28.	44.	11:47	25.	0:35	49.
28	27.	27.	26.	29.	0: 3	23.	23:53	52.
MEAN	33.	37.	31.					50.
STANDARD DEVIATION	7.9	8.6	7.6					6.6

ENVIRONMENTAL SUMMARY REPORT

SITE: UPTON CENTER
BALTIMORE, MARYLAND

REPORT PERIOD: 80/ 2
SITE NUMBER: 36

LATITUDE: 39.20 DEG NORTH
LONGITUDE: 76.60 DEG WEST

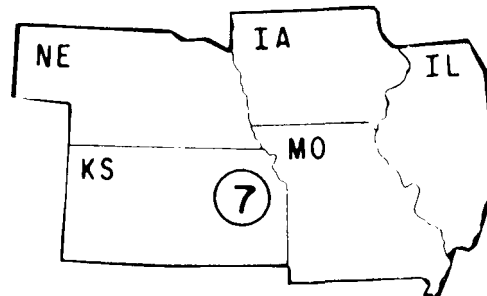
AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN
ALTITUDE: 172 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1989.	N.A.	N.A.	319.	12:13	3157.	63.
2	2074.	N.A.	N.A.	319.	12: 8	3166.	66.
3	2079.	N.A.	N.A.	319.	12: 7	3171.	66.
4	1756.	N.A.	N.A.	310.	12: 7	3180.	55.
5	2064.	N.A.	N.A.	319.	12: 2	3189.	65.
6	195.	N.A.	N.A.	44.	14: 7	3190.	6.
7	1745.	N.A.	N.A.	319.	12: 2	3202.	54.
8	1859.	N.A.	N.A.	300.	11:40	3211.	58.
9	421.	N.A.	N.A.	123.	11:15	3212.	13.
10	2037.	N.A.	N.A.	325.	10:32	3220.	63.
11	1563.	N.A.	N.A.	300.	12:13	3229.	48.
12	2059.	N.A.	N.A.	316.	12:11	3238.	64.
13	2029.	N.A.	N.A.	316.	12:11	3246.	63.
14	1681.	N.A.	N.A.	306.	13:10	3246.	52.
15	405.	N.A.	N.A.	193.	14:33	3258.	12.
16	535.	N.A.	N.A.	272.	14: 3	3265.	16.
17	2206.	N.A.	N.A.	344.	12: 6	3266.	68.
18	2164.	N.A.	N.A.	329.	12:11	3273.	66.
19	1474.	N.A.	N.A.	281.	12:11	3280.	45.
20	1714.	N.A.	N.A.	316.	11:47	3288.	52.
21	1532.	N.A.	N.A.	313.	12:23	3294.	46.
22	109.	N.A.	N.A.	25.	12: 4	3294.	3.
23	787.	N.A.	N.A.	338.	12:20	3301.	24.
24	904.	N.A.	N.A.	287.	11:48	3303.	27.
25	706.	N.A.	N.A.	224.	13:51	3309.	21.
26	2067.	N.A.	N.A.	344.	12:44	3315.	62.
27	623.	N.A.	N.A.	278.	11:42	3320.	19.
28	141.	N.A.	N.A.	32.	10:27	3325.	4.
MEAN	1390.	N.A.	N.A.			3248.	
STANDARD DEVIATION	730.	N.A.	N.A.			52.	

ZONE 7



ENVIRONMENTAL SUMMARY REPORT

SITE: ARGONNE NATIONAL LABORATORY
ARGONNE, ILLINOIS

REPORT PERIOD: 80/ 2
SITE NUMBER: 217

LATITUDE: 41.70 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 88.00 DEG WEST PYRANOMETER TILT: 45 DEG TIME ZONE: CENTRAL
ALTITUDE: 750 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	10.	16.	6.	23.	13:14	2.	6: 7	N.A.
2	11.	19.	5.	25.	14:19	-1.	2:32	N.A.
3	15.	22.	11.	32.	12:54	2.	6:35	N.A.
4	17.	21.	13.	29.	13:47	6.	4:54	N.A.
5	24.	25.	22.	29.	13:42	14.	0: 0	N.A.
6	25.	27.	24.	30.	14:18	19.	23:38	N.A.
7	24.	27.	22.	34.	11:33	15.	7:22	N.A.
8	26.	29.	24.	37.	13:16	22.	1: 6	N.A.
9	23.	27.	19.	32.	13:49	10.	23:57	N.A.
10	14.	17.	12.	24.	13:12	1.	6:21	N.A.
11	16.	19.	13.	22.	13:33	6.	23:52	N.A.
12	11.	16.	8.	23.	14:11	0.	6:43	N.A.
13	22.	25.	20.	32.	13:22	10.	2:32	N.A.
14	29.	32.	27.	39.	13:56	24.	6:44	N.A.
15	26.	27.	25.	29.	11: 3	17.	23:50	N.A.
16	10.	12.	8.	17.	0: 1	2.	21:58	N.A.
17	6.	10.	3.	17.	15:50	-8.	5:47	N.A.
18	22.	26.	19.	35.	13:54	3.	1:31	N.A.
19	36.	39.	34.	43.	11:14	31.	0:28	N.A.
20	38.	39.	36.	43.	15:51	33.	2:53	N.A.
21	38.	41.	36.	47.	12:11	34.	6:35	N.A.
22	35.	35.	35.	37.	3:23	33.	21: 7	N.A.
23	34.	36.	31.	40.	12:30	27.	21:50	N.A.
24	31.	33.	29.	37.	15:26	26.	1:45	N.A.
25	21.	23.	20.	29.	5:23	10.	23:40	N.A.
26	15.	17.	14.	26.	23:55	3.	6: 4	N.A.
27	27.	27.	26.	32.	20: 8	21.	23:36	N.A.
28	22.	26.	19.	29.	13:55	13.	23:35	N.A.
MEAN	22.	26.	20.					N.A.
STANDARD DEVIATION	9.1	8.3	9.8					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: ARGONNE NATIONAL LABORATORY
ARGONNE, ILLINOIS

REPORT PERIOD: 80/ 2
SITE NUMBER: 217

LATITUDE: 41.70 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 88.00 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: CENTRAL
ALTITUDE: 750 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2014.	N.A.	N.A.	321.	11:43	3077.	65.
2	1968.	N.A.	N.A.	314.	12: 8	3092.	64.
3	1377.	N.A.	N.A.	337.	12:48	3094.	45.
4	1008.	N.A.	N.A.	347.	12:16	3105.	32.
5	285.	N.A.	N.A.	91.	10:51	3116.	9.
6	414.	N.A.	N.A.	133.	13:30	3126.	13.
7	740.	N.A.	N.A.	295.	11:33	3137.	24.
8	394.	N.A.	N.A.	113.	13:27	3139.	13.
9	2059.	N.A.	N.A.	363.	11:39	3150.	65.
10	447.	N.A.	N.A.	175.	12: 8	3161.	14.
11	1930.	N.A.	N.A.	360.	12:13	3171.	61.
12	2018.	N.A.	N.A.	363.	11:36	3181.	63.
13	662.	N.A.	N.A.	285.	10:42	3183.	21.
14	1537.	N.A.	N.A.	298.	11:21	3193.	48.
15	182.	N.A.	N.A.	45.	13:33	3200.	6.
16	2250.	N.A.	N.A.	343.	12: 6	3210.	70.
17	2262.	N.A.	N.A.	343.	11:28	3219.	70.
18	1783.	N.A.	N.A.	337.	11:34	3229.	55.
19	382.	N.A.	N.A.	91.	11: 8	3238.	12.
20	243.	N.A.	N.A.	58.	11:41	3240.	8.
21	411.	N.A.	N.A.	198.	11: 7	3252.	13.
22	116.	N.A.	N.A.	39.	11:29	3254.	4.
23	239.	N.A.	N.A.	55.	12:14	3262.	7.
24	495.	N.A.	N.A.	123.	13:18	3270.	15.
25	849.	N.A.	N.A.	230.	13:18	3275.	26.
26	1568.	N.A.	N.A.	321.	10:30	3283.	48.
27	1478.	N.A.	N.A.	343.	11:18	3290.	45.
28	1906.	N.A.	N.A.	350.	11:52	3297.	58.
MEAN	1108.	N.A.	N.A.			3194.	
STANDARD DEVIATION	759.	N.A.	N.A.			67.	

ENVIRONMENTAL SUMMARY REPORT

SITE: BOND CONSTRUCTION
GLADSTONE, MISSOURI

REPORT PERIOD: 80/ 2
SITE NUMBER: 132

LATITUDE: 39.17 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 94.43 DEG WEST PYRANOMETER TILT: 37 DEG ALTITUDE: 1014 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	11.	15.	7.	23. 14:18	-6. 7:44	60.
2	26.	30.	22.	36. 12:34	14. 0:7	60.
3	25.	27.	24.	39. 14:43	19. 21:20	60.
4	23.	24.	23.	28. 23:48	18. 5:52	60.
5	30.	32.	28.	34. 11:0	23. 23:58	59.
6	22.	24.	20.	29. 15:5	15. 23:37	59.
7	19.	20.	19.	25. 17:13	11. 2:11	59.
8	23.	24.	23.	27. 14:30	20. 8:43	61.
9	17.	19.	16.	27. 14:4	11. 23:29	61.
10	17.	17.	17.	27. 14:25	9. 8:23	61.
11	19.	21.	17.	24. 14:31	11. 23:47	58.
12	18.	20.	16.	31. 16:19	4. 7:53	59.
13	33.	37.	31.	43. 15:14	20. 0:2	60.
14	35.	36.	34.	37. 13:50	32. 23:32	62.
15	25.	25.	25.	32. 0:20	14. 23:59	60.
16	11.	12.	11.	17. 15:34	6. 7:59	61.
17	17.	20.	15.	30. 16:22	5. 7:34	60.
18	31.	34.	30.	42. 16:57	18. 2:9	58.
19	39.	40.	38.	44. 15:0	34. 7:21	58.
20	38.	38.	38.	41. 15:11	35. 7:27	59.
21	40.	43.	39.	51. 11:0	37. 23:37	59.
22	40.	41.	38.	47. 14:15	36. 7:53	58.
23	36.	37.	35.	39. 14:56	31. 23:23	60.
24	38.	40.	37.	53. 14:35	27. 2:45	58.
25	25.	23.	27.	41. 0:0	15. 23:14	58.
26	27.	28.	26.	44. 17:43	11. 3:30	58.
27	44.	46.	43.	58. 17:39	32. 6:5	57.
28	41.	41.	41.	54. 1:8	26. 23:42	58.
MEAN	28.	29.	26.			59.
STANDARD DEVIATION	9.6	9.5	9.8			1.3

ENVIRONMENTAL SUMMARY REPORT

SITE: BOND CONSTRUCTION
GLADSTONE, MISSOURI

REPORT PERIOD: 80/ 2
SITE NUMBER: 132

LATITUDE: 39.17 DEG NORTH
LONGITUDE: 94.43 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 37 DEG

TIME ZONE: CENTRAL
ALTITUDE: 1014 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1277.	N.A.	N.A.	257.	10: 8	3000.	43.
2	818.	N.A.	N.A.	294.	12:28	3011.	27.
3	1675.	N.A.	N.A.	307.	13:29	3014.	56.
4	238.	N.A.	N.A.	60.	12:48	3029.	8.
5	521.	N.A.	N.A.	130.	10:55	3040.	17.
6	1570.	N.A.	N.A.	334.	13:56	3044.	52.
7	351.	N.A.	N.A.	87.	12:30	3055.	11.
8	383.	N.A.	N.A.	117.	11:50	3069.	12.
9	1314.	N.A.	N.A.	357.	13:48	3073.	43.
10	1088.	N.A.	N.A.	324.	14: 9	3084.	35.
11	2105.	N.A.	N.A.	330.	13: 5	3095.	68.
12	2166.	N.A.	N.A.	330.	13:18	3106.	70.
13	776.	N.A.	N.A.	277.	15: 4	3117.	25.
14	215.	N.A.	N.A.	57.	13:55	3121.	7.
15	118.	N.A.	N.A.	30.	13:24	3131.	4.
16	2195.	N.A.	N.A.	360.	13:37	3145.	70.
17	2292.	N.A.	N.A.	340.	13:16	3149.	73.
18	1943.	N.A.	N.A.	367.	13:35	3159.	61.
19	297.	N.A.	N.A.	67.	14:17	3170.	9.
20	286.	N.A.	N.A.	60.	12:53	3180.	9.
21	228.	N.A.	N.A.	120.	11: 0	3190.	7.
22	593.	N.A.	N.A.	147.	11:15	3193.	19.
23	265.	N.A.	N.A.	73.	13:52	3206.	8.
24	1616.	N.A.	N.A.	350.	13:36	3209.	50.
25	2153.	N.A.	N.A.	364.	13:36	3219.	67.
26	1805.	N.A.	N.A.	327.	13:17	3228.	56.
27	1838.	N.A.	N.A.	317.	13:12	3237.	57.
28	1536.	N.A.	N.A.	327.	13:50	3245.	47.
MEAN	1131.	N.A.	N.A.			3126.	
STANDARD DEVIATION	765.	N.A.	N.A.			75.	

ENVIRONMENTAL SUMMARY REPORT

SITE: DUCAT INVESTMENT
KANSAS CITY, KANSAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 171

LATITUDE: 39.17 DEG NORTH AZIMUTH: 3 DEG
LONGITUDE: 94.43 DEG WEST PYRANOMETER TILT: 53 DEG
TIME ZONE: CENTRAL
ALTITUDE: 1014 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	12.	16.	9.	24.	15:33	-2.	3:43	N.A.
2	28.	31.	26.	36.	13:30	20.	0: 4	N.A.
3	26.	29.	24.	36.	14:17	20.	21:24	N.A.
4	25.	26.	24.	29.	23:58	20.	0:47	N.A.
5	30.	33.	28.	37.	11:36	23.	23:40	N.A.
6	22.	25.	20.	31.	14: 9	14.	23:33	N.A.
7	22.	24.	21.	27.	11:28	14.	0:26	N.A.
8	24.	24.	23.	27.	15:18	21.	7:34	N.A.
9	18.	23.	15.	31.	13: 0	8.	22:36	N.A.
10	17.	20.	15.	28.	14: 4	7.	1: 5	N.A.
11	19.	23.	16.	27.	12:55	9.	23:27	N.A.
12	17.	22.	13.	30.	15:17	3.	6: 2	N.A.
13	34.	38.	31.	44.	14:11	22.	0: 9	N.A.
14	36.	37.	34.	40.	12:38	32.	23:57	N.A.
15	25.	25.	25.	32.	0: 2	13.	23:54	N.A.
16	12.	15.	9.	19.	15:49	6.	7:11	N.A.
17	17.	22.	13.	31.	15: 1	3.	5:51	N.A.
18	32.	35.	29.	43.	15:35	18.	0:16	N.A.
19	39.	41.	37.	44.	12:33	33.	5:48	N.A.
20	39.	39.	38.	42.	14: 8	35.	5:52	N.A.
21	41.	43.	39.	52.	8:46	37.	22:18	N.A.
22	38.	39.	37.	48.	11:34	36.	6: 8	N.A.
23	37.	37.	38.	40.	10:55	36.	7:22	N.A.
24	*	*	*	*	*:*	*	*:*	N.A.
25	*	*	*	*	*:*	*	*:*	N.A.
26	*	*	*	*	*:*	*	*:*	N.A.
27	*	*	*	*	*:*	*	*:*	N.A.
28	*	*	*	*	*:*	*	*:*	N.A.
MEAN	26.	29.	25.					N.A.
STANDARD DEVIATION	9.0	8.3	9.7					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: DUCAT INVESTMENT
KANSAS CITY, KANSAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 171

LATITUDE: 39.17 DEG NORTH AZIMUTH: 3 DEG
LONGITUDE: 94.43 DEG WEST PYRANOMETER TILT: 53 DEG
TIME ZONE: CENTRAL
ALTITUDE: 1014 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1339.	N.A.	N.A.	248.	10:45	3252.	41.
2	700.	N.A.	N.A.	232.	10:12	3259.	21.
3	1160.	N.A.	N.A.	316.	12:15	3257.	36.
4	172.	N.A.	N.A.	62.	10:12	3268.	5.
5	871.	N.A.	N.A.	311.	11:36	3274.	27.
6	1373.	N.A.	N.A.	348.	13:32	3273.	42.
7	254.	N.A.	N.A.	76.	11:28	3279.	8.
8	367.	N.A.	N.A.	76.	9:58	3289.	11.
9	1257.	N.A.	N.A.	365.	13:16	3287.	38.
10	1074.	N.A.	N.A.	292.	12: 1	3293.	33.
11	2246.	N.A.	N.A.	340.	12:12	3299.	68.
12	2240.	N.A.	N.A.	340.	12:21	3305.	68.
13	927.	N.A.	N.A.	294.	13:50	3310.	28.
14	176.	N.A.	N.A.	54.	12:22	3308.	5.
15	69.	N.A.	N.A.	27.	15:51	3313.	2.
16	2287.	N.A.	N.A.	362.	12:15	3320.	69.
17	2284.	N.A.	N.A.	343.	12:26	3318.	69.
18	1963.	N.A.	N.A.	348.	12:33	3322.	59.
19	266.	N.A.	N.A.	73.	11:24	3326.	8.
20	282.	N.A.	N.A.	62.	11:34	3330.	8.
21	246.	N.A.	N.A.	154.	9:45	3333.	7.
22	*	N.A.	N.A.	*	*:*	3330.	*
23	*	N.A.	N.A.	*	*:*	3336.	*
24	*	N.A.	N.A.	*	*:*	3332.	*
25	*	N.A.	N.A.	*	*:*	3334.	*
26	*	N.A.	N.A.	*	*:*	3336.	*
27	*	N.A.	N.A.	*	*:*	3337.	*
28	*	N.A.	N.A.	*	*:*	3339.	*
MEAN	1026.	N.A.	N.A.			3306.	
STANDARD DEVIATION	793.	N.A.	N.A.			28.	

ENVIRONMENTAL SUMMARY REPORT

SITE: JOHN BYRUM, JR.
SHAWNEE MISSION, KANSAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 66

LATITUDE: 39.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 95.00 DEG WEST PYRANOMETER TILT: 54 DEG
TIME ZONE: CENTRAL
ALTITUDE: 742 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	10.	16.	6.	27.	13:26	-9.	6: 9	50.
2	30.	34.	27.	40.	13: 8	19.	0: 2	71.
3	29.	34.	25.	45.	11:22	21.	21:19	55.
4	26.	27.	26.	31.	15:50	22.	7:32	48.
5	32.	36.	29.	47.	10:10	24.	23:52	47.
6	28.	32.	22.	41.	15:47	21.	7:20	47.
7	26.	26.	26.	28.	13:41	24.	23:55	76.
8	26.	28.	24.	32.	13:27	22.	8: 2	62.
9	19.	28.	13.	40.	13:45	-2.	23:31	61.
10	17.	23.	11.	36.	12:41	-3.	1:45	73.
11	20.	30.	13.	45.	10:43	0.	23:57	65.
12	15.	24.	8.	37.	10:54	-7.	7:19	60.
13	35.	40.	30.	47.	13:29	19.	1:18	66.
14	37.	39.	35.	42.	12:30	34.	23:20	72.
15	26.	27.	26.	34.	0: 3	14.	23:55	49.
16	13.	21.	9.	33.	14:20	5.	22:25	63.
17	17.	25.	11.	36.	14: 4	2.	6: 9	66.
18	32.	37.	28.	45.	15:21	19.	0: 1	60.
19	38.	41.	36.	45.	13:29	33.	3:21	61.
20	39.	39.	39.	43.	23: 8	35.	6:48	63.
21	42.	43.	40.	48.	9:32	38.	22: 4	65.
22	42.	46.	39.	55.	12:17	36.	7:18	57.
23	38.	40.	36.	42.	10:47	32.	23:57	55.
24	41.	47.	36.	61.	15:25	30.	7: 3	63.
25	27.	30.	24.	39.	0:34	12.	23:57	69.
26	29.	35.	24.	49.	15:57	10.	1:54	47.
27	43.	50.	38.	64.	15:31	24.	6:59	76.
28	42.	46.	38.	55.	12:52	26.	23:47	76.
MEAN	29.	34.	26.					61.
STANDARD DEVIATION	9.7	8.7	10.7					9.2

ENVIRONMENTAL SUMMARY REPORT

SITE: JOHN BYRUM, JR.
SHAWNEE MISSION, KANSAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 66

LATITUDE: 39.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 95.00 DEG WEST PYRANOMETER TILT: 54 DEG ALTITUDE: 742 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1324.	N.A.	N.A.	260.	10:30	3262.	41.
2	726.	N.A.	N.A.	214.	9:54	3273.	22.
3	1113.	N.A.	N.A.	320.	11:43	3270.	34.
4	201.	N.A.	N.A.	56.	10:46	3277.	6.
5	768.	N.A.	N.A.	256.	9:54	3283.	23.
6	1313.	N.A.	N.A.	309.	13: 1	3284.	40.
7	*	N.A.	N.A.	*	*:*	3290.	*
8	332.	N.A.	N.A.	77.	10:15	3297.	10.
9	1171.	N.A.	N.A.	337.	13:13	3302.	35.
10	1356.	N.A.	N.A.	372.	12:30	3308.	41.
11	2221.	N.A.	N.A.	341.	12: 3	3308.	67.
12	2233.	N.A.	N.A.	341.	11:52	3314.	67.
13	1117.	N.A.	N.A.	306.	13:13	3319.	34.
14	207.	N.A.	N.A.	70.	12:20	3315.	6.
15	120.	N.A.	N.A.	35.	15:41	3320.	4.
16	1839.	N.A.	N.A.	379.	12:22	3324.	55.
17	2254.	N.A.	N.A.	348.	11:56	3328.	68.
18	1945.	N.A.	N.A.	323.	11:53	3332.	58.
19	325.	N.A.	N.A.	74.	13:29	3328.	10.
20	295.	N.A.	N.A.	56.	10:59	3331.	9.
21	259.	N.A.	N.A.	144.	8:39	3334.	8.
22	760.	N.A.	N.A.	313.	12: 1	3337.	23.
23	240.	N.A.	N.A.	49.	10:21	3339.	7.
24	1459.	N.A.	N.A.	341.	11:46	3334.	44.
25	2051.	N.A.	N.A.	348.	12: 4	3336.	61.
26	1816.	N.A.	N.A.	327.	11:46	3337.	54.
27	1861.	N.A.	N.A.	309.	11:15	3338.	56.
28	1950.	N.A.	N.A.	313.	12: 4	3339.	58.
MEAN	1158.	N.A.	N.A.			3313.	
STANDARD DEVIATION	741.	N.A.	N.A.			24.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KAW VALLEY BANK
TOPEKA, KANSAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 172

LATITUDE: 39.40 DEG NORTH AZIMUTH: 5 DEG
LONGITUDE: 95.38 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: CENTRAL
ALTITUDE: 877 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	14.	20.	10.	31. 15:35	-4. 4:49	N.A.
2	30.	34.	27.	43. 12:45	22. 7:25	N.A.
3	28.	32.	26.	70. 6:19	22. 7:37	N.A.
4	27.	28.	26.	32. 14:17	22. 7: 0	N.A.
5	31.	35.	29.	43. 12:47	21. 23:53	N.A.
6	21.	25.	18.	60. 12:37	15. 7:16	N.A.
7	22.	23.	20.	25. 11:15	15. 1:34	N.A.
8	22.	24.	21.	27. 13:15	16. 23:32	N.A.
9	16.	22.	11.	34. 12:11	2. 23: 7	N.A.
10	17.	22.	14.	41. 15: 7	-0. 3: 2	N.A.
11	18.	22.	14.	28. 15:12	6. 23:59	N.A.
12	16.	23.	10.	35. 14:34	-3. 7: 6	N.A.
13	33.	38.	30.	43. 13:46	16. 0: 0	N.A.
14	34.	36.	33.	38. 13:37	31. 23:50	N.A.
15	23.	23.	23.	32. 0:22	10. 23:59	N.A.
16	12.	14.	9.	21. 14:28	6. 7:11	N.A.
17	18.	25.	13.	35. 15:27	0. 7:11	N.A.
18	33.	37.	29.	46. 15:29	19. 0:10	N.A.
19	38.	42.	35.	49. 13: 5	30. 5:32	N.A.
20	36.	36.	35.	40. 13:15	31. 4:32	N.A.
21	39.	39.	38.	42. 7:56	36. 23:13	N.A.
22	38.	40.	37.	44. 12: 1	34. 6:41	N.A.
23	36.	38.	34.	40. 13:19	31. 23:22	N.A.
24	40.	45.	36.	59. 14:39	30. 4:42	N.A.
25	25.	25.	25.	37. 1: 3	14. 23: 9	N.A.
26	31.	37.	26.	49. 15:15	14. 3: 9	N.A.
27	45.	53.	39.	67. 15:42	26. 6:59	N.A.
28	39.	40.	37.	48. 0: 2	26. 23:56	N.A.
MEAN	28.	31.	25.			N.A.
STANDARD DEVIATION	9.4	9.2	9.8			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: KAW VALLEY BANK
TOPEKA, KANSAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 172

LATITUDE: 39.40 DEG NORTH AZIMUTH: 5 DEG
LONGITUDE: 95.38 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: CENTRAL
ALTITUDE: 877 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1086.	N.A.	N.A.	227.	11:35	3139.	35.
2	790.	N.A.	N.A.	292.	12:35	3149.	25.
3	1151.	N.A.	N.A.	266.	13:45	3158.	36.
4	195.	N.A.	N.A.	49.	10: 1	3163.	6.
5	1116.	N.A.	N.A.	367.	12:47	3172.	35.
6	1297.	N.A.	N.A.	328.	12:52	3181.	41.
7	179.	N.A.	N.A.	36.	10:22	3190.	6.
8	717.	N.A.	N.A.	198.	13: 9	3199.	22.
9	1451.	N.A.	N.A.	370.	12:38	3203.	45.
10	1876.	N.A.	N.A.	389.	12:22	3212.	58.
11	2306.	N.A.	N.A.	347.	12:22	3221.	72.
12	2187.	N.A.	N.A.	344.	12:15	3222.	68.
13	666.	N.A.	N.A.	214.	9:52	3231.	21.
14	177.	N.A.	N.A.	45.	11:18	3239.	5.
15	191.	N.A.	N.A.	58.	14:30	3247.	6.
16	1715.	N.A.	N.A.	376.	12:36	3254.	53.
17	2440.	N.A.	N.A.	360.	12:31	3256.	75.
18	1322.	N.A.	N.A.	334.	10:23	3263.	41.
19	340.	N.A.	N.A.	81.	13: 0	3270.	10.
20	383.	N.A.	N.A.	78.	13: 9	3277.	12.
21	108.	N.A.	N.A.	29.	12:17	3284.	3.
22	376.	N.A.	N.A.	75.	11:39	3285.	11.
23	419.	N.A.	N.A.	110.	8:47	3291.	13.
24	1997.	N.A.	N.A.	337.	11:22	3297.	61.
25	2353.	N.A.	N.A.	357.	12:20	3303.	71.
26	2138.	N.A.	N.A.	334.	12:40	3309.	65.
27	1928.	N.A.	N.A.	324.	12:41	3309.	58.
28	1637.	N.A.	N.A.	328.	12:39	3316.	49.
MEAN	1162.	N.A.	N.A.			3237.	
STANDARD DEVIATION	788.	N.A.	N.A.			54.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LINCOLN HOUSING
LINCOLN, NEBRASKA

REPORT PERIOD: 80/ 2
SITE NUMBER: 178

LATITUDE: 40.51 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 96.45 DEG WEST PYRANOMETER TILT: 56 DEG
TIME ZONE: CENTRAL
ALTITUDE: 1180 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	13.	17.	11.	24.	14:15	0.	5:32	64.
2	23.	24.	22.	28.	12:41	18.	23:57	71.
3	21.	24.	19.	31.	14:32	15.	6: 0	72.
4	23.	23.	24.	31.	23:41	19.	4:40	64.
5	27.	28.	26.	33.	4: 7	16.	23:40	63.
6	20.	23.	18.	31.	14:36	14.	23:44	65.
7	19.	20.	18.	23.	15:17	12.	4:58	66.
8	19.	21.	17.	27.	13:33	8.	23:44	67.
9	9.	12.	7.	22.	14: 2	-4.	7:49	74.
10	22.	27.	18.	34.	12:26	7.	0:10	74.
11	15.	18.	13.	22.	0:10	8.	23:37	64.
12	17.	21.	14.	30.	15:32	4.	4:47	63.
13	25.	27.	24.	30.	16:11	20.	4: 6	62.
14	24.	24.	25.	26.	1:19	23.	6:18	65.
15	17.	18.	16.	25.	0:52	7.	23: 8	64.
16	11.	13.	9.	19.	16:20	5.	23:42	71.
17	13.	17.	11.	27.	15:16	0.	7:21	74.
18	28.	29.	27.	35.	23:12	17.	0: 4	73.
19	34.	36.	33.	39.	12:59	28.	5: 9	63.
20	32.	32.	32.	35.	13: 7	27.	7:15	64.
21	35.	36.	35.	37.	11:19	33.	0: 7	62.
22	36.	38.	35.	40.	16:14	34.	3:41	64.
23	31.	30.	32.	34.	0: 0	27.	7:28	74.
24	37.	42.	34.	49.	11:38	28.	7:27	78.
25	19.	18.	19.	30.	0: 4	13.	7:11	66.
26	32.	36.	29.	51.	16:48	15.	0:10	64.
27	40.	41.	39.	52.	15:21	28.	5:40	65.
28	32.	30.	34.	46.	0: 4	24.	23:44	66.
MEAN	24.	26.	23.					67.
STANDARD DEVIATION	8.6	8.2	9.1					4.6

ENVIRONMENTAL SUMMARY REPORT

SITE: LINCOLN HOUSING
LINCOLN, NEBRASKA

REPORT PERIOD: 80/ 2
SITE NUMBER: 178

LATITUDE: 40.51 DEG NORTH
LONGITUDE: 96.45 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 56 DEG

TIME ZONE: CENTRAL
ALTITUDE: 1180 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	817.	N.A.	N.A.	202.	10:47	3247.	25.
2	308.	N.A.	N.A.	59.	10:33	3255.	9.
3	865.	N.A.	N.A.	290.	13:33	3252.	27.
4	152.	N.A.	N.A.	42.	10:21	3259.	5.
5	515.	N.A.	N.A.	264.	13: 6	3270.	16.
6	1348.	N.A.	N.A.	339.	12:44	3268.	41.
7	230.	N.A.	N.A.	49.	13: 4	3275.	7.
8	1115.	N.A.	N.A.	352.	12:51	3281.	34.
9	1681.	N.A.	N.A.	283.	14:39	3288.	51.
10	891.	N.A.	N.A.	283.	11:54	3294.	27.
11	2278.	N.A.	N.A.	365.	12:37	3291.	69.
12	2287.	N.A.	N.A.	348.	12:31	3297.	69.
13	356.	N.A.	N.A.	68.	11:18	3302.	11.
14	88.	N.A.	N.A.	29.	11:17	3307.	3.
15	352.	N.A.	N.A.	107.	12:36	3312.	11.
16	1668.	N.A.	N.A.	362.	14: 1	3309.	50.
17	2376.	N.A.	N.A.	358.	12:57	3313.	72.
18	396.	N.A.	N.A.	127.	10:29	3318.	12.
19	462.	N.A.	N.A.	130.	12:59	3322.	14.
20	335.	N.A.	N.A.	68.	12:30	3325.	10.
21	74.	N.A.	N.A.	20.	14:25	3321.	2.
22	245.	N.A.	N.A.	62.	12:35	3328.	7.
23	376.	N.A.	N.A.	101.	8:54	3323.	11.
24	1908.	N.A.	N.A.	342.	13: 3	3326.	57.
25	2319.	N.A.	N.A.	352.	12:58	3328.	70.
26	2114.	N.A.	N.A.	326.	12:21	3330.	63.
27	1727.	N.A.	N.A.	316.	12:52	3331.	52.
28	234.	N.A.	N.A.	55.	10:49	3329.	7.
MEAN	983.	N.A.	N.A.			3300.	
STANDARD DEVIATION	812.	N.A.	N.A.			27.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SCATTERGOOD
WEST BRANCH, IOWA

REPORT PERIOD: 80/ 2
SITE NUMBER: 9

LATITUDE: 41.70 DEG NORTH
LONGITUDE: 91.30 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 50 DEG

TIME ZONE: CENTRAL
ALTITUDE: 860 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	7.	13.	3.	20. 12:44	-7. 7:19	67.
2	9.	*	9.	9. 22:45	8. 23:22	65.
3	12.	*	12.	13. 22:13	11. 23:22	62.
4	19.	*	19.	19. 22:28	19. 23: 0	72.
5	22.	24.	20.	25. 13:19	17. 23:53	63.
6	23.	27.	19.	31. 13:45	16. 18:21	63.
7	22.	27.	19.	33. 14:21	15. 23:55	67.
8	19.	22.	16.	27. 14: 8	13. 1:52	67.
9	14.	18.	10.	26. 14:47	3. 6:39	69.
10	15.	21.	11.	28. 15:41	1. 0:39	67.
11	15.	17.	14.	21. 15: 3	7. 23:57	71.
12	11.	15.	8.	23. 15:31	-1. 6:48	60.
13	23.	25.	21.	30. 16:15	11. 1:26	60.
14	25.	27.	23.	32. 13:57	18. 5:51	70.
15	20.	23.	18.	25. 12: 6	7. 23:50	67.
16	5.	8.	3.	12. 13:23	-1. 6:52	70.
17	7.	12.	4.	21. 15:31	-5. 6:37	68.
18	21.	24.	19.	32. 15:53	5. 3: 9	65.
19	33.	35.	32.	38. 14:17	28. 4:25	63.
20	35.	36.	34.	40. 12:18	33. 4:34	65.
21	35.	36.	35.	37. 13:57	34. 8:26	66.
22	36.	37.	35.	39. 15:11	34. 7: 1	70.
23	31.	31.	31.	35. 14:19	28. 10:30	72.
24	30.	33.	28.	38. 13:42	24. 21:58	65.
25	16.	17.	14.	27. 0: 1	2. 23:56	65.
26	14.	15.	14.	33. 23: 0	-2. 4:12	63.
27	26.	26.	25.	32. 0: 4	21. 8: 9	63.
28	22.	26.	18.	31. 12:22	6. 23:55	66.
MEAN	20.	24.	18.			66.
STANDARD DEVIATION	9.0	8.1	9.5			3.4

ENVIRONMENTAL SUMMARY REPORT

SITE: SCATTERGOOD
WEST BRANCH, IOWA

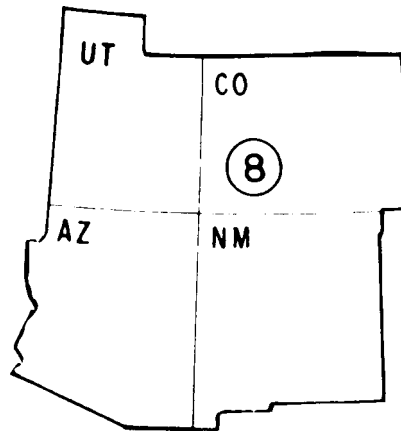
REPORT PERIOD: 80/ 2
SITE NUMBER: 9

LATITUDE: 41.70 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 91.30 DEG WEST PYRANOMETER TILT: 50 DEG
TIME ZONE: CENTRAL
ALTITUDE: 860 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1977.	N.A.	N.A.	321.	12: 7	3155.	63.
2	*	N.A.	N.A.	*	*:*	3168.	*
3	*	N.A.	N.A.	*	*:*	3169.	*
4	*	N.A.	N.A.	*	*:*	3179.	*
5	*	N.A.	N.A.	*	*:*	3188.	*
6	*	N.A.	N.A.	*	*:*	3198.	*
7	*	N.A.	N.A.	*	*:*	3207.	*
8	765.	N.A.	N.A.	172.	12:16	3207.	24.
9	2124.	N.A.	N.A.	337.	11:51	3217.	66.
10	1596.	N.A.	N.A.	347.	11:30	3226.	49.
11	2141.	N.A.	N.A.	347.	12:23	3235.	66.
12	2280.	N.A.	N.A.	354.	12:35	3243.	70.
13	378.	N.A.	N.A.	81.	12:38	3243.	12.
14	1316.	N.A.	N.A.	298.	12:26	3252.	40.
15	369.	N.A.	N.A.	94.	11:34	3256.	11.
16	1622.	N.A.	N.A.	370.	14:11	3264.	50.
17	2552.	N.A.	N.A.	399.	12:13	3272.	78.
18	1608.	N.A.	N.A.	363.	12:51	3280.	49.
19	465.	N.A.	N.A.	107.	9:39	3287.	14.
20	243.	N.A.	N.A.	52.	12:29	3287.	7.
21	57.	N.A.	N.A.	19.	13: 3	3297.	2.
22	106.	N.A.	N.A.	49.	11:39	3297.	3.
23	738.	N.A.	N.A.	334.	13:10	3303.	22.
24	1621.	N.A.	N.A.	344.	12:22	3309.	49.
25	1231.	N.A.	N.A.	379.	11: 2	3311.	37.
26	1183.	N.A.	N.A.	341.	14:14	3317.	36.
27	1427.	N.A.	N.A.	344.	12:20	3322.	43.
28	1801.	N.A.	N.A.	373.	12:27	3327.	54.
MEAN	1254.	N.A.	N.A.			3251.	
STANDARD DEVIATION	759.	N.A.	N.A.			52.	

ZONE 8



ENVIRONMENTAL SUMMARY REPORT

SITE: ALBUQUERQUE WESTERN
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 55

LATITUDE: 35.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 106.00 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 5389 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	41.	45.	38.	53. 15:38	30. 5:41	64.
2	45.	48.	42.	57. 16:25	35. 5:22	67.
3	46.	51.	42.	60. 13:39	32. 6:33	66.
4	48.	55.	43.	61. 14:49	35. 5:23	67.
5	43.	47.	40.	58. 16:32	30. 7:20	66.
6	47.	52.	43.	63. 14:35	29. 5:31	65.
7	43.	46.	41.	58. 12:37	32. 23:57	66.
8	28.	29.	27.	33. 10:59	22. 22:40	65.
9	28.	31.	26.	40. 16: 4	18. 7:39	65.
10	33.	38.	29.	51. 15:48	20. 6:44	65.
11	38.	43.	34.	53. 14:39	24. 7:11	66.
12	42.	47.	38.	56. 15:31	30. 6:37	66.
13	45.	50.	42.	58. 15:50	30. 6:42	66.
14	47.	49.	46.	52. 15: 2	44. 7:18	65.
15	47.	48.	45.	54. 14:15	44. 8:39	64.
16	48.	51.	46.	54. 15:20	42. 22:16	67.
17	44.	44.	44.	49. 13:44	39. 8: 3	67.
18	51.	54.	48.	63. 14:17	40. 2:38	67.
19	50.	54.	47.	61. 11:47	41. 5:29	67.
20	44.	45.	43.	50. 12:52	39. 19:57	66.
21	44.	47.	41.	51. 15: 9	36. 6:11	66.
22	46.	49.	44.	54. 14:30	37. 23:59	67.
23	45.	50.	40.	60. 15:23	30. 4:57	67.
24	43.	46.	40.	53. 14:25	34. 7: 2	67.
25	43.	48.	39.	60. 14:41	29. 6:25	67.
26	47.	53.	42.	63. 16: 9	31. 6:18	67.
27	52.	57.	47.	71. 16:20	34. 6:12	67.
28	53.	59.	49.	71. 15:35	36. 6:18	68.
MEAN	44.	48.	41.			66.
STANDARD DEVIATION	6.1	6.6	5.9			1.0

ENVIRONMENTAL SUMMARY REPORT

SITE: ALBUQUERQUE WESTERN
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 55

LATITUDE: 35.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 106.00 DEG WEST PYRANOMETER TILT: 35 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5389 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1403.	N.A.	N.A.	266.	12:42	3089.	45.
2	1682.	N.A.	N.A.	255.	12:14	3098.	54.
3	1250.	N.A.	N.A.	258.	11:42	3111.	40.
4	1608.	N.A.	N.A.	258.	12:30	3112.	52.
5	1446.	N.A.	N.A.	293.	12:19	3125.	46.
6	1383.	N.A.	N.A.	250.	11:49	3134.	44.
7	1186.	N.A.	N.A.	264.	12:26	3139.	38.
8	544.	N.A.	N.A.	139.	11: 9	3148.	17.
9	1742.	N.A.	N.A.	266.	12:31	3154.	55.
10	1750.	N.A.	N.A.	266.	12:15	3163.	55.
11	1754.	N.A.	N.A.	266.	12:20	3172.	55.
12	1741.	N.A.	N.A.	266.	12:19	3177.	55.
13	1549.	N.A.	N.A.	285.	13:33	3186.	49.
14	371.	N.A.	N.A.	109.	11:34	3191.	12.
15	717.	N.A.	N.A.	242.	13:54	3200.	22.
16	*	N.A.	N.A.	*	*:*	3208.	*
17	356.	N.A.	N.A.	215.	13: 7	3213.	11.
18	709.	N.A.	N.A.	242.	12:19	3221.	22.
19	1000.	N.A.	N.A.	269.	11:31	3229.	31.
20	424.	N.A.	N.A.	190.	12:31	3237.	13.
21	681.	N.A.	N.A.	206.	9:39	3242.	21.
22	1301.	N.A.	N.A.	312.	13:37	3250.	40.
23	1815.	N.A.	N.A.	269.	12:17	3257.	56.
24	1908.	N.A.	N.A.	280.	12:11	3262.	58.
25	1677.	N.A.	N.A.	285.	11:50	3269.	51.
26	1874.	N.A.	N.A.	274.	11:33	3276.	57.
27	1852.	N.A.	N.A.	272.	11:53	3282.	56.
28	1815.	N.A.	N.A.	280.	11:43	3283.	55.
MEAN	1316.	N.A.	N.A.			3194.	
STANDARD DEVIATION	522.	N.A.	N.A.			60.	

ENVIRONMENTAL SUMMARY REPORT

SITE: BOULDER POST OFFICE
BOULDER, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 181

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5283 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	41.	53.	32.	65. 12:21	22. 1:14	N.A.
2	42.	51.	35.	63. 14:10	30. 6:11	N.A.
3	41.	46.	37.	59. 11:20	29. 6: 5	N.A.
4	41.	49.	35.	60. 10:10	25. 23:59	N.A.
5	32.	40.	26.	50. 12:57	20. 6:23	N.A.
6	32.	39.	27.	58. 14:18	23. 5:25	N.A.
7	24.	26.	23.	30. 0: 2	15. 23:58	N.A.
8	15.	21.	11.	34. 14:22	7. 7:15	N.A.
9	28.	41.	20.	59. 13:56	10. 3:14	N.A.
10	29.	39.	22.	53. 12:15	19. 2:17	N.A.
11	27.	36.	20.	52. 13: 8	16. 23:14	N.A.
12	35.	46.	27.	62. 13:17	15. 6:37	N.A.
13	37.	47.	29.	61. 15:13	22. 21:43	N.A.
14	22.	23.	22.	24. 15: 8	20. 23:51	N.A.
15	17.	18.	16.	22. 14: 4	11. 22:50	N.A.
16	18.	25.	13.	40. 14:58	8. 5:57	N.A.
17	33.	41.	28.	54. 10:42	15. 0:13	N.A.
18	47.	54.	42.	68. 13: 3	33. 5:22	N.A.
19	48.	55.	41.	64. 14:44	34. 23:37	N.A.
20	42.	44.	41.	54. 11:37	34. 3:31	N.A.
21	43.	50.	37.	60. 12:21	30. 6:18	N.A.
22	37.	43.	32.	55. 15:39	28. 23:20	N.A.
23	31.	35.	29.	45. 12:52	26. 2:59	N.A.
24	36.	43.	31.	54. 12:42	22. 5:25	N.A.
25	37.	45.	31.	64. 13:19	19. 6:23	N.A.
26	51.	57.	45.	66. 15:10	39. 6:38	N.A.
27	54.	65.	46.	76. 10:37	35. 4:24	N.A.
28	48.	58.	40.	72. 13:49	33. 23:56	N.A.
MEAN	35.	42.	30.			N.A.
STANDARD DEVIATION	10.2	11.8	9.4			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: BOULDER POST OFFICE
BOULDER, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 181

LATITUDE: 39.45 DEG NORTH
LONGITUDE: 104.52 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 5283 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2033.	N.A.	N.A.	345.	11: 6	3144.	65.
2	2010.	N.A.	N.A.	352.	11:26	3154.	64.
3	1230.	N.A.	N.A.	339.	11: 4	3164.	39.
4	1875.	N.A.	N.A.	336.	11:30	3168.	59.
5	2006.	N.A.	N.A.	329.	11:37	3177.	63.
6	1391.	N.A.	N.A.	361.	12:21	3187.	44.
7	285.	N.A.	N.A.	38.	9: 1	3196.	9.
8	402.	N.A.	N.A.	77.	13:23	3200.	13.
9	1768.	N.A.	N.A.	352.	11:37	3209.	55.
10	2264.	N.A.	N.A.	355.	11:32	3218.	70.
11	2100.	N.A.	N.A.	348.	11:53	3227.	65.
12	2163.	N.A.	N.A.	352.	12:45	3227.	67.
13	2089.	N.A.	N.A.	361.	10:51	3236.	65.
14	235.	N.A.	N.A.	35.	11:45	3244.	7.
15	353.	N.A.	N.A.	83.	13:27	3252.	11.
16	1446.	N.A.	N.A.	355.	12:50	3260.	44.
17	723.	N.A.	N.A.	262.	10:31	3261.	22.
18	1711.	N.A.	N.A.	345.	11: 6	3268.	52.
19	2379.	N.A.	N.A.	348.	11:27	3276.	73.
20	665.	N.A.	N.A.	198.	12: 9	3283.	20.
21	2046.	N.A.	N.A.	332.	12:15	3290.	62.
22	808.	N.A.	N.A.	256.	13:17	3290.	25.
23	750.	N.A.	N.A.	291.	10:12	3297.	23.
24	2218.	N.A.	N.A.	358.	11: 6	3303.	67.
25	1925.	N.A.	N.A.	345.	11:27	3309.	58.
26	2006.	N.A.	N.A.	348.	11:26	3315.	61.
27	2085.	N.A.	N.A.	361.	10:43	3314.	63.
28	2178.	N.A.	N.A.	345.	12:40	3320.	66.
MEAN	1541.	N.A.	N.A.			3242.	
STANDARD DEVIATION	710.	N.A.	N.A.			54.	

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS
LONGMONT, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 89 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5283 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	30.	39.	23.	55.	13:58	11.	0: 1	53.
2	33.	43.	26.	60.	14:23	17.	6:54	51.
3	30.	35.	27.	49.	11:11	19.	5:35	54.
4	33.	41.	28.	54.	10:44	21.	23:26	55.
5	27.	34.	22.	48.	11:42	16.	7:10	52.
6	29.	34.	26.	53.	13:20	20.	0:48	52.
7	24.	26.	23.	29.	0: 1	15.	23:46	51.
8	12.	24.	3.	37.	12:14	-6.	20:35	52.
9	15.	32.	2.	54.	14:22	-13.	2:27	50.
10	21.	31.	13.	48.	12:35	4.	1:18	49.
11	20.	31.	10.	44.	12:57	6.	3:15	53.
12	24.	32.	18.	50.	12:19	-1.	5: 7	54.
13	28.	31.	24.	42.	13:29	17.	6:43	55.
14	22.	22.	22.	28.	17:10	20.	0:22	51.
15	*	*	*	*	*:*	*	*:*	*
16	*	*	*	*	*:*	*	*:*	*
17	*	*	*	*	*:*	*	*:*	*
18	*	*	*	*	*:*	*	*:*	*
19	*	*	*	*	*:*	*	*:*	*
20	*	*	*	*	*:*	*	*:*	*
21	*	*	*	*	*:*	*	*:*	*
22	*	*	*	*	*:*	*	*:*	*
23	*	*	*	*	*:*	*	*:*	*
24	*	*	*	*	*:*	*	*:*	*
25	*	*	*	*	*:*	*	*:*	*
26	*	*	*	*	*:*	*	*:*	*
27	*	*	*	*	*:*	*	*:*	*
28	*	*	*	*	*:*	*	*:*	*
MEAN	25.	32.	19.					52.
STANDARD DEVIATION	6.5	6.0	8.5					1.8

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS
LONGMONT, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH
LONGITUDE: 104.52 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 89 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 5283 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE TIME BTU/HR/FT2 HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2262.	N.A.	N.A.	357. 11:50	2904.	78.
2	1999.	N.A.	N.A.	335. 11:48	2901.	69.
3	1054.	N.A.	N.A.	304. 11:11	2898.	36.
4	2048.	N.A.	N.A.	304. 11:43	2888.	71.
5	2064.	N.A.	N.A.	298. 11:48	2885.	72.
6	1016.	N.A.	N.A.	348. 12:11	2881.	35.
7	539.	N.A.	N.A.	111. 12: 1	2876.	19.
8	2426.	N.A.	N.A.	403. 12: 9	2865.	85.
9	2474.	N.A.	N.A.	366. 11:42	2859.	87.
10	2377.	N.A.	N.A.	354. 12: 9	2854.	83.
11	1459.	N.A.	N.A.	308. 11:37	2847.	51.
12	1689.	N.A.	N.A.	354. 12:14	2832.	60.
13	1644.	N.A.	N.A.	338. 12: 3	2824.	58.
14	183.	N.A.	N.A.	49. 15:34	2817.	7.
15	*	N.A.	N.A.	*:*	2809.	*
16	*	N.A.	N.A.	*:*	2800.	*
17	*	N.A.	N.A.	*:*	2783.	*
18	*	N.A.	N.A.	*:*	2773.	*
19	*	N.A.	N.A.	*:*	2763.	*
20	*	N.A.	N.A.	*:*	2753.	*
21	*	N.A.	N.A.	*:*	2742.	*
22	*	N.A.	N.A.	*:*	2723.	*
23	*	N.A.	N.A.	*:*	2711.	*
24	*	N.A.	N.A.	*:*	2699.	*
25	*	N.A.	N.A.	*:*	2686.	*
26	*	N.A.	N.A.	*:*	2672.	*
27	*	N.A.	N.A.	*:*	2651.	*
28	*	N.A.	N.A.	*:*	2637.	*
MEAN	1660.	N.A.	N.A.		2798.	
STANDARD DEVIATION	724.	N.A.	N.A.		82.	

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS
LONGMONT, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH
LONGITUDE: 104.52 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 89 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 5283 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	59.	42.	70.	89.	0:22	16.	13:58
2	57.	42.	67.	82.	23:32	28.	14:28
3	73.	62.	81.	100.	6:7	40.	11:11
4	70.	54.	82.	100.	20:14	32.	10:12
5	74.	58.	85.	100.	0:57	37.	11:48
6	71.	58.	80.	97.	23:56	29.	12:43
7	95.	91.	98.	100.	0:23	80.	12:44
8	69.	53.	81.	95.	8:38	32.	12:9
9	59.	44.	71.	93.	8:45	18.	13:29
10	63.	43.	78.	89.	23:31	25.	12:41
11	73.	54.	88.	100.	7:47	34.	13:34
12	59.	56.	62.	100.	9:18	26.	21:9
13	50.	47.	53.	84.	23:39	33.	12:19
14	97.	98.	96.	100.	0:54	81.	0:0
15	*	*	*	*	*:*	*	*:*
16	*	*	*	*	*:*	*	*:*
17	*	*	*	*	*:*	*	*:*
18	*	*	*	*	*:*	*	*:*
19	*	*	*	*	*:*	*	*:*
20	*	*	*	*	*:*	*	*:*
21	*	*	*	*	*:*	*	*:*
22	*	*	*	*	*:*	*	*:*
23	*	*	*	*	*:*	*	*:*
24	*	*	*	*	*:*	*	*:*
25	*	*	*	*	*:*	*	*:*
26	*	*	*	*	*:*	*	*:*
27	*	*	*	*	*:*	*	*:*
28	*	*	*	*	*:*	*	*:*

MEAN 69. 57. 78.

STANDARD
DEVIATION 14. 17. 13.

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS
LONGMONT, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 5283 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	272.	3.	288.	3.	15.	212.	21:18
2	302.	2.	335.	2.	9.	241.	4:14
3	239.	3.	238.	3.	12.	245.	13:19
4	344.	4.	357.	5.	15.	337.	11:22
5	310.	3.	341.	4.	11.	349.	14:28
6	232.	3.	264.	2.	17.	225.	22:47
7	244.	11.	258.	10.	18.	225.	20:39
8	*	1.	*	0.	8.	*	0:28
9	*	0.	*	1.	6.	*	15:10
10	*	1.	*	1.	8.	*	10:49
11	*	1.	*	1.	7.	*	16:46
12	157.	2.	234.	2.	22.	97.	21:57
13	247.	4.	243.	4.	12.	238.	16: 3
14	282.	5.	311.	4.	14.	265.	0:27
15	*	*	*	*	*	*	*:*
16	*	*	*	*	*	*	*:*
17	*	*	*	*	*	*	*:*
18	*	*	*	*	*	*	*:*
19	*	*	*	*	*	*	*:*
20	*	*	*	*	*	*	*:*
21	*	*	*	*	*	*	*:*
22	*	*	*	*	*	*	*:*
23	*	*	*	*	*	*	*:*
24	*	*	*	*	*	*	*:*
25	*	*	*	*	*	*	*:*
26	*	*	*	*	*	*	*:*
27	*	*	*	*	*	*	*:*
28	*	*	*	*	*	*	*:*
MEAN	260.	3.	287.	3.			
STANDARD DEVIATION	51.7	2.8	46.1	2.5			

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS
LONGMONT, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 89 DEG TIME ZONE: MOUNTAIN
ALTITUDE: 5283 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	17	6	1	0	0	0	0	0	0
2	23	1	0	0	0	0	0	0	0
3	18	6	0	0	0	0	0	0	0
4	14	7	3	0	0	0	0	0	0
5	17	5	2	0	0	0	0	0	0
6	16	5	0	3	0	0	0	0	0
7	0	1	20	3	0	0	0	0	0
8	22	2	0	0	0	0	0	0	0
9	24	0	0	0	0	0	0	0	0
10	24	0	0	0	0	0	0	0	0
11	23	1	0	0	0	0	0	0	0
12	22	0	1	1	0	0	0	0	0
13	9	9	3	0	0	0	0	0	3
14	6	9	3	0	0	0	0	0	6
15	0	0	0	0	0	0	0	0	24
16	0	0	0	0	0	0	0	0	24
17	0	0	0	0	0	0	0	0	24
18	0	0	0	0	0	0	0	0	24
19	0	0	0	0	0	0	0	0	24
20	0	0	0	0	0	0	0	0	24
21	0	0	0	0	0	0	0	0	24
22	0	0	0	0	0	0	0	0	24
23	0	0	0	0	0	0	0	0	24
24	0	0	0	0	0	0	0	0	24
25	0	0	0	0	0	0	0	0	24
26	0	0	0	0	0	0	0	0	24
27	0	0	0	0	0	0	0	0	24
28	0	0	0	0	0	0	0	0	24
AVERAGE	8.4	1.9	1.2	0.3	0.0	0.0	0.0	0.0	12.3
TOTAL	235	52	33	7	0	0	0	0	345

ENVIRONMENTAL SUMMARY REPORT

SITE: HOMES BY MARILYN
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 52

LATITUDE: 35.05 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 106.42 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 5100 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	29.	36.	25.	46. 14:10	17. 5:22	69.
2	32.	39.	27.	48. 15: 0	18. 6:54	68.
3	30.	37.	24.	48. 13:24	16. 7: 0	71.
4	33.	41.	26.	52. 13:57	15. 7: 6	65.
5	29.	37.	24.	49. 15:27	15. 6:49	60.
6	30.	38.	25.	48. 15: 0	14. 5:56	71.
7	31.	35.	28.	46. 12:20	21. 19:58	67.
8	21.	23.	19.	28. 11: 5	15. 23:36	69.
9	20.	26.	16.	33. 15:42	8. 7: 9	74.
10	23.	31.	16.	41. 14:59	8. 7:10	74.
11	24.	33.	17.	43. 15:15	8. 6:43	65.
12	26.	35.	19.	45. 15:58	9. 6:47	66.
13	29.	37.	23.	46. 13:34	12. 5:40	65.
14	34.	36.	32.	39. 11:56	28. 1:38	63.
15	34.	36.	32.	40. 14:20	30. 22:31	70.
16	34.	37.	31.	43. 16: 8	28. 23:52	71.
17	32.	33.	30.	39. 13:28	26. 3: 9	71.
18	38.	42.	35.	51. 14:16	28. 2:27	66.
19	37.	42.	33.	51. 11:25	28. 5:23	68.
20	32.	34.	31.	39. 12:41	28. 6:59	72.
21	33.	35.	31.	40. 13:21	22. 6:57	71.
22	34.	39.	30.	46. 14:57	21. 23:56	68.
23	33.	40.	27.	49. 14:15	16. 5:53	71.
24	32.	39.	26.	46. 12:12	20. 3:51	72.
25	31.	39.	24.	50. 14:36	17. 2:47	69.
26	35.	43.	27.	53. 11:56	16. 6:42	68.
27	39.	47.	32.	58. 14:18	19. 6:23	68.
28	38.	48.	30.	62. 14:59	18. 6:32	68.
MEAN	31.	37.	26.			69.
STANDARD DEVIATION	4.8	5.3	5.3			3.2

ENVIRONMENTAL SUMMARY REPORT

SITE: HOMES BY MARILYN
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 52

LATITUDE: 35.05 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 106.42 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 5100 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1930.	N.A.	N.A.	331.	14: 0	3334.	58.
2	2337.	N.A.	N.A.	343.	12:52	3339.	70.
3	1635.	N.A.	N.A.	340.	12: 4	3346.	49.
4	2270.	N.A.	N.A.	343.	12:21	3341.	68.
5	1986.	N.A.	N.A.	367.	12: 9	3348.	59.
6	1715.	N.A.	N.A.	319.	11:43	3351.	51.
7	1548.	N.A.	N.A.	343.	12:26	3349.	46.
8	511.	N.A.	N.A.	189.	10:43	3352.	15.
9	2415.	N.A.	N.A.	352.	12:35	3349.	72.
10	2355.	N.A.	N.A.	346.	12:24	3352.	70.
11	2418.	N.A.	N.A.	337.	12:14	3349.	72.
12	2300.	N.A.	N.A.	340.	12:44	3351.	69.
13	1902.	N.A.	N.A.	340.	12:25	3353.	57.
14	381.	N.A.	N.A.	114.	10:20	3350.	11.
15	567.	N.A.	N.A.	223.	12:28	3351.	17.
16	996.	N.A.	N.A.	349.	14:11	3352.	30.
17	430.	N.A.	N.A.	268.	13:23	3348.	13.
18	1478.	N.A.	N.A.	355.	12: 3	3349.	44.
19	1058.	N.A.	N.A.	340.	11:20	3349.	32.
20	617.	N.A.	N.A.	271.	12:35	3344.	18.
21	596.	N.A.	N.A.	213.	9:26	3344.	18.
22	2023.	N.A.	N.A.	364.	12:12	3343.	61.
23	2221.	N.A.	N.A.	343.	13: 6	3342.	66.
24	2463.	N.A.	N.A.	355.	12:34	3337.	74.
25	2247.	N.A.	N.A.	358.	12:18	3335.	67.
26	2369.	N.A.	N.A.	346.	13:27	3332.	71.
27	2369.	N.A.	N.A.	334.	12:37	3330.	71.
28	2267.	N.A.	N.A.	340.	12:40	3320.	68.
MEAN	1693.	N.A.	N.A.			3344.	
STANDARD DEVIATION	736.	N.A.	N.A.			8.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 114.40 DEG WEST PYRANOMETER TILT: 60 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 7000 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	40.	47.	34.	60.	15:54	28.	5:51	N.A.
2	40.	48.	33.	61.	15:40	25.	7:34	N.A.
3	43.	54.	35.	69.	16:17	27.	7:19	N.A.
4	45.	55.	37.	67.	14:20	28.	7:13	N.A.
5	42.	52.	35.	65.	15:41	26.	7:31	N.A.
6	45.	53.	39.	62.	12:24	34.	0: 8	N.A.
7	39.	40.	37.	48.	14:26	28.	6:10	N.A.
8	35.	40.	31.	49.	13:43	23.	6:36	N.A.
9	31.	37.	27.	48.	13:37	18.	7:36	N.A.
10	32.	40.	25.	53.	16:43	15.	6: 9	N.A.
11	34.	44.	27.	58.	15:39	17.	6: 9	N.A.
12	35.	45.	28.	56.	13:39	20.	7:25	N.A.
13	39.	43.	36.	48.	10:54	24.	0:51	N.A.
14	45.	46.	43.	49.	15:41	40.	22: 1	N.A.
15	40.	42.	39.	44.	1:45	33.	23:22	N.A.
16	40.	44.	37.	49.	14:27	33.	6: 8	N.A.
17	43.	46.	41.	50.	12:30	37.	0:57	N.A.
18	46.	46.	46.	49.	15:50	43.	7:10	N.A.
19	44.	47.	41.	50.	11: 2	36.	22:56	N.A.
20	38.	40.	37.	43.	14: 8	33.	4:27	N.A.
21	39.	41.	38.	45.	12:15	34.	4:58	N.A.
22	41.	46.	37.	54.	13:31	30.	7:28	N.A.
23	40.	46.	34.	56.	14:46	26.	6:19	N.A.
24	40.	46.	35.	58.	15:23	25.	6:51	N.A.
25	40.	48.	33.	62.	15:28	24.	7: 7	N.A.
26	43.	52.	35.	67.	15:35	25.	7:13	N.A.
27	45.	54.	37.	71.	14:58	25.	7: 3	N.A.
28	47.	55.	41.	66.	12:21	31.	7: 1	N.A.
MEAN	40.	46.	36.					N.A.
STANDARD DEVIATION	4.2	5.2	5.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH
LONGITUDE: 114.40 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 60 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 7000 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2309.	N.A.	N.A.	351.	12:42	3347.	69.
2	2227.	N.A.	N.A.	345.	12:49	3343.	67.
3	2193.	N.A.	N.A.	342.	12:17	3349.	65.
4	2033.	N.A.	N.A.	342.	12:23	3350.	61.
5	2197.	N.A.	N.A.	351.	12:35	3346.	66.
6	968.	N.A.	N.A.	292.	10:48	3347.	29.
7	1872.	N.A.	N.A.	392.	12:55	3342.	56.
8	1423.	N.A.	N.A.	327.	11:30	3343.	43.
9	2387.	N.A.	N.A.	351.	12:27	3338.	72.
10	2472.	N.A.	N.A.	360.	12:27	3338.	74.
11	2417.	N.A.	N.A.	348.	12:22	3341.	72.
12	2343.	N.A.	N.A.	351.	12:29	3332.	70.
13	299.	N.A.	N.A.	180.	10:17	3334.	9.
14	334.	N.A.	N.A.	203.	14:48	3333.	10.
15	180.	N.A.	N.A.	65.	15:10	3327.	5.
16	587.	N.A.	N.A.	301.	10:59	3325.	18.
17	767.	N.A.	N.A.	392.	12:25	3323.	23.
18	326.	N.A.	N.A.	100.	15:18	3316.	10.
19	252.	N.A.	N.A.	218.	12:33	3313.	8.
20	820.	N.A.	N.A.	354.	13:52	3310.	25.
21	564.	N.A.	N.A.	209.	12: 5	3302.	17.
22	2404.	N.A.	N.A.	386.	12:54	3298.	73.
23	2301.	N.A.	N.A.	342.	12:38	3294.	70.
24	2195.	N.A.	N.A.	362.	12: 6	3286.	67.
25	2386.	N.A.	N.A.	351.	12:11	3281.	73.
26	2423.	N.A.	N.A.	348.	12:33	3275.	74.
27	2428.	N.A.	N.A.	342.	12:28	3266.	74.
28	1622.	N.A.	N.A.	348.	12:21	3260.	50.
MEAN	1597.	N.A.	N.A.			3320.	
STANDARD DEVIATION	872.	N.A.	N.A.			27.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 114.40 DEG WEST PYRANOMETER TILT: 60 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 7000 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	83.	67.	95.	100.	0: 5	16.	14:39
2	78.	58.	93.	100.	0: 1	19.	14:41
3	70.	43.	90.	100.	0: 1	1.	16:17
4	62.	36.	82.	100.	1:59	10.	13:21
5	72.	46.	92.	100.	0: 3	9.	16:13
6	67.	40.	88.	100.	0: 2	15.	11:41
7	62.	60.	64.	100.	8:34	29.	4:39
8	77.	62.	88.	100.	0: 2	34.	15:40
9	68.	52.	80.	100.	0: 3	14.	14:35
10	56.	33.	75.	100.	1:15	3.	15:13
11	58.	33.	78.	100.	4:27	6.	14:46
12	66.	42.	85.	100.	0: 3	15.	13:23
13	98.	97.	98.	100.	0: 3	75.	10:43
14	100.	100.	100.	100.	0: 2	100.	0: 2
15	100.	100.	100.	100.	0: 4	100.	0: 4
16	99.	98.	100.	100.	0: 0	82.	14:33
17	100.	100.	100.	100.	0: 3	98.	12:57
18	100.	100.	100.	100.	0: 3	100.	0: 3
19	100.	100.	100.	100.	0: 1	100.	0: 1
20	100.	100.	100.	100.	0: 0	89.	16: 5
21	100.	100.	100.	100.	0: 5	100.	0: 5
22	87.	74.	98.	100.	0: 0	41.	14:30
23	83.	67.	96.	100.	0: 0	27.	15: 7
24	74.	58.	87.	100.	0: 0	12.	15: 7
25	71.	49.	89.	100.	0: 0	11.	16:32
26	68.	46.	88.	100.	0: 1	6.	16:44
27	60.	39.	78.	100.	0: 2	0.	15:24
28	54.	39.	67.	100.	5:52	15.	17:44

MEAN 79. 66. 90.

STANDARD
DEVIATION16. 26. 10.

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 114.40 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 7000 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED DIRECTION	TIME HR:MN
1	*	1.	*	1.	7.	* 12:58
2	*	1.	*	2.	6.	* 13: 5
3	*	0.	*	1.	5.	* 16:23
4	*	1.	*	1.	6.	* 0: 1
5	*	1.	*	1.	5.	* 14:38
6	*	2.	*	3.	10.	* 13: 6
7	293.	3.	277.	5.	12.	258. 10:53
8	346.	2.	348.	3.	8.	344. 14:42
9	*	1.	*	3.	8.	* 12:17
10	*	1.	*	2.	7.	* 14:30
11	*	1.	*	2.	7.	* 11:50
12	*	2.	*	3.	8.	* 15:41
13	263.	3.	264.	4.	9.	262. 23: 4
14	273.	13.	275.	15.	26.	279. 17:40
15	282.	3.	320.	1.	15.	277. 2:33
16	*	1.	*	2.	7.	* 23:37
17	302.	4.	314.	4.	9.	312. 13: 2
18	307.	10.	305.	11.	21.	315. 15:50
19	281.	8.	271.	7.	24.	282. 22:35
20	290.	11.	295.	13.	23.	286. 1:52
21	293.	8.	293.	11.	23.	297. 15:43
22	299.	2.	307.	3.	11.	323. 0:11
23	*	1.	*	2.	7.	* 14:51
24	*	1.	*	1.	5.	* 11:34
25	*	1.	*	2.	7.	* 14:30
26	*	1.	*	2.	8.	* 13:32
27	*	1.	*	2.	8.	* 12:28
28	303.	4.	304.	7.	15.	325. 12: 0
MEAN	294.	3.	298.	4.		
STANDARD DEVIATION	20.8	3.5	24.2	3.9		

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 114.40 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 7000 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	23	1	0	0	0	0	0	0	0
2	24	0	0	0	0	0	0	0	0
3	24	0	0	0	0	0	0	0	0
4	24	0	0	0	0	0	0	0	0
5	24	0	0	0	0	0	0	0	0
6	19	5	0	0	0	0	0	0	0
7	16	5	3	0	0	0	0	0	0
8	19	5	0	0	0	0	0	0	0
9	20	4	0	0	0	0	0	0	0
10	22	2	0	0	0	0	0	0	0
11	23	1	0	0	0	0	0	0	0
12	18	6	0	0	0	0	0	0	0
13	12	11	1	0	0	0	0	0	0
14	0	2	10	12	0	0	0	0	0
15	17	3	3	1	0	0	0	0	0
16	21	3	0	0	0	0	0	0	0
17	17	7	0	0	0	0	0	0	0
18	1	3	15	5	0	0	0	0	0
19	5	10	5	3	1	0	0	0	0
20	4	4	7	9	0	0	0	0	0
21	7	5	8	4	0	0	0	0	0
22	18	6	0	0	0	0	0	0	0
23	24	0	0	0	0	0	0	0	0
24	24	0	0	0	0	0	0	0	0
25	21	3	0	0	0	0	0	0	0
26	23	1	0	0	0	0	0	0	0
27	20	4	0	0	0	0	0	0	0
28	15	1	7	0	0	0	0	0	1
AVERAGE	17.3	3.3	2.1	1.2	0.0	0.0	0.0	0.0	0.0
TOTAL	485	92	59	34	1	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 106.60 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5350 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	40.	46.	34.	56.	14:32	25.	5:55	N.A.
2	43.	48.	39.	60.	15:54	27.	6:56	N.A.
3	44.	53.	37.	65.	15:43	28.	5:51	N.A.
4	46.	54.	40.	62.	14:23	30.	5:35	N.A.
5	41.	48.	36.	60.	16:23	27.	6:17	N.A.
6	45.	52.	39.	66.	15:30	25.	6:10	N.A.
7	42.	47.	39.	59.	12:29	30.	23:55	N.A.
8	24.	25.	24.	30.	0:11	20.	23:10	N.A.
9	27.	32.	23.	45.	16: 3	17.	7:36	N.A.
10	32.	39.	25.	53.	15:47	16.	6:59	N.A.
11	35.	43.	29.	57.	15:15	20.	5:34	N.A.
12	39.	47.	33.	60.	15:11	24.	7: 0	N.A.
13	43.	49.	39.	60.	13:43	26.	6:58	N.A.
14	46.	48.	44.	52.	11:37	42.	5:51	N.A.
15	44.	47.	42.	54.	15: 4	39.	23:45	N.A.
16	44.	48.	41.	54.	15: 9	37.	6:30	N.A.
17	42.	43.	41.	50.	13:43	37.	7:51	N.A.
18	49.	53.	46.	64.	14:16	37.	2:10	N.A.
19	48.	52.	45.	60.	11:26	38.	5:28	N.A.
20	42.	44.	41.	49.	12:48	35.	6:56	N.A.
21	43.	46.	40.	51.	13:28	32.	6:37	N.A.
22	45.	49.	41.	56.	15:59	33.	23:59	N.A.
23	43.	50.	37.	59.	16:20	26.	6:55	N.A.
24	42.	47.	37.	55.	14:39	30.	7: 0	N.A.
25	41.	48.	29.	67.	14:49	25.	6:28	N.A.
26	42.	51.	34.	64.	15: 5	27.	4:54	N.A.
27	50.	59.	43.	73.	16:19	29.	6:11	N.A.
28	52.	60.	44.	74.	15:10	31.	6:17	N.A.
MEAN	42.	48.	37.					N.A.
STANDARD DEVIATION	6.2	7.0	6.2					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 106.60 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5350 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1792.	N.A.	N.A.	314.	12:14	2965.	60.
2	2080.	N.A.	N.A.	318.	12:31	2975.	70.
3	1546.	N.A.	N.A.	326.	11:43	2989.	52.
4	2082.	N.A.	N.A.	314.	12:20	2992.	70.
5	1830.	N.A.	N.A.	344.	12:19	3006.	61.
6	1786.	N.A.	N.A.	311.	11:51	3016.	59.
7	1470.	N.A.	N.A.	326.	12:24	3024.	49.
8	*	N.A.	N.A.	*	*:*	3034.	*
9	2166.	N.A.	N.A.	329.	11:42	3041.	71.
10	2209.	N.A.	N.A.	329.	11:58	3052.	72.
11	2261.	N.A.	N.A.	326.	11:42	3059.	74.
12	2199.	N.A.	N.A.	333.	12:15	3070.	72.
13	1989.	N.A.	N.A.	348.	13:27	3080.	65.
14	459.	N.A.	N.A.	180.	10:23	3087.	15.
15	685.	N.A.	N.A.	273.	13:49	3098.	22.
16	826.	N.A.	N.A.	344.	12:45	3108.	27.
17	406.	N.A.	N.A.	202.	13: 6	3115.	13.
18	807.	N.A.	N.A.	344.	14:11	3125.	26.
19	1213.	N.A.	N.A.	329.	11:31	3135.	39.
20	629.	N.A.	N.A.	314.	12:48	3143.	20.
21	712.	N.A.	N.A.	225.	9:28	3152.	23.
22	1366.	N.A.	N.A.	337.	11: 2	3162.	43.
23	2232.	N.A.	N.A.	337.	13: 3	3171.	70.
24	2362.	N.A.	N.A.	344.	12:41	3179.	74.
25	2298.	N.A.	N.A.	341.	12:41	3188.	72.
26	2513.	N.A.	N.A.	356.	12:55	3197.	79.
27	2339.	N.A.	N.A.	337.	12: 3	3206.	73.
28	2245.	N.A.	N.A.	348.	12: 9	3210.	70.
MEAN	1648.	N.A.	N.A.			3092.	
STANDARD DEVIATION	684.	N.A.	N.A.			75.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 106.60 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 5350 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED DIRECTION	TIME HR:MN	
1	150.	2.	142.	2.	11.	175.	16:14
2	166.	3.	165.	3.	11.	154.	16:58
3	*	0.	*	0.	3.	*	1:14
4	152.	3.	151.	5.	13.	166.	14:55
5	*	1.	*	1.	6.	*	14:33
6	*	2.	*	3.	9.	*	23:20
7	304.	6.	42.	6.	32.	57.	13:28
8	271.	14.	265.	13.	26.	259.	2:30
9	*	2.	*	1.	9.	*	0:14
10	*	0.	*	1.	5.	*	14:27
11	*	0.	*	1.	5.	*	13: 7
12	354.	2.	13.	3.	10.	12.	10:18
13	357.	2.	39.	2.	11.	59.	14:20
14	1.	8.	359.	11.	20.	345.	15: 0
15	9.	3.	11.	5.	10.	44.	15:25
16	*	2.	*	3.	8.	*	14:47
17	*	0.	*	0.	4.	*	14:47
18	55.	8.	42.	9.	24.	61.	19:52
19	28.	3.	25.	5.	14.	74.	15:10
20	77.	7.	86.	9.	19.	71.	18:42
21	35.	4.	45.	5.	13.	58.	14:16
22	103.	4.	140.	4.	17.	60.	1:31
23	95.	5.	72.	6.	16.	62.	15:16
24	147.	4.	141.	4.	12.	156.	16: 4
25	*	1.	*	1.	4.	*	3:16
26	152.	2.	152.	4.	12.	179.	12:55
27	*	2.	*	1.	10.	*	19: 5
28	*	1.	*	2.	9.	*	16:16
MEAN	145.	3.	111.	4.			
STANDARD DEVIATION	115.2	3.1	94.3	3.2			

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 106.60 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5350 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	19	4	1	0	0	0	0	0	0
2	19	5	0	0	0	0	0	0	0
3	24	0	0	0	0	0	0	0	0
4	17	2	5	0	0	0	0	0	0
5	23	1	0	0	0	0	0	0	0
6	17	7	0	0	0	0	0	0	0
7	12	4	1	5	1	0	0	0	1
8	0	2	5	9	2	0	0	0	6
9	23	1	0	0	0	0	0	0	0
10	24	0	0	0	0	0	0	0	0
11	24	0	0	0	0	0	0	0	0
12	21	3	0	0	0	0	0	0	0
13	18	6	0	0	0	0	0	0	0
14	7	5	9	3	0	0	0	0	0
15	14	10	0	0	0	0	0	0	0
16	21	3	0	0	0	0	0	0	0
17	24	0	0	0	0	0	0	0	0
18	8	3	9	3	1	0	0	0	0
19	16	7	1	0	0	0	0	0	0
20	5	9	8	2	0	0	0	0	0
21	10	11	3	0	0	0	0	0	0
22	14	8	2	0	0	0	0	0	0
23	13	3	8	0	0	0	0	0	0
24	17	5	2	0	0	0	0	0	0
25	17	0	0	0	0	0	0	0	7
26	12	7	0	0	0	0	0	0	5
27	19	5	0	0	0	0	0	0	0
28	22	1	0	0	0	0	0	0	1
AVERAGE	16.4	4.0	1.9	0.8	0.1	0.0	0.0	0.0	0.7
TOTAL	460	112	54	22	4	0	0	0	20

ENVIRONMENTAL SUMMARY REPORT

SITE: PERL MACK
MONTBELLO, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 60

LATITUDE: 39.80 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 104.00 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5250 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	38.	47.	32.	62. 12:17	20. 0: 1	53.
2	39.	44.	37.	48. 9:20	32. 20:48	50.
3	40.	43.	39.	44. 17: 3	36. 22:55	46.
4	40.	44.	36.	54. 10: 5	26. 22:58	54.
5	26.	*	26.	28. 18:55	23. 23:54	46.
6	31.	38.	26.	50. 12:52	22. 0:42	51.
7	25.	26.	24.	30. 10:30	15. 23:47	49.
8	16.	20.	10.	30. 11:58	3. 7: 4	50.
9	*	*	*	* *:*	* *:*	*
10	*	*	*	* *:*	* *:*	*
11	*	*	*	* *:*	* *:*	*
12	46.	47.	41.	63. 14:31	28. 7:46	-19.
13	24.	*	24.	25. 20:26	23. 23:12	-19.
14	24.	24.	23.	26. 12:24	22. 0:26	19.
15	17.	19.	15.	22. 13:15	14. 21:53	47.
16	20.	25.	16.	37. 14:42	9. 7: 8	48.
17	35.	45.	27.	57. 11:19	15. 1:54	48.
18	46.	58.	41.	67. 14:26	31. 0: 7	50.
19	52.	59.	43.	68. 14:20	37. 6:10	52.
20	37.	39.	36.	44. 13:36	32. 22:53	50.
21	40.	45.	36.	50. 13: 8	30. 6:28	49.
22	37.	45.	31.	55. 10:30	27. 3:56	51.
23	30.	31.	29.	36. 15:32	25. 6:52	49.
24	34.	41.	28.	51. 11:43	20. 6: 2	48.
25	37.	47.	25.	59. 12:26	21. 6:34	51.
26	50.	57.	43.	65. 14:56	36. 23:46	52.
27	54.	63.	44.	76. 13:53	36. 2:31	53.
28	48.	54.	44.	67. 13:16	30. 8: 1	55.
MEAN	35.	42.	31.			43.
STANDARD DEVIATION	10.7	12.6	9.5			19.8

ENVIRONMENTAL SUMMARY REPORT

SITE: PERL MACK
MONTBELLO, COLORADO

REPORT PERIOD: 80/ 2
SITE NUMBER: 60

LATITUDE: 39.80 DEG NORTH
LONGITUDE: 104.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: MOUNTAIN
ALTITUDE: 5250 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1630.	N.A.	N.A.	297.	11:45	2787.	58.
2	*	N.A.	N.A.	*	*:*	2800.	*
3	*	N.A.	N.A.	*	*:*	2809.	*
4	1839.	N.A.	N.A.	288.	12: 2	2822.	65.
5	*	N.A.	N.A.	*	*:*	2835.	*
6	1366.	N.A.	N.A.	334.	12:52	2848.	48.
7	237.	N.A.	N.A.	55.	10:35	2858.	8.
8	938.	N.A.	N.A.	251.	12: 3	2871.	33.
9	*	N.A.	N.A.	*	*:*	2884.	*
10	*	N.A.	N.A.	*	*:*	2891.	*
11	*	N.A.	N.A.	*	*:*	2905.	*
12	2119.	N.A.	N.A.	306.	11:19	2918.	73.
13	*	N.A.	N.A.	*	*:*	2931.	*
14	164.	N.A.	N.A.	40.	11:54	2945.	6.
15	374.	N.A.	N.A.	95.	11:12	2952.	13.
16	1499.	N.A.	N.A.	355.	12: 2	2965.	51.
17	1144.	N.A.	N.A.	297.	11: 8	2978.	38.
18	*	N.A.	N.A.	*	*:*	2991.	*
19	2012.	N.A.	N.A.	317.	11:46	3004.	67.
20	334.	N.A.	N.A.	78.	13:10	3012.	11.
21	1797.	N.A.	N.A.	306.	11:42	3025.	59.
22	1246.	N.A.	N.A.	314.	10:30	3038.	41.
23	378.	N.A.	N.A.	213.	11:59	3051.	12.
24	2349.	N.A.	N.A.	332.	9:35	3063.	77.
25	2365.	N.A.	N.A.	323.	11:59	3070.	77.
26	1841.	N.A.	N.A.	320.	11:44	3085.	60.
27	1919.	N.A.	N.A.	317.	11:55	3092.	62.
28	1955.	N.A.	N.A.	323.	13:32	3105.	63.
MEAN	1375.	N.A.	N.A.			2948.	
STANDARD DEVIATION	737.	N.A.	N.A.			98.	

ENVIRONMENTAL SUMMARY REPORT.

SITE: PUBLIC SERVICE
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 201

LATITUDE: 35.03 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 106.37 DEG WEST PYRANOMETER TILT: 32 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 5311 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	26.	34.	20.	47.	12:53	13.	4:37	56.
2	29.	36.	24.	45.	15:26	17.	3: 3	55.
3	30.	40.	23.	50.	15:47	16.	6:38	55.
4	30.	40.	23.	56.	11:24	14.	7: 5	55.
5	28.	36.	22.	53.	14:47	12.	5:27	57.
6	29.	37.	23.	48.	15: 3	10.	5:48	56.
7	26.	32.	23.	47.	12:34	15.	20:12	54.
8	15.	19.	12.	29.	11: 3	5.	22:57	56.
9	14.	21.	9.	32.	14:35	-1.	6:30	57.
10	20.	30.	13.	44.	13:31	5.	1:36	53.
11	23.	33.	16.	46.	15:44	4.	6: 8	53.
12	23.	33.	15.	46.	14:31	5.	6:53	57.
13	27.	36.	19.	47.	13:41	8.	6:13	55.
14	31.	33.	29.	37.	12:46	25.	1:28	52.
15	30.	32.	27.	38.	12:23	25.	22:44	54.
16	25.	27.	24.	35.	11:35	21.	6:34	52.
17	*	*	*	*	*:*	*	*:*	*
18	*	*	*	*	*:*	*	*:*	*
19	28.	*	28.	29.	21:21	28.	22:14	63.
20	28.	30.	26.	37.	13: 5	22.	20:14	59.
21	28.	32.	25.	38.	15:26	16.	5:13	55.
22	29.	34.	25.	41.	14:16	19.	7: 9	55.
23	29.	39.	21.	49.	13:34	11.	6:41	57.
24	27.	34.	21.	41.	13:55	13.	1: 2	56.
25	28.	37.	21.	53.	15:22	14.	5:23	54.
26	32.	40.	26.	51.	10:34	12.	6:34	55.
27	37.	48.	29.	62.	12: 8	15.	4:51	59.
28	39.	49.	31.	62.	12:18	20.	3: 0	58.
MEAN	27.	34.	22.					56.
STANDARD DEVIATION	5.4	6.6	5.5					2.2

ENVIRONMENTAL SUMMARY REPORT

SITE: PUBLIC SERVICE
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 2
SITE NUMBER: 201

LATITUDE: 35.03 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 106.37 DEG WEST PYRANOMETER TILT: 32 DEG TIME ZONE: MOUNTAIN
ALTITUDE: 5311 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	17.	N.A.	N.A.	37.	11:28	3017.	1.
2	38.	N.A.	N.A.	24.	12: 3	3027.	1.
3	19.	N.A.	N.A.	31.	12:14	3040.	1.
4	206.	N.A.	N.A.	281.	11:30	3043.	7.
5	26.	N.A.	N.A.	34.	11:19	3057.	1.
6	5.	N.A.	N.A.	24.	11:24	3067.	0.
7	16.	N.A.	N.A.	34.	12: 7	3073.	1.
8	0.	N.A.	N.A.	0.	6:15	3083.	0.
9	116.	N.A.	N.A.	49.	13:10	3089.	4.
10	95.	N.A.	N.A.	43.	11:55	3099.	3.
11	91.	N.A.	N.A.	40.	12:11	3106.	3.
12	70.	N.A.	N.A.	37.	12:13	3116.	2.
13	72.	N.A.	N.A.	40.	12:15	3125.	2.
14	1.	N.A.	N.A.	6.	10:38	3132.	0.
15	0.	N.A.	N.A.	3.	11:56	3142.	0.
16	*	N.A.	N.A.	*	*:*	3151.	*
17	*	N.A.	N.A.	*	*:*	3158.	*
18	*	N.A.	N.A.	*	*:*	3167.	*
19	*	N.A.	N.A.	*	*:*	3176.	*
20	35.	N.A.	N.A.	88.	13: 0	3182.	1.
21	0.	N.A.	N.A.	0.	6: 6	3191.	0.
22	210.	N.A.	N.A.	70.	11:41	3200.	7.
23	134.	N.A.	N.A.	55.	12: 8	3209.	4.
24	187.	N.A.	N.A.	67.	11:52	3215.	6.
25	180.	N.A.	N.A.	73.	11:54	3223.	6.
26	161.	N.A.	N.A.	82.	12:42	3232.	5.
27	415.	N.A.	N.A.	320.	11:20	3239.	13.
28	146.	N.A.	N.A.	134.	10:53	3242.	5.
MEAN	102.	N.A.	N.A.			3136.	
STANDARD DEVIATION	100.	N.A.	N.A.			69.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TEMPE UNION
TEMPE, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 34

LATITUDE: 33.26 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN
LONGITUDE: 111.50 DEG WEST PYRANOMETER TILT: 32 DEG ALTITUDE: 1117 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	62.	69.	57.	80. 15:33	50. 6:39	94.
2	61.	68.	55.	81. 14: 5	43. 6:49	114.
3	60.	68.	54.	82. 14:42	41. 6: 5	103.
4	59.	67.	52.	81. 14:18	40. 5:59	91.
5	61.	68.	55.	83. 15:27	42. 7:54	99.
6	60.	65.	55.	76. 14:21	46. 6:37	97.
7	53.	59.	49.	72. 15:54	41. 7:32	96.
8	49.	55.	45.	61. 12:47	39. 22:49	97.
9	48.	55.	42.	67. 15: 7	32. 6:54	117.
10	50.	59.	44.	72. 16:27	34. 4:43	102.
11	52.	62.	45.	74. 15:19	33. 5:37	89.
12	54.	62.	47.	75. 14:42	34. 7:14	99.
13	52.	53.	51.	58. 10:41	45. 0: 1	94.
14	60.	63.	57.	72. 15: 7	52. 0: 0	85.
15	57.	58.	56.	63. 15:59	48. 23:30	99.
16	56.	60.	52.	67. 14:40	45. 7:19	121.
17	56.	59.	54.	67. 16:32	51. 2:29	105.
18	59.	62.	56.	71. 14:45	52. 7: 7	83.
19	59.	64.	55.	69. 16:12	50. 23:56	92.
20	56.	60.	53.	67. 16:18	49. 3:24	99.
21	55.	58.	53.	63. 15:14	50. 6:42	98.
22	58.	64.	52.	75. 16: 2	44. 6:54	88.
23	58.	63.	53.	76. 15:30	41. 7:25	104.
24	59.	65.	54.	77. 15:30	43. 5:17	98.
25	64.	72.	58.	84. 16:38	45. 5:38	99.
26	67.	74.	60.	89. 15:59	50. 5:30	112.
27	66.	74.	59.	91. 16:53	42. 6:50	100.
28	62.	70.	56.	85. 14:45	43. 6:34	108.
MEAN	58.	63.	53.			99.
STANDARD DEVIATION	4.8	5.7	4.7			9.1

ENVIRONMENTAL SUMMARY REPORT

SITE: TEMPE UNION
TEMPE, ARIZONA

REPORT PERIOD: 80/ 2
SITE NUMBER: 34

LATITUDE: 33.26 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 111.50 DEG WEST PYRANOMETER TILT: 32 DEG
TIME ZONE: MOUNTAIN
ALTITUDE: 1117 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1833.	N.A.	N.A.	301.	11:49	3080.	60.
2	1996.	N.A.	N.A.	308.	12:18	3085.	65.
3	1794.	N.A.	N.A.	323.	12:50	3094.	58.
4	1774.	N.A.	N.A.	317.	12:37	3100.	57.
5	1959.	N.A.	N.A.	304.	12:31	3112.	63.
6	946.	N.A.	N.A.	257.	13: 1	3121.	30.
7	2085.	N.A.	N.A.	311.	12:15	3126.	67.
8	376.	N.A.	N.A.	92.	12:21	3135.	12.
9	2060.	N.A.	N.A.	314.	12:17	3141.	66.
10	2126.	N.A.	N.A.	317.	12:17	3153.	67.
11	2223.	N.A.	N.A.	317.	12:34	3155.	70.
12	2074.	N.A.	N.A.	314.	12:24	3167.	65.
13	288.	N.A.	N.A.	89.	9:15	3175.	9.
14	958.	N.A.	N.A.	292.	15: 7	3177.	30.
15	393.	N.A.	N.A.	212.	15:59	3189.	12.
16	315.	N.A.	N.A.	257.	10:34	3197.	25.
17	1052.	N.A.	N.A.	292.	10:50	3203.	33.
18	499.	N.A.	N.A.	231.	14:40	3211.	16.
19	368.	N.A.	N.A.	111.	16:12	3216.	11.
20	1281.	N.A.	N.A.	377.	12:28	3224.	40.
21	454.	N.A.	N.A.	105.	15: 8	3232.	14.
22	2036.	N.A.	N.A.	333.	12: 3	3237.	63.
23	2144.	N.A.	N.A.	317.	12:18	3244.	66.
24	1888.	N.A.	N.A.	349.	12:24	3251.	58.
25	2343.	N.A.	N.A.	327.	12:16	3256.	72.
26	2225.	N.A.	N.A.	327.	12:15	3263.	68.
27	2215.	N.A.	N.A.	323.	12:16	3270.	68.
28	1777.	N.A.	N.A.	320.	12:48	3274.	54.
MEAN	1499.	N.A.	N.A.			3182.	
STANDARD DEVIATION	719.	N.A.	N.A.			60.	

ZONE 9



ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH
LONGITUDE: 119.43 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: PACIFIC
ALTITUDE: 328 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	48.	52.	45.	66.	14:32	37.	1:39	70.
2	49.	50.	48.	54.	14:52	46.	1:44	64.
3	48.	49.	48.	53.	14:36	46.	6:42	60.
4	50.	53.	48.	64.	15: 3	46.	19:51	69.
5	50.	52.	48.	58.	13:31	46.	6:41	70.
6	49.	53.	48.	60.	16: 8	44.	23:58	70.
7	50.	59.	46.	64.	15:43	41.	23:33	70.
8	50.	58.	43.	69.	15:11	36.	5: 9	70.
9	52.	63.	44.	77.	14:19	35.	5:20	61.
10	53.	63.	44.	76.	14:46	36.	6:19	55.
11	51.	62.	43.	75.	15:47	34.	6:14	69.
12	52.	61.	44.	74.	15:22	34.	6:27	70.
13	47.	52.	44.	60.	11:12	37.	3:38	69.
14	52.	54.	51.	59.	13:19	46.	2:55	70.
15	56.	59.	54.	68.	15:30	51.	5:57	70.
16	54.	55.	54.	62.	9:41	51.	4: 7	64.
17	57.	58.	57.	65.	12:27	54.	0: 0	58.
18	63.	67.	60.	73.	14:48	57.	3:23	64.
19	55.	58.	52.	68.	15:13	47.	23:39	69.
20	53.	55.	51.	61.	12:22	46.	6:19	70.
21	57.	63.	52.	70.	11:53	45.	23:58	70.
22	53.	57.	49.	67.	14:11	43.	2:38	70.
23	55.	64.	48.	74.	14:38	41.	6:43	66.
24	57.	65.	50.	82.	15:42	43.	2:54	62.
25	59.	68.	51.	82.	14: 1	43.	5:39	70.
26	61.	70.	54.	82.	13:50	46.	3:38	71.
27	61.	67.	57.	77.	12:28	51.	3:24	71.
28	57.	63.	51.	70.	14:48	46.	6:19	71.
MEAN	54.	59.	49.					67.
STANDARD DEVIATION	4.3	5.8	4.4					4.5

ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH
LONGITUDE: 119.43 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: PACIFIC
ALTITUDE: 328 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	994.	N.A.	N.A.	278.	12:19	2904.	34.
2	205.	N.A.	N.A.	51.	13:11	2915.	7.
3	142.	N.A.	N.A.	35.	14: 4	2927.	5.
4	366.	N.A.	N.A.	174.	14:52	2934.	12.
5	367.	N.A.	N.A.	167.	14:10	2946.	12.
6	*	N.A.	N.A.	*	*:*	2954.	*
7	*	N.A.	N.A.	*	*:*	2965.	*
8	1742.	N.A.	N.A.	281.	12:20	2977.	59.
9	1790.	N.A.	N.A.	284.	12: 1	2985.	60.
10	1774.	N.A.	N.A.	291.	12: 1	2997.	59.
11	1852.	N.A.	N.A.	291.	12: 1	3008.	62.
12	1766.	N.A.	N.A.	284.	12: 3	3016.	59.
13	405.	N.A.	N.A.	253.	11: 6	3028.	13.
14	196.	N.A.	N.A.	60.	12:26	3039.	6.
15	626.	N.A.	N.A.	294.	12:16	3051.	21.
16	105.	N.A.	N.A.	82.	12:53	3059.	3.
17	180.	N.A.	N.A.	117.	12:21	3070.	6.
18	1562.	N.A.	N.A.	344.	10:58	3082.	51.
19	567.	N.A.	N.A.	373.	12:35	3087.	18.
20	911.	N.A.	N.A.	284.	11: 7	3098.	29.
21	1129.	N.A.	N.A.	335.	10:44	3109.	36.
22	752.	N.A.	N.A.	310.	12:41	3117.	24.
23	1729.	N.A.	N.A.	316.	12:41	3128.	55.
24	1079.	N.A.	N.A.	325.	12:35	3139.	34.
25	1676.	N.A.	N.A.	303.	11:53	3149.	53.
26	1621.	N.A.	N.A.	291.	11:16	3159.	51.
27	623.	N.A.	N.A.	155.	11:24	3164.	20.
28	2027.	N.A.	N.A.	313.	11:50	3174.	64.
MEAN	1007.	N.A.	N.A.			3042.	
STANDARD DEVIATION	664.	N.A.	N.A.			83.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC
LONGITUDE: 119.43 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 328 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED DIRECTION	TIME HR:MN
1	*	1.	*	0.	7.	23:52
2	*	1.	*	1.	7.	22:42
3	*	1.	*	1.	5.	10:42
4	*	0.	*	1.	7.	11: 3
5	293.	2.	299.	2.	14.	19:30
6	*	1.	*	2.	9.	14:26
7	*	1.	*	1.	8.	14: 2
8	*	1.	*	1.	5.	10:39
9	*	0.	*	0.	5.	14:30
10	*	0.	*	1.	6.	10:57
11	*	0.	*	1.	5.	10:51
12	*	0.	*	1.	6.	13:28
13	*	1.	*	1.	5.	11:49
14	72.	3.	75.	3.	15.	18:18
15	64.	4.	67.	5.	14.	8:10
16	65.	5.	62.	6.	15.	16:37
17	74.	6.	69.	6.	16.	16:11
18	90.	7.	98.	8.	18.	16: 8
19	78.	6.	83.	8.	18.	9:34
20	75.	6.	78.	6.	15.	22: 1
21	77.	5.	*	5.	16.	0:14
22	*	1.	*	2.	8.	8:30
23	*	0.	*	1.	6.	15:42
24	*	0.	*	1.	6.	13: 7
25	*	1.	*	2.	9.	15:10
26	*	1.	*	1.	7.	12:47
27	93.	3.	95.	3.	13.	20: 1
28	293.	4.	291.	5.	13.	16:24
MEAN	116.	2.	122.	3.		
STANDARD DEVIATION	88.2	2.2	92.2	2.5		

ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC
LONGITUDE: 119.43 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 328 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	24	0	0	0	0	0	0	0	0
2	24	0	0	0	0	0	0	0	0
3	24	0	0	0	0	0	0	0	0
4	24	0	0	0	0	0	0	0	0
5	19	5	0	0	0	0	0	0	0
6	20	0	0	0	0	0	0	0	4
7	20	0	0	0	0	0	0	0	4
8	24	0	0	0	0	0	0	0	0
9	23	0	0	0	0	0	0	0	1
10	24	0	0	0	0	0	0	0	0
11	24	0	0	0	0	0	0	0	0
12	24	0	0	0	0	0	0	0	0
13	24	0	0	0	0	0	0	0	0
14	10	13	0	0	0	0	0	0	1
15	13	11	0	0	0	0	0	0	0
16	10	7	7	0	0	0	0	0	0
17	1	21	2	0	0	0	0	0	0
18	1	16	7	0	0	0	0	0	0
19	9	8	7	0	0	0	0	0	0
20	6	10	8	0	0	0	0	0	0
21	10	12	2	0	0	0	0	0	0
22	22	2	0	0	0	0	0	0	0
23	24	0	0	0	0	0	0	0	0
24	24	0	0	0	0	0	0	0	0
25	22	2	0	0	0	0	0	0	0
26	24	0	0	0	0	0	0	0	0
27	19	5	0	0	0	0	0	0	0
28	10	11	2	0	0	0	0	0	1
AVERAGE	18.0	4.4	1.3	0.0	0.0	0.0	0.0	0.0	0.4
TOTAL	503	123	35	0	0	0	0	0	11

ENVIRONMENTAL SUMMARY REPORT

SITE: FACILITIES DEVELOPMENT
SAN DIEGO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 61

LATITUDE: 32.73 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC
LONGITUDE: 117.17 DEG WEST PYRANOMETER TILT: 42 DEG ALTITUDE: 50 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	60.	66.	57.	77.	11: 7	51.	6:19	62.
2	59.	66.	54.	75.	14:57	48.	6:50	62.
3	57.	62.	53.	68.	14:25	47.	6:52	62.
4	57.	62.	53.	68.	10:52	48.	6:14	62.
5	52.	52.	52.	53.	0: 4	50.	5:30	62.
6	*	*	*	*	*:*	*	*:*	*
7	*	*	*	*	*:*	*	*:*	*
8	60.	67.	55.	69.	11:39	48.	23:48	62.
9	56.	64.	49.	75.	11:12	43.	4:57	62.
10	53.	60.	47.	69.	10:48	39.	6:10	62.
11	52.	59.	46.	68.	11:15	39.	6: 5	62.
12	55.	62.	49.	72.	11:32	40.	6: 6	62.
13	60.	61.	59.	65.	14:48	52.	1: 3	62.
14	62.	62.	61.	66.	12:13	59.	23:12	61.
15	62.	64.	60.	67.	12: 0	59.	2: 8	62.
16	61.	61.	60.	67.	14:42	59.	4:43	62.
17	63.	66.	62.	69.	13:22	61.	23:14	62.
18	63.	66.	61.	70.	13:41	59.	2:26	62.
19	62.	63.	60.	66.	13:15	56.	20:49	62.
20	60.	62.	59.	66.	12:11	56.	0:11	62.
21	61.	63.	60.	67.	11:47	55.	22:16	63.
22	58.	61.	54.	65.	11:57	51.	6:53	62.
23	56.	61.	50.	68.	11:26	47.	6:38	62.
24	*	*	*	*	*:*	*	*:*	*
25	65.	71.	61.	73.	16:52	57.	21:50	62.
26	62.	71.	55.	84.	11:42	48.	6:12	63.
27	62.	67.	55.	77.	10:56	48.	6:34	63.
28	58.	62.	55.	68.	12: 4	48.	6:28	63.
MEAN	59.	63.	56.					62.
STANDARD DEVIATION	3.7	3.9	4.9					0.4

ENVIRONMENTAL SUMMARY REPORT

SITE: FACILITIES DEVELOPMENT
SAN DIEGO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 61

LATITUDE: 32.73 DEG NORTH
LONGITUDE: 117.17 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 42 DEG

TIME ZONE: PACIFIC
ALTITUDE: 50 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1934.	N.A.	N.A.	301.	10:57	3278.	59.
2	1902.	N.A.	N.A.	310.	11:13	3284.	58.
3	1356.	N.A.	N.A.	301.	11:34	3285.	41.
4	1641.	N.A.	N.A.	316.	10:46	3295.	50.
5	*	N.A.	N.A.	*	*:*	3301.	*
6	*	N.A.	N.A.	*	*:*	3302.	*
7	*	N.A.	N.A.	*	*:*	3308.	*
8	*	N.A.	N.A.	*	*:*	3309.	*
9	2065.	N.A.	N.A.	310.	10:51	3318.	62.
10	2122.	N.A.	N.A.	316.	11:20	3315.	64.
11	1966.	N.A.	N.A.	307.	11:20	3324.	59.
12	2027.	N.A.	N.A.	313.	11:16	3329.	61.
13	255.	N.A.	N.A.	210.	14:43	3330.	8.
14	768.	N.A.	N.A.	379.	11:52	3334.	23.
15	995.	N.A.	N.A.	322.	10:40	3335.	30.
16	287.	N.A.	N.A.	277.	13:43	3339.	9.
17	*	N.A.	N.A.	*	*:*	3340.	*
18	936.	N.A.	N.A.	334.	12:32	3344.	28.
19	485.	N.A.	N.A.	198.	11:55	3351.	14.
20	1154.	N.A.	N.A.	328.	12:27	3347.	34.
21	1121.	N.A.	N.A.	325.	11: 9	3351.	33.
22	1938.	N.A.	N.A.	328.	10:48	3357.	58.
23	2541.	N.A.	N.A.	313.	11: 5	3353.	76.
24	*	N.A.	N.A.	*	*:*	3359.	*
25	*	N.A.	N.A.	*	*:*	3361.	*
26	2060.	N.A.	N.A.	316.	10:12	3357.	61.
27	2041.	N.A.	N.A.	316.	11:38	3362.	61.
28	1287.	N.A.	N.A.	334.	11:32	3364.	38.
MEAN	1471.	N.A.	N.A.			3330.	
STANDARD DEVIATION	668.	N.A.	N.A.			26.	

ENVIRONMENTAL SUMMARY REPORT

SITE: IRVINE SCHOOL
IRVINE, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 16

LATITUDE: 33.73 DEG NORTH
LONGITUDE: 117.78 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 25 DEG

TIME ZONE: PACIFIC
ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	64.	75.	56.	83.	13:36	50.	6:29	N.A.
2	68.	79.	58.	85.	14: 5	53.	23:57	N.A.
3	66.	76.	57.	82.	12: 8	51.	23:41	N.A.
4	54.	*	54.	55.	22:15	53.	23:51	N.A.
5	61.	69.	54.	80.	12:17	50.	5: 5	N.A.
6	62.	70.	55.	76.	14:39	48.	23:50	N.A.
7	63.	66.	63.	68.	16:36	59.	21:34	N.A.
8	64.	70.	56.	77.	13:45	49.	23:38	N.A.
9	58.	71.	48.	81.	11:20	42.	5:20	N.A.
10	56.	69.	46.	77.	12: 2	37.	5:33	N.A.
11	55.	66.	47.	74.	11:46	40.	2:37	N.A.
12	57.	68.	49.	80.	12:56	41.	3:52	N.A.
13	58.	59.	58.	65.	3:57	52.	0: 2	N.A.
14	61.	63.	59.	70.	13:19	56.	6:29	N.A.
15	63.	66.	61.	74.	12:42	59.	2:34	N.A.
16	60.	59.	60.	63.	21:13	58.	16:20	N.A.
17	64.	69.	60.	79.	11:17	58.	5:24	N.A.
18	65.	68.	62.	78.	12: 9	61.	4:10	N.A.
19	61.	63.	59.	69.	11:37	54.	16: 4	N.A.
20	58.	61.	56.	70.	10:17	54.	3: 5	N.A.
21	61.	65.	58.	72.	13:31	53.	23:49	N.A.
22	59.	66.	53.	74.	12:47	49.	3:54	N.A.
23	59.	67.	51.	76.	12:42	45.	5:14	N.A.
24	61.	69.	53.	82.	14:18	47.	5: 4	N.A.
25	63.	75.	54.	86.	14: 2	46.	6: 8	N.A.
26	66.	78.	56.	89.	15:29	50.	4: 2	N.A.
27	63.	73.	54.	86.	12:44	48.	5:54	N.A.
28	62.	71.	55.	82.	9:54	51.	1:43	N.A.
MEAN	61.	69.	55.					N.A.
STANDARD DEVIATION	3.5	5.3	4.4					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: IRVINE SCHOOL
IRVINE, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 16

LATITUDE: 33.73 DEG NORTH
LONGITUDE: 117.78 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 25 DEG

TIME ZONE: PACIFIC
ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1777.	469.	1308.	277.	12: 5	2874.	62.
2	*	*	*	*	*:*	2884.	*
3	*	*	*	*	*:*	2892.	*
4	*	*	*	*	*:*	2903.	*
5	994.	581.	413.	270.	12:17	2911.	34.
6	*	*	*	*	*:*	2925.	*
7	*	*	*	*	*:*	2936.	*
8	1932.	591.	1341.	294.	11:37	2945.	66.
9	1967.	567.	1400.	298.	11:36	2956.	67.
10	1963.	553.	1409.	298.	11:30	2964.	66.
11	1869.	542.	1327.	280.	11:57	2975.	63.
12	1936.	459.	1477.	294.	11:47	2984.	65.
13	302.	258.	43.	174.	15:51	2995.	10.
14	635.	520.	115.	238.	13:14	3009.	21.
15	901.	659.	243.	287.	12:36	3015.	30.
16	153.	141.	12.	46.	11:32	3026.	5.
17	1300.	647.	654.	348.	11:17	3040.	43.
18	1600.	652.	948.	348.	11:32	3046.	53.
19	585.	500.	85.	224.	11:37	3060.	19.
20	954.	533.	422.	284.	10:55	3071.	31.
21	1418.	731.	688.	326.	12:22	3076.	46.
22	1742.	639.	1103.	333.	12:53	3090.	56.
23	1940.	629.	1311.	309.	11:49	3100.	63.
24	1529.	770.	759.	312.	11:28	3106.	49.
25	2022.	540.	1482.	305.	11:38	3120.	65.
26	1965.	489.	1476.	312.	11:56	3130.	63.
27	1757.	673.	1084.	319.	11:46	3135.	56.
28	1788.	660.	1128.	337.	11: 3	3145.	57.
MEAN	1436.	557.	879.			3011.	
STANDARD DEVIATION	589.	140.	530.			84.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LAKE VALLEY
TAHOE PARADISE, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 11

LATITUDE: 38.57 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC
LONGITUDE: 119.58 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 6300 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	646.	N.A.	N.A.	216.	13:28	3283.	20.
2	*	N.A.	N.A.	*	*:*	3279.	*
3	*	N.A.	N.A.	*	*:*	3286.	*
4	*	N.A.	N.A.	*	*:*	3296.	*
5	*	N.A.	N.A.	*	*:*	3292.	*
6	*	N.A.	N.A.	*	*:*	3298.	*
7	483.	N.A.	N.A.	345.	12:13	3307.	15.
8	1628.	N.A.	N.A.	348.	11:51	3304.	49.
9	1623.	N.A.	N.A.	345.	12:10	3309.	49.
10	588.	N.A.	N.A.	299.	10:56	3314.	18.
11	942.	N.A.	N.A.	358.	12:26	3319.	28.
12	799.	N.A.	N.A.	279.	11:22	3318.	24.
13	1463.	N.A.	N.A.	358.	12:48	3323.	44.
14	380.	N.A.	N.A.	212.	11:49	3327.	11.
15	267.	N.A.	N.A.	252.	11:21	3331.	8.
16	93.	N.A.	N.A.	86.	14:58	3326.	3.
17	192.	N.A.	N.A.	63.	9:33	3330.	6.
18	14.	N.A.	N.A.	17.	12:37	3333.	0.
19	7.	N.A.	N.A.	10.	10:40	3335.	0.
20	48.	N.A.	N.A.	27.	12:37	3338.	1.
21	0.	N.A.	N.A.	0.	6: 8	3333.	0.
22	287.	N.A.	N.A.	348.	13:59	3335.	9.
23	1831.	N.A.	N.A.	368.	11:37	3336.	55.
24	881.	N.A.	N.A.	289.	12:35	3337.	26.
25	1211.	N.A.	N.A.	309.	12:14	3338.	36.
26	1434.	N.A.	N.A.	329.	11:26	3332.	43.
27	*	N.A.	N.A.	*	*:*	3332.	*
28	1411.	N.A.	N.A.	385.	12:53	3332.	42.
MEAN	773.	N.A.	N.A.			3319.	
STANDARD DEVIATION	608.	N.A.	N.A.			19.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 121.35 DEG WEST PYRANOMETER TILT: 60 DEG TIME ZONE: PACIFIC
ALTITUDE: 17 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	47.	52.	42.	60. 12:50	37. 7:25	*
2	48.	52.	46.	58. 15:34	42. 2:38	*
3	48.	51.	47.	56. 15:40	44. 0:44	*
4	49.	53.	45.	62. 13:37	39. 7:18	*
5	48.	50.	47.	53. 14: 6	42. 1: 7	*
6	53.	58.	50.	67. 14:31	47. 0:17	*
7	53.	57.	50.	63. 14:22	45. 6:43	*
8	54.	61.	49.	70. 15: 6	45. 6:12	*
9	49.	56.	43.	65. 14:56	33. 7:24	*
10	50.	58.	43.	67. 15:44	37. 7: 6	*
11	49.	54.	45.	64. 13:57	39. 7:17	*
12	49.	56.	43.	68. 14:55	36. 7: 5	*
13	50.	55.	46.	66. 14:25	35. 3:29	*
14	50.	51.	50.	53. 12: 5	47. 3:17	*
15	55.	56.	54.	60. 11:54	51. 1:20	*
16	55.	55.	54.	58. 15:19	52. 2:55	*
17	56.	56.	56.	58. 15:24	54. 19:19	*
18	58.	60.	56.	65. 13:25	54. 2: 4	*
19	55.	57.	53.	63. 14:51	51. 23:57	*
20	51.	53.	51.	57. 12: 2	47. 6:42	*
21	54.	58.	51.	66. 15: 6	46. 7:12	*
22	53.	55.	51.	60. 13: 6	49. 5:28	*
23	*	*	*	* *:*	* *:*	*
24	*	*	*	* *:*	* *:*	*
25	*	*	*	* *:*	* *:*	*
26	*	*	*	* *:*	* *:*	*
27	*	*	*	* *:*	* *:*	*
28	*	*	*	* *:*	* *:*	*
MEAN	51.	55.	49.			0.
STANDARD DEVIATION	3.1	2.9	4.3			*****

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH
LONGITUDE: 121.35 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 60 DEG

TIME ZONE: PACIFIC
ALTITUDE: 17 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	812.	N.A.	N.A.	208.	11: 3	3297.	25.
2	353.	N.A.	N.A.	113.	14:36	3302.	11.
3	249.	N.A.	N.A.	91.	15:24	3301.	8.
4	1217.	N.A.	N.A.	330.	11:18	3305.	37.
5	139.	N.A.	N.A.	41.	14:33	3310.	4.
6	1701.	N.A.	N.A.	324.	11:13	3308.	51.
7	2166.	N.A.	N.A.	321.	12: 9	3312.	65.
8	2095.	N.A.	N.A.	324.	11:54	3316.	63.
9	1814.	N.A.	N.A.	286.	12:26	3319.	55.
10	1706.	N.A.	N.A.	296.	12: 0	3317.	51.
11	1015.	N.A.	N.A.	324.	11:54	3320.	31.
12	1766.	N.A.	N.A.	299.	12: 9	3322.	53.
13	1309.	N.A.	N.A.	296.	11:39	3316.	39.
14	98.	N.A.	N.A.	47.	12: 0	3318.	3.
15	294.	N.A.	N.A.	302.	11:38	3320.	9.
16	202.	N.A.	N.A.	161.	15:13	3322.	6.
17	97.	N.A.	N.A.	41.	13: 5	3318.	3.
18	976.	N.A.	N.A.	315.	12:53	3319.	29.
19	835.	N.A.	N.A.	286.	12:59	3320.	25.
20	633.	N.A.	N.A.	249.	12: 7	3320.	19.
21	1985.	N.A.	N.A.	353.	10:29	3312.	60.
22	1222.	N.A.	N.A.	327.	12: 2	3312.	37.
23	*	N.A.	N.A.	*	*:*	3311.	*
24	*	N.A.	N.A.	*	*:*	3310.	*
25	*	N.A.	N.A.	*	*:*	3308.	*
26	*	N.A.	N.A.	*	*:*	3300.	*
27	*	N.A.	N.A.	*	*:*	3298.	*
28	*	N.A.	N.A.	*	*:*	3295.	*

MEAN 1031. N.A. N.A. 3312.

STANDARD
DEVIATION 711. N.A. N.A. 8.

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 121.35 DEG WEST PYRANOMETER TILT: 60 DEG
TIME ZONE: PACIFIC
ALTITUDE: 17 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	78.	55.	95.	100.	0:23	22.	13: 1
2	95.	90.	99.	100.	0: 3	70.	14:46
3	100.	100.	100.	100.	0: 1	94.	15:45
4	92.	82.	99.	100.	0: 1	51.	14:30
5	100.	100.	100.	100.	0: 3	100.	0: 3
6	60.	53.	65.	100.	0: 1	0.	15:13
7	15.	9.	20.	50.	23:38	0.	12:57
8	33.	13.	47.	94.	23:13	0.	14: 2
9	70.	49.	86.	100.	1:16	8.	16: 0
10	70.	47.	83.	100.	0:42	11.	14:29
11	71.	54.	85.	100.	0: 0	19.	14:40
12	69.	49.	85.	100.	1:19	5.	14:44
13	61.	38.	78.	100.	0: 1	3.	14:30
14	100.	100.	99.	100.	1: 9	87.	0:16
15	100.	100.	100.	100.	0: 0	98.	12: 5
16	100.	100.	100.	100.	0: 4	98.	12:44
17	100.	100.	100.	100.	0: 1	100.	0: 1
18	94.	87.	98.	100.	0: 1	59.	13:20
19	90.	83.	96.	100.	0: 0	44.	16:59
20	97.	92.	100.	100.	0: 2	65.	12:50
21	78.	65.	88.	100.	0: 0	4.	15:22
22	97.	92.	100.	100.	0: 2	67.	13: 6
23	*	*	*	*	*:*	*	*:*
24	*	*	*	*	*:*	*	*:*
25	*	*	*	*	*:*	*	*:*
26	*	*	*	*	*:*	*	*:*
27	*	*	*	*	*:*	*	*:*
28	*	*	*	*	*:*	*	*:*

MEAN 80. 71. 88.

STANDARD
DEVIATION23. 29. 20.

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC
LONGITUDE: 121.35 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 17 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM SPEED	WIND DIRECTION	TIME HR:MN
1	202.	3.	191.	5.	11.	204.	11:51
2	*	1.	*	1.	6.	*	7:26
3	215.	4.	203.	4.	9.	216.	15: 2
4	47.	2.	59.	3.	7.	56.	15:29
5	*	1.	*	2.	7.	*	14:27
6	212.	10.	212.	11.	23.	195.	22:11
7	211.	19.	210.	24.	30.	217.	14:54
8	193.	10.	181.	9.	19.	204.	4:31
9	*	2.	*	3.	8.	*	0: 1
10	*	2.	*	2.	6.	*	10:24
11	*	1.	*	2.	6.	*	9:30
12	199.	3.	183.	4.	10.	211.	10:12
13	212.	5.	202.	7.	13.	207.	10:51
14	*	4.	*	3.	10.	*	19:38
15	27.	12.	27.	15.	25.	34.	11:38
16	34.	15.	40.	17.	30.	17.	20:12
17	22.	18.	31.	17.	32.	355.	19:24
18	2.	14.	347.	17.	29.	332.	13: 4
19	356.	12.	350.	13.	23.	23.	3:39
20	22.	14.	29.	15.	28.	26.	20:32
21	314.	8.	294.	8.	14.	29.	1:36
22	23.	8.	22.	11.	18.	17.	12:40
23	*	*	*	*	*	*	*:*
24	*	*	*	*	*	*	*:*
25	*	*	*	*	*	*	*:*
26	*	*	*	*	*	*	*:*
27	*	*	*	*	*	*	*:*
28	*	*	*	*	*	*	*:*
MEAN	143.	8.	161.	9.			
STANDARD DEVIATION	115.8	5.9	114.0	6.6			

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC
LONGITUDE: 121.35 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 17 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	18	5	1	0	0	0	0	0	0
2	24	0	0	0	0	0	0	0	0
3	14	10	0	0	0	0	0	0	0
4	21	3	0	0	0	0	0	0	0
5	21	3	0	0	0	0	0	0	0
6	0	7	10	6	1	0	0	0	0
7	0	0	5	4	11	4	0	0	0
8	1	12	5	6	0	0	0	0	0
9	21	3	0	0	0	0	0	0	0
10	23	1	0	0	0	0	0	0	0
11	24	0	0	0	0	0	0	0	0
12	19	5	0	0	0	0	0	0	0
13	10	8	6	0	0	0	0	0	0
14	13	9	2	0	0	0	0	0	0
15	0	1	14	7	2	0	0	0	0
16	0	4	5	4	10	1	0	0	0
17	0	0	4	11	6	3	0	0	0
18	0	1	11	9	2	0	0	0	1
19	0	0	17	7	0	0	0	0	0
20	0	3	8	9	3	0	0	0	1
21	2	9	13	0	0	0	0	0	0
22	3	9	8	2	0	0	0	0	2
23	0	0	0	0	0	0	0	0	24
24	0	0	0	0	0	0	0	0	24
25	0	0	0	0	0	0	0	0	24
26	0	0	0	0	0	0	0	0	24
27	0	0	0	0	0	0	0	0	24
28	0	0	0	0	0	0	0	0	24
AVERAGE	7.6	3.3	3.9	2.3	1.3	0.3	0.0	0.0	5.3
TOTAL	214	93	109	65	35	8	0	0	148

ENVIRONMENTAL SUMMARY REPORT

SITE: MONTECITO PINES
SANTA ROSA, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 164

LATITUDE: 37.61 DEG NORTH AZIMUTH: 22 DEG TIME ZONE: PACIFIC
LONGITUDE: 122.38 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 8 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	51.	56.	47.	63. 12:25	44. 21:59	60.
2	48.	51.	46.	59. 14:20	40. 6:25	59.
3	52.	54.	50.	62. 15:45	47. 23:56	59.
4	50.	54.	47.	70. 13:58	44. 7:13	59.
5	50.	51.	49.	61. 14:15	44. 7:14	60.
6	53.	58.	48.	66. 15: 5	42. 4:57	59.
7	56.	59.	54.	66. 15:40	41. 5:53	61.
8	55.	62.	50.	69. 13:46	36. 23:56	59.
9	46.	56.	39.	67. 14:35	30. 6:36	60.
10	46.	54.	39.	64. 14: 3	35. 23:45	59.
11	44.	51.	40.	59. 12:22	34. 2: 3	59.
12	47.	56.	40.	67. 14:18	34. 7: 0	60.
13	48.	55.	43.	72. 14:53	30. 7: 3	62.
14	50.	51.	49.	53. 9:16	47. 1:53	59.
15	52.	52.	51.	57. 12:33	49. 1:32	62.
16	53.	53.	53.	56. 12:37	50. 7: 0	60.
17	54.	53.	55.	57. 21:25	51. 14:45	62.
18	56.	57.	55.	61. 14:35	51. 23:23	60.
19	51.	52.	50.	59. 15: 7	48. 22:56	63.
20	48.	50.	47.	56. 13: 4	44. 6:50	61.
21	51.	55.	49.	64. 13:33	47. 0: 2	64.
22	51.	56.	48.	63. 12:14	44. 22: 1	61.
23	51.	56.	47.	63. 15:52	40. 7: 0	62.
24	53.	56.	51.	60. 9:22	47. 6:42	60.
25	56.	59.	53.	68. 12:45	50. 5:22	63.
26	56.	60.	54.	72. 13:42	47. 6:19	62.
27	53.	54.	52.	60. 11:51	48. 23:57	62.
28	50.	54.	47.	62. 16: 8	42. 23:41	63.
MEAN	51.	55.	48.			61.
STANDARD DEVIATION	3.2	3.1	4.6			1.4

ENVIRONMENTAL SUMMARY REPORT

SITE: MONTECITO PINES
SANTA ROSA, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 164

LATITUDE: 37.61 DEG NORTH AZIMUTH: 22 DEG
LONGITUDE: 122.38 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: PACIFIC
ALTITUDE: 8 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	703.	N.A.	N.A.	210.	11:59	3055.	23.
2	347.	N.A.	N.A.	119.	13:42	3064.	11.
3	354.	N.A.	N.A.	210.	11:29	3068.	12.
4	871.	N.A.	N.A.	292.	12:17	3074.	28.
5	410.	N.A.	N.A.	210.	13:49	3082.	13.
6	1751.	N.A.	N.A.	284.	11:32	3086.	57.
7	1888.	N.A.	N.A.	298.	11:29	3092.	61.
8	1710.	N.A.	N.A.	292.	12:26	3097.	55.
9	1733.	N.A.	N.A.	281.	11:29	3104.	56.
10	1450.	N.A.	N.A.	261.	11:23	3109.	47.
11	1032.	N.A.	N.A.	278.	12:22	3115.	33.
12	1595.	N.A.	N.A.	281.	12:15	3122.	51.
13	1492.	N.A.	N.A.	309.	13: 1	3126.	48.
14	150.	N.A.	N.A.	40.	12:22	3130.	5.
15	260.	N.A.	N.A.	142.	11:24	3137.	8.
16	*	N.A.	N.A.	*	*:*	3143.	*
17	33.	N.A.	N.A.	20.	11:54	3147.	1.
18	279.	N.A.	N.A.	128.	14:35	3154.	9.
19	561.	N.A.	N.A.	269.	13:36	3157.	18.
20	546.	N.A.	N.A.	255.	10:18	3161.	17.
21	1531.	N.A.	N.A.	326.	12:23	3167.	48.
22	911.	N.A.	N.A.	321.	11:15	3171.	29.
23	988.	N.A.	N.A.	224.	10:53	3174.	31.
24	417.	N.A.	N.A.	238.	9:17	3180.	13.
25	601.	N.A.	N.A.	190.	13: 1	3183.	19.
26	907.	N.A.	N.A.	286.	12: 6	3186.	28.
27	126.	N.A.	N.A.	48.	11:30	3191.	4.
28	932.	N.A.	N.A.	338.	11: 4	3194.	29.
MEAN	873.	N.A.	N.A.			3131.	
STANDARD DEVIATION	580.	N.A.	N.A.			43.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ORTIZ & REILL
ESCONDIDO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 175

LATITUDE: 33.07 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 117.10 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: PACIFIC
ALTITUDE: 13 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	*	*	*	*	*:*	*	*:*	*
2	*	*	*	*	*:*	*	*:*	*
3	*	*	*	*	*:*	*	*:*	*
4	*	*	*	*	*:*	*	*:*	*
5	*	*	*	*	*:*	*	*:*	*
6	*	*	*	*	*:*	*	*:*	*
7	*	*	*	*	*:*	*	*:*	*
8	*	*	*	*	*:*	*	*:*	*
9	*	*	*	*	*:*	*	*:*	*
10	*	*	*	*	*:*	*	*:*	*
11	54.	69.	45.	74.	13:14	38.	23:46	*
12	54.	66.	43.	79.	13:22	33.	5:17	*
13	59.	60.	58.	64.	4:53	51.	0:10	*
14	60.	61.	59.	64.	14:29	57.	23:11	*
15	59.	61.	58.	63.	12:31	56.	3:27	*
16	59.	59.	58.	63.	22:19	56.	3:18	*
17	64.	69.	60.	76.	11:29	58.	5:58	*
18	63.	67.	60.	71.	11:56	57.	20:23	*
19	59.	61.	58.	64.	8:33	52.	21:21	*
20	57.	59.	56.	68.	12:12	52.	5:53	*
21	60.	62.	57.	69.	14:29	51.	21:47	*
22	56.	63.	51.	74.	12:16	46.	5:52	*
23	56.	65.	48.	74.	12:32	42.	3:39	*
24	58.	69.	50.	78.	14:34	44.	5:36	*
25	63.	76.	49.	89.	11:54	42.	4: 5	*
26	66.	81.	52.	94.	14:13	43.	5:25	*
27	64.	77.	51.	91.	12:33	43.	6:25	*
28	59.	67.	52.	77.	12:36	42.	4:31	*
MEAN	59.	66.	54.					0.
STANDARD DEVIATION	3.4	6.4	5.2					*****

ENVIRONMENTAL SUMMARY REPORT

SITE: ORTIZ & REILL
ESCONDIDO, CALIFORNIA

REPORT PERIOD: 80/ 2
SITE NUMBER: 175

LATITUDE: 33.07 DEG NORTH
LONGITUDE: 117.10 DEG WEST

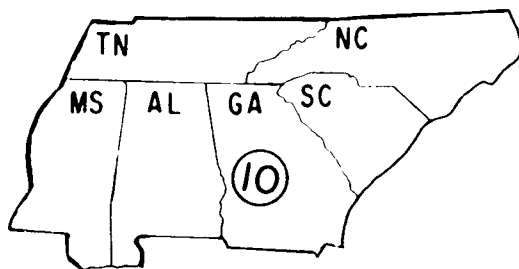
AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: PACIFIC
ALTITUDE: 13 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*: *	3310.	*
2	*	N.A.	N.A.	*	*: *	3315.	*
3	*	N.A.	N.A.	*	*: *	3316.	*
4	*	N.A.	N.A.	*	*: *	3316.	*
5	*	N.A.	N.A.	*	*: *	3322.	*
6	*	N.A.	N.A.	*	*: *	3330.	*
7	*	N.A.	N.A.	*	*: *	3327.	*
8	*	N.A.	N.A.	*	*: *	3335.	*
9	*	N.A.	N.A.	*	*: *	3340.	*
10	*	N.A.	N.A.	*	*: *	3340.	*
11	1244.	N.A.	N.A.	255.	13: 9	3340.	37.
12	2154.	N.A.	N.A.	321.	10:53	3344.	64.
13	212.	N.A.	N.A.	103.	15:11	3352.	6.
14	640.	N.A.	N.A.	273.	10:50	3348.	19.
15	292.	N.A.	N.A.	97.	13:57	3351.	9.
16	177.	N.A.	N.A.	36.	11: 7	3358.	5.
17	1591.	N.A.	N.A.	345.	10:30	3354.	47.
18	1048.	N.A.	N.A.	388.	11:40	3360.	31.
19	415.	N.A.	N.A.	197.	11:51	3363.	12.
20	1178.	N.A.	N.A.	342.	11:56	3362.	35.
21	748.	N.A.	N.A.	230.	12:59	3364.	22.
22	1580.	N.A.	N.A.	367.	10:45	3366.	47.
23	2004.	N.A.	N.A.	321.	10:56	3364.	60.
24	1438.	N.A.	N.A.	309.	11:38	3366.	43.
25	2247.	N.A.	N.A.	327.	10:45	3367.	67.
26	2303.	N.A.	N.A.	333.	10:40	3365.	68.
27	2247.	N.A.	N.A.	333.	10:52	3365.	67.
28	2387.	N.A.	N.A.	339.	10:44	3365.	71.
MEAN	1328.	N.A.	N.A.			3347.	
STANDARD DEVIATION	784.	N.A.	N.A.			19.	

ZONE 10



ENVIRONMENTAL SUMMARY REPORT

SITE: ALABAMA POWER
MONTEVALLO, ALABAMA

REPORT PERIOD: 80/ 2
SITE NUMBER: 17

LATITUDE: 32.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 86.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 620 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	25.	25.	24.	34. 16:31	18. 8:36	58.
2	27.	29.	25.	43. 17: 2	14. 8:33	57.
3	35.	37.	33.	49. 15:32	23. 1:50	56.
4	35.	37.	34.	46. 15:37	25. 7:26	56.
5	36.	38.	34.	46. 15:16	26. 0:36	56.
6	38.	40.	36.	46. 16:39	30. 23:51	57.
7	33.	34.	32.	49. 16:12	19. 8:23	58.
8	39.	41.	38.	51. 17:27	30. 6:15	59.
9	40.	41.	39.	44. 14:42	37. 23:57	59.
10	33.	33.	33.	39. 15:30	27. 23:51	58.
11	34.	36.	32.	49. 17:17	21. 8:39	56.
12	35.	38.	33.	50. 16:31	25. 3:38	57.
13	37.	39.	35.	53. 17:20	28. 7:54	57.
14	41.	47.	37.	67. 16:29	23. 7:25	58.
15	48.	51.	45.	65. 14:15	32. 8:12	58.
16	44.	42.	46.	59. 3:13	30. 23:57	59.
17	29.	29.	29.	41. 16:34	18. 8:34	58.
18	35.	38.	32.	58. 15:41	16. 7:57	57.
19	45.	47.	42.	53. 15: 4	31. 1:23	58.
20	59.	62.	57.	74. 17: 8	49. 0: 4	60.
21	61.	64.	58.	70. 17: 2	48. 2:54	60.
22	67.	70.	65.	80. 14:33	56. 0:20	61.
23	63.	67.	59.	82. 15:58	46. 7: 9	63.
24	61.	63.	59.	80. 16:20	43. 7:37	63.
25	48.	50.	47.	60. 15:26	34. 23:53	63.
26	33.	34.	32.	48. 17: 3	24. 8:20	62.
27	42.	46.	38.	65. 16:53	22. 8: 0	61.
28	52.	56.	47.	75. 16: 2	30. 6:48	61.
MEAN	42.	44.	40.			59.
STANDARD DEVIATION	11.5	12.2	11.0			2.3

ENVIRONMENTAL SUMMARY REPORT

SITE: ALABAMA POWER
MONTEVALLO, ALABAMA

REPORT PERIOD: 80/ 2
SITE NUMBER: 17

LATITUDE: 32.00 DEG NORTH
LONGITUDE: 86.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 50 DEG

TIME ZONE: CENTRAL
ALTITUDE: 620 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1846.	N.A.	N.A.	329.	12:52	3362.	55.
2	1676.	N.A.	N.A.	303.	12:49	3369.	50.
3	1286.	N.A.	N.A.	335.	13:40	3368.	38.
4	2031.	N.A.	N.A.	322.	13:50	3371.	60.
5	422.	N.A.	N.A.	176.	14:12	3369.	13.
6	813.	N.A.	N.A.	335.	14:31	3375.	24.
7	1946.	N.A.	N.A.	313.	13:43	3378.	58.
8	782.	N.A.	N.A.	335.	12:55	3375.	23.
9	150.	N.A.	N.A.	38.	13:17	3373.	4.
10	1111.	N.A.	N.A.	319.	14:26	3375.	33.
11	1465.	N.A.	N.A.	287.	13:59	3380.	43.
12	1828.	N.A.	N.A.	316.	13: 9	3374.	54.
13	933.	N.A.	N.A.	207.	16:26	3379.	28.
14	2055.	N.A.	N.A.	313.	13:44	3376.	61.
15	678.	N.A.	N.A.	217.	11:19	3377.	20.
16	173.	N.A.	N.A.	35.	12:39	3373.	5.
17	2208.	N.A.	N.A.	335.	13:59	3374.	65.
18	2159.	N.A.	N.A.	332.	14:16	3377.	64.
19	351.	N.A.	N.A.	160.	6: 1	3370.	10.
20	1046.	N.A.	N.A.	322.	14:55	3373.	31.
21	499.	N.A.	N.A.	121.	13: 2	3372.	15.
22	1135.	N.A.	N.A.	319.	14:28	3364.	34.
23	1836.	N.A.	N.A.	313.	13:45	3366.	55.
24	1919.	N.A.	N.A.	306.	13:13	3364.	57.
25	2101.	N.A.	N.A.	335.	13:56	3359.	63.
26	2264.	N.A.	N.A.	338.	13:35	3357.	67.
27	2123.	N.A.	N.A.	322.	13:47	3351.	63.
28	2048.	N.A.	N.A.	313.	13:38	3348.	61.
MEAN	1389.	N.A.	N.A.			3370.	
STANDARD DEVIATION	698.	N.A.	N.A.			8.	

ENVIRONMENTAL SUMMARY REPORT

SITE: BLAKEDALE
GREENWOOD, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 13

LATITUDE: 34.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 82.20 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 496 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	28.	32.	25.	43. 15:21	19. 7:42	53.
2	28.	33.	25.	48. 13:28	14. 7:45	50.
3	34.	38.	31.	53. 14: 6	22. 7:15	53.
4	47.	47.	0.	48. 16:40	47. 16:35	*
5	35.	*	35.	35. 23:39	35. 23:34	58.
6	33.	33.	33.	37. 14: 3	31. 11:55	57.
7	35.	40.	35.	50. 16:50	22. 6:20	58.
8	36.	39.	34.	45. 14:53	30. 3:30	56.
9	34.	34.	34.	39. 0:17	31. 7:24	56.
10	40.	44.	36.	60. 15:28	31. 7:28	57.
11	37.	42.	34.	53. 13:30	23. 6:13	56.
12	40.	46.	35.	61. 15:22	29. 6: 2	57.
13	42.	46.	39.	58. 15:24	31. 6:47	60.
14	47.	55.	42.	77. 13:50	27. 6:27	60.
15	52.	57.	49.	73. 15:28	32. 5:57	62.
16	53.	59.	48.	66. 12: 0	36. 23:55	63.
17	37.	42.	34.	54. 13:41	26. 7:17	57.
18	39.	45.	34.	64. 13:47	24. 6: 8	57.
19	44.	50.	39.	68. 14:29	26. 6: 8	59.
20	49.	50.	48.	56. 15: 2	43. 5:58	63.
21	59.	61.	56.	71. 13:11	48. 7: 3	65.
22	63.	66.	60.	72. 14:38	58. 21:25	68.
23	65.	70.	62.	83. 15:32	57. 1:30	67.
24	64.	69.	60.	81. 15: 0	50. 7:48	65.
25	54.	61.	49.	71. 13:29	35. 23:55	65.
26	38.	43.	34.	56. 15:40	26. 6: 4	57.
27	44.	48.	40.	64. 15:46	26. 4:45	58.
28	59.	62.	56.	77. 15:58	41. 7:20	64.
MEAN	44.	49.	41.			59.
STANDARD DEVIATION	10.8	11.3	10.7			4.5

ENVIRONMENTAL SUMMARY REPORT

SITE: BLAKEDALE
GREENWOOD, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 13

LATITUDE: 34.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 82.20 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 496 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2075.	N.A.	N.A.	339.	13:34	3287.	63.
2	1752.	N.A.	N.A.	332.	13:12	3288.	53.
3	1949.	N.A.	N.A.	318.	13:55	3294.	59.
4	*	N.A.	N.A.	*	*:*	3295.	*
5	*	N.A.	N.A.	*	*:*	3301.	*
6	*	N.A.	N.A.	*	*:*	3302.	*
7	*	N.A.	N.A.	*	*:*	3308.	*
8	688.	N.A.	N.A.	191.	12: 7	3317.	21.
9	77.	N.A.	N.A.	23.	10:30	3315.	2.
10	1753.	N.A.	N.A.	328.	13:30	3323.	53.
11	1377.	N.A.	N.A.	322.	12:42	3328.	41.
12	1982.	N.A.	N.A.	349.	13:52	3329.	60.
13	1079.	N.A.	N.A.	235.	12:23	3334.	32.
14	2008.	N.A.	N.A.	328.	13:34	3334.	60.
15	1377.	N.A.	N.A.	335.	14:29	3339.	41.
16	520.	N.A.	N.A.	285.	11:49	3343.	16.
17	2104.	N.A.	N.A.	335.	13:25	3343.	63.
18	2158.	N.A.	N.A.	335.	13:36	3347.	64.
19	1476.	N.A.	N.A.	369.	13:31	3346.	44.
20	249.	N.A.	N.A.	147.	10:56	3350.	7.
21	733.	N.A.	N.A.	261.	11:24	3353.	22.
22	782.	N.A.	N.A.	245.	13:56	3355.	23.
23	1529.	N.A.	N.A.	315.	13:56	3355.	46.
24	2050.	N.A.	N.A.	339.	13:45	3357.	61.
25	2090.	N.A.	N.A.	339.	13:40	3359.	62.
26	2281.	N.A.	N.A.	345.	13:32	3358.	68.
27	2119.	N.A.	N.A.	335.	13:17	3359.	63.
28	1717.	N.A.	N.A.	355.	12:56	3360.	51.
MEAN	1497.	N.A.	N.A.			3331.	
STANDARD DEVIATION	665.	N.A.	N.A.			24.	

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER
CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG
TIME ZONE: EASTERN
ALTITUDE: 700 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	26.	30.	22.	37. 14:21	19. 5:43	54.
2	28.	34.	23.	44. 13:57	16. 7:16	62.
3	31.	37.	27.	49. 15:55	19. 6:51	68.
4	31.	33.	29.	41. 15:49	24. 8:32	56.
5	41.	46.	37.	51. 12:58	35. 23:40	48.
6	33.	34.	33.	34. 16:33	32. 22:45	50.
7	41.	47.	35.	51. 14:19	31. 23:52	48.
8	36.	38.	33.	47. 15:47	26. 6:48	55.
9	33.	33.	33.	35. 13:24	32. 6: 9	62.
10	37.	40.	32.	47. 15:48	28. 23:48	74.
11	37.	42.	33.	50. 15:58	23. 6:44	56.
12	40.	47.	36.	57. 13: 4	29. 6:13	59.
13	39.	43.	35.	55. 13: 9	28. 7:28	55.
14	48.	56.	41.	71. 14:37	28. 6:53	54.
15	53.	58.	49.	67. 15: 4	34. 7:15	56.
16	49.	55.	44.	60. 12: 4	31. 23:48	69.
17	33.	37.	30.	47. 15: 0	24. 7: 0	69.
18	36.	43.	31.	54. 16:33	19. 7: 0	55.
19	43.	48.	39.	63. 13:53	28. 6:41	54.
20	47.	48.	46.	55. 13:42	41. 2:57	56.
21	57.	61.	53.	74. 14:44	40. 7: 0	56.
22	64.	67.	61.	74. 15:25	58. 5:44	57.
23	63.	67.	59.	79. 14:21	53. 5:18	65.
24	62.	68.	57.	79. 16: 7	47. 7: 9	69.
25	52.	56.	49.	68. 14:26	35. 23:58	59.
26	36.	40.	33.	50. 15:47	27. 6: 0	56.
27	42.	46.	39.	60. 16:23	26. 6:57	56.
28	55.	59.	51.	75. 16:23	35. 4:13	56.
MEAN	43.	47.	39.			58.
STANDARD DEVIATION	10.8	11.2	10.6			6.6

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER
CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2090.	N.A.	N.A.	349.	12:39	3082.	68.
2	2040.	N.A.	N.A.	343.	10: 1	3094.	66.
3	2054.	N.A.	N.A.	310.	12:11	3104.	66.
4	1802.	N.A.	N.A.	319.	12:27	3109.	58.
5	*	N.A.	N.A.	*	*:*	3118.	*
6	*	N.A.	N.A.	*	*:*	3124.	*
7	*	N.A.	N.A.	*	*:*	3133.	*
8	727.	N.A.	N.A.	262.	11:58	3138.	23.
9	31.	N.A.	N.A.	24.	12:41	3147.	1.
10	2113.	N.A.	N.A.	337.	12: 4	3160.	67.
11	2004.	N.A.	N.A.	307.	12:25	3162.	63.
12	1804.	N.A.	N.A.	313.	11:44	3171.	57.
13	1741.	N.A.	N.A.	319.	11:44	3183.	55.
14	1909.	N.A.	N.A.	319.	12:51	3185.	60.
15	1506.	N.A.	N.A.	319.	12:45	3194.	47.
16	135.	N.A.	N.A.	66.	14:28	3206.	4.
17	2232.	N.A.	N.A.	334.	12:20	3208.	70.
18	2252.	N.A.	N.A.	334.	12:44	3216.	70.
19	1674.	N.A.	N.A.	364.	11:50	3228.	52.
20	264.	N.A.	N.A.	223.	13:37	3229.	8.
21	1222.	N.A.	N.A.	235.	10:49	3237.	38.
22	646.	N.A.	N.A.	172.	14:16	3245.	20.
23	1504.	N.A.	N.A.	322.	13:27	3250.	46.
24	1901.	N.A.	N.A.	313.	12: 7	3257.	58.
25	1521.	N.A.	N.A.	331.	12:29	3265.	47.
26	2352.	N.A.	N.A.	343.	12:40	3272.	72.
27	1976.	N.A.	N.A.	334.	12:17	3276.	60.
28	1592.	N.A.	N.A.	331.	12:13	3283.	48.
MEAN	1564.	N.A.	N.A.			3188.	
STANDARD DEVIATION	680.	N.A.	N.A.			61.	

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER
CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED DIRECTION	TIME HR:MN	
1	149.	5.	155.	7.	25.	135.	9:17
2	175.	3.	161.	3.	11.	100.	15:12
3	204.	2.	198.	1.	15.	198.	0:37
4	189.	4.	186.	5.	23.	193.	15:49
5	355.	2.	16.	2.	11.	342.	23:56
6	*	0.	*	0.	4.	*	18: 3
7	152.	3.	127.	4.	14.	120.	16:21
8	*	2.	*	2.	11.	*	10:16
9	*	2.	*	1.	8.	*	23:32
10	191.	4.	189.	6.	20.	199.	10: 6
11	19.	4.	16.	6.	19.	348.	15:21
12	178.	2.	173.	2.	11.	157.	9:25
13	228.	3.	265.	3.	13.	221.	9:20
14	*	1.	*	1.	6.	*	16:18
15	6.	4.	20.	4.	16.	28.	13:12
16	*	7.	*	7.	24.	*	19: 6
17	191.	4.	187.	5.	18.	192.	2:55
18	*	2.	*	3.	11.	*	14:20
19	*	1.	*	2.	12.	*	11:13
20	*	1.	*	2.	10.	*	13:48
21	2.	3.	3.	3.	14.	17.	15:37
22	23.	9.	20.	11.	27.	79.	14:11
23	32.	5.	31.	7.	27.	43.	14:42
24	*	2.	*	2.	14.	*	14:53
25	159.	7.	219.	6.	29.	101.	22:43
26	127.	7.	141.	7.	35.	104.	3:15
27	47.	4.	44.	6.	20.	54.	14:20
28	34.	7.	32.	11.	28.	26.	13:17
MEAN	130.	4.	115.	4.			
STANDARD DEVIATION	95.5	2.2	86.0	2.9			

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER
CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 7

LATITUDE: . 35.22 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: . 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	7	16	1	0	0	0	0	0	0
2	20	4	0	0	0	0	0	0	0
3	20	4	0	0	0	0	0	0	0
4	10	13	0	0	0	0	0	0	1
5	12	1	0	0	0	0	0	0	11
6	8	0	0	0	0	0	0	0	16
7	11	3	0	0	0	0	0	0	10
8	22	1	0	0	0	0	0	0	1
9	19	0	0	0	0	0	0	0	5
10	9	10	1	0	0	0	0	0	4
11	12	9	3	0	0	0	0	0	0
12	20	4	0	0	0	0	0	0	0
13	19	5	0	0	0	0	0	0	0
14	24	0	0	0	0	0	0	0	0
15	10	12	2	0	0	0	0	0	0
16	1	17	6	0	0	0	0	0	0
17	15	9	0	0	0	0	0	0	0
18	22	2	0	0	0	0	0	0	0
19	24	0	0	0	0	0	0	0	0
20	22	2	0	0	0	0	0	0	0
21	15	9	0	0	0	0	0	0	0
22	0	9	12	3	0	0	0	0	0
23	13	6	4	1	0	0	0	0	0
24	22	2	0	0	0	0	0	0	0
25	4	11	9	0	0	0	0	0	0
26	6	10	7	1	0	0	0	0	0
27	14	8	2	0	0	0	0	0	0
28	10	2	8	3	0	0	0	0	1
AVERAGE	14.0	6.0	2.0	0.3	0.0	0.0	0.0	0.0	1.8
TOTAL	391	169	55	8	0	0	0	0	49

ENVIRONMENTAL SUMMARY REPORT

SITE: CHESTER WEST
HUNTSVILLE, ALABAMA

REPORT PERIOD: 80/ 2
SITE NUMBER: 78

LATITUDE: 34.40 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 86.60 DEG WEST PYRANOMETER TILT: 49 DEG
TIME ZONE: CENTRAL
ALTITUDE: 600 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	18.	19.	16.	24.	13:52	12.	23:46	57.
2	25.	31.	20.	39.	12:56	11.	6:48	90.
3	29.	34.	25.	43.	13: 7	19.	6:16	84.
4	29.	34.	25.	43.	15:26	18.	6: 0	124.
5	33.	36.	31.	40.	13:45	24.	0: 4	*
6	31.	31.	30.	34.	8:57	23.	21:23	*
7	31.	33.	28.	40.	14: 1	25.	2: 1	63.
8	34.	36.	32.	40.	14:52	30.	1:32	*
9	33.	36.	31.	38.	13:23	30.	22:37	59.
10	27.	30.	26.	35.	15: 4	20.	23:41	72.
11	28.	34.	23.	44.	14:53	17.	3:15	135.
12	29.	32.	27.	35.	13:51	23.	23:52	84.
13	36.	42.	30.	53.	15:20	18.	4:51	83.
14	42.	51.	30.	63.	15:10	25.	6:28	113.
15	54.	54.	54.	56.	15:14	52.	18:57	107.
16	34.	32.	35.	56.	1:11	20.	23:46	83.
17	23.	26.	20.	34.	15:19	14.	5:59	*
18	33.	39.	29.	51.	16: 3	13.	5:59	130.
19	43.	43.	42.	47.	13: 7	41.	2:53	*
20	47.	46.	47.	51.	17: 1	42.	2:58	93.
21	61.	63.	58.	69.	15:52	48.	1:33	80.
22	65.	72.	59.	78.	13:57	49.	23:33	142.
23	62.	71.	55.	80.	13:48	48.	23:51	*
24	51.	59.	45.	68.	15: 0	38.	6:36	*
25	38.	41.	35.	44.	14:23	24.	23:38	*
26	27.	31.	24.	41.	15:38	20.	6:24	174.
27	42.	51.	33.	60.	16: 1	22.	5: 5	180.
28	58.	67.	50.	76.	15: 2	38.	0:49	176.
MEAN	38.	42.	34.					106.
STANDARD DEVIATION	12.7	13.9	12.2					38.9

ENVIRONMENTAL SUMMARY REPORT

SITE: CHESTER WEST
HUNTSVILLE, ALABAMA

REPORT PERIOD: 80/ 2
SITE NUMBER: 78

LATITUDE: 34.40 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 86 60 DEG WEST PYRANOMETER TILT: 49 DEG
TIME ZONE: CENTRAL
ALTITUDE: 600 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	787.	N.A.	N.A.	285.	11:33	3317.	24.
2	1968.	N.A.	N.A.	363.	11:25	3322.	59.
3	994.	N.A.	N.A.	309.	12:19	3322.	30.
4	2261.	N.A.	N.A.	333.	11:36	3327.	68.
5	271.	N.A.	N.A.	201.	11: 0	3335.	8.
6	174.	N.A.	N.A.	87.	12: 9	3335.	5.
7	654.	N.A.	N.A.	285.	11:10	3340.	20.
8	258.	N.A.	N.A.	126.	12:38	3339.	8.
9	*	N.A.	N.A.	*	*:*	3344.	*
10	619.	N.A.	N.A.	222.	13:17	3348.	18.
11	1633.	N.A.	N.A.	339.	12:24	3347.	49.
12	476.	N.A.	N.A.	129.	11:48	3351.	14.
13	2126.	N.A.	N.A.	348.	12:24	3350.	63.
14	2497.	N.A.	N.A.	318.	12: 4	3353.	74.
15	*	N.A.	N.A.	*	*:*	3359.	*
16	69.	N.A.	N.A.	21.	11:56	3354.	2.
17	2165.	N.A.	N.A.	339.	11:56	3357.	65.
18	2416.	N.A.	N.A.	336.	11:52	3363.	72.
19	128.	N.A.	N.A.	57.	10:27	3357.	4.
20	214.	N.A.	N.A.	75.	14:10	3359.	6.
21	460.	N.A.	N.A.	204.	9:12	3364.	14.
22	1834.	N.A.	N.A.	318.	12:11	3358.	55.
23	1464.	N.A.	N.A.	276.	12:39	3359.	44.
24	2103.	N.A.	N.A.	324.	11:59	3360.	63.
25	347.	N.A.	N.A.	180.	13:51	3357.	10.
26	2294.	N.A.	N.A.	342.	11:54	3357.	68.
27	2159.	N.A.	N.A.	327.	11:50	3357.	64.
28	2097.	N.A.	N.A.	309.	11:39	3356.	62.
MEAN	1249.	N.A.	N.A.			3348.	
STANDARD DEVIATION	891.	N.A.	N.A.			13.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HELIOTHERMICS
GREENVILLE, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 73

LATITUDE: 34.00 DEG NORTH AZIMUTH: 10 DEG
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 51 DEG
TIME ZONE: EASTERN
ALTITUDE: 980 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	23.	26.	20.	33. 14:38	16. 7:16	47.
2	26.	32.	21.	40. 16:13	13. 3:36	48.
3	29.	33.	26.	43. 15:51	11. 7:35	50.
4	29.	34.	26.	39. 15:26	16. 23:55	51.
5	28.	34.	24.	43. 14:41	11. 6:46	52.
6	33.	34.	32.	36. 13:29	29. 6:55	48.
7	32.	37.	27.	46. 16:18	17. 5:22	55.
8	31.	35.	26.	41. 14:36	19. 3:34	49.
9	33.	33.	33.	36. 0: 4	32. 7:11	47.
10	34.	40.	30.	46. 16:11	21. 23:29	55.
11	31.	38.	26.	48. 15:29	17. 6: 4	50.
12	34.	40.	29.	53. 15:40	19. 5:24	53.
13	35.	41.	30.	48. 15:31	22. 23:59	55.
14	36.	47.	27.	63. 16:31	18. 5:29	59.
15	46.	53.	40.	67. 14:55	25. 6: 7	62.
16	47.	54.	42.	63. 11:48	30. 23:53	61.
17	32.	37.	28.	46. 15: 5	21. 20:57	55.
18	28.	38.	21.	51. 15:47	12. 6: 1	57.
19	36.	44.	29.	55. 13:18	18. 3:21	59.
20	45.	47.	44.	50. 11:35	39. 0: 1	58.
21	51.	58.	46.	72. 14: 7	32. 5:46	66.
22	60.	64.	57.	72. 14: 2	51. 0:47	70.
23	62.	67.	57.	80. 16: 4	52. 1:47	77.
24	56.	63.	51.	74. 16:31	38. 7: 0	72.
25	49.	57.	41.	65. 14: 1	30. 23:58	71.
26	32.	38.	27.	47. 16:52	21. 22:39	56.
27	39.	47.	33.	62. 15:22	17. 3:54	62.
28	56.	60.	52.	75. 15:12	37. 1:15	68.
MEAN	38.	44.	34.			58.
STANDARD DEVIATION	11.0	11.4	10.9			8.3

ENVIRONMENTAL SUMMARY REPORT

SITE: HELIOTHERMICS
GREENVILLE, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 73

LATITUDE: 34.00 DEG NORTH AZIMUTH: 10 DEG
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 51 DEG
TIME ZONE: EASTERN
ALTITUDE: 980 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2164.	N.A.	N.A.	328.	13: 2	3308.	65.
2	2037.	N.A.	N.A.	325.	12:50	3308.	62.
3	2009.	N.A.	N.A.	313.	13:22	3314.	61.
4	2105.	N.A.	N.A.	328.	12:51	3318.	63.
5	1084.	N.A.	N.A.	296.	11:18	3318.	33.
6	175.	N.A.	N.A.	47.	12:57	3322.	5.
7	1939.	N.A.	N.A.	345.	13:22	3322.	58.
8	502.	N.A.	N.A.	152.	13:48	3325.	15.
9	58.	N.A.	N.A.	20.	13:15	3324.	2.
10	2102.	N.A.	N.A.	325.	12:59	3327.	63.
11	1706.	N.A.	N.A.	313.	14:20	3332.	51.
12	1750.	N.A.	N.A.	331.	12:34	3329.	53.
13	1481.	N.A.	N.A.	299.	11:47	3333.	44.
14	2008.	N.A.	N.A.	322.	13: 3	3335.	60.
15	1338.	N.A.	N.A.	328.	13:46	3334.	40.
16	519.	N.A.	N.A.	222.	11:37	3335.	16.
17	2164.	N.A.	N.A.	328.	13: 2	3336.	65.
18	2234.	N.A.	N.A.	337.	13: 7	3335.	67.
19	1535.	N.A.	N.A.	354.	12:35	3335.	46.
20	206.	N.A.	N.A.	53.	10:57	3335.	6.
21	944.	N.A.	N.A.	319.	12:37	3333.	28.
22	853.	N.A.	N.A.	299.	13:14	3333.	26.
23	1506.	N.A.	N.A.	322.	13: 3	3332.	45.
24	2125.	N.A.	N.A.	325.	12:52	3329.	64.
25	1974.	N.A.	N.A.	343.	13:40	3328.	59.
26	2314.	N.A.	N.A.	337.	12:57	3326.	70.
27	2174.	N.A.	N.A.	343.	12:53	3323.	65.
28	1889.	N.A.	N.A.	337.	11:39	3321.	57.
MEAN	1532.	N.A.	N.A.			3327.	
STANDARD DEVIATION	707.	N.A.	N.A.			8.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RHRU
CLEMSON, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 216

LATITUDE: 34.54 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 83.13 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 937 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	24.	31.	19.	46. 16: 5	13. 6:13	69.
2	26.	32.	21.	47. 16: 0	11. 7:31	66.
3	30.	35.	27.	46. 16:11	15. 7:28	64.
4	32.	40.	26.	51. 14:51	21. 23:59	69.
5	29.	34.	25.	43. 13: 3	14. 6:44	67.
6	32.	33.	31.	36. 17:12	29. 5:33	69.
7	34.	41.	29.	56. 15:48	19. 6:55	69.
8	33.	36.	31.	44. 16:35	22. 2:33	64.
9	32.	32.	32.	35. 0: 1	31. 3:56	65.
10	37.	44.	33.	57. 15:14	27. 23:51	71.
11	33.	36.	31.	49. 14:52	21. 6:36	74.
12	38.	43.	34.	57. 15:42	25. 7: 5	71.
13	35.	42.	30.	53. 13:47	23. 6:19	75.
14	40.	49.	32.	69. 16:36	19. 7:16	75.
15	47.	52.	43.	66. 14:45	28. 5:47	80.
16	47.	54.	42.	60. 11:33	27. 23:47	76.
17	32.	38.	27.	51. 15:42	18. 7: 5	77.
18	32.	39.	26.	54. 17: 1	17. 7: 5	79.
19	39.	47.	33.	63. 16: 8	21. 2:43	76.
20	44.	45.	43.	50. 12:10	39. 3:11	70.
21	52.	57.	47.	71. 13: 9	35. 6: 8	73.
22	58.	62.	55.	71. 13:32	50. 1:37	79.
23	60.	65.	57.	79. 15:27	48. 7: 8	78.
24	58.	63.	53.	76. 16:21	39. 6:45	85.
25	48.	56.	41.	63. 13:35	29. 23:51	81.
26	34.	38.	31.	48. 14:36	25. 6:36	74.
27	42.	47.	38.	59. 15:30	26. 3:57	79.
28	54.	56.	52.	75. 15:35	37. 6:58	81.
MEAN	39.	45.	35.			73.
STANDARD DEVIATION	10.1	10.2	10.3			5.7

ENVIRONMENTAL SUMMARY REPORT

SITE: RHRU
CLEMSON, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 216

LATITUDE: 34.54 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 83.13 DEG WEST PYRANOMETER TILT: 60 DEG
TIME ZONE: EASTERN
ALTITUDE: 937 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2219.	N.A.	N.A.	341.	12:53	3340.	66.
2	2221.	N.A.	N.A.	344.	12:25	3346.	66.
3	2154.	N.A.	N.A.	331.	12:38	3339.	65.
4	2245.	N.A.	N.A.	341.	12:27	3345.	67.
5	1009.	N.A.	N.A.	338.	12: 9	3346.	30.
6	209.	N.A.	N.A.	57.	14: 0	3342.	6.
7	2228.	N.A.	N.A.	331.	12: 9	3343.	67.
8	427.	N.A.	N.A.	131.	13:39	3339.	13.
9	54.	N.A.	N.A.	25.	13: 0	3339.	2.
10	1823.	N.A.	N.A.	351.	12:28	3334.	55.
11	1315.	N.A.	N.A.	296.	12:28	3335.	39.
12	1872.	N.A.	N.A.	360.	12:30	3338.	56.
13	1490.	N.A.	N.A.	309.	11:34	3329.	45.
14	2265.	N.A.	N.A.	335.	12:30	3332.	68.
15	1312.	N.A.	N.A.	347.	13:25	3330.	39.
16	746.	N.A.	N.A.	229.	11: 1	3321.	22.
17	2280.	N.A.	N.A.	335.	12:19	3323.	69.
18	2289.	N.A.	N.A.	338.	12:30	3320.	69.
19	1208.	N.A.	N.A.	284.	10:27	3310.	36.
20	116.	N.A.	N.A.	38.	11:54	3311.	3.
21	846.	N.A.	N.A.	293.	12:26	3308.	26.
22	850.	N.A.	N.A.	280.	13:21	3297.	26.
23	1386.	N.A.	N.A.	309.	12:23	3293.	42.
24	2176.	N.A.	N.A.	328.	12:10	3292.	66.
25	2084.	N.A.	N.A.	338.	12:47	3281.	64.
26	2392.	N.A.	N.A.	344.	12:17	3276.	73.
27	2237.	N.A.	N.A.	335.	12:45	3271.	68.
28	1050.	N.A.	N.A.	354.	12:37	3262.	32.
MEAN	1518.	N.A.	N.A.			3319.	
STANDARD DEVIATION	760.	N.A.	N.A.			25.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RHRU
CLEMSON, SOUTH CAROLINA

REPORT PERIOD: 80/ 2
SITE NUMBER: 216

LATITUDE: 34.54 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 83.13 DEG WEST PYRANOMETER TILT: 60 DEG
TIME ZONE: EASTERN
ALTITUDE: 937 FEET

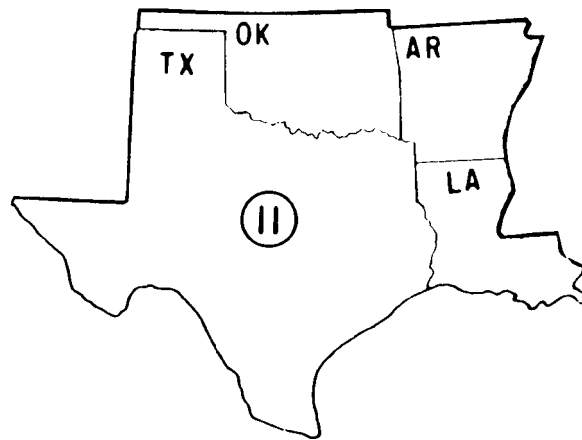
RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	70.	58.	79.	100.	4:26	42.	15:59
2	65.	59.	70.	100.	6:27	38.	16:32
3	56.	54.	57.	90.	8: 0	39.	17: 4
4	54.	51.	57.	85.	2: 3	32.	17:47
5	72.	63.	78.	100.	4:25	40.	18: 7
6	98.	99.	96.	100.	0: 3	83.	21:45
7	73.	61.	82.	100.	3:27	39.	16:47
8	78.	70.	85.	100.	0:57	54.	16:41
9	100.	100.	99.	100.	0:39	78.	0: 1
10	80.	71.	87.	100.	0: 2	42.	16:39
11	82.	83.	81.	100.	1:27	55.	16:34
12	59.	56.	61.	92.	7:47	34.	16:51
13	66.	55.	76.	100.	23:26	41.	15: 7
14	66.	56.	74.	100.	0: 4	25.	17:24
15	66.	58.	72.	100.	3: 7	29.	14:45
16	83.	80.	86.	100.	1:19	59.	14:59
17	66.	61.	71.	100.	6:33	40.	17:34
18	64.	56.	71.	97.	8: 9	37.	17:33
19	62.	51.	72.	97.	5: 1	32.	16:40
20	75.	70.	78.	88.	23:54	53.	12:42
21	95.	89.	99.	100.	2:34	70.	11:49
22	95.	91.	99.	100.	0: 1	71.	13:59
23	76.	74.	78.	100.	0: 1	30.	17: 9
24	59.	56.	62.	100.	3:38	23.	17:14
25	61.	53.	68.	96.	3: 6	33.	14:50
26	50.	48.	51.	65.	2: 9	37.	17:37
27	46.	44.	48.	61.	4:29	33.	16: 8
28	53.	54.	52.	79.	7:14	30.	15:46

MEAN 70. 65. 75.

STANDARD
DEVIATION 14. 15. 14.

ZONE 11



ENVIRONMENTAL SUMMARY REPORT

SITE: COLLEGE HOUSES
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 70

LATITUDE: 30.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 97.00 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 625 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	37.	37.	36.	44. 14:56	30. 7:28	77.
2	40.	42.	38.	48. 15:17	35. 23:28	78.
3	51.	57.	47.	73. 15:39	36. 7:49	82.
4	51.	52.	51.	61. 17:15	38. 7: 7	85.
5	59.	61.	58.	71. 16:50	50. 23:57	86.
6	55.	60.	51.	73. 14:21	39. 7:25	88.
7	57.	59.	55.	64. 13:39	53. 1: 7	90.
8	50.	49.	50.	70. 9:25	38. 23:12	84.
9	34.	35.	34.	38. 0: 0	30. 22:43	77.
10	38.	42.	35.	52. 13:50	26. 7:26	79.
11	46.	50.	43.	61. 14:17	33. 2:49	80.
12	50.	52.	49.	59. 15:35	44. 5:16	80.
13	56.	57.	54.	69. 15:28	44. 3:38	81.
14	62.	63.	61.	72. 13:35	56. 7: 0	81.
15	70.	77.	63.	91. 16:34	46. 23:49	85.
16	36.	36.	35.	45. 0: 0	29. 23:38	84.
17	35.	36.	33.	43. 14:50	27. 7:32	83.
18	47.	51.	45.	62. 16: 1	36. 1:19	85.
19	67.	74.	61.	91. 16:17	48. 0: 1	93.
20	68.	76.	62.	88. 13:51	50. 7:11	99.
21	69.	76.	63.	87. 16:15	57. 23:39	101.
22	70.	77.	63.	92. 15:34	50. 5:47	102.
23	65.	70.	60.	78. 15:14	53. 7:10	102.
24	60.	68.	54.	79. 13:43	47. 6:36	101.
25	55.	59.	51.	70. 16:12	41. 6:52	99.
26	48.	43.	50.	64. 17:19	37. 6:59	97.
27	55.	58.	52.			97.
28	60.	58.	61.	80. 17:23	51. 7:16	100.
MEAN	53.	56.	51.			88.
STANDARD DEVIATION	11.2	13.3	9.9			8.7

ENVIRONMENTAL SUMMARY REPORT

SITE: COLLEGE HOUSES
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 70

LATITUDE: 30.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 97.00 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: CENTRAL
ALTITUDE: 625 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	662.	N.A.	N.A.	219.	10:45	3136.	21.
2	382.	N.A.	N.A.	99.	14:13	3140.	12.
3	1796.	N.A.	N.A.	280.	12:53	3151.	57.
4	662.	N.A.	N.A.	262.	11:33	3155.	21.
5	807.	N.A.	N.A.	262.	14: 9	3159.	26.
6	1759.	N.A.	N.A.	347.	14:16	3167.	56.
7	43.	N.A.	N.A.	15.	9: 1	3178.	1.
8	116.	N.A.	N.A.	102.	9:19	3182.	4.
9	308.	N.A.	N.A.	137.	12:46	3187.	10.
10	1384.	N.A.	N.A.	312.	13:13	3194.	43.
11	703.	N.A.	N.A.	213.	12:41	3205.	22.
12	659.	N.A.	N.A.	181.	13:43	3209.	21.
13	698.	N.A.	N.A.	268.	15:17	3216.	22.
14	286.	N.A.	N.A.	265.	13: 8	3221.	9.
15	1747.	N.A.	N.A.	289.	13: 1	3231.	54.
16	577.	N.A.	N.A.	268.	14:39	3232.	18.
17	1196.	N.A.	N.A.	341.	11:38	3242.	37.
18	1930.	N.A.	N.A.	300.	12:59	3246.	59.
19	1945.	N.A.	N.A.	321.	13:15	3252.	60.
20	1907.	N.A.	N.A.	286.	12:26	3256.	59.
21	2037.	N.A.	N.A.	309.	13: 3	3263.	62.
22	1976.	N.A.	N.A.	300.	12:16	3272.	60.
23	1961.	N.A.	N.A.	294.	12:23	3273.	60.
24	1870.	N.A.	N.A.	297.	12: 2	3282.	57.
25	2123.	N.A.	N.A.	315.	13: 0	3285.	65.
26	*	N.A.	N.A.	*	*:*	3291.	*
27	1908.	N.A.	N.A.	306.	12:35	3294.	58.
28	*	N.A.	N.A.	*	*:*	3299.	*
MEAN	1209.	N.A.	N.A.			3222.	
STANDARD DEVIATION	721.	N.A.	N.A.			51.	

ENVIRONMENTAL SUMMARY REPORT

SITE: DALLAS RECREATION CENTER
DALLAS, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 48

LATITUDE: 32.54 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 97.20 DEG WEST PYRANOMETER TILT: 25 DEG
TIME ZONE: CENTRAL
ALTITUDE: 551 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	35.	41.	32.	45.	14:40	21.	3:19	66.
2	40.	43.	37.	53.	15:49	34.	23:50	67.
3	39.	44.	33.	60.	13:15	30.	4: 0	69.
4	57.	58.	56.	64.	16:14	53.	11:35	72.
5	51.	56.	48.	66.	15:15	39.	23:30	75.
6	48.	55.	42.	66.	14:10	31.	7: 8	73.
7	45.	46.	44.	48.	8:26	40.	20:13	72.
8	37.	37.	37.	41.	0:34	34.	23:18	71.
9	30.	30.	30.	34.	0: 1	23.	23:58	73.
10	30.	34.	27.	44.	13:29	20.	7:37	72.
11	39.	44.	34.	55.	14:28	26.	2: 1	72.
12	42.	45.	40.	56.	16: 6	30.	7:24	68.
13	49.	52.	46.	62.	14:32	33.	7:14	71.
14	55.	55.	55.	64.	17: 0	44.	3:29	70.
15	57.	64.	51.	76.	13: 2	35.	23:21	73.
16	29.	29.	29.	35.	0: 4	22.	23:45	71.
17	30.	33.	27.	42.	14:57	19.	5:42	70.
18	45.	48.	42.	56.	15:24	34.	0: 1	70.
19	63.	72.	55.	84.	15:24	48.	6:20	76.
20	67.	76.	59.	90.	15: 0	47.	2:12	77.
21	69.	73.	66.	80.	15:16	58.	1:56	79.
22	67.	73.	62.	84.	13:17	51.	4:40	80.
23	55.	58.	54.	67.	15:11	43.	7:14	86.
24	49.	55.	44.	63.	12:25	39.	4: 9	85.
25	46.	52.	40.	61.	14:28	32.	5: 3	79.
26	46.	50.	43.	64.	16: 4	27.	5:56	77.
27	58.	65.	51.	80.	15:20	35.	6:59	77.
28	68.	73.	63.	85.	14:51	47.	6:41	78.

MEAN 48. 52. 45. 74.

STANDARD DEVIATION 12.3 13.8 11.4 4.9

ENVIRONMENTAL SUMMARY REPORT

SITE: DALLAS RECREATION CENTER
DALLAS, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 48

LATITUDE: 32.54 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 97.20 DEG WEST PYRANOMETER TILT: 25 DEG
TIME ZONE: CENTRAL
ALTITUDE: 551 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1838.	N.A.	N.A.	279.	13: 4	2920.	63.
2	967.	N.A.	N.A.	272.	13:41	2928.	33.
3	1516.	N.A.	N.A.	275.	12:38	2938.	52.
4	2322.	N.A.	N.A.	275.	11:36	2945.	79.
5	1654.	N.A.	N.A.	275.	12:46	2959.	56.
6	1753.	N.A.	N.A.	275.	12:39	2963.	59.
7	101.	N.A.	N.A.	49.	12:58	2977.	3.
8	38.	N.A.	N.A.	31.	10:53	2984.	1.
9	180.	N.A.	N.A.	49.	12:14	2995.	6.
10	1379.	N.A.	N.A.	324.	11:21	3003.	46.
11	1206.	N.A.	N.A.	266.	12:30	3013.	40.
12	1547.	N.A.	N.A.	288.	12: 1	3027.	51.
13	1164.	N.A.	N.A.	272.	11:36	3031.	38.
14	272.	N.A.	N.A.	98.	17: 0	3045.	9.
15	1111.	N.A.	N.A.	245.	11:10	3055.	36.
16	506.	N.A.	N.A.	150.	13:10	3063.	17.
17	1617.	N.A.	N.A.	306.	12:54	3073.	53.
18	1681.	N.A.	N.A.	291.	12:28	3081.	55.
19	1850.	N.A.	N.A.	291.	12:33	3092.	60.
20	1935.	N.A.	N.A.	294.	12:36	3100.	62.
21	1975.	N.A.	N.A.	294.	12:10	3110.	64.
22	1835.	N.A.	N.A.	291.	12:40	3119.	59.
23	1571.	N.A.	N.A.	269.	12:47	3127.	50.
24	1778.	N.A.	N.A.	282.	12:47	3137.	57.
25	1981.	N.A.	N.A.	306.	12:47	3150.	63.
26	2033.	N.A.	N.A.	303.	12:10	3154.	64.
27	2070.	N.A.	N.A.	291.	12:24	3164.	65.
28	1936.	N.A.	N.A.	291.	12:22	3176.	61.
MEAN	1422.	N.A.	N.A.			3047.	
STANDARD DEVIATION	653.	N.A.	N.A.			78.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 98.00 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: CENTRAL
ALTITUDE: 600 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	38.	39.	37.	40.	15:42	37.	22:20	N.A.
2	37.	39.	36.	46.	17: 8	33.	7: 3	N.A.
3	49.	56.	43.	70.	15:48	32.	7:38	N.A.
4	49.	50.	48.	59.	20:48	37.	5:30	N.A.
5	57.	61.	54.	67.	16:41	49.	22: 6	N.A.
6	57.	59.	53.	70.	14:33	38.	7:16	N.A.
7	56.	58.	54.	61.	13:26	52.	21:58	N.A.
8	37.	38.	36.	38.	16:43	35.	23:50	N.A.
9	31.	32.	30.	33.	15:51	28.	23:51	N.A.
10	42.	46.	39.	51.	14:15	36.	23:51	N.A.
11	34.	*	34.	36.	0: 2	32.	2:58	N.A.
12	48.	49.	46.	58.	14: 4	39.	7:19	N.A.
13	53.	54.	52.	64.	15: 0	42.	3:53	N.A.
14	59.	60.	59.	69.	13:55	53.	6:49	N.A.
15	67.	75.	60.	88.	16:32	42.	23:55	N.A.
16	35.	33.	35.	41.	0: 0	32.	5:52	N.A.
17	*	*	*	*	*:*	*	*:*	N.A.
18	*	*	*	*	*:*	*	*:*	N.A.
19	72.	73.	71.	87.	15:54	48.	6:58	N.A.
20	68.	75.	61.	87.	13:46	50.	6:56	N.A.
21	67.	74.	62.	84.	16:25	56.	7:49	N.A.
22	69.	76.	64.	89.	14:22	50.	6:17	N.A.
23	63.	69.	58.	75.	13:52	50.	23:55	N.A.
24	58.	65.	52.	76.	13:47	46.	6:30	N.A.
25	52.	57.	47.	67.	14:24	37.	6:51	N.A.
26	50.	54.	47.	65.	14:41	34.	6:47	N.A.
27	59.	65.	53.	80.	13:48	41.	6: 8	N.A.
28	64.	69.	59.	79.	14:23	49.	5:13	N.A.
MEAN	53.	57.	50.					N.A.
STANDARD DEVIATION	12.2	13.7	10.8					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH
LONGITUDE: 98.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: CENTRAL
ALTITUDE: 600 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	*	*	*	*: *	3136.	*
2	476.	381.	95.	128.	14:34	3140.	15.
3	1991.	222.	1769.	304.	12:42	3151.	63.
4	927.	348.	578.	277.	11:48	3155.	29.
5	*	*	*	*	*: *	3159.	*
6	1930.	282.	1649.	325.	14: 6	3167.	61.
7	*	*	*	*	*: *	3178.	*
8	*	*	*	*	*: *	3182.	*
9	249.	217.	33.	104.	13:22	3187.	8.
10	*	*	*	*	*: *	3194.	*
11	*	*	*	*	*: *	3205.	*
12	853.	588.	265.	256.	13:54	3209.	27.
13	797.	572.	226.	280.	14:22	3216.	25.
14	324.	279.	45.	156.	14: 1	3221.	10.
15	1895.	269.	1627.	308.	12:47	3231.	59.
16	*	*	*	*	*: *	3232.	*
17	*	*	*	*	*: *	3242.	*
18	*	*	*	*	*: *	3246.	*
19	2237.	270.	1967.	332.	13:33	3252.	69.
20	2058.	233.	1825.	304.	12:58	3256.	63.
21	2164.	225.	1938.	322.	12:53	3263.	66.
22	2078.	307.	1771.	318.	12:46	3272.	64.
23	2211.	422.	1789.	311.	12:43	3273.	68.
24	2036.	536.	1500.	318.	13:20	3282.	62.
25	2221.	469.	1752.	329.	12:59	3285.	68.
26	1869.	788.	1080.	322.	12:44	3291.	57.
27	2121.	1509.	612.	315.	12:44	3294.	64.
28	1897.	1684.	213.	332.	12:52	3299.	58.
MEAN	1597.	505.	1091.			3222.	
STANDARD DEVIATION	717.	415.	765.			51.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.00 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 600 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED DIRECTION	TIME HR:MN
1	98.	2.	60.	2.	10.	131. 23:35
2	174.	6.	174.	7.	14.	177. 14:28
3	174.	3.	57.	3.	12.	195. 2:12
4	176.	9.	181.	12.	28.	182. 14:12
5	346.	10.	341.	12.	20.	345. 13:37
6	135.	7.	120.	5.	19.	172. 22:57
7	123.	13.	127.	14.	32.	108. 21:58
8	347.	21.	335.	20.	38.	9. 23:23
9	325.	21.	323.	24.	39.	311. 14:42
10	*	2.	*	3.	12.	* 12:50
11	*	0.	*	0.	4.	* 1:54
12	120.	6.	71.	6.	17.	137. 15:51
13	180.	10.	184.	10.	22.	184. 14:28
14	167.	9.	155.	7.	20.	173. 18:50
15	*	12.	*	10.	40.	* 20:21
16	344.	21.	346.	22.	38.	23. 6:13
17	*	*	*	*	*	* **
18	*	*	*	*	*	* **
19	253.	9.	245.	11.	30.	287. 14:37
20	171.	5.	167.	8.	20.	174. 15:54
21	289.	7.	289.	12.	38.	295. 10:50
22	236.	7.	254.	10.	23.	301. 11:53
23	4.	8.	11.	10.	23.	341. 10:24
24	335.	13.	322.	14.	33.	349. 15:44
25	356.	12.	360.	13.	30.	25. 11:50
26	*	9.	*	7.	23.	* 22:51
27	187.	7.	184.	9.	22.	201. 16:47
28	189.	12.	196.	14.	30.	176. 23:30
MEAN	215.	9.	205.	11.		
STANDARD DEVIATION	97.3	5.5	106.1	5.6		

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH
LONGITUDE: 98.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: CENTRAL
ALTITUDE: 600 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	48.	41.	50.	60.	22:57	39.	15:42
2	89.	88.	90.	100.	8:23	59.	0: 1
3	73.	62.	83.	100.	0: 4	35.	14:44
4	90.	88.	92.	100.	1:35	67.	11:38
5	62.	68.	56.	92.	11: 3	49.	17: 2
6	45.	42.	48.	85.	6:49	24.	15: 5
7	93.	85.	100.	100.	14:19	70.	11:18
8	100.	100.	100.	100.	16:38	99.	22:30
9	86.	88.	84.	100.	5:31	78.	15:19
10	48.	37.	59.	67.	23:19	31.	17: 0
11	70.	0.	70.	79.	3: 3	64.	0: 2
12	68.	68.	69.	94.	7:30	46.	16:28
13	77.	74.	79.	93.	4: 9	63.	15: 5
14	96.	94.	98.	100.	3:10	77.	14:17
15	74.	62.	85.	100.	0: 5	25.	17: 4
16	98.	94.	100.	100.	0: 0	88.	8:43
17	*	*	*	*	*:*	*	*:*
18	*	*	*	*	*:*	*	*:*
19	44.	51.	33.	100.	6:42	20.	17:20
20	57.	45.	68.	100.	23:49	32.	11:44
21	46.	29.	60.	100.	0: 5	18.	16:35
22	35.	28.	41.	65.	6:33	15.	15: 4
23	46.	35.	55.	72.	23:55	32.	8:54
24	58.	51.	64.	82.	6:40	35.	14:14
25	52.	47.	57.	88.	6:56	29.	17:32
26	34.	30.	39.	51.	23:55	21.	15: 3
27	52.	46.	57.	85.	7: 7	24.	13:53
28	65.	58.	71.	97.	23:51	37.	16:23

MEAN 66. 60. 69.

STANDARD
DEVIATION 21. 23. 20.

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN
AUSTIN, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 98.00 DEG WEST PYRANOMETER TILT: 30 DEG
TIME ZONE: CENTRAL
ALTITUDE: 600 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	9	1	0	0	0	0	0	0	14
2	5	15	4	0	0	0	0	0	0
3	13	11	0	0	0	0	0	0	0
4	7	3	4	9	0	0	0	0	1
5	0	4	7	2	0	0	0	0	11
6	6	5	8	0	0	0	0	0	5
7	0	2	5	6	0	0	0	0	11
8	0	0	0	2	6	0	0	0	16
9	0	0	1	3	9	3	0	0	8
10	11	3	0	0	0	0	0	0	10
11	3	0	0	0	0	0	0	0	21
12	5	12	6	0	0	0	0	0	1
13	2	5	12	5	0	0	0	0	0
14	3	8	13	0	0	0	0	0	0
15	0	4	12	4	3	1	0	0	0
16	0	0	0	1	6	1	0	0	16
17	0	0	0	0	0	0	0	0	24
18	0	0	0	0	0	0	0	0	24
19	3	7	5	4	0	0	0	0	5
20	10	7	5	2	0	0	0	0	0
21	9	7	3	3	2	0	0	0	0
22	5	9	8	2	0	0	0	0	0
23	4	7	11	2	0	0	0	0	0
24	2	5	4	7	5	1	0	0	0
25	0	2	13	9	0	0	0	0	0
26	3	7	10	4	0	0	0	0	0
27	6	11	4	3	0	0	0	0	0
28	4	1	6	8	4	0	0	0	1
AVERAGE	3.9	4.9	5.0	2.7	1.3	0.2	0.0	0.0	6.0
TOTAL	110	136	141	76	35	6	0	0	168

ENVIRONMENTAL SUMMARY REPORT

SITE: RANDOLPH AIR FORCE BASE
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 25

LATITUDE: 29.50 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.30 DEG WEST PYRANOMETER TILT: 15 DEG ALTITUDE: 790 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	35.	37.	34.	45. 14:10	30. 1:31	87.
2	36.	37.	34.	46. 15:59	31. 4:52	89.
3	48.	55.	43.	68. 15:59	33. 0:15	97.
4	47.	48.	46.	65. 16:37	37. 7:54	92.
5	55.	58.	54.	66. 16:10	49. 23:55	98.
6	54.	60.	50.	67. 13:36	40. 7:12	92.
7	57.	58.	56.	63. 12:23	51. 4: 7	87.
8	51.	52.	50.	68. 11:29	36. 23: 4	92.
9	34.	35.	33.	39. 12:30	29. 23:36	89.
10	39.	44.	35.	57. 14:43	23. 6:16	96.
11	45.	48.	42.	57. 15:42	34. 1:18	84.
12	47.	49.	45.	53. 16:15	42. 6:39	92.
13	52.	53.	50.	62. 16: 1	42. 4:17	88.
14	59.	60.	58.	66. 15:12	53. 5:26	91.
15	66.	71.	63.	84. 14:43	47. 23:55	89.
16	37.	38.	36.	47. 0: 0	28. 23:49	85.
17	32.	35.	30.	40. 12:27	26. 5:52	102.
18	44.	48.	41.	59. 16:20	31. 7: 7	102.
19	64.	69.	59.	90. 16:15	45. 7: 6	91.
20	68.	74.	63.	86. 14:58	49. 7: 8	94.
21	70.	77.	64.	87. 15:43	55. 23:56	95.
22	69.	76.	63.	88. 15:30	51. 2:58	94.
23	64.	70.	59.	83. 15:36	52. 4:22	92.
24	61.	71.	53.	86. 13:50	47. 5:24	100.
25	54.	60.	49.	71. 15:10	40. 5:50	98.
26	51.	53.	48.	67. 15:32	37. 6:55	96.
27	56.	63.	51.	76. 14:42	36. 6:26	92.
28	62.	68.	57.	83. 15:17	46. 5:57	91.
MEAN	52.	56.	49.			93.
STANDARD DEVIATION	11.4	13.0	10.3			4.8

ENVIRONMENTAL SUMMARY REPORT

SITE: RANDOLPH AIR FORCE BASE
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 25

LATITUDE: 29.50 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.30 DEG WEST PYRANOMETER TILT: 15 DEG ALTITUDE: 790 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	966.	N.A.	N.A.	255.	13:27	2708.	36.
2	423.	N.A.	N.A.	167.	15:59	2722.	16.
3	1698.	N.A.	N.A.	275.	12:42	2731.	62.
4	443.	N.A.	N.A.	182.	15:59	2741.	16.
5	830.	N.A.	N.A.	258.	14:18	2752.	30.
6	1354.	N.A.	N.A.	281.	11:49	2766.	49.
7	227.	N.A.	N.A.	146.	13:11	2776.	8.
8	120.	N.A.	N.A.	79.	11:29	2786.	4.
9	781.	N.A.	N.A.	293.	12:51	2797.	28.
10	1654.	N.A.	N.A.	307.	12:40	2812.	59.
11	635.	N.A.	N.A.	182.	12: 8	2822.	23.
12	453.	N.A.	N.A.	129.	11:43	2832.	16.
13	653.	N.A.	N.A.	179.	13:43	2844.	23.
14	239.	N.A.	N.A.	88.	13:36	2859.	8.
15	1520.	N.A.	N.A.	278.	12: 8	2869.	53.
16	886.	N.A.	N.A.	246.	14:35	2881.	31.
17	775.	N.A.	N.A.	293.	11:55	2891.	27.
18	1916.	N.A.	N.A.	290.	12:31	2906.	66.
19	1855.	N.A.	N.A.	296.	13:13	2914.	64.
20	1861.	N.A.	N.A.	281.	12:34	2929.	64.
21	1964.	N.A.	N.A.	299.	13: 8	2941.	67.
22	1904.	N.A.	N.A.	287.	12:44	2951.	64.
23	1810.	N.A.	N.A.	296.	12:56	2962.	61.
24	1684.	N.A.	N.A.	290.	11:58	2974.	57.
25	2133.	N.A.	N.A.	310.	12:20	2988.	71.
26	1713.	N.A.	N.A.	275.	11:53	2996.	57.
27	1869.	N.A.	N.A.	281.	13:54	3011.	62.
28	1660.	N.A.	N.A.	302.	14:19	3022.	55.
MEAN	1215.	N.A.	N.A.			2864.	
STANDARD DEVIATION	652.	N.A.	N.A.			96.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.48 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 750 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	36.	37.	35.	43.	13:19	31.	2: 2	70.
2	37.	38.	36.	45.	16:36	31.	6:19	70.
3	48.	53.	44.	65.	13:45	33.	2: 1	70.
4	50.	49.	51.	65.	17:26	37.	6:39	70.
5	58.	60.	56.	64.	17:13	50.	23:48	71.
6	58.	63.	58.	64.	17:16	53.	23: 8	71.
7	63.	63.	63.	65.	16:10	58.	11: 8	71.
8	39.	41.	39.	42.	16:41	36.	23: 0	71.
9	35.	37.	32.	41.	13:13	30.	23:53	70.
10	39.	43.	37.	55.	13:39	26.	7:15	70.
11	46.	48.	45.	56.	15:43	37.	5:34	70.
12	47.	48.	47.	52.	15:47	43.	6:37	71.
13	52.	53.	51.	61.	15:24	42.	2:25	71.
14	59.	59.	59.	65.	14:47	53.	6:47	71.
15	67.	70.	64.	78.	17: 6	48.	23:57	71.
16	38.	38.	38.	49.	0:13	29.	23:48	71.
17	33.	34.	31.	42.	12:20	27.	4: 9	70.
18	45.	47.	43.	59.	17:39	32.	7:15	70.
19	64.	69.	60.	87.	16: 5	44.	7: 9	71.
20	69.	73.	66.	84.	16:40	52.	7: 6	72.
21	71.	76.	67.	84.	14:10	60.	23:59	73.
22	70.	76.	65.	85.	14: 7	54.	1:45	72.
23	65.	70.	62.	82.	14:35	52.	8:11	73.
24	62.	70.	55.	84.	14:35	49.	7: 1	74.
25	55.	59.	52.	70.	14:45	42.	6:56	72.
26	52.	54.	51.	64.	16:22	39.	7:20	72.
27	57.	61.	54.	73.	14:25	41.	5:47	72.
28	*	*	*	*	*:*	*	*:*	*
MEAN	52.	55.	50.					71.
STANDARD DEVIATION	12.0	13.1	11.3					1.0

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL
LONGITUDE: 98.48 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 750 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM SPEED	WIND DIRECTION	TIME HR:MN
1	166.	6.	163.	6.	18.	194.	3: 0
2	115.	3.	118.	4.	12.	128.	7: 2
3	335.	3.	327.	5.	10.	280.	7:21
4	82.	4.	77.	3.	20.	83.	19:39
5	193.	7.	193.	9.	15.	180.	14:24
6	84.	11.	72.	10.	19.	90.	20:49
7	90.	15.	88.	16.	27.	84.	15: 2
8	163.	15.	179.	11.	29.	163.	19:42
9	189.	10.	190.	12.	25.	189.	16:57
10	149.	3.	158.	2.	11.	80.	18:43
11	*	1.	*	2.	9.	*	11:26
12	86.	4.	100.	5.	12.	88.	12: 3
13	63.	3.	55.	2.	13.	82.	22:42
14	73.	4.	68.	4.	14.	62.	16:10
15	*	4.	*	5.	33.	*	22:47
16	175.	12.	178.	13.	26.	154.	1:43
17	136.	5.	122.	5.	15.	212.	0:36
18	54.	5.	55.	6.	19.	70.	16:24
19	243.	5.	250.	7.	19.	231.	15:38
20	81.	2.	71.	4.	12.	71.	15:36
21	211.	6.	215.	8.	24.	210.	10:26
22	251.	4.	257.	7.	14.	251.	13: 8
23	139.	5.	131.	5.	19.	131.	17:31
24	193.	7.	205.	6.	21.	183.	15:55
25	178.	8.	180.	9.	23.	178.	12:53
26	125.	7.	115.	7.	18.	171.	5: 7
27	41.	4.	358.	4.	13.	70.	16: 7
28	*	*	*	*	*	*	*: *
MEAN	145.	6.	157.	7.			
STANDARD DEVIATION	71.0	3.6	81.7	3.4			

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH
LONGITUDE: 98.48 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: CENTRAL
ALTITUDE: 750 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	7	15	2	0	0	0	0	0	0
2	18	6	0	0	0	0	0	0	0
3	15	9	0	0	0	0	0	0	0
4	11	8	3	1	0	0	0	0	1
5	3	5	5	0	0	0	0	0	11
6	0	0	7	1	0	0	0	0	16
7	0	0	3	10	0	0	0	0	11
8	0	0	1	7	0	0	0	0	16
9	1	4	8	1	0	0	0	0	10
10	21	3	0	0	0	0	0	0	0
11	24	0	0	0	0	0	0	0	0
12	10	13	1	0	0	0	0	0	0
13	13	10	1	0	0	0	0	0	0
14	12	11	1	0	0	0	0	0	0
15	12	7	4	1	0	0	0	0	0
16	0	6	8	10	0	0	0	0	0
17	9	14	1	0	0	0	0	0	0
18	8	11	5	0	0	0	0	0	0
19	13	5	6	0	0	0	0	0	0
20	17	6	1	0	0	0	0	0	0
21	7	13	4	0	0	0	0	0	0
22	12	11	1	0	0	0	0	0	0
23	9	10	5	0	0	0	0	0	0
24	7	8	7	2	0	0	0	0	0
25	3	11	9	1	0	0	0	0	0
26	1	17	6	0	0	0	0	0	0
27	12	11	0	0	0	0	0	0	1
28	0	0	0	0	0	0	0	0	24
AVERAGE	8.8	7.6	3.2	1.2	0.0	0.0	0.0	0.0	3.2
TOTAL	245	214	89	34	0	0	0	0	90

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 2
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH
LONGITUDE: 98.48 DEG WEST

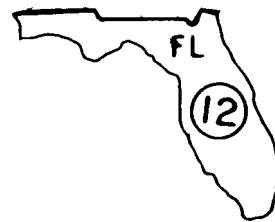
AZIMUTH: 0 DEG
PYRANOMETER TILT: 30 DEG

TIME ZONE: CENTRAL
ALTITUDE: 750 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE TIME BTU/HR/FT2 HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	885.	259. 12:58	3137.	28.
2	637.	206. 15:43	3141.	20.
3	1907.	306. 12:47	3152.	61.
4	638.	193. 15:50	3156.	20.
5	*	*:*	3160.	*
6	*	*:*	3168.	*
7	*	*:*	3179.	*
8	*	*:*	3183.	*
9	*	*:*	3188.	*
10	1879.	339. 12:35	3195.	59.
11	661.	203. 11:53	3205.	21.
12	419.	133. 11:36	3210.	13.
13	641.	150. 12:17	3217.	20.
14	335.	103. 14:37	3221.	10.
15	1500.	309. 12:58	3232.	46.
16	1031.	249. 14:54	3232.	32.
17	705.	266. 11:42	3242.	22.
18	2127.	312. 13: 1	3247.	66.
19	2095.	326. 13: 1	3253.	64.
20	2037.	299. 12:32	3257.	63.
21	2175.	322. 12:50	3263.	67.
22	2092.	316. 12:36	3273.	64.
23	1970.	316. 12:37	3273.	60.
24	1772.	319. 13:47	3282.	54.
25	2258.	329. 12:32	3286.	69.
26	1920.	292. 13:28	3291.	58.
27	2004.	312. 12:11	3294.	61.
28	*	*:*	3299.	*
MEAN	1440.		3223.	
STANDARD DEVIATION	692.		51.	

ZONE 12



ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA GAS
WINTER SPRINGS, FLORIDA

REPORT PERIOD: 80/ 2
SITE NUMBER: 51

LATITUDE: 28.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 82.00 DEG WEST PYRANOMETER TILT: 18 DEG
TIME ZONE: EASTERN
ALTITUDE: 106 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	41.	45.	38.	51. 14:32	32. 23:55	N.A.
2	40.	46.	36.	57. 15:18	28. 6:35	N.A.
3	44.	48.	40.	58. 14:40	36. 23:39	N.A.
4	41.	48.	36.	60. 15:12	28. 7: 2	N.A.
5	45.	53.	39.	66. 14:51	30. 7: 2	N.A.
6	49.	58.	42.	67. 13:54	35. 3:46	N.A.
7	43.	49.	38.	60. 15:57	32. 7:41	N.A.
8	50.	57.	45.	69. 13:42	34. 3:50	N.A.
9	60.	66.	55.	78. 15: 3	42. 7:13	N.A.
10	57.	61.	54.	69. 10: 4	46. 23:51	N.A.
11	48.	51.	46.	58. 13:43	43. 5:21	N.A.
12	51.	56.	46.	67. 15:25	41. 3:18	N.A.
13	53.	59.	48.	70. 14:21	41. 2:48	N.A.
14	56.	59.	55.	63. 13:46	50. 4:21	N.A.
15	59.	63.	56.	73. 15: 6	50. 23:44	N.A.
16	62.	67.	58.	76. 14:49	49. 0:27	N.A.
17	50.	49.	51.	62. 1:13	43. 20: 3	N.A.
18	51.	55.	47.	64. 12:44	38. 3:10	N.A.
19	58.	63.	54.	74. 14:42	49. 23:53	N.A.
20	59.	65.	53.	79. 15: 5	43. 6:22	N.A.
21	64.	71.	58.	82. 15:33	49. 4:58	N.A.
22	66.	71.	61.	81. 14:28	52. 7:11	N.A.
23	69.	75.	64.	83. 15:29	57. 3:55	N.A.
24	68.	74.	63.	84. 14:57	59. 23:50	N.A.
25	65.	70.	60.	77. 12:22	56. 23:54	N.A.
26	48.	50.	45.	58. 15:49	33. 23:54	N.A.
27	46.	52.	40.	65. 15:17	29. 6:45	N.A.
28	53.	60.	47.	73. 15:35	34. 5:16	N.A.
MEAN	53.	59.	49.			N.A.
STANDARD DEVIATION	8.6	8.8	8.6			N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA GAS
WINTER SPRINGS, FLORIDA

REPORT PERIOD: 80/ 2
SITE NUMBER: 51

LATITUDE: 28.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 82.00 DEG WEST PYRANOMETER TILT: 18 DEG
TIME ZONE: EASTERN
ALTITUDE: 106 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1565.	N.A.	N.A.	317.	12:40	2872.	54.
2	1697.	N.A.	N.A.	288.	12:11	2880.	59.
3	823.	N.A.	N.A.	306.	13:47	2892.	28.
4	1764.	N.A.	N.A.	292.	12:11	2900.	61.
5	1639.	N.A.	N.A.	303.	12:54	2908.	56.
6	1224.	N.A.	N.A.	274.	13:17	2917.	42.
7	1782.	N.A.	N.A.	295.	12:29	2930.	61.
8	1216.	N.A.	N.A.	303.	12:38	2938.	41.
9	1537.	N.A.	N.A.	281.	11:43	2946.	52.
10	458.	N.A.	N.A.	299.	12:39	2959.	15.
11	574.	N.A.	N.A.	295.	13:21	2968.	19.
12	1793.	N.A.	N.A.	352.	12: 7	2978.	60.
13	1214.	N.A.	N.A.	334.	13:23	2986.	41.
14	244.	N.A.	N.A.	81.	11:22	2999.	8.
15	1099.	N.A.	N.A.	373.	12:42	3007.	37.
16	1189.	N.A.	N.A.	362.	12:25	3017.	39.
17	1214.	N.A.	N.A.	352.	12:57	3026.	40.
18	662.	N.A.	N.A.	250.	12:12	3039.	22.
19	1344.	N.A.	N.A.	369.	10:20	3048.	44.
20	1917.	N.A.	N.A.	341.	12:57	3057.	63.
21	1674.	N.A.	N.A.	359.	11:54	3065.	55.
22	1877.	N.A.	N.A.	359.	12:20	3078.	61.
23	1598.	N.A.	N.A.	362.	12: 6	3087.	52.
24	1224.	N.A.	N.A.	327.	13:16	3096.	40.
25	491.	N.A.	N.A.	331.	12:17	3104.	16.
26	2440.	N.A.	N.A.	380.	12:16	3113.	78.
27	2281.	N.A.	N.A.	380.	11:17	3126.	73.
28	2281.	N.A.	N.A.	362.	12:28	3134.	73.
MEAN	1386.	N.A.	N.A.			3003.	
STANDARD DEVIATION	570.	N.A.	N.A.			81.	

ENVIRONMENTAL SUMMARY REPORT

SITE: MATT CANNON
GAINESVILLE, FLORIDA

REPORT PERIOD: 80/ 2
SITE NUMBER: 163

LATITUDE: 29.40 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 82.10 DEG WEST PYRANOMETER TILT: 45 DEG
TIME ZONE: EASTERN
ALTITUDE: 30 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	38.	41.	36.	48. 14:56	25. 23:30	59.
2	36.	40.	32.	54. 14:58	25. 7: 9	57.
3	39.	44.	35.	53. 16: 8	32. 23:57	56.
4	41.	48.	35.	56. 15:30	26. 5: 6	58.
5	45.	52.	39.	65. 16:27	30. 7:12	57.
6	48.	55.	43.	63. 15:54	36. 2:23	59.
7	41.	45.	39.	58. 15:27	31. 7:33	58.
8	48.	55.	42.	70. 13:56	31. 2:12	58.
9	60.	66.	56.	79. 13:35	42. 2: 1	61.
10	54.	53.	54.	67. 0:10	43. 23:54	62.
11	47.	50.	45.	59. 15:59	42. 6: 2	59.
12	50.	53.	47.	63. 14: 6	41. 4:40	59.
13	51.	54.	48.	63. 15: 8	44. 3:30	59.
14	56.	60.	53.	68. 13:57	48. 0:21	60.
15	61.	69.	55.	79. 14:14	51. 23:58	61.
16	61.	64.	58.	74. 12:50	51. 0:14	64.
17	46.	48.	44.	59. 15:19	37. 8:23	62.
18	46.	51.	43.	63. 14:15	36. 6:58	60.
19	56.	63.	51.	74. 14:58	47. 0:13	61.
20	58.	65.	52.	76. 14:55	43. 4:58	62.
21	66.	73.	60.	82. 12:43	55. 23:33	66.
22	66.	74.	60.	85. 14:40	52. 3:49	68.
23	70.	74.	67.	84. 15:52	63. 2:21	68.
24	67.	68.	66.	72. 12: 2	62. 14:48	69.
25	66.	70.	63.	75. 14:10	55. 23:49	68.
26	45.	48.	43.	56. 16:32	34. 22:50	63.
27	44.	51.	39.	63. 15:22	29. 3:22	60.
28	55.	61.	49.	73. 14:55	41. 5:30	61.
MEAN	52.	57.	48.			61.
STANDARD DEVIATION	9.8	10.3	9.8			3.6

ENVIRONMENTAL SUMMARY REPORT

SITE: MATT CANNON
GAINESVILLE, FLORIDA

REPORT PERIOD: 80/ 2
SITE NUMBER: 163

LATITUDE: 29.40 DEG NORTH
LONGITUDE: 82.10 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN
ALTITUDE: 30 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1918.	N.A.	N.A.	319.	13:26	3375.	57.
2	1565.	N.A.	N.A.	322.	13: 6	3382.	46.
3	1157.	N.A.	N.A.	334.	13: 1	3381.	34.
4	1877.	N.A.	N.A.	310.	13:38	3384.	55.
5	1829.	N.A.	N.A.	304.	12:59	3382.	54.
6	1830.	N.A.	N.A.	319.	13:40	3388.	54.
7	1759.	N.A.	N.A.	310.	13:25	3386.	52.
8	1106.	N.A.	N.A.	307.	13: 8	3389.	33.
9	1611.	N.A.	N.A.	316.	13:24	3387.	48.
10	180.	N.A.	N.A.	62.	13:14	3392.	5.
11	972.	N.A.	N.A.	337.	13:30	3390.	29.
12	1076.	N.A.	N.A.	322.	14: 6	3391.	32.
13	358.	N.A.	N.A.	100.	14:15	3389.	11.
14	344.	N.A.	N.A.	83.	12:59	3393.	10.
15	1432.	N.A.	N.A.	348.	13:32	3387.	42.
16	564.	N.A.	N.A.	316.	12:39	3391.	17.
17	1826.	N.A.	N.A.	354.	13:59	3388.	54.
18	920.	N.A.	N.A.	328.	14:10	3388.	27.
19	1528.	N.A.	N.A.	334.	13:22	3385.	45.
20	1409.	N.A.	N.A.	313.	13: 9	3388.	42.
21	1401.	N.A.	N.A.	334.	12:22	3387.	41.
22	1886.	N.A.	N.A.	313.	13:30	3384.	56.
23	1068.	N.A.	N.A.	340.	14: 5	3379.	32.
24	341.	N.A.	N.A.	151.	15:46	3378.	10.
25	645.	N.A.	N.A.	295.	14:10	3380.	19.
26	2463.	N.A.	N.A.	345.	13:31	3372.	73.
27	1464.	N.A.	N.A.	310.	12:15	3373.	43.
28	2012.	N.A.	N.A.	319.	13:25	3370.	60.
MEAN	1305.	N.A.	N.A.			3384.	
STANDARD DEVIATION	597.	N.A.	N.A.			6.	

ENVIRONMENTAL SUMMARY REPORT

SITE: REEDY CREEK
LAKE BUENA VISTA, FLORIDA

REPORT PERIOD: 80/ 2
SITE NUMBER: 18

LATITUDE: 28.40 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 81.30 DEG WEST PYRANOMETER TILT: 0 DEG ALTITUDE: 66 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	45.	49.	42.	55.	14:57	36.	23:56	156.
2	44.	49.	40.	61.	14:59	33.	6:36	148.
3	47.	51.	43.	59.	13:39	39.	23:31	159.
4	46.	52.	41.	63.	16:19	33.	6:33	135.
5	52.	59.	46.	74.	15: 7	38.	7:23	160.
6	54.	62.	47.	72.	14:54	42.	3: 4	160.
7	48.	53.	43.	64.	15: 8	39.	5:27	156.
8	57.	65.	50.	79.	14:18	39.	0:47	158.
9	66.	72.	62.	83.	15:39	51.	5:46	154.
10	61.	66.	56.	71.	14:13	48.	23:28	*
11	51.	54.	49.	64.	15: 1	46.	5:52	132.
12	54.	59.	50.	71.	15: 1	44.	4:48	127.
13	58.	65.	53.	77.	14:11	45.	2:38	145.
14	59.	60.	58.	65.	15:45	52.	5: 5	131.
15	63.	65.	61.	77.	16:25	57.	4:57	121.
16	66.	69.	64.	81.	14:33	59.	1:51	123.
17	52.	50.	53.	64.	1:39	44.	11:37	117.
18	52.	57.	49.	64.	12:58	42.	1:34	112.
19	61.	66.	56.	77.	15:17	51.	0: 0	123.
20	64.	72.	57.	83.	14:57	47.	5:59	121.
21	69.	76.	62.	87.	16:33	54.	5:42	114.
22	70.	76.	65.	87.	16: 1	57.	4:33	116.
23	73.	78.	69.	88.	14:11	63.	2: 7	130.
24	73.	79.	68.	90.	15:37	62.	3:21	141.
25	69.	73.	65.	80.	12:24	58.	23:51	134.
26	52.	53.	51.	62.	15:19	42.	23:42	146.
27	51.	58.	44.	70.	15: 3	35.	6:10	118.
28	57.	65.	49.	78.	15:29	40.	6:41	153.
MEAN	58.	63.	53.					137.
STANDARD DEVIATION	8.7	9.3	8.7					16.3

ENVIRONMENTAL SUMMARY REPORT

SITE: REEDY CREEK
LAKE BUENA VISTA, FLORIDA

REPORT PERIOD: 80/ 2
SITE NUMBER: 18

LATITUDE: 28.40 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN
LONGITUDE: 81.30 DEG WEST PYRANOMETER TILT: 0 DEG ALTITUDE: 66 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1299.	*	*	257.	11:35	2138.	61.
2	1358.	*	*	229.	12: 1	2153.	63.
3	1053.	*	*	245.	12:35	2167.	49.
4	1441.	*	*	235.	12:30	2183.	66.
5	1384.	*	*	222.	12:27	2197.	63.
6	1069.	*	*	232.	13:18	2211.	48.
7	1475.	*	*	238.	12:55	2225.	66.
8	1378.	*	*	280.	12:58	2242.	61.
9	1249.	*	*	254.	12:21	2257.	55.
10	632.	*	*	267.	14: 8	2271.	28.
11	846.	*	*	238.	12:32	2287.	37.
12	1189.	*	*	257.	12:16	2304.	52.
13	1032.	*	*	238.	12:30	2320.	44.
14	300.	*	*	92.	13:21	2335.	13.
15	541.	*	*	194.	13:29	2351.	23.
16	822.	*	*	251.	12:41	2369.	35.
17	528.	*	*	251.	13:45	2385.	22.
18	486.	*	*	146.	11:49	2401.	20.
19	1235.	*	*	295.	11:49	2418.	51.
20	1292.	*	*	273.	12:55	2437.	53.
21	1198.	*	*	289.	12:54	2453.	49.
22	1367.	*	*	257.	11:40	2470.	55.
23	1211.	*	*	280.	12:35	2486.	49.
24	1220.	*	*	270.	12:51	2505.	49.
25	458.	*	*	245.	11:15	2520.	18.
26	1774.	*	*	276.	12:34	2539.	70.
27	1620.	*	*	295.	12:39	2556.	63.
28	1670.	*	*	264.	12:28	2573.	65.
MEAN	1112.	0.	0.			2348.	
STANDARD DEVIATION	394.	*****	*****			133.	

HAWAII

ENVIRONMENTAL SUMMARY REPORT

SITE: A-FRAME INDUSTRIES
KANEEOHE, HAWAII

REPORT PERIOD: 80/ 2
SITE NUMBER: 54

LATITUDE: 21.50 DEG NORTH
LONGITUDE: 158.00 DEG WEST

AZIMUTH: -10 DEG
PYRANOMETER TILT: 21 DEG

TIME ZONE: HONOLULU
ALTITUDE: 50 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	68.	71.	66.	74.	14:32	63.	3:45	69.
2	69.	72.	66.	76.	15:54	62.	4:51	71.
3	69.	72.	67.	77.	15:28	64.	7:22	72.
4	68.	70.	67.	73.	10:13	65.	22:45	70.
5	69.	71.	68.	76.	11:33	66.	0:10	71.
6	70.	73.	68.	77.	16:23	67.	2:29	71.
7	73.	74.	71.	78.	16: 1	68.	0:12	75.
8	74.	77.	72.	79.	13:38	69.	23:51	74.
9	71.	74.	67.	78.	14:37	66.	7: 3	70.
10	*	*	*	*	*:*	*	*:*	*
11	69.	*	69.	70.	21:48	68.	23:45	72.
12	71.	74.	69.	78.	12:33	67.	22: 9	71.
13	69.	71.	67.	74.	11:56	66.	23:17	70.
14	72.	76.	71.	77.	14:52	68.	22:14	73.
15	*	*	*	*	*:*	*	*:*	*
16	*	*	*	*	*:*	*	*:*	*
17	*	*	*	*	*:*	*	*:*	*
18	*	*	*	*	*:*	*	*:*	*
19	*	*	*	*	*:*	*	*:*	*
20	*	*	*	*	*:*	*	*:*	*
21	*	*	*	*	*:*	*	*:*	*
22	*	*	*	*	*:*	*	*:*	*
23	*	*	*	*	*:*	*	*:*	*
24	*	*	*	*	*:*	*	*:*	*
25	*	*	*	*	*:*	*	*:*	*
26	*	*	*	*	*:*	*	*:*	*
27	*	*	*	*	*:*	*	*:*	*
28	*	*	*	*	*:*	*	*:*	*
MEAN	70.	73.	68.					71.
STANDARD DEVIATION	1.9	2.2	1.9					1.7

ENVIRONMENTAL SUMMARY REPORT

SITE: A-FRAME INDUSTRIES
KANEEOHE, HAWAII

REPORT PERIOD: 80/ 2
SITE NUMBER: 54

LATITUDE: 21.50 DEG NORTH
LONGITUDE: 158.00 DEG WEST

AZIMUTH: -10 DEG
PYRANOMETER TILT: 21 DEG

TIME ZONE: HONOLULU
ALTITUDE: 50 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	722.	N.A.	N.A.	182.	15: 9	3165.	23.
2	1029.	N.A.	N.A.	334.	12:15	3168.	32.
3	1295.	N.A.	N.A.	316.	12:15	3175.	41.
4	736.	N.A.	N.A.	256.	10:56	3178.	23.
5	822.	N.A.	N.A.	319.	11:33	3187.	26.
6	*	N.A.	N.A.	*	*:*	3190.	*
7	1068.	N.A.	N.A.	366.	12:28	3200.	33.
8	*	N.A.	N.A.	*	*:*	3202.	*
9	2140.	N.A.	N.A.	295.	12:18	3205.	67.
10	*	N.A.	N.A.	*	*:*	3212.	*
11	*	N.A.	N.A.	*	*:*	3221.	*
12	749.	N.A.	N.A.	173.	11: 2	3224.	23.
13	988.	N.A.	N.A.	336.	11:56	3233.	31.
14	*	N.A.	N.A.	*	*:*	3236.	*
15	*	N.A.	N.A.	*	*:*	3239.	*
16	*	N.A.	N.A.	*	*:*	3248.	*
17	*	N.A.	N.A.	*	*:*	3251.	*
18	*	N.A.	N.A.	*	*:*	3259.	*
19	*	N.A.	N.A.	*	*:*	3262.	*
20	*	N.A.	N.A.	*	*:*	3264.	*
21	*	N.A.	N.A.	*	*:*	3273.	*
22	*	N.A.	N.A.	*	*:*	3275.	*
23	*	N.A.	N.A.	*	*:*	3283.	*
24	*	N.A.	N.A.	*	*:*	3285.	*
25	*	N.A.	N.A.	*	*:*	3287.	*
26	*	N.A.	N.A.	*	*:*	3295.	*
27	*	N.A.	N.A.	*	*:*	3298.	*
28	*	N.A.	N.A.	*	*:*	3300.	*
MEAN	1061.	N.A.	N.A.			3236.	
STANDARD DEVIATION	447.	N.A.	N.A.			43.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HEI WAI WONG
HONOLULU, HAWAII

REPORT PERIOD: 80/ 2
SITE NUMBER: 59

LATITUDE: 21.00 DEG NORTH AZIMUTH: 0 DEG
LONGITUDE: 157.00 DEG WEST PYRANOMETER TILT: 24 DEG
TIME ZONE: HONOLULU
ALTITUDE: 7 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	*	*	*	*	*:*	*	*:*	*
2	*	*	*	*	*:*	*	*:*	*
3	*	*	*	*	*:*	*	*:*	*
4	*	*	*	*	*:*	*	*:*	*
5	*	*	*	*	*:*	*	*:*	*
6	76.	76.	0.	81.	15:53	71.	9:47	71.
7	76.	78.	74.	81.	13:49	72.	4:17	74.
8	76.	80.	73.	84.	13:46	69.	5: 8	74.
9	76.	81.	72.	85.	13: 5	67.	6:27	78.
10	75.	78.	72.	84.	11:55	70.	23:45	74.
11	73.	76.	71.	81.	15:37	69.	4: 1	73.
12	75.	78.	72.	83.	12: 4	69.	23:54	74.
13	72.	74.	69.	79.	10:45	67.	23:39	72.
14	73.	76.	70.	81.	14:19	65.	6:30	73.
15	73.	75.	71.	81.	12:16	65.	6: 8	72.
16	72.	75.	69.	78.	11:33	66.	23:55	73.
17	69.	73.	66.	79.	14:19	62.	3:33	72.
18	69.	73.	65.	78.	12:50	60.	6:37	71.
19	69.	75.	66.	83.	13:11	60.	5:11	74.
20	72.	75.	70.	85.	16: 6	65.	4: 2	72.
21	75.	79.	71.	84.	15:18	67.	2:19	75.
22	74.	77.	72.	82.	10:11	70.	7:10	74.
23	*	*	*	*	*:*	*	*:*	*
24	*	*	*	*	*:*	*	*:*	*
25	68.	*	68.	68.	23:19	67.	23:35	71.
26	67.	74.	67.	76.	14:47	61.	5:48	73.
27	68.	*	68.	68.	2:17	67.	1:23	70.
28	69.	72.	65.	75.	11:40	64.	4:18	71.
MEAN	72.	76.	69.					73.
STANDARD DEVIATION	3.1	2.5	2.9					1.7

ENVIRONMENTAL SUMMARY REPORT

SITE: HEI WAI WONG
HONOLULU, HAWAII

REPORT PERIOD: 80/ 2
SITE NUMBER: 59

LATITUDE: 21.00 DEG NORTH
LONGITUDE: 157.00 DEG WEST

AZIMUTH: 0 DEG
PYRANOMETER TILT: 24 DEG

TIME ZONE: HONOLULU
ALTITUDE: 7 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*: *	3259.	*
2	*	N.A.	N.A.	*	*: *	3261.	*
3	*	N.A.	N.A.	*	*: *	3269.	*
4	*	N.A.	N.A.	*	*: *	3274.	*
5	*	N.A.	N.A.	*	*: *	3276.	*
6	*	N.A.	N.A.	*	*: *	3283.	*
7	2236.	N.A.	N.A.	341.	13:38	3285.	68.
8	2165.	N.A.	N.A.	325.	13: 8	3287.	66.
9	2247.	N.A.	N.A.	325.	12:49	3294.	68.
10	1672.	N.A.	N.A.	353.	12:59	3299.	51.
11	2027.	N.A.	N.A.	332.	12:57	3301.	61.
12	1042.	N.A.	N.A.	328.	11:59	3308.	31.
13	1073.	N.A.	N.A.	307.	12: 5	3310.	32.
14	1905.	N.A.	N.A.	359.	13:19	3311.	58.
15	1328.	N.A.	N.A.	335.	12:11	3318.	40.
16	2354.	N.A.	N.A.	347.	12:53	3319.	71.
17	1128.	N.A.	N.A.	365.	13:52	3326.	34.
18	1218.	N.A.	N.A.	365.	12:50	3327.	37.
19	2129.	N.A.	N.A.	328.	12:50	3331.	64.
20	*	N.A.	N.A.	*	*: *	3332.	*
21	2117.	N.A.	N.A.	328.	12:59	3338.	63.
22	*	N.A.	N.A.	*	*: *	3339.	*
23	*	N.A.	N.A.	*	*: *	3344.	*
24	*	N.A.	N.A.	*	*: *	3345.	*
25	*	N.A.	N.A.	*	*: *	3345.	*
26	*	N.A.	N.A.	*	*: *	3350.	*
27	*	N.A.	N.A.	*	*: *	3351.	*
28	*	N.A.	N.A.	*	*: *	3355.	*
MEAN	1760.	N.A.	N.A.			3312.	
STANDARD DEVIATION	497.	N.A.	N.A.			30.	