CLIMATIC DATA FOR WILLIAMS LAKE, HUBBARD COUNTY, MINNESOTA, 1982

By
D.O. Rosenberry, A.M. Sturrock, J. L. Scarborough and T.C. Winter

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TABLES

METRIC CONVERSION FACTORS

Multiply	*By*	*To obtain*
meter	3.281	feet
kilometer	0.621	mile
centimeter	0.394	inch
millibar	0.0145	pound per square inch
millibar	1.0197	grams per square centimeter
mile per hour	1.609	kilometer per hour
calories per square centimeter per minute	1.433×10^{-3}	watts per square meter
calories per square centimeter per day	278.96	watts per square meter
calories per square centimeter per day	25.913	watts per square foot

To convert degrees Celsius (°C) to degrees Fahrenheit (°F) use the following formula:

$$(°C \times 9/5) + 32 = °F.$$

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ABSTRACT

Research on the hydrology of Williams Lake, north-central Minnesota includes study of evaporation. Presented here are those climatic data needed for energy-budget and mass-transfer studies, including: water-surface temperature, dry-bulb and wet-bulb air temperatures, wind speed, precipitation, and solar and atmospheric radiation. Some calculated values necessary for these studies are also presented, such as vapor pressure and Bowen-ratio values. Data are collected at raft and land stations.

INTRODUCTION

Climatic data are being collected at Williams Lake, Hubbard County, Minnesota, as part of a continuing study by the U.S. Geological Survey of the hydrology of the lake. Williams Lake is one of several lakes in different parts of the United States that have been selected for intensive study of hydrological and related chemical and biological processes. The rationale for selection of Williams Lake is given by Siegel and Winter (1980). Climatic data collected during 1983 through 1986 are presented in Rosenberry and others (1988) and in Sturrock and others (1984, 1986a, 1986b).

DATA COLLECTION AND PRESENTATION

Data presented here are being collected principally for studies of evaporation. Therefore, the period of record includes only the time when the lake is ice-free. The period of record for 1982 is from June 13 (Julian day 164) to October 24 (Julian day 297). The interval from day 164 to day 297 is the part of the year for which evaporation will be determined by the energy-budget method. Within each table, the data are grouped into energy-budget periods, which are defined by the dates thermal surveys were made of the lake. For example, the first energy-budget period is from Julian day 164 through Julian day 176.

Climatic instruments are located on a raft near the middle of the lake, and at a land station located near the northwest shore of the lake. Instruments on the raft include anemometers at 1, 2, and 4 meters above the water surface, a thermistor psychrometer with wet- and dry-bulb temperature sensors fixed at 2 meters above the water surface, and a water-temperature sensor located beneath the raft at a depth of about 1 centimeter. Data from the above sensors are recorded by a digtital data logger located on the raft. The data logger scans the sensors every minute and calculates hourly

and daily averages. In addition, for selected sensors, the daily output includes maximum and minimum values and the time they occur.

The land station consists of long- and short-wave radiometers; an anemometer and thermistor psychrometer, both at 2 meters above the land surface; and a tipping-bucket rain gage. Data from these sensors are recorded by a data logger, identical to that on the raft, which records hourly totals and averages, and daily totals, averages, and selected maximum and minimum values and their associated times of occurence. Additional backup instruments include an analog hygrothermograph and a manually read rain gage.

Calibration checks are made every few days at both stations using independent laboratory thermometers and wind-up and motorized psychrometers.

Data presented here are daily summaries. For periods that the primary instruments were not operating properly, daily values were obtained by regression using data from backup instruments, provided a satisfactory statistical relation could be established. Data used to establish regressions were selected to bracket the period of missing or inadequate data. Only table 1, which is considered to be the primary source of data for evaporation studies, includes values obtained by regression.

Although only daily values are reported here, hourly values also were recorded. Hourly values are voluminous and expensive to reproduce, but they are available for all or part of the period of record on request.

ACKNOWLEDGMENT

We are especially indebted to Kenneth Chase for allowing us to place climatic instruments on his property.

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Table 1. --*Summary of 1982 energy budget data*

[C, degrees Celsius; mb, millibars; mi/h, miles per hour; (cal/cm²)/d, calories per square centimeter per day; blank, no data. Footnote refrence numbers 8-10 apply to all pages of table 1]

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C) [1]	WET-BULB AIR TEMPERATURE (C) [1]	WATER VAPOR PRESSURE (mb) [2]	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C) [1]	WET-BULB AIR TEMPERATURE (C) [1]	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
164	17.510	17.690	13.550	20.005	12.844	18.060	13.520	12.556	-0.015
165	18.620	16.940	14.920	21.451	15.652	17.230	14.090	14.043	.170
166	18.580	13.520	10.980	21.397	11.468	13.700	9.874	9.710	.300
167	18.600	14.900	12.760	21.424	13.356	15.020	11.600	11.449	.270
168	18.630	12.730	11.280	21.464	12.433	12.840	9.890	10.286	.384
169	18.530	11.210	10.380	21.330	12.056	10.880	9.030	10.310	.464
170	18.200	12.310	11.710	20.893	13.366	11.750	10.280	11.560	.460
171	18.040	13.060	11.950	20.684	13.257	12.870	10.780	11.585	.394
172	18.210	13.220	11.360	20.906	12.240	13.000	10.040	10.403	.338
173	19.170	14.750	12.150	22.200	12.482	14.890	11.010	10.631	.267
174	19.670	18.780	15.830	22.902	16.069	18.760	14.860	14.370	.077
175	19.680	16.050	15.550	22.916	17.336	15.310	13.460	14.233	.382
176	19.890	14.150	12.120	23.216	12.821	13.780	10.350	10.357	.325

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h) [3]	WIND SPEED AT 2 METERS (mi/h) [3]	WIND SPEED AT 4 METERS (mi/h) [3]	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h) [3]	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm²)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm²)/d]
164	4.476	5.234	6.115	3.700	0.000	653.2	761.3
165	2.722	3.162	3.502	1.942	.120	440.3	783.7
166	4.129	4.696	5.142	3.480	.000	717.0	698.2
167	3.455	4.055	4.627	2.175	.000	434.5	757.6
168	3.303	3.713	4.001	3.522	.000	560.6	731.3
169	1.798	2.053	2.190	1.520	.090	341.3	719.8
170	2.824	3.306	3.834	1.768	.150	239.2	733.6
171	4.791	5.403	6.362	3.682	.060	480.2	739.4
172	3.751	4.166	4.768	3.023	.020	612.4	723.5
173	2.103	2.216	2.491	1.962	.000	619.0	728.3
174	5.137	5.898	6.919	2.497	.350	529.6	802.9
175	5.626	6.456	7.572	3.927	.440	294.7	779.6
176	2.391	2.473	2.744	2.228	.000	724.8	705.4

[4]

Table 1. --*Summary of 1982 enregy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
177	20.320	16.000	13.540	23.843	13.919	16.160	12.150	11.572	0.256
178	21.010	18.960	16.240	24.878	16.694	19.200	14.850	14.068	.147
179	20.670	13.550	13.090	24.363	14.762	12.310	11.090	12.414	.436
180	20.350	14.650	12.580	23.887	13.229	14.540	11.110	11.008	.314
181	20.860	14.920	11.880	24.650	11.949	14.810	10.250	9.547	.275
182	21.090	17.030	13.710	25.000	13.536	17.020	12.440	11.477	.208
183	21.730	20.440	18.930	26.000	20.889	20.600	17.660	18.287	.148
184	22.510	22.690	19.180	27.265	19.933	22.840	18.190	17.861	-.014
185	23.530	23.100	20.390	29.001	22.182	22.890	19.020	19.479	.037
186	23.880	25.020	22.250	29.618	25.031	24.950	20.680	21.598	-.146
187	24.340	20.320	19.050	30.447	21.210	19.800	17.410	18.328	.256
188	23.270	5 15.440	14.250	28.950	6 13.713	15.320	12.300	12.351	.310

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
177	3.043	3.485	4.107	1.802	0.000	616.1	758.1
178	2.903	3.115	3.696	2.374	.000	618.4	797.9
179	2.763	2.909	3.194	3.365	.360	171.3	749.0
180	2.674	2.779	2.984	2.635	.010	677.1	726.7
181	2.159	2.113	2.337	1.972	.000	730.5	704.5
182	3.666	3.930	4.746	2.379	.000	694.6	748.2
183	5.055	5.596	6.707	2.207	.000	475.0	832.6
184	4.513	4.982	6.051	3.606	.000	671.5	891.4
185	4.546	5.027	5.962	3.334	.000	576.7	863.7
186	6.927	7.929	9.210	4.423	.630	486.4	891.4
187	2.843	2.967	3.661	1.736	.350	387.3	832.1
188	6.544	7.186	8.330	4.500	.010	491.1	763.8

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Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
189	23.070	19.090 [5]		28.207	18.740 [6]	19.080	16.530	17.147	0.247
190	22.970	17.560 [5]		28.037	20.130 [6]	17.500	16.680	18.449	.401
191	22.300	15.730	15.640	26.920	17.703	14.600	13.760	15.189	.419
192	22.210	18.810	16.600	26.773	17.452	18.650	15.070	14.807	.214
193	23.290	20.480	18.230	28.584	19.472	20.470	16.680	16.524	.181
194	23.170	18.700	17.710	28.378	19.616	18.240	16.340	17.343	.300
195	23.580	21.060	19.030	29.088	20.688	21.030	18.380	19.410	.176
196	23.400 [7]	19.360 [5]		28.770	22.740 [6]	19.360	18.620	20.970	.394
197	23.180	21.250 [5]	21.480	28.395	25.395 [6]	21.300	20.460	23.503	.378
198	23.250	19.580 [5]	16.540	28.515	15.935 [6]	19.580	15.220	14.468	.171
199	23.340	16.950 [5]	14.230	28.671	14.524 [6]	16.880	13.400	13.120	.265
200	22.810 [7]	14.100 [5]		27.770	15.970 [6]	13.950	13.090	14.504	.434
201	23.800	22.400	19.900	29.476	21.605	22.540	19.350	20.377	.105
202	24.410	21.680	19.140	30.575	20.508	21.440	18.010	18.419	.159
203	24.530	19.900	16.990	30.795	17.470	19.590	16.160	16.140	.204

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
189	3.303	3.492	4.173	2.112	0.350	432.1	813.4
190	3.219	3.376	3.900	3.053	.120	232.6	801.5
191	2.401	2.373	2.699	2.514	.000	135.8	777.5
192	3.250	3.358	4.098	2.636	.000	612.0	797.6
193	2.234	2.152	2.657	2.229	.010	619.7	819.6
194	1.919	1.764	2.174	1.549	.000	255.9	811.7
195	3.173	3.406	4.105	2.271	.230	562.0	837.6
196				3.079	.430	187.4	839.7 [4]
197	4.802	5.456	6.396	3.065	.000	192.5	851.9
198	6.784	7.741	9.220	5.561	.000	686.1	784.4
199	3.441	3.623	4.204	2.852	.000	676.4	750.3
200				2.584	1.150	168.8	878.2
201	2.834	2.887	3.669	1.901	.000	589.8	850.0
202	2.585	2.455	2.833	2.461	.000	563.1	852.5
203	2.331	2.310	2.703	2.480	.000	660.7	796.2

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
204	24.580	22.410	19.670	30.887	21.120	23.090	19.740	20.823	0.131
205	24.530	22.800	21.170	30.795	24.062	22.990	20.770	23.068	.151
206	24.300	19.240	17.780	30.374	19.401	18.110	16.510	17.739	.271
207	24.510	19.670	17.270	30.758	18.147	19.770	17.120	17.799	.226
208	24.650	18.550	17.070	31.017	18.496	18.460	16.560	17.605	.286
209	25.160	20.090	17.270	31.975	17.875	20.330	17.030	17.267	.211
210	24.310	17.770	16.310	30.392	17.592	17.910	16.140	17.192	.300
211	23.980	18.940	17.020	29.797	18.149	19.370	17.180	18.171	.254
212	24.110	20.860	18.870	30.030	20.496	21.200	18.940	20.416	.200
213	24.210	19.530	18.670	30.211	20.959	19.640	18.170	19.899	.297
214	23.640	18.850	18.110	29.194	20.295	19.040	17.910	19.782	.316
215	24.220	23.530	21.020	30.229	23.258	23.950	20.580	22.034	.058
216	25.340	23.490	21.590	32.319	24.540	23.910	20.980	22.924	.140
217	26.110	23.490	22.070	33.828	25.619	23.660	21.190	23.545	.188

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
204	5.729	6.536	7.687	2.885	0.000	557.6	852.8
205	4.471	4.951	5.900	2.768	.290	269.0	4 865.1
206	2.222	2.166	2.666	1.629	.030	335.4	816.5
207	1.925	1.786	2.216	2.028	.010	563.6	798.0
208	1.522	1.520	1.962	1.677	.120	459.4	809.6
209	1.647	1.337	1.825	1.420	.010	570.8	800.5
210	5.775	6.500	7.616	4.067	.300	439.5	805.1
211	3.407	3.587	4.290	2.664	.010	546.0	772.7
212	2.808	3.002	3.484	1.853	.000	359.1	803.7
213	3.489	3.723	4.292	3.230	.000	453.5	847.6
214	6.180	6.979	8.190	4.247	.000	350.2	863.1
215	3.237	3.445	4.197	2.631	.110	585.3	834.1
216	2.780	2.774	3.357	2.042	.000	582.7	861.5
217	1.884	1.726	2.150	1.959	.000	504.0	871.3

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
218	26.160	23.440	22.020	33.928	25.538	23.540	21.250	23.755	0.191
219	25.780	22.190	19.480	33.174	20.871	22.050	18.560	19.103	.172
220	24.360	16.390	14.580	30.484	15.420	16.100	13.410	13.640	.311
221	22.960	12.930	11.370	28.020	12.442	12.920	10.440	11.044	.378
222	22.600	13.550	11.360	27.415	12.027	13.200	10.180	10.480	.346
223	22.510	14.820	12.030	27.265	12.248	14.320	11.090	11.119	.301
224	22.150	17.240	13.970	26.675	13.835	17.560	13.530	12.895	.225
225	22.400	19.560	18.540	27.084	20.681	20.010	17.860	19.056	.261
226	22.390	20.000	19.090	27.067	21.499	20.430	18.510	20.056	.252
227	23.140	21.990	20.500	28.326	23.139	22.560	19.680	21.043	.130
228	23.330	20.460	19.550	28.653	22.140	20.210	18.410	20.001	.259
229	23.820	21.430	20.090	29.512	22.634	21.790	19.230	20.619	.204

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
218	2.605	2.619	3.268	1.789	0.000	402.1	879.7
219	4.535	5.103	6.036	3.447	.030	398.2	819.4
220	7.770	8.750	10.370	5.895	.050	312.4	756.5
221	5.487	6.091	7.081	4.135	.000	448.9	728.3
222	2.582	2.413	2.994	2.225	.000	595.5	682.6
223	3.530	3.701	4.454	2.116	.000	614.8	698.8
224	6.342	6.905	8.030	3.057	.050	502.4	754.2
225	3.307	3.595	4.309	1.788	.000	338.2	838.3
226	4.171	4.712	5.539	2.087	.000	376.6	847.5
227	2.970	3.032	3.830	1.867	.000	453.9	845.6
228	1.650	1.429	1.909	1.727	.080	333.9	827.4
229	2.269	2.173	2.829	1.992	.000	511.8	830.4

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
230	24.030	23.250	21.790	29.886	25.144	23.350	20.680	22.639	0.097
231	24.010	21.160	18.830	29.851	20.220	21.120	17.760	18.142	.174
232	23.660	18.310	15.280	29.229	15.395	18.110	14.020	13.356	.227
233	23.320	19.090	17.030	28.636	18.071	18.560	15.660	15.907	.235
234	23.030	18.550	16.610	28.139	17.639	18.780	15.750	15.925	.251
235	23.010	16.460	14.850	28.104	15.841	16.490	13.760	13.968	.314
236	22.780	15.800	13.900	27.716	14.648	15.150	12.400	12.619	.314
237	22.310	15.260	13.210	26.936	13.854	15.230	12.020	11.968	.317
238	21.740	11.480	9.920	26.016	11.205	11.290	8.580	9.413	.407
239	21.090	10.230	7.732	25.000	8.926	9.752	6.308	7.342	.397

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
230	4.332	4.946	5.840	2.488	0.000	331.7	888.0
231	2.955	3.029	3.591	2.457	.100	455.1	813.2
232	3.339	3.561	4.211	2.690	.000	566.6	749.7
233	3.721	4.054	4.754	2.099	.700	252.9	831.0
234	3.779	4.147	4.711	2.841	.000	509.8	786.9
235	2.883	2.903	3.316	2.347	.000	499.4	739.7
236	3.541	3.627	4.332	2.938	.020	459.5	734.5
237	4.815	5.314	6.181	3.411	.000	447.4	757.0
238	2.911	2.849	3.429	2.415	.000	311.3	688.7
239	3.216	3.132	3.801	2.385	.000	552.9	657.3

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
240	20.750	12.950	10.320	24.483	10.847	13.450	9.700	9.618	0.336
241	20.550	16.460	15.580	24.183	17.124	16.120	14.220	14.980	.341
242	20.200	12.140	11.430	23.666	13.043	11.500	9.930	11.207	.446
243	19.900	16.050	15.970	23.231	18.089	16.200	15.060	16.374	.440
244	20.140	18.750	16.480	23.579	17.269	18.820	15.590	15.614	.129
245	19.650	13.200	11.640	22.873	12.684	12.860	10.500	11.172	.372
246	19.510	13.760	11.420	22.675	11.984	13.830	10.590	10.682	.316
247	19.760	18.780	16.150	23.030	16.647	19.180	15.190	14.674	.090
248	19.750	14.760	12.090	23.016	12.381	15.100	11.130	10.678	.276
249	19.410	11.670	10.190	22.535	11.479	12.190	9.740	10.486	.412
250	18.920	13.790	13.780	21.857	15.746	13.750	12.980	14.454	.493
251	18.950	19.090	18.370	21.898	20.650	19.450	17.410	18.555	-.066
252	19.400	21.100	20.100	22.521	22.870	21.450	19.170	20.718	2.863
253	20.340	21.560	20.190	23.872	22.760	22.250	19.590	21.058	-.645
254	20.450	18.720	18.050	24.035	20.262	18.300	16.610	17.801	.270
255	19.380	12.300	12.300	22.493	14.299	11.300	10.860	12.716	.508

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
240	5.178	5.787	6.911	3.186	0.000	471.9	735.6
241	3.278	3.443	4.232	2.413	.000	265.0	788.6
242	2.670	2.830	3.152	2.763	.100	249.7	738.8
243	3.082	3.665	3.966	2.181	.090	193.3	830.9
244	4.451	5.125	5.797	3.387	.000	418.0	791.0
245	5.067	5.783	6.462	3.681	.000	354.0	704.8
246	2.617	3.112	3.105	2.169	.000	502.7	687.1
247	4.377	5.278	5.551	2.700	.000	499.2	747.9
248	3.863	4.437	4.429	4.520	.000	484.0	696.1
249	4.062	4.538	4.926	3.571	.000	422.5	661.1
250	5.548	6.207	7.366	2.600	.000	137.7	796.7
251	7.190	8.050	9.440	4.070	.000	289.1	844.2
252	6.276	7.107	8.450	3.166	.000	284.0	852.0
253	3.692	4.109	4.927	2.143	.000	403.3	827.7
254	5.031	5.510	6.548	3.633	.120	224.4	835.6
255	4.413	4.840	5.330	4.012	1.160	45.6	790.5

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
256	18.510	11.360	11.040	21.303	12.950	10.880	9.820	11.445	0.503
257	17.840	10.130	9.940	20.425	12.102	9.710	8.860	10.821	.545
258	17.220	8.490	8.400	19.641	10.961				.591
259	16.720	9.340	9.060	19.028	11.342				.564
260	16.360	10.660	10.060	18.598	11.937				.503
261	16.270	11.690	9.190	18.491	10.017				.318
262	15.880	8.750	8.080	18.036	10.351				.545
263	15.370	7.310	5.949	17.456	8.443				.526
264	15.800	9.480	7.928	17.944	9.674				.449
265	15.340	13.100	10.370	17.423	10.825				.200
266	15.150	12.600	12.290	17.211	14.089				.480
267	14.830	8.900	8.140	16.860	10.338				.534
268	14.710	8.007	6.446	16.730	8.640				.487

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
256	3.879	4.221	4.621	3.111	0.000	118.7	720.2
257	3.903	4.252	4.598	4.309	.030	110.1	753.9
258	2.276	2.561	2.509	2.039	.440	137.2	718.0
259	4.143	4.596	5.225	1.888	.090	137.2	741.8
260	4.283	4.685	5.473	3.200	.020	258.3	686.8
261	4.165	4.639	5.225	2.816	.010	412.7	672.8
262	5.393	6.039	6.916	4.390	.000	174.5	677.2
263	3.092	3.464	3.605	2.393	.010	308.2	643.6
264	1.578	1.847	1.690	1.504	.000	427.7	641.8
265	6.017	6.726	7.875	3.023	.090	423.0	682.0
266	5.235	5.892	6.798	4.039	.070	129.9	751.0
267	5.179	5.813	6.316	4.493	.010	166.3	727.5
268	3.637	4.188	4.479	2.229	.000	389.1	614.5

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
269	14.660	12.750	11.030	16.676	12.039				0.242
270	14.520	11.850	11.260	16.526	12.969				.441
271	14.320	14.570	14.130	16.314	15.830				-.304
272	14.590	13.540	12.300	16.601	13.499				.199
273	14.390	8.018	6.141	16.388	8.237	7.827	5.609	7.678	.460
274	14.000	6.776	6.290	15.979	9.225	6.651	5.911	8.816	.629
275	13.630	9.790	9.520	15.599	11.711	9.490	9.040	11.217	.581
276	13.890	11.040	9.510	15.865	10.893	11.140	8.880	9.931	.337
277	13.670	12.390	10.610	15.640	11.639	12.480	9.700	10.242	.188
278	13.550	8.670	7.422	15.518	9.508	8.050	6.165	8.247	.477
279	13.310	10.000	10.000	15.277	12.274	9.140	9.070	11.485	.648
280	12.890	6.360	6.337	14.863	9.553	5.746	5.313	8.635	.723
281	12.720	8.338	8.150	14.699	10.712	8.110	7.354	9.775	.646
282	12.410	8.810	8.810	14.403	11.329	8.260	7.911	10.434	.688

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
269	5.208	5.902	6.617	2.534	0.000	334.2	688.2
270	6.041	6.782	7.803	5.387	.030	157.2	747.7
271	8.740	9.890	11.520		.230	82.5	814.0
272	2.856	3.392	3.881	2.355	.010	266.9	699.4
273	3.747	4.217	4.825	3.038	.000	365.7	624.9
274	4.295	4.870	5.405	4.848	.180	123.6	700.7
275	4.333	5.040	5.773	3.839	.910	82.2	755.1
276	3.319	3.859	4.388	2.546	.000	361.0	655.1
277	5.344	6.107	7.131	4.286	.000	266.2	665.6
278	3.410	3.842	4.119	4.184	.410	295.4	672.6
279	4.916	5.585	6.296	5.399	1.030	32.8	770.1
280	4.612	5.305	6.150	3.687	.020	103.3	723.3
281	4.509	5.118	5.659		.000	142.8	740.2
282	5.636	6.312	6.939		1.100	25.9	752.4

Table 1. --*Summary of 1982 energy budget data* --Continued

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: LAKE-SURFACE WATER TEMPERATURE (C)	DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	WATER VAPOR PRESSURE (mb)	ATMOSPHERIC VAPOR PRESSURE (mb)	DAILY AVERAGES AT LAND STATION: DRY-BULB AIR TEMPERATURE (C)	WET-BULB AIR TEMPERATURE (C)	ATMOSPHERIC VAPOR PRESSURE (mb)	BOWEN RATIO
283	12.290	9.460	9.160	14.289	11.407	9.080	8.310	10.457	0.577
284	12.120	8.700	8.690	14.130	11.231	8.270	8.190	10.811	.693
285	11.970	7.639	7.624	13.991	10.442	7.392	7.249	10.095	.717
286	11.750	6.513	6.462	13.790	9.618	6.274	5.938	9.092	.738
287	11.680	11.110	9.070	13.726	10.219	11.240	8.770	9.712	.096
288	11.560	6.542	4.963	13.617	7.688	6.224	4.209	6.963	.497
289	11.130	3.063	2.571	13.235	7.035	2.581	1.662	6.301	.765
290	10.970	9.350	8.010	13.095	9.870	9.720	7.950	9.551	.295
291	10.890	9.190	8.920	13.025	11.240	9.200	8.530	10.686	.560
292	10.520	2.493	2.326	12.708	7.115	2.213	1.622	6.490	.844
293	9.680	.608	.588	12.013	6.361	.110	-.381	5.629	.944
294	9.290	1.476	.649	11.702	5.876	.819	-.605	4.940	.788
295	9.050	3.856	2.891	11.514	6.902	3.753	2.383	6.377	.662
296	8.910	6.698	5.240	11.406	7.934	6.422	4.640	7.364	.375
297	8.880	8.840	6.785	11.383	8.550	8.960	6.271	7.802	.008

JULIAN DAY	DAILY AVERAGES AT RAFT STATION: WIND SPEED AT 1 METER (mi/h)	WIND SPEED AT 2 METERS (mi/h)	WIND SPEED AT 4 METERS (mi/h)	LAND STATION DAILY AVERAGE WIND SPEED AT 2 METERS (mi/h)	DAILY TOTALS AT LAND STATION: PRECIPITATION (inches)	SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	LONG-WAVE ATMOS. RADIATION [(cal/cm^2)/d]
283	1.971	2.403	2.413	1.709	0.130	139.2	726.1
284	3.296	3.765	4.327	2.739	.180	89.8	746.4
285	4.283	4.952	5.694	3.398	.080	91.5	734.1
286	4.147	4.775	5.594	3.441	.000	103.8	691.3
287	5.026	5.769	6.801	4.208	.040	308.0	673.8
288	6.524	7.471	8.600	5.485	.000	292.0	576.3
289	2.781	3.231	3.310	3.000	.150	95.6	644.4
290	5.486	6.299	7.329	4.957	.020	283.4	650.8
291	4.128	4.765	5.239	3.639	.020	80.1	725.3
292	6.060	6.853	7.636	5.370	.000	52.7	664.3
293	7.089	8.070	9.290	5.771	.000	132.1	626.5
294	2.596	3.068	3.203	2.125	.000	299.7	494.9
295	3.414	3.922	4.423	2.772	.000	284.5	529.0
296	3.971	4.619	5.242	3.192	.000	247.1	608.7
297	4.377	5.086	5.667	2.669	.000	221.4	610.9

Footnotes to table 1:

[1]Measured at 2 meters above water or land surface.

[2]Water-vapor pressure is calculated using surface water-temperature data and assuming the air is completely saturated at the air-water interface.

[3]Elevation above water or land surface.

[4]Calculated by regression equation 1 (see below), which was determined by using Brunt's equation (Koberg, 1964) and the atmospheric long-wave radiation sensor connected to the digital-data logger.

[5]Calculated by regression equation 2 (see below), which was determined by using air-temperature data from the dry-bulb sensors connected to digital-data loggers at the raft and land stations.

[6]Calculated by regression equation 3 (see below), which was determined by using calculated vapor pressures at the raft and land stations.

[7]Three hourly values were interpolated from a 21 hour trend.

Regression	Data points	r^2 value
1. $Y_1 = 79.070 + 1.015X_1$	90	0.862
2. $Y_2 = 0.545 + 0.972X_2$	111	0.996
3. $Y_3 = 0.787 + 1.047X_3$	111	0.971

Y_1 = atmospheric long-wave radiation measured by the sensor at the land station.
X_1 = atmospheric long-wave radiation derived from Brunt's equation.
Y_2 = dry-bulb air temperature measured by the sensor at the raft station.
X_2 = dry-bulb air temperature measured by the sensor at the land station.
Y_3 = calculated vapor pressure using data gathered at the raft station.
X_3 = calculated vapor pressure using data gathered at the land station.

Table 2. --*Summary of 1982 temperature data at the raft station*
[C, degrees Celsius; h, hour; blank, no data]

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
164	17.510	17.690					13.550
165	18.620	16.940					14.920
166	18.580	13.520					10.980
167	18.600	14.900					12.760
168	18.630	12.730					11.280
169	18.530	11.210					10.380
170	18.200	12.310					11.710
171	18.040	13.060					11.950
172	18.210	13.220					11.360
173	19.170	14.750					12.150
174	19.670	18.780					15.830
175	19.680	16.050					15.550
176	19.890	14.150					12.120
177	20.320	16.000					13.540
178	21.010	18.960					16.240
179	20.670	13.550					13.090
180	20.350	14.650					12.580
181	20.860	14.920	21.310	1834	6.889	0443	11.880
182	21.090	17.030	22.450	1705	8.290	0332	13.710
183	21.730	20.440	24.560	1351	15.940	0458	18.930
184	22.510	22.690	28.610	1852	16.910	2338	19.180
185	23.530	23.100	28.170	1559	15.680	0455	20.390
186	23.880	25.020	32.040	1417	18.500	2400	22.250
187	24.340	20.320	25.800	1208	16.740	1609	19.050
188	23.270						14.250

Table 2. --*Summary of 1982 temperature data at the raft station* --Continued

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
189	23.070						
190	22.970						
191	22.300	15.730	18.580	1859	13.310	2342	15.640
192	22.210	18.810	24.390	1731	11.110	0457	16.600
193	23.290	20.480	26.240	1456	14.010	0420	18.230
194	23.170	18.700	22.450	1553			17.710
195	23.580	21.060	26.240	1511	14.360	0459	19.030
196							
197	23.180						
198	23.250						
199	23.340						
200							
201	23.800	22.400	29.750	1514	12.340	0449	19.900
202	24.410	21.680	26.240	1335	15.770	2359	19.140
203	24.530	19.900	26.240	1818	13.310	0427	16.990

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
204	24.580	22.410	26.850	1617	16.650	0340	19.670
205	24.530	22.800	26.940	1719	16.120	2400	21.170
206	24.300	19.240	24.920	1621	14.450	0427	17.780
207	24.510	19.670	25.270	1902	15.150	2359	17.270
208	24.650	18.550	24.480	1210	13.130	0459	17.070
209	25.160	20.090	25.880	1353	13.220	0521	17.270
210	24.310	17.770	20.080	1408	15.060	0506	16.310
211	23.980	18.940	23.690	1617	14.540	0510	17.020
212	24.110	20.860	27.470	1437	15.770	0508	18.870
213	24.210	19.530	25.530	1741	11.550	2344	18.670
214	23.640	18.850	26.590	2347	11.190	0305	18.110
215	24.220	23.530	27.640	1500	18.410	2235	21.020
216	25.340	23.490	30.630	1752	16.560	0517	21.590
217	26.110	23.490	28.610	1509	19.290	0524	22.070

Table 2. --*Summary of 1982 temperature data at the raft station* --Continued

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
218	26.160	23.440	27.820	1801	19.020	0119	22.020
219	25.780	22.190	26.940	1709	17.530	2400	19.480
220	24.360	16.390	19.460	1457	12.600	2358	14.580
221	22.960	12.930	16.560	1508	8.640	0600	11.370
222	22.600	13.550	19.640	1811	8.380	0532	11.360
223	22.510	14.820	20.610	1725	6.977	0353	12.030
224	22.150	17.240	21.660	1532	11.280	0455	13.970
225	22.400	19.560	26.150	1621	15.590	0531	18.540
226	22.390	20.000	23.250	1521	16.910	0608	19.090
227	23.140	21.990	27.290	1524	17.260	0318	20.500
228	23.330	20.460	25.440	1612	17.260	0517	19.550
229	23.820	21.430	25.620	1459	16.740	0453	20.090

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
230	24.030	23.250	28.610	1638	19.200	0108	21.790
231	24.010	21.160	24.920	1258	13.570	2359	18.830
232	23.660	18.310	24.300	1833	11.810	0532	15.280
233	23.320	19.090	26.590	1452	12.870	0348	17.030
234	23.030	18.550	22.720	1706	15.590	0434	16.610
235	23.010	16.460	21.750	1716	12.690	2242	14.850
236	22.780	15.800	20.690	1520	9.790	2352	13.900
237	22.310	15.260	22.450	1125	9.170	0345	13.210
238	21.740	11.480	16.470	1604	5.833	2359	9.920
239	21.090	10.230	15.500	1706	4.162	0542	7.732

Table 2. --*Summary of 1982 temperature data at the raft station* --Continued

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
240	20.750	12.950	16.910	1523	8.820	0623	10.320
241	20.550	16.460	22.720	1536	9.960	2356	15.580
242	20.200	12.140	15.240	1457	6.977	0542	11.430
243	19.900	16.050	21.400	1749	11.190	0641	15.970
244	20.140	18.750	22.980	1505	12.780	2356	16.480
245	19.650	13.200	18.410	1748	8.640	2400	11.640
246	19.510	13.760	20.960	1649	6.713	0445	11.420
247	19.760	18.780	25.970	1427	11.020	0020	16.150
248	19.750	14.760	18.230	1643	10.140	2352	12.090
249	19.410	11.670	16.740	1611	6.977	0454	10.190
250	18.920	13.790	17.180	2359	7.505	0255	13.780
251	18.950	19.090	22.370	1622	15.680	0459	18.370
252	19.400	21.100	24.740	1437	17.700	0117	20.100
253	20.340	21.560	26.240	1611	17.440	0657	20.190
254	20.450	18.720	21.930	1244	12.250	2322	18.050
255	19.380	12.300	13.040	1336	9.700	1804	12.300

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
256	18.510	11.360	13.480	1759	9.260	0557	11.040
257	17.840	10.130	11.900	1225	8.470	2358	9.940
258	17.220	8.490	11.990	1729	5.482	2352	8.400
259	16.720	9.340	12.340	1424	3.810	0410	9.060
260	16.360	10.660	13.920	1528	5.130	2400	10.060
261	16.270	11.690	19.020	1617	2.579	0600	9.190
262	15.880	8.750	11.550	0020	4.426	2355	8.080
263	15.370	7.310	12.600	1705	2.403	0306	5.949
264	15.800	9.480	18.060	1606	1.435	0457	7.928
265	15.340	13.100	19.020	1333	6.537	0122	10.370
266	15.150	12.600	15.420	1426	9.520	0621	12.290
267	14.830	8.900	11.280	0038	4.250	2400	8.140
268	14.710	8.007	14.270	1614	.028	0508	6.446

Table 2. --*Summary of 1982 temperature data at the raft station* --Continued

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
269	14.660	12.750	18.850	1559	8.290	0638	11.030
270	14.520	11.850	14.540	1342	9.080	0612	11.260
271	14.520	14.570	18.760	1557	10.750	0130	14.130
272	14.590	13.540	17.620	1629	7.593	2348	12.300
273	14.390	8.018	13.660	1534	2.315	0609	6.141
274	14.000	6.776	8.910	2348	3.195	0508	6.290
275	13.630	9.790	10.750	0825	7.681	1252	9.520
276	13.890	11.040	16.740	1606	5.745	0618	9.510
277	13.670	12.390	17.090	1605	5.306	2400	10.610
278	13.550	8.670	13.830	1613	1.084	0632	7.422
279	13.310	10.000	11.370	1740	4.250	2358	10.000
280	12.890	6.360	8.470	1500	2.227	0359	6.337
281	12.720	8.338	11.280	1506	5.745	0311	8.150
282	12.410	8.810	9.440	2323	7.065	0851	8.810

JULIAN DAY	DAILY AVERAGE LAKE-SURFACE WATER TEMPERATURE (C)	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
283	12.290	9.460	12.340	1609	6.625	2113	9.160
284	12.120	8.700	9.790	1419	6.537	0201	8.690
285	11.970	7.639	8.560	1358	6.009	2359	7.624
286	11.750	6.513	7.856	1316	5.130	2400	6.462
287	11.680	11.110	17.620	1306	4.778	0049	9.070
288	11.560	6.542	9.440	1419	2.579	2400	4.963
289	11.130	3.063	6.185	1433	-.675	0531	2.571
290	10.970	9.350	15.940	1617	3.458	0146	8.010
291	10.890	9.190	13.310	0836	4.426	2400	8.920
292	10.520	2.493	4.690	0016	-.235	2357	2.326
293	9.680	.608	1.699	1224	-.939	0805	.588
294	9.290	1.476	7.065	1552	-3.480	0506	.649
295	9.050	3.856	11.020	1552	-1.640	0637	2.891
296	8.910	6.698	13.310	1539	-.323	0316	5.240
297	8.880	8.840	15.940	1509	4.250	2400	6.785

Table 3. --*Summary of 1982 wind-speed data at the raft station*
[mi/h, miles per hour; h, hour; blank, no data]

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h) 1/	TIME OF MINIMUM WIND SPEED (h)
1	164	4.476				
	165	2.722				
	166	4.129				
	167	3.455				
	168	3.303				
	169	1.798				
	170	2.824				
	171	4.791				
	172	3.751				
	173	2.103				
	174	5.137				
	175	5.626				
	176	2.391				
2	164	5.234	17.150	1237	0.600	2057
	165	3.162	16.330	1555	.600	2035
	166	4.696	19.950	1451	.600	2344
	167	4.055	18.710	1024	.571	2005
	168	3.713	15.310	1230	.571	0022
	169	2.053	14.600	1610	.571	2027
	170	3.306	14.070	1740	.600	2337
	171	5.403	17.660	1715	.600	2353
	172	4.166	19.020	1445	.600	2400
	173	2.216	15.540	1439	.571	0321
	174	5.898	17.940	1008	.571	0315
	175	6.456	19.730	1441	.600	2318
	176	2.473	12.080	0937	.571	1356
4	164	6.115	19.100	1158	0.600	2349
	165	3.502	18.960	0248	.600	2055
	166	5.142	21.250	1451	.571	2116
	167	4.627	20.090	1003	.571	2007
	168	4.001	15.140	1230	.571	0223
	169	2.190	15.230	1610	.571	2028
	170	3.834	15.510	1450	.600	2336
	171	6.362	26.350	1543	.571	2010
	172	4.768	18.710	1445	.571	2317
	173	2.491	11.750	1439	.571	0302
	174	6.919	19.190	1521	.600	0528
	175	7.572	22.950	0159	.600	2330
	176	2.744	11.430	1600	.543	1356

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	177	3.043				
	178	2.903				
	179	2.763				
	180	2.674				
	181	2.159	10.640	1023	0.600	2354
	182	3.666	12.000	1316	.571	0354
	183	5.055	14.290	1018	.600	2105
	184	4.513	20.630	1358	.600	2354
	185	4.546	19.640	2245	.600	1009
	186	6.927	23.180	1419	.600	2249
	187	2.843	20.550	0002	.600	2216
	188	6.544	23.940	1250	.600	2342
2	177	3.485	14.040	1152	0.571	0557
	178	3.115	14.350	1459	.571	2250
	179	2.909	20.800	1115	.571	2214
	180	2.779				
	181	2.113	10.470	1023	.571	2241
	182	3.930	15.340	1323	.600	2125
	183	5.596	19.220	1205	.600	2346
	184	4.982	21.930	1345	.600	2400
	185	5.027	27.000	2300	.571	0158
	186	7.929	28.500	1539	.600	2305
	187	2.967	21.450	0009	.571	0152
	188	7.186	24.450	1250	.571	2217
4	177	4.107	14.800	1522	0.571	2029
	178	3.696	14.800	1410	.571	1922
	179	3.194	18.170	1115	.571	0604
	180	2.984				
	181	2.337	12.590	1242	.571	2241
	182	4.746	16.810	1548	.571	0038
	183	6.707	19.410	1205	.600	2313
	184	6.051	22.870	1155	.600	2351
	185	5.962	28.390	2300	.600	1338
	186	9.210	30.370	1405	.600	2251
	187	3.661	21.370	0005	.571	0152
	188	8.330	25.530	0725	.600	2349

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	189	3.303	13.100	1201	0.600	2348
	190	3.219	10.980	1431	.571	0621
	191	2.401	9.990	1026	.571	1933
	192	3.250	14.040	1039	.571	0510
	193	2.234	14.380	1617	.571	0634
	194	1.919	9.820	1236	.571	2348
	195	3.173	12.820	1029	.600	2020
	196					
	197	4.802				
	198	6.784				
	199	3.441				
	200					
	201	2.834	22.050	2230	.600	2400
	202	2.585	10.390	1730	.571	1047
	203	2.331	11.290	1303	.571	0240
2	189	3.492	15.310	1200	0.571	2119
	190	3.376	11.010	1655	.571	0625
	191	2.373	10.980	1026	.571	2355
	192	3.358	15.030	1314	.571	2345
	193	2.152	14.800	1617	.571	0638
	194	1.764	10.130	1236	.571	2353
	195	3.406	13.440	1636	.600	2319
	196					
	197	5.456				
	198	7.741				
	199	3.623				
	200					
	201	2.887	26.520	2230	.600	2400
	202	2.455	12.080	1730	.571	2355
	203	2.310	9.880	1248	.571	0659
4	189	4.173	18.200	1217	0.571	2119
	190	3.900	13.020	1456	.571	2334
	191	2.699	10.300	1404	.571	2354
	192	4.098	15.230	1317	.600	2400
	193	2.657	15.620	1617	.571	0635
	194	2.174	10.420	1215	.571	2348
	195	4.105	13.700	1702	.571	0510
	196					
	197	6.396				
	198	9.220				
	199	4.204				
	200					
	201	3.669	26.320	2230	.600	2400
	202	2.833	12.680	1730	.571	2355
	203	2.703	11.410	1048	.571	0240

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	204	5.729	18.060	1613	0.883	0142
	205	4.471	17.550	0315	.600	2349
	206	2.222	9.740	1000	.571	1743
	207	1.925	12.420	1339	.515	2235
	208	1.522	8.410	1405	.401	0631
	209	1.647	9.000	1106	.600	2319
	210	5.775	19.270	1410	.600	2231
	211	3.407	12.650	1202	.571	0519
	212	2.808	11.830	1316	.600	2400
	213	3.489	12.310	1834	.571	0156
	214	6.180	19.080	1048	.741	1504
	215	3.237	11.800	1043	.600	2400
	216	2.780	12.740	0947	.600	2400
	217	1.884	7.950	1957	.571	0723
2	204	6.536	16.900	1732	0.600	0142
	205	4.951	19.130	0315	.600	2400
	206	2.166	12.110	0950	.571	2113
	207	1.786	15.060	1339	.571	2317
	208	1.520	10.250	1135	.571	2204
	209	1.337	7.448	1218	.571	0642
	210	6.500	24.450	1358	.600	2357
	211	3.587	12.820	1110	.571	2046
	212	3.002	15.680	1423	.571	2221
	213	3.723	13.730	2137	.571	0720
	214	6.979	20.910	1048	.600	1504
	215	3.445	18.760	0125	.571	2025
	216	2.774	13.330	0848	.571	1746
	217	1.726	9.910	1551	.571	1913
4	204	7.687	20.010	1732	0.628	0138
	205	5.900	20.210	0535	.600	2353
	206	2.666	13.300	0950	.600	2400
	207	2.216	14.120	1339	.571	2314
	208	1.962	12.760	1431	.571	2204
	209	1.825	9.790	1106	.571	1423
	210	7.616	23.520	1358	.600	2233
	211	4.290	13.780	1132	.571	2046
	212	3.484	15.680	1423	.571	2221
	213	4.292	15.510	2341	.288	0810
	214	8.190	20.520	1048	2.071	1504
	215	4.197	21.880	0125	.571	2218
	216	3.357	13.390	0944	.571	2033
	217	2.150	11.410	1053	.571	1913

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	218	2.605	14.630	0701	0.600	2304
	219	4.535	17.150	1710	.600	1156
	220	7.770	21.570	1302	1.449	1850
	221	5.487	18.930	1247	.600	2353
	222	2.582	11.070	1137	.600	2400
	223	3.530	12.960	1146	.600	0742
	224	6.342	25.670	1021	.600	1907
	225	3.307	13.080	0104	.600	1650
	226	4.171	11.660	1323	.600	2100
	227	2.970	13.130	1024	.600	2354
	228	1.650	13.100	1040	.571	0634
	229	2.269	9.090	1449	.571	2237
2	218	2.619	14.430	1109	0.571	2203
	219	5.103	17.520	1710	.571	0242
	220	8.750	22.390	1305	.684	1851
	221	6.091	21.480	1159	.571	2107
	222	2.413	13.190	1055	.571	2249
	223	3.701	15.170	1357	.571	0655
	224	6.905	21.990	1110	.600	1934
	225	3.595	11.580	0104	.600	1650
	226	4.712	16.410	1314	.600	2329
	227	3.032	12.820	1024	.571	2027
	228	1.429	13.190	1036	.571	1702
	229	2.173	9.230	1414	.571	2237
4	218	3.268	15.540	1112	0.571	2203
	219	6.036	24.110	1710	.571	0238
	220	10.370	26.570	1701	1.816	1852
	221	7.081	20.660	1249	.571	2106
	222	2.994	14.120	1252	.571	2249
	223	4.454	16.190	1554	.571	0654
	224	8.030	26.090	1021	.600	1907
	225	4.309	12.820	0104	.458	1700
	226	5.539	15.910	1314	.600	2105
	227	3.830	17.150	1024	.571	2027
	228	1.909	14.150	1034	.571	1422
	229	2.829	9.620	1410	.543	1150

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	230	4.332	19.700	1925	0.600	2025
	231	2.955	10.980	0807	.600	2344
	232	3.339	15.620	1205	.571	0043
	233	3.721	18.760	1922	.600	2351
	234	3.779	12.370	0815	.600	2351
	235	2.883	11.660	1123	.571	2311
	236	3.541	21.740	1523	.600	2334
	237	4.815	16.870	1241	.600	1905
	238	2.911	12.480	1839	.600	2347
	239	3.216	14.460	1605	.600	2356
2	230	4.946	26.210	1945	0.600	2025
	231	3.029	12.620	1534	.600	2400
	232	3.561	18.820	1109	.571	2146
	233	4.054	22.640	1944	.571	0043
	234	4.147	14.600	0815	.571	1924
	235	2.903	13.270	0758	.571	2315
	236	3.627	23.010	1523	.571	2144
	237	5.314	22.980	1200	.571	0005
	238	2.849	15.880	1714	.571	1300
	239	3.132	14.890	1104	.571	1843
4	230	5.840	26.770	1945	0.600	1900
	231	3.591	14.430	1349	.600	2352
	232	4.211	19.100	1138	.600	2400
	233	4.754	21.280	1944	.571	0036
	234	4.711	14.460	1406	.600	2351
	235	3.316	13.050	1037	.571	2312
	236	4.332	20.550	1553	.571	0617
	237	6.181	19.190	1200	.571	0003
	238	3.429	16.100	1839	.600	2354
	239	3.801	15.170	1221	.571	0504

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	240	5.178	15.080	2322	0.600	0335
	241	3.278	12.760	1503	.600	2359
	242	2.670	9.250	1454	.571	1743
	243	3.082	8.750	0700	.600	2338
	244	4.451	19.950	2148	.600	1038
	245	5.067	18.310	1343	.600	2348
	246	2.617	12.030	1006	.571	2129
	247	4.377	18.400	1006	.571	1903
	248	3.863	14.150	0906	.600	2400
	249	4.062	12.450	1144	.600	1317
	250	5.548	13.980	1734	1.335	0603
	251	7.190	19.920	1220	1.477	2351
	252	6.276	16.130	1319	.939	1433
	253	3.692	11.120	1200	.600	1837
	254	5.031	16.900	1213	.600	2400
	255	4.413	17.660	1732	.600	1300
2	240	5.787	17.690	2302	0.600	1427
	241	3.443	13.390	1540	.571	2154
	242	2.830	10.900	1252	.571	0727
	243	3.665	10.470	0639	.600	2333
	244	5.125	21.990	2129	.600	0956
	245	5.783	20.720	1554	.600	2345
	246	3.112	13.250	1116	.600	2246
	247	5.278	22.640	1334	.571	1903
	248	4.437	16.730	0906	.600	2153
	249	4.538	14.260	1444	.684	1240
	250	6.207	15.850	2134	1.930	0543
	251	8.050	26.660	1309	2.184	1834
	252	7.107	18.060	1231	2.241	1404
	253	4.109	14.460	0033	.600	1036
	254	5.510	18.570	1104	.600	0822
	255	4.840	18.250	1702	.600	1238
4	240	6.911	20.550	2322	0.600	0144
	241	4.232	14.380	1500	.571	1200
	242	3.152	11.890	1252	.571	1744
	243	3.966	11.010	1057	.600	2339
	244	5.797	20.580	2148	.600	1642
	245	6.462	22.610	1007	.571	2230
	246	3.105	15.990	1050	.571	2130
	247	5.551	19.440	1412	.571	1903
	248	4.429	17.410	0822	.571	1808
	249	4.926	17.260	0830	.600	1609
	250	7.366	16.870	2152	1.845	1537
	251	9.440	23.660	1309	1.618	0719
	252	8.450	21.340	1319	2.156	1500
	253	4.927	13.750	1200	.600	1829
	254	6.548	18.400	1213	.600	2400
	255	5.330	15.880	1646	.571	1256

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	256	3.879	16.920	1320	0.600	2316
	257	3.903	12.880	1520	.600	2347
	258	2.276	9.000	1353	.600	2358
	259	4.143	13.730	1413	.600	0708
	260	4.283	14.940	1533	.600	2359
	261	4.165	17.040	1333	.600	2400
	262	5.393	19.160	0958	.600	2359
	263	3.092	16.730	1349	.571	2321
	264	1.578	6.967	1417	.571	2046
	265	6.017	19.810	1349	.600	0121
	266	5.235	14.260	2242	.600	0704
	267	5.179	14.350	1049	.600	2352
	268	3.637	13.560	1334	.600	0928
2	256	4.221	17.320	1320	0.769	2213
	257	4.252	15.310	1227	.600	1630
	258	2.561	10.250	1210	.600	2344
	259	4.596	14.210	1352	.600	0638
	260	4.685	14.580	1533	.600	2311
	261	4.639	18.510	1446	.600	2400
	262	6.039	17.240	1241	.600	0103
	263	3.464	16.780	1036	.600	2338
	264	1.847	7.950	1412	.571	1332
	265	6.726	21.230	1234	.600	0105
	266	5.892	16.440	2148	.600	0704
	267	5.813	17.860	0112	.600	2352
	268	4.188	14.120	1334	.600	0925
4	256	4.621	17.890	1320	0.600	2321
	257	4.598	16.640	1227	.571	1548
	258	2.509	11.290	1208	.571	2358
	259	5.225	15.820	1446	.571	0144
	260	5.473	16.560	1317	.600	2359
	261	5.225	21.740	1322	.571	0037
	262	6.916	18.310	1952	.600	2400
	263	3.605	17.010	1034	.571	2321
	264	1.690	7.950	1412	.571	2247
	265	7.875	24.540	1348	.600	0122
	266	6.798	16.580	2220	.600	0704
	267	6.316	19.560	1426	.600	2358
	268	4.479	16.440	1409	.571	0414

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	269	5.208	14.750	0920	0.600	1928
	270	6.041	15.880	2235	.600	0518
	271	8.740	27.850	1551	2.411	0514
	272	2.856	9.280	0015	.571	1036
	273	3.747	10.700	1401	.600	2351
	274	4.295	13.840	2101	.600	0645
	275	4.333	13.640	1528	.600	2032
	276	3.319	12.060	2239	.600	1907
	277	5.344	17.090	0639	.571	1820
	278	3.410	14.660	1408	.571	0117
	279	4.916	19.700	1234	.571	0830
	280	4.612	13.810	0049	.600	2210
	281	4.509	14.260	2036	.600	0806
	282	5.636	18.310	0621	.600	2234
2	269	5.902	18.960	1212	0.600	1912
	270	6.782	22.410	2227	1.024	0518
	271	9.890	23.570	1551	3.118	0048
	272	3.392	15.480	0150	.600	2245
	273	4.217	12.230	1522	.600	1229
	274	4.870	15.200	2102	.600	0645
	275	5.040	15.110	1356	.571	0719
	276	3.859	12.990	1004	.600	1852
	277	6.107	19.020	1007	.600	2345
	278	3.842	15.110	1450	.600	1844
	279	5.585	19.670	1234	.600	0359
	280	5.305	15.850	1307	.600	1817
	281	5.118	15.250	2036	.600	0617
	282	6.312	21.450	0621	.911	1735
4	269	6.617	17.260	1212	0.600	1928
	270	7.803	21.820	2227	.600	0518
	271	11.520	26.890	2034	3.175	0045
	272	3.881	14.860	0150	.571	1039
	273	4.825	14.150	0851	.600	1229
	274	5.405	16.440	1954	.600	1232
	275	5.773	17.260	1528	.600	1919
	276	4.388	14.380	0956	.600	1903
	277	7.131	22.870	0639	.571	1813
	278	4.119	20.890	2357	.571	0116
	279	6.296	20.350	1843	.600	0631
	280	6.150	17.150	1156	.600	2209
	281	5.659	17.520	1906	.600	0616
	282	6.939	22.300	0621	.600	2302

Table 3. --*Summary of 1982 wind-speed data at the raft station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
1	283	1.971	6.684	1645	0.600	2400
	284	3.296	9.140	1123	.600	1821
	285	4.283	13.470	1213	.826	2008
	286	4.147	13.440	1410	.600	2029
	287	5.026	25.240	1153	.571	2117
	288	6.524	20.260	0858	.600	0252
	289	2.781	10.020	2154	.600	1731
	290	5.486	15.850	0503	.600	1727
	291	4.128	14.430	1321	.600	1115
	292	6.060	18.140	2115	1.279	0130
	293	7.089	19.410	1145	1.703	2318
	294	2.596	10.950	1427	.571	0846
	295	3.414	10.980	1425	.600	2334
	296	3.971	14.320	1527	.600	1849
	297	4.377	14.010	1350	.600	2400
2	283	2.403	7.646	1306	0.600	2400
	284	3.765	9.480	2258	.600	0002
	285	4.952	13.360	1314	1.364	2008
	286	4.775	12.080	1454	.939	0024
	287	5.769	26.010	1153	.600	2352
	288	7.471	23.490	1202	.600	0252
	289	3.231	11.090	2324	.600	1419
	290	6.299	19.700	0322	1.024	1721
	291	4.765	14.460	1632	.600	1115
	292	6.853	17.830	1841	1.618	0837
	293	8.070	19.500	1145	1.873	1644
	294	3.068	10.900	1427	.600	1905
	295	3.922	10.220	1247	.600	2329
	296	4.619	13.700	1527	.600	1839
	297	5.086	14.490	1350	.571	2329
4	283	2.413	8.460	0223	0.600	2400
	284	4.327	10.560	2029	.600	1806
	285	5.694	13.640	1314	1.052	2008
	286	5.594	13.920	1458	.600	1241
	287	6.801	28.900	1425	.600	2400
	288	8.600	25.810	1501	.600	2355
	289	3.310	12.450	2324	.571	1108
	290	7.329	20.800	0514	.996	1731
	291	5.239	15.280	0759	.600	1115
	292	7.636	20.040	1806	.600	0837
	293	9.290	21.200	1117	.600	1644
	294	3.203	12.200	1304	.600	2012
	295	4.423	11.350	1133	.600	2359
	296	5.242	15.170	1554	.571	0335
	297	5.667	16.220	1353	.571	2348

[1] Values of 0.600 or 0.571 are threshold values that represent the minimum windspeed required to turn the anemometer cups.

Table 4. --*Summary of 1982 radiation data at the land station*
[(cal/cm²)/d, calories per square centimeter per day; (cal/cm²)/min, calories per square centimeter per minute; h, hour; blank, no data]

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm²)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm²)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm²)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm²)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm²)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
164	653.2	1.570	1234					
165	440.3	1.736	1158					
166	717.0	1.598	1134					
167	434.5	1.672	1154					
168	560.6	1.826	1132					
169	341.3	1.452	1437					
170	239.2	1.471	1453					
171	480.2	1.699	1123					
172	612.4	1.948	1248					
173	619.0	1.738	1118					
174	529.6	1.789	1147					
175	294.7	1.581	1447					
176	724.8	1.409	0915					
177	616.1	1.317	1121					
178	618.4	1.617	1139					
179	171.3	1.694	1206					
180	677.1	1.568	1249					
181	730.5	1.387	1211					
182	694.6	1.359	1219					
183	475.0	1.679	1236					
184	671.5	1.500	1321					
185	576.7	1.495	1117					
186	486.4	1.601	1246					
187	387.3	1.787	1156					
188	491.1	1.834	1238					

Table 4. --*Summary of 1982 radiation data at the land station* --Continued

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
189	432.1	1.590	1145					
190	232.6	1.802	1308					
191	135.8	.693	1706					
192	612.0	1.511	1237					
193	619.7	1.535	1333					
194	255.9	1.724	1334					
195	562.0	1.630	1132					
196	187.4	.804	1722					
197	192.5	.624	1703					
198	686.1	1.355	1220					
199	676.4	1.343	1231					
200	168.8	1.616	1323					
201	589.8	1.541	1207					
202	563.1	1.645	1049					
203	660.7	1.345	1304					
204	557.6	1.651	1218					
205	269.0	1.367	1027					
206	335.4	1.597	1319					
207	563.6	1.566	1258	798.0	0.627	1256	0.486	2156
208	459.4	1.580	1237	809.6	.658	1237	.506	2012
209	570.8	1.452	1208	800.5	.641	1613	.517	2248
210	439.5	1.513	1244	805.1	.614	1252	.496	2139
211	546.0	1.371	1300	772.7	.635	1301	.484	0209
212	359.1	1.183	1252	803.7	.632	1419	.487	0512
213	453.5	1.770	1215	847.6	.661	1151	.506	2103
214	350.2	1.482	1344	863.1	.649	2241	.553	0121
215	585.3	1.312	1448	834.1	.660	0122	.526	1943
216	582.7	1.526	1207	861.5	.670	1208	.550	0814
217	504.0	1.270	1132	871.3	.667	1353	.545	2158

Table 4. --*Summary of 1982 radiation data at the land station* --Continued

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
218	402.1	1.598	1157	879.7	0.693	1241	0.555	0146
219	398.2	1.444	1253	819.4	.649	1617	.472	2400
220	312.4	1.639	1239	756.5	.625	1119	.437	2400
221	448.9	1.674	1312	728.3	.578	1508	.421	0137
222	595.5	1.531	1145	682.6	.552	1012	.405	2127
223	614.8	1.271	1228	698.8	.534	0707	.440	2236
224	502.4	1.452	1308	754.2	.611	1702	.430	0408
225	338.2	1.696	1233	838.3	.663	1233	.515	2336
226	376.6	1.623	1049	847.5	.646	1102	.513	0031
227	453.9	1.598	1123	845.6	.681	1151	.526	0236
228	333.9	1.271	1256	827.4	.618	2330	.531	2126
229	511.8	1.277	1248	830.4	.649	1557	.522	0607

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
230	331.7	1.260	1316	888.0	0.703	1518	0.555	2028
231	455.1	1.340	1022	813.2	.637	0134	.461	2055
232	566.6	1.323	1244	749.7	.567	1250	.475	2220
233	252.9	1.541	1224	831.0	.641	1146	.505	0005
234	509.8	1.445	1226	786.9	.597	1253	.477	0830
235	499.4	1.585	1149	739.7	.580	1112	.458	0434
236	459.5	1.518	1212	734.5	.611	1243	.425	2137
237	447.4	1.501	1122	757.0	.639	1125	.458	2400
238	311.3	1.638	1225	688.7	.562	1238	.378	2310
239	552.9	1.408	1327	657.3	.506	2400	.405	0834

Table 4. --*Summary of 1982 radiation data at the land station* --Continued

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
240	471.9	1.160	1254	735.6	0.574	2148	0.438	0911
241	265.0	1.532	1217	788.6	.630	1126	.430	2153
242	249.7	1.017	0905	738.8	.557	1239	.458	0845
243	193.3	1.216	1504	830.9	.641	1500	.531	1753
244	418.0	1.424	1241	791.0	.630	1404	.438	2256
245	354.0	1.602	1158	704.8	.588	1244	.426	2121
246	502.7	1.280	1245	687.1	.526	1536	.440	0803
247	499.2	1.106	1232	747.9	.587	2309	.442	0326
248	484.0	1.151	1304	696.1	.557	0406	.416	2400
249	422.5	1.319	1103	661.1	.552	0813	.395	0436
250	137.7	.432	0909	796.7	.602	2400	.416	0242
251	289.1	1.397	1214	844.2	.639	1216	.496	0433
252	284.0	1.138	1127	852.0	.658	1558	.526	0252
253	403.3	1.222	1254	827.7	.642	1245	.520	2242
254	224.4	1.410	1241	835.6	.644	1242	.526	0033
255	45.6	.261	1116	790.5	.574	1117	.438	2347

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
256	118.7	0.416	1155	720.2	0.546	1529	0.418	2131
257	110.1	.760	1218	753.9	.557	1218	.477	0151
258	137.2	1.165	1411	718.0	.545	1343	.397	1908
259	137.2	.693	0957	741.8	.552	0935	.451	0424
260	258.3	1.296	1021	686.8	.564	1021	.388	2105
261	412.7	1.108	1156	672.8	.536	2153	.412	0039
262	174.5	1.027	1200	677.2	.546	1359	.362	2342
263	308.2	1.464	1306	643.6	.527	1513	.371	0006
264	427.7	1.024	1200	641.8	.480	0740	.405	2123
265	423.0	1.087	1258	682.0	.550	2216	.409	0647
266	129.9	1.015	1329	751.0	.578	1319	.428	0553
267	166.3	1.228	1259	727.5	.550	0006	.358	2400
268	389.1	1.010	1230	614.5	.466	1532	.351	0039

Table 4. --*Summary of 1982 radiation data at the land station* --Continued

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
269	334.2	1.028	0953	688.2	0.555	1036	0.407	0154
270	157.2	1.037	0955	747.7	.559	1812	.440	0432
271	82.5	.695	1443	814.0	.607	1907	.498	0415
272	266.9	1.062	1134	699.4	.600	0110	.398	2400
273	365.7	1.289	1302	624.9	.526	1320	.393	0053
274	123.6	.500	0830	700.7	.534	2335	.398	0419
275	82.2	1.144	1328	755.1	.548	0830	.447	2312
276	361.0	.913	1204	655.1	.524	0254	.411	0914
277	266.2	1.111	1145	665.6	.548	1243	.381	2358
278	295.4	.945	1232	672.6	.538	2207	.384	0004
279.	32.8	.264	1140	770.1	.555	1342	.491	2357
280	103.3	.531	1146	723.3	.522	1208	.477	0446
281	142.8	1.170	1353	740.2	.545	1353	.435	1514
282	25.9	.126	1412	752.4	.536	2358	.484	0540

JULIAN DAY	DAILY TOTAL SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM SHORT-WAVE SOLAR RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM SHORT-WAVE SOLAR RADIATION (h)	DAILY TOTAL LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/d]	DAILY MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MAXIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)	DAILY MINIMUM LONG-WAVE ATMOSPHERIC RADIATION [(cal/cm^2)/min]	TIME OF MINIMUM LONG-WAVE ATMOSPHERIC RADIATION (h)
283	139.2	1.115	1232	726.1	0.538	1244	0.409	1757
284	89.8	.339	1121	746.4	.536	0013	.496	0016
285	91.5	.883	1224	734.1	.526	1310	.445	2347
286	103.8	.532	1523	691.3	.515	0927	.395	2255
287	308.0	1.035	1300	673.8	.540	1210	.398	0013
288	292.0	1.056	1158	576.3	.487	0842	.339	2353
289	95.6	1.053	1028	644.4	.491	1030	.332	0141
290	283.4	.760	1142	650.8	.492	0511	.393	0743
291	80.1	.769	1223	725.3	.555	1104	.432	0027
292	52.7	.443	0841	664.3	.487	0016	.411	0830
293	132.1	1.063	1109	626.5	.451	1024	.362	1123
294	299.7	.772	1148	494.9	.419	0011	.308	0440
295	284.5	.748	1153	529.0	.414	1358	.322	0421
296	247.1	.815	1049	608.7	.468	0951	.391	2400
297	221.4	.939	1136	610.9	.529	1143	.388	0619

Table 5. --*Summary of 1982 temperature data at the land station*
[C, degrees Celsius; h, hour; blank, no data]

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
164	18.060	27.120	1416	10.140	0209	13.520
165	17.230	26.060	1202	12.070	0513	14.090
166	13.700	20.780	1458	5.921	2353	9.874
167	15.020	24.300	1547	4.954	0112	11.600
168	12.840	18.140	1352	7.417	2400	9.890
169	10.880	17.260	0848	4.690	0520	9.030
170	11.750	17.880	1650	7.593	0443	10.280
171	12.870	20.430	1430	7.769	2341	10.780
172	13.000	21.400	1213	5.657	0334	10.040
173	14.890	23.690	1440	4.778	0404	11.010
174	18.760	26.940	1555	12.250	0306	14.860
175	15.310	19.460	0837	9.880	2359	13.460
176	13.780	21.930	1512	6.889	0501	10.350
177	16.160	24.480	1356	5.570	0509	12.150
178	19.200	28.700	1220	11.460	2400	14.850
179	12.310	18.760	1204	9.000	2311	11.090
180	14.540	22.630	1158	6.537	0409	11.110
181	14.810	23.420	1413	4.866	0449	10.250
182	17.020	25.440	1419	5.921	0444	12.440
183	20.600	27.910	1318	16.210	0408	17.660
184	22.840	32.040	1853	16.210	2400	18.190
185	22.890	29.670	1403	14.710	0458	19.020
186	24.950	33.710	1425	18.410	2359	20.680
187	19.800	30.550	1123	16.910	2359	17.410
188	15.320	20.960	1556	11.020	2209	12.300

Table 5. --*Summary of 1982 temperature data at the land station* --Continued

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
189	19.080	29.140	1221	11.460	0034	16.530
190	17.500	23.070	1310	13.830	2352	16.680
191	14.600	19.460	1716	11.720	2348	13.760
192	18.650	27.910	1457	9.790	0415	15.070
193	20.470	30.280	1303	12.600	0454	16.680
194	18.240	24.120	1203	13.130	0305	16.340
195	21.030	29.750	1419	13.310	0313	18.380
196	19.360	23.250	1257	17.790	0521	18.620
197	21.300	24.830	2218	19.020	0522	20.460
198	19.580	25.620	0127	15.420	2330	15.220
199	16.880	24.740	1527	11.370	2345	13.400
200	13.950	18.760	1713	10.840	0327	13.090
201	22.540	33.100	1421	11.020	0438	19.350
202	21.440	28.870	1410	14.540	2400	18.010
203	19.590	26.850	1452	11.280	0312	16.160

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
204	23.090	28.960	1500	16.910	0343	19.740
205	22.990	28.610	1718	15.590	2358	20.770
206	18.110	27.470	1622	12.690	0433	16.510
207	19.770	27.820	1445	13.570	2335	17.120
208	18.460	27.640	1224	11.190	0512	16.560
209	20.330	28.870	1241	11.190	0443	17.030
210	17.910	22.540	1406	14.980	2210	16.140
211	19.370	26.680	1428	13.130	0501	17.180
212	21.200	30.110	1420	15.150	0513	18.940
213	19.640	26.500	1620	11.990	2336	18.170
214	19.040	26.760	1503	11.720	0102	17.910
215	23.950	29.930	1355	17.180	2400	20.580
216	23.910	32.920	1427	14.980	0520	20.980
217	23.660	30.900	1355	18.230	0511	21.190

Table 5. --*Summary of 1982 temperature data at the land station* --Continued

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
218	23.540	30.990	1241	17.790	0147	21.250
219	22.050	29.310	1354	16.030	2400	18.560
220	16.100	21.490	1326	11.720	2400	13.410
221	12.920	19.200	1459	8.470	0600	10.440
222	13.200	21.310	1443	5.833	0512	10.180
223	14.320	23.070	1439	4.074	0523	11.090
224	17.560	23.510	1522	9.520	0421	13.530
225	20.010	28.000	1533	15.860	0600	17.860
226	20.430	25.800	1510	16.650	0201	18.510
227	22.560	29.840	1514	16.300	0325	19.680
228	20.210	26.850	1527	15.680	0511	18.410
229	21.790	28.000	1432	16.380	0535	19.230

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
230	23.350	30.370	1628	17.790	0103	20.680
231	21.120	27.290	1247	12.160	2351	17.760
232	18.110	26.940	1424	10.400	0509	14.020
233	18.560	28.790	1338	10.490	0351	15.660
234	18.780	24.650	1222	15.150	0130	15.750
235	16.490	23.600	1717	11.550	2324	13.760
236	15.150	23.860	1122	8.030	2359	12.400
237	15.230	25.270	1408	7.241	0016	12.020
238	11.290	19.370	1312	3.458	2400	8.580
239	9.752	17.620	1417	1.787	0543	6.308

Table 5. --*Summary of 1982 temperature data at the land station* --Continued

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
240	13.450	18.760	1318	7.940	0136	9.700
241	16.120	25.180	1500	8.640	2357	14.220
242	11.500	16.470	0958	4.514	0417	9.930
243	16.200	23.510	1508	11.550	0546	15.060
244	18.820	25.270	1439	11.990	2400	15.590
245	12.860	20.340	1625	7.241	2356	10.500
246	13.830	24.040	1744	4.690	0550	10.590
247	19.180	28.520	1403	9.700	0021	15.190
248	15.100	20.340	1307	8.560	2400	11.130
249	12.190	19.020	1611	6.185	0527	9.740
250	13.750	17.350	1326	7.681	0405	12.980
251	19.450	24.560	1509	15.770	0507	17.410
252	21.450	27.200	1443	17.620	0008	19.170
253	22.250	29.230	1525	17.790	0611	19.590
254	18.300	24.300	1227	12.070	2359	16.610
255	11.300	13.040	1119	9.610	2400	10.860

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
256	10.880	13.920	1449	8.730	2355	9.820
257	9.710	12.690	1235			
258						
259						
260						
261						
262						
263						
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265						
266						
267						
268						

Table 5. --*Summary of 1982 temperature data at the land station* --Continued

JULIAN DAY	DAILY AVERAGE DRY-BULB AIR TEMPERATURE (C)	DAILY MAXIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MAXIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY MINIMUM DRY-BULB AIR TEMPERATURE (C)	TIME OF MINIMUM DRY-BULB AIR TEMPERATURE (h)	DAILY AVERAGE WET-BULB AIR TEMPERATURE (C)
269						
270						
271						
272						
273	7.827	15.500	1531	1.171	0616	5.609
274	6.651	9.170	2338	2.403	0511	5.911
275	9.490	10.580	0819	7.681	1246	9.040
276	11.140	19.550	1601	4.602	0558	8.880
277	12.480	19.110	1218	4.162	2356	9.700
278	8.050	14.270	1453	-1.110	0606	6.165
279	9.140	11.630	1722	4.074	2357	9.070
280	5.746	8.730	1547	2.227	0434	5.313
281	8.110	12.340	1511	5.745	0412	7.354
282	8.260	9.610	2336	7.065	0852	7.911
283	9.080	13.390	1220	6.009	2055	8.310
284	8.270	10.840	1406	6.587	0201	8.190
285	7.392	9.380	1226	5.833	2400	7.249
286	6.274	8.730	1233	4.866	2356	5.938
287	11.240	20.080	1256	4.426	0047	8.770
288	6.224	10.670	1412	.732	2400	4.209
289	2.581	6.889	1353	-3.050	0337	1.662
290	9.720	17.970	1522	3.722	0151	7.950
291	9.200	14.360	1047	4.338	2400	8.530
292	2.213	4.338	0001	-.411	2400	1.622
293	.110	2.843	1137	-1.020	0759	-.381
294	.819	8.910	1521	-4.980	0552	-.605
295	3.753	12.250	1401	-2.960	0615	2.383
296	6.422	14.270	1501	-1.370	0528	4.640
297	8.960	17.700	1457	3.107	2358	6.271

Table 6. --*Summary of 1982 wind-speed data at the land station*
[mi/h, miles per hour; h, hour; blank, no data]

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)[1]	TIME OF MINIMUM WIND SPEED (h)
2	164	3.700	15.200	1204	0.600	2400
	165	1.942	14.600	1402	.600	2356
	166	3.480	14.720	0945	.600	2400
	167	2.175	18.420	1042	.571	2135
	168	3.522	15.420	1058	.571	2324
	169	1.520	8.920	1616	.571	1559
	170	1.768	9.790	1512	.571	2053
	171	3.682	18.510	1537	.571	2245
	172	3.023	13.390	1323	.571	0527
	173	1.962	8.180	0949	.571	2251
	174	2.497	12.930	1615	.600	2358
	175	3.927	16.560	0150	.571	2319
	176	2.228	10.220	1530	.600	2400
	177	1.802	8.460	1643	0.600	2352
	178	2.374	11.350	1456	.571	0337
	179	3.365	14.120	1505	.600	2359
	180	2.635	12.110	1222	.571	2111
	181	1.972	10.590	1556	.571	2048
	182	2.379	9.030	1319	.600	2107
	183	2.207	10.360	1420	.600	2351
	184	3.606	16.470	1326	.600	2400
	185	3.334	17.430	2259	.571	0550
	186	4.423	25.070	2352	.600	2259
	187	1.736	14.600	0004	.600	2342
	188	4.500	18.850	1009	.600	2359

Table 6. --*Summary of 1982 wind-speed data at the land station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	189	2.112	10.440	1124	0.571	0023
	190	3.053	10.560	1820	.600	1126
	191	2.514	9.710	0737	.600	2400
	192	2.636	15.230	1231	.571	2221
	193	2.229	12.590	1613	.571	2218
	194	1.549	7.476	1350	.571	1023
	195	2.271	9.110	2227	.600	2316
	196	3.079	11.830	1410	.600	2224
	197	3.065	11.210	1731	.600	2255
	198	5.561	20.720	0202	.600	2353
	199	2.852	12.140	1229	.571	0113
	200	2.584	10.640	0650	.571	0153
	201	1.901	17.830	2238	.600	2400
	202	2.461	10.920	1655	.600	2344
	203	2.480	9.030	0824	.600	2400

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	204	2.885	10.610	1309	0.600	2329
	205	2.768	15.340	0459	.600	2400
	206	1.629	10.870	1407	.600	2400
	207	2.028	9.990	1002	.571	0653
	208	1.677	7.618	1321	.571	0709
	209	1.420	13.700	2020	.571	2239
	210	4.067	18.680	0926	.600	2308
	211	2.664	13.840	1109	.571	1734
	212	1.853	10.750	1225	.486	0559
	213	3.230	12.450	2019	.600	0713
	214	4.247	14.460	1044	.600	2303
	215	2.631	25.390	0125	.600	2355
	216	2.042	7.193	2154	.571	1321
	217	1.959	7.788	1329	.571	2156

Table 6. --*Summary of 1982 wind-speed data at the land station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	218	1.789	10.750	0913	0.571	2103
	219	3.447	14.940	1556	.600	2031
	220	5.895	19.130	0928	.600	1852
	221	4.135	15.370	1219	.571	2136
	222	2.225	9.230	1551	.571	0154
	223	2.116	8.860	1414	.571	0642
	224	3.057	11.490	1200	.600	2330
	225	1.788	8.380	1212	.600	2400
	226	2.087	7.675	1240	.571	0915
	227	1.867	10.920	0915	.571	1925
	228	1.727	9.930	1033	.571	0157
	229	1.992	8.040	1300	.600	2357

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	230	2.488	22.220	1927	0.600	2353
	231	2.457	13.080	1255	.571	0452
	232	2.690	13.840	1322	.571	0135
	233	2.099	18.650	1933	.571	0733
	234	2.841	11.010	1300	.600	2359
	235	2.347	10.730	1126	.600	2359
	236	2.438	19.730	1259	.571	0137
	237	3.411	19.500	1111	.600	2326
	238	2.415	11.380	1708	.600	2400
	239	2.385	12.370	0946	.571	0319

Table 6. --*Summary of 1982 wind-speed data at the land station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	240	3.186	16.220	2254	0.600	1907
	241	2.413	10.330	1412	.600	2400
	242	2.763	8.580	1447	.600	1850
	243	2.181	8.550	0418	.571	2256
	244	3.387	14.800	2002	.600	1829
	245	3.681	21.450	1554	.571	2218
	246	2.169	12.000	1121	.571	2309
	247	2.700	14.010	1055	.600	2246
	248	4.520	15.930	1013	.600	2121
	249	3.571	11.180	1445	.600	1935
	250	2.600	12.450	2355	.600	2247
	251	4.070	15.570	0945	.600	2135
	252	3.166	14.750	1113	.600	2333
	253	2.143	7.165	1543	.600	2355
	254	3.633	13.580	1240	.600	2330
	255	4.012	13.670	1615	.600	2400

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	256	3.111	11.410	1426	0.600	2345
	257	4.309	15.480	1443	.600	2121
	258	2.039	7.392	1354	.571	2250
	259	1.888	10.870	2233	.571	1815
	260	3.200	12.510	1316	.600	2400
	261	2.816	15.400	1257	.571	2345
	262	4.390	14.860	1328	.571	0335
	263	2.393	13.810	1058	.571	2249
	264	1.504	6.514	0949	.571	2131
	265	3.023	14.430	1703	.600	2152
	266	4.039	13.670	1004	.571	0138
	267	4.493	16.870	1404	.600	2400
	268	2.229	12.030	1544	.571	0741

Table 6. --*Summary of 1982 wind-speed data at the land station* --Continued

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	269	2.534	13.130	1229	0.571	2044
	270	5.387	17.290	2118	.571	0427
	271					
	272	2.355	12.930	0001	.571	0234
	273	3.038	12.590	2119	.571	0730
	274	4.848	14.150	1959	.571	0513
	275	3.839	14.490	1024	.571	1938
	276	2.546	12.620	0953	.600	2047
	277	4.286	15.170	1116	.600	2400
	278	4.184	16.670	2057	.600	1904
	279	5.399	18.570	1335	.600	2334
	280	3.687	13.900	1046	.543	1926
	281					
	282					

HEIGHT OF ANEMOMETER ABOVE LAKE SURFACE (m)	JULIAN DAY	DAILY AVERAGE WIND SPEED (mi/h)	DAILY MAXIMUM WIND SPEED (mi/h)	TIME OF MAXIMUM WIND SPEED (h)	DAILY MINIMUM WIND SPEED (mi/h)	TIME OF MINIMUM WIND SPEED (h)
2	283	1.709	7.618	1221	0.571	1810
	284	2.739	8.490	1408	.572	0314
	285	3.398	10.560	1013	.600	2359
	286	3.441	12.740	1411	.572	1947
	287	4.208	20.830	1429	.600	2400
	288	5.485	23.150	1335	.571	0253
	289	3.000	11.580	2319	.203	0331
	290	4.957	15.740	0500	.600	2354
	291	3.639	12.990	0744	.571	1045
	292	5.370	19.160	1700	.600	2120
	293	5.771	18.000	1047	.600	2111
	294	2.125	10.810	1053	.486	0606
	295	2.772	8.520	1353	.571	2058
	296	3.192	12.250	1127	.571	0129
	297	2.669	10.950	1308	.571	2339

[1] Values of 0.600 or 0.571 are threshold values that represent the minimum windspeed required to turn the anemometer cups.