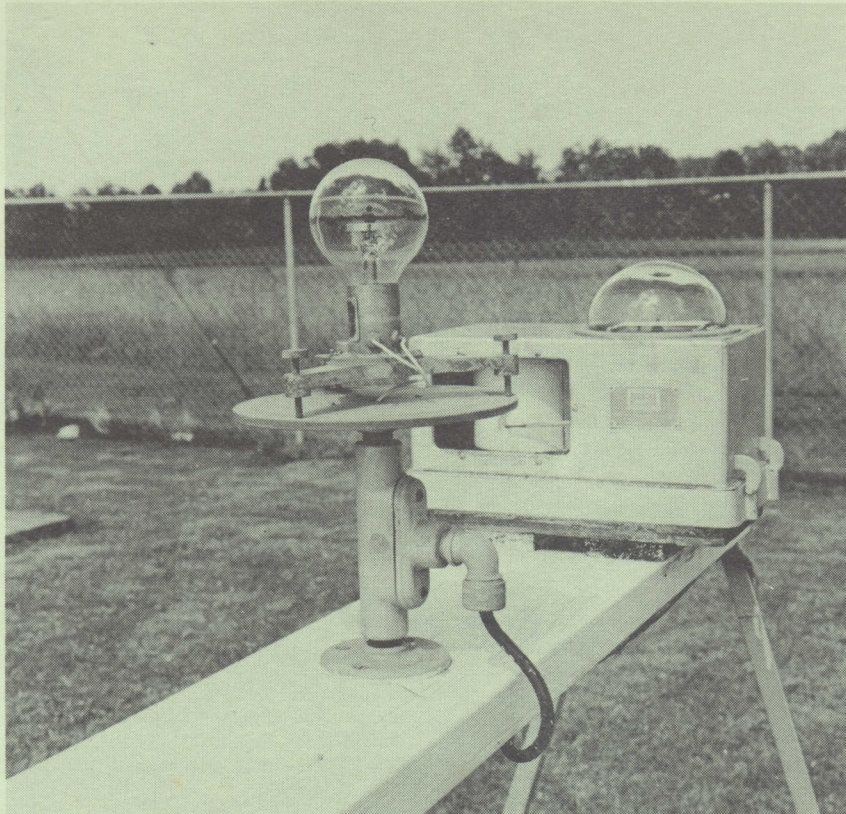


LOCAL CLIMATOLOGICAL DATA
AUBURN UNIVERSITY
1970



Agricultural Weather Series No. 8

February 1971

UNITED STATES DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
WEATHER BUREAU

in cooperation with

AGRICULTURAL EXPERIMENT STATION
AUBURN UNIVERSITY

E. V. SMITH, Director

AUBURN, ALABAMA

TABLE OF CONTENTS

FOREWORD	1
TABLES	
Daily Maximum, Minimum, and Mean Temperature	2-13
Precipitation	2-13
Solar Radiation	2-13
Evaporation and Wind Movement	2-13
Monthly and Annual Average Temperature and Precipitation, 1855-1952	14
Monthly and Annual Average Evaporation, 1947-1950 & 1964-1970 . .	14
Six Hourly Temperature and Relative Humidity	15-26
Soil Temperature, Wind Direction and Speed	27-38
Duration in Hours and Tenths of Hours that the Temperature was 32F or Lower	39-40
Cooling Degree Days - Base 75F	41
Heating Degree Days - Base 65F	42
Time of Sunrise	43
Time of Sunset	44
Growing Degree Days - Base 40F	45
Growing Degree Days - Base 45F	46
Growing Degree Days - Base 50F	47
Precipitation Accumulation and Departure from Average	48

FOREWORD

Except for the long term averages of temperature, precipitation, and evaporation, data in this publication were recorded at the National Weather Service micro-meteorology station located at the south end of the Agronomy Farm at Auburn University. The station was established during September 1963 with the cooperation of the Auburn University Agricultural Experiment Station and the Agronomy and Soils Department. The current Cooperative Weather Observer is Mr. Jack Jones, foreman of the Agronomy Farm.

Soil temperatures and evaporation readings are for a 24-hour period ending at 8:00 AM for the day indicated. All other readings are for a 24-hour period from midnight to midnight for the indicated date.

The sensing elements for the soil thermometers are under bare soil while all other instruments are exposed over sod.

Evaporation is measured in the National Weather Service Class "A" pan of 4 foot diameter.

Unless otherwise indicated, units in this publication are as follows:

- Temperature in °F
- Relative humidity as a percentage
- Wind speed in miles per day
- Solar radiation in langleys (gram calorie/sq. cm.)
- Precipitation and evaporation in inches

Cooling degree days are used in computing air conditioning requirements. The "base" for such computations is the mean daily temperature of 75F. These data are obtained by subtracting 75F from the mean daily temperatures, if the latter is above 75F. A day with a mean temperature of 76F is one degree day. If the daily mean temperature continues above 75F for any length of time, air conditioning or cooling will be required for human comfort.

Heating degree days are used in computing fuel requirements. The "base" for computing heating degree days is a mean daily temperature of 65F. A mean daily temperature of 64F is one degree day. If the daily mean temperature continues below 65F for any length of time, heating will be necessary for human comfort.

Sunrise and sunset are considered to occur when the upper edge of the disk of the sun appears to be exactly on the horizon, with normal atmospheric conditions, and at zero elevation above the earth's surface in a level region. Times of sunrise and sunset shown in this publication are valid for the remainder of the 20th century.

Growing degree days were computed daily by averaging the maximum and minimum temperature and then subtracting the "base" temperatures of 40, 45, and 50F.

Paul A. Mott
Advisory Agricultural Meteorologist
NOAA - National Weather Service
Auburn University, Auburn, Alabama

Table 1. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for January 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	41	28	35	0	105	.13	62.2
2	53	24	39	0	295	.03	42.1
3	40	24	32	0	151	.07	39.6
4	50	22	36	0	291	.07	63.0
5	47	34	41	.22	124	.03	32.0
6	40	27	34	.90	47	-	82.5
7	27	12	20	0	304	-	134.9
8	29	10	20	0	320	-	94.0
9	29	5	17	0	309	-	106.1
10	40	12	26	0	303	-	82.4
11	37	28	38	#.37	317	-	41.5
12	44	35	40	0	86	-	69.9
13	52	30	41	0	297	-	138.8
14	58	28	43	0	284	-	47.3
15	52	37	45	.03	99	.07	41.9
16	57	38	48	.03	19	.04	65.6
17	50	42	46	.10	58	.08	80.0
18	53	42	48	0	77	-	32.8
19	42	37	40	.10	65	-	56.7
20	35	26	31	0	36	.03	54.6
21	35	18	27	0	289	-	101.1
22	40	19	30	#.04	228	-	88.0
23	39	32	36	.12	66	-	42.9
24	58	30	44	0	317	.04	70.1
25	64	37	51	0	52	.06	38.9
26	71	48	60	.11	317	-	88.8
27	72	40	56	0	266	.19	33.4
28	73	43	58	0	294	.11	33.7
29	69	39	54	1.50	38	.11	78.3
30	47	25	34	0	357	-	111.2
31	57	25	41	0	363	.13	65.4
Total	1501	897	1211	3.52	6,174	*1.53	2119.7
Avg.	48.4	28.9	39.1				68.4

Sleet and snow mixed with rain

* Evap. adjusted for full month

- Missing data

Table 2. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for February 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	53	30	42	.84	97	.08	32.0
2	67	41	54	.33	318	.02	132.2
3	49	16	33	0	349	-	101.0
4	44	12	28	0	375	-	88.1
5	52	24	38	0	300	-	87.7
6	57	35	46	0	275	-	37.8
7	65	34	50	0	389	.05	46.1
8	63	34	49	.19	260	.13	14.9
9	49	40	45	.01	313	.06	56.3
10	52	34	43	0	385	.10	109.1
11	65	32	49	0	391	.12	85.3
12	52	27	40	0	402	.15	80.3
13	58	27	43	0	383	.12	35.8
14	68	31	50	0	298	.15	27.3
15	70	51	61	.30	182	.09	60.7
16	60	48	54	.76	38	.06	55.7
17	52	38	45	.04	100	.07	74.2
18	64	38	51	0	312	.03	37.5
19	64	35	50	0	368	.09	57.8
20	52	30	41	0	424	.19	97.1
21	57	25	41	0	433	.23	190.6
22	63	28	46	0	415	.15	53.9
23	59	48	54	0	170	.12	44.2
24	60	43	51	.03	171	.06	34.5
25	53	29	41	1.14	84	.07	24.2
26	50	24	37	0	437	.06	15.0
27	62	25	44	0	437	.17	30.8
28	68	41	55	0	347	.15	27.3
Total	1628	920	1281	3.64	8,453	*2.60	1737.4
Avg.	58.1	32.9	45.8				62.1

* Evap. adjusted for full month

- Missing data

Table 3. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for March 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	73	45	59	0	350	.15	26.7
2	72	43	58	0	324	.15	42.1
3	72	48	60	.02	201	.14	93.2
4	68	55	62	.57	193	.18	48.6
5	74	46	60	0	323	.07	52.6
6	67	37	52	0	404	.18	69.4
7	51	44	48	0	84	.18	51.9
8	58	47	53	0	87	.02	52.9
9	74	44	59	0	458	.03	38.0
10	72	40	56	0	460	.20	32.4
11	66	44	55	0	183	.19	51.0
12	69	50	60	0	248	.09	83.2
13	50	33	42	0	69	.16	28.1
14	52	28	40	0	537	.12	99.5
15	54	29	42	0	553	.15	80.0
16	59	29	44	0	513	.20	84.3
17	64	38	51	.48	293	.13	53.8
18	74	54	64	0	325	.19	123.8
19	73	57	65	2.03	104	.09	47.8
20	67	53	60	1.81	78	-	86.4
21	53	44	49	3.63	45	-	70.2
22	46	36	41	0	122	-	66.1
23	60	34	47	0	441	.02	59.0
24	73	34	54	0	506	.17	82.7
25	72	43	58	0	452	.23	94.0
26	61	40	51	.05	375	.21	89.5
27	67	38	53	0	539	.19	118.4
28	63	49	56	0	162	.07	79.8
29	75	54	65	0	519	.03	69.4
30	55	50	53	.76	22	.10	54.6
31	74	47	61	0	421	.17	77.6
Total	2008	1333	1678	9.35	9,391	*3.85	2107.0
Avg.	64.8	43.0	54.1				68.0

* Evap. adjusted for full month

- Missing data

Table 4. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for April, 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	82	59	71	0	273	.08	49.3
2	71	42	57	.53	513	.32	168.9
3	69	38	54	0	582	.29	113.8
4	73	42	58	0	469	.19	44.7
5	75	47	61	0	473	.20	46.4
6	73	46	60	0	551	.22	61.2
7	74	43	59	0	592	.27	66.0
8	77	45	61	0	556	.18	38.5
9	78	46	62	0	460	.24	53.9
10	66	56	61	.04	149	.21	45.8
11	65	55	60	.05	163	.13	61.6
12	64	53	59	.03	147	.08	70.1
13	81	56	69	0	429	.04	38.0
14	75	50	63	0	592	.18	68.0
15	79	46	63	0	600	.26	99.6
16	68	55	62	.15	167	.19	35.5
17	77	56	67	0	297	.02	41.7
18	83	60	72	0	392	.12	56.9
19	84	62	73	.85	402	.15	55.4
20	80	60	70	0	591	.39	135.4
21	85	55	70	0	545	.28	53.5
22	86	57	72	0	494	.23	25.5
23	88	61	75	0	459	.21	43.8
24	80	64	72	1.03	211	.25	50.7
25	75	60	68	.07	235	.23	55.4
26	77	62	70	.15	225	.05	44.1
27	83	64	74	0	316	.13	37.2
28	86	68	77	0	465	.12	52.9
29	86	70	78	0	426	.23	58.7
30	89	66	78	0	502	.18	26.1
Total	2329	1644	1996	2.90	12,276	5.67	1798.6
Avg.	77.6	54.8	66.5				60.0

Table 5. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for May 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	82	66	74	0	465	.31	69.1
2	77	63	70	0	246	.25	51.6
3	68	54	61	.90	72	.13	83.6
4	74	53	64	0	539	.06	72.7
5	80	49	65	0	613	.24	26.8
6	84	58	71	0	596	.23	77.1
7	83	56	70	0	627	.37	73.0
8	84	56	70	0	610	.23	30.3
9	83	54	69	0	591	.31	29.9
10	83	57	70	0	555	.31	46.3
11	84	61	73	0	543	.25	44.0
12	85	63	74	0	530	.27	42.5
13	86	63	75	0	562	.24	32.7
14	88	61	75	0	581	.28	34.9
15	89	63	76	.09	571	.29	29.8
16	84	64	74	.08	490	.33	45.7
17	80	60	70	0	615	.29	61.7
18	82	53	68	0	664	.29	82.3
19	84	59	72	0	591	.29	55.5
20	86	61	74	0	628	.25	32.7
21	89	58	74	0	644	.31	28.2
22	92	61	77	0	590	.33	32.4
23	91	67	79	0	534	.34	34.8
24	88	61	75	0	565	.32	38.1
25	84	63	74	0	335	.32	33.2
26	87	65	76	.25	450	.16	27.7
27	89	62	76	0	651	.25	52.3
28	90	66	78	.15	592	.33	36.2
29	78	65	72	.21	193	.30	69.9
30	75	66	71	.66	340	.08	84.3
31	81	67	74	.25	444	.08	91.7
Total	2590	1875	2241	2.59	16,027	8.04	1551.0
Avg.	83.5	60.5	72.3				50.0

Table 6. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for June, 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	84	67	76	.85	603	.20	66.6
2	80	67	74	.49	346	-	77.3
3	69	65	67	.74	134	.14	69.1
4	80	65	73	.28	549	-	53.6
5	78	62	70	0	496	.30	55.6
6	74	57	66	.05	425	.29	59.3
7	82	56	69	0	569	.18	52.2
8	85	62	74	0	620	.25	57.9
9	86	61	74	0	572	.30	49.9
10	85	62	74	0	433	.22	18.5
11	86	65	76	0	384	.19	20.7
12	87	63	75	0	573	.18	27.5
13	87	66	77	0	402	.27	28.1
14	87	61	74	0	608	.22	65.1
15	83	67	75	0	442	.30	72.5
16	89	67	78	0	554	.20	42.7
17	92	67	80	0	523	.24	26.3
18	95	69	82	0	572	.25	18.4
19	95	71	83	0	564	.31	35.5
20	95	70	83	0	496	.34	39.0
21	95	68	82	0	510	.33	45.2
22	94	71	83	0	512	.23	26.0
23	94	69	82	0	523	.28	38.9
24	89	69	79	.06	393	.27	48.1
25	80	69	75	0	278	.24	49.8
26	88	70	79	.02	495	.10	41.3
27	86	70	78	.08	369	.29	55.7
28	84	63	74	0	577	.21	85.6
29	82	64	73	0	525	.25	43.9
30	89	62	76	0	641	.26	37.1
Total	2580	1965	2281	2.57	14,688	*6.87	1407.4
Avg.	86.0	65.5	76.0				46.9

* Evap. adjusted for full month

- Missing data

Table 7. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for July 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	95	68	82	0	612	.31	30.6
2	98	75	87	0	587	.34	56.1
3	99	75	87	0	617	.37	45.2
4	93	74	84	.22	353	.40	49.6
5	83	67	75	0	621	.25	56.1
6	85	61	73	0	667	.33	56.5
7	90	63	77	0	488	.32	42.3
8	91	68	80	.07	467	.25	24.8
9	90	69	80	.17	420	.23	40.7
10	90	70	80	0	495	.28	59.3
11	93	68	81	.14	533	.23	33.1
12	90	67	79	0	599	.16	36.1
13	91	70	81	0	497	.27	32.2
14	91	67	79	0	571	.25	35.8
15	91	72	82	0	511	.29	47.9
16	92	70	81	.07	575	.31	57.1
17	91	70	81	0	488	.32	65.7
18	92	65	79	.61	481	.29	27.3
19	92	68	80	0	521	.24	30.6
20	92	69	81	.73	447	.25	39.0
21	88	68	78	.84	396	-	93.2
22	77	68	73	.56	202	.24	153.7
23	85	68	77	0	286	.07	45.7
24	88	69	79	.55	468	-	32.1
25	91	70	81	.03	520	.23	27.3
26	91	71	81	0	479	.22	20.9
27	90	71	81	.40	554	.19	25.6
28	92	72	82	0	570	.33	27.1
29	92	72	82	0	488	.26	22.1
30	90	70	80	0	466	.26	36.8
31	93	70	82	0	576	.21	19.6
Total	2806	2145	2485	4.39	15,555	*7.78	1370.1
Avg.	90.5	69.2	80.2				44.2

* Evap. adjusted for full month

- Missing data

Table 8. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for August, 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	92	72	82	.02	357	.29	16.4
2	91	69	80	0	491	.20	31.7
3	92	72	82	0	520	.21	32.3
4	89	72	81	.23	290	.29	46.3
5	92	71	82	0	554	.16	40.6
6	94	75	85	0	506	.29	28.8
7	87	71	79	0	368	.25	37.9
8	86	73	80	.20	282	.17	41.8
9	86	70	78	.16	352	.12	34.6
10	82	70	76	.36	230	.18	37.9
11	72	67	70	.33	143	.08	46.4
12	85	67	76	0	424	.17	41.3
13	85	69	77	0	487	.15	26.3
14	80	68	74	0	370	.18	21.2
15	90	71	81	0	345	.19	17.6
16	92	71	82	0	500	.18	22.0
17	92	70	81	0	483	.22	17.7
18	90	71	81	0	505	.26	24.7
19	89	71	80	0	418	.20	31.0
20	88	69	79	.19	385	.21	27.2
21	90	70	80	0	456	.19	30.7
22	89	70	80	0	460	.19	26.3
23	90	71	81	1.99	433	.22	28.2
24	85	70	81	.01	231	-	27.4
25	86	70	78	0	364	.11	38.0
26	82	71	77	.02	233	.18	49.7
27	80	70	75	.23	163	.10	31.6
28	87	70	79	.02	389	.05	29.1
29	89	72	81	0	426	.14	41.3
30	92	70	81	0	535	.18	18.3
31	92	71	82	0	423	.22	15.9
Total	2716	2184	2461	3.76	12,123	*5.77	960.2
Avg.	87.6	70.5	79.4				31.0

* Evap. adjusted for full month

- Missing data

Table 9. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for September 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	92	71	82	0	417	.20	18.6
2	92	69	81	0	449	.21	21.1
3	90	71	81	0	508	.21	20.6
4	89	71	80	0	425	.24	36.9
5	87	72	80	0	275	.25	46.5
6	90	72	81	0	323	.12	21.1
7	89	70	80	.62	284	.10	34.0
8	87	70	79	0	385	.17	65.4
9	87	68	78	0	491	.17	27.6
10	90	70	80	0	402	.23	29.1
11	89	69	79	0	370	.19	16.6
12	90	68	79	0	489	.18	28.4
13	81	68	75	0	215	.26	45.9
14	88	66	77	0	499	.10	40.5
15	87	69	78	0	312	.25	63.5
16	88	67	78	0	386	.17	44.4
17	90	70	80	0	412	.12	46.3
18	91	70	81	0	420	.22	81.2
19	93	68	81	0	452	.22	23.7
20	92	69	81	0	382	.25	20.1
21	91	70	81	0	452	.16	27.6
22	90	70	80	0	442	.23	30.0
23	90	69	80	0	374	.20	36.2
24	90	68	79	.10	336	.20	41.3
25	89	67	78	.10	390	.15	30.2
26	87	66	78	0	408	.21	35.8
27	86	66	76	0	317	.19	23.2
28	79	58	69	0	460	.18	70.9
29	76	52	64	0	481	.30	104.1
30	83	50	66	0	469	.15	50.5
Total	2643	2024	2342	.82	12,025	5.83	1181.3
Avg.	88.1	67.5	78.1				39.4

Table 10. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for October, 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	80	54	67	0	466	.23	36.7
2	85	56	71	0	409	.20	28.2
3	88	58	73	0	413	.20	25.1
4	80	57	69	0	472	.30	69.3
5	81	53	67	0	426	.29	74.9
6	79	56	68	0	277	.25	63.2
7	72	60	66	.10	92	.14	82.7
8	78	65	72	1.85	154	.07	86.9
9	81	65	73	.06	253	.17	78.9
10	78	62	70	0	156	.05	53.0
11	85	63	74	0	335	.07	14.9
12	82	66	74	0	264	.14	-
13	82	67	74	0	234	.12	-
14	79	66	73	.45	215	.14	36.2
15	80	65	73	1.12	193	.05	23.7
16	70	58	64	0	331	.31	66.6
17	66	44	55	0	418	.24	10.2
18	72	46	59	.03	347	.20	62.2
19	68	58	63	.06	107	.12	59.2
20	73	58	65	1.15	239	.05	75.2
21	71	59	65	0	194	.16	64.3
22	75	53	64	0	392	.12	50.4
23	76	53	65	0	320	.12	39.0
24	67	56	62	.85	75	.14	34.0
25	75	57	66	0	260	-	44.0
26	73	55	64	0	285	.04	25.9
27	73	55	64	0	353	.09	50.2
28	66	54	60	.05	108	.15	68.3
29	66	59	63	2.69	57	.08	61.1
30	73	60	67	0	257	-	36.8
31	70	51	61	0	338	-	67.2
Total	2344	1789	2071	8.41	8,440	*4.37	-
Avg.	75.6	57.7	66.8				-

* Evap. adjusted for full month

- Missing data

Table 11. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for November 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	68	52	60	0	153	.07	57.6
2	73	50	62	0	266	.05	21.0
3	59	36	48	0	369	.13	65.4
4	50	34	42	0	226	.16	52.4
5	60	35	48	0	308	.05	67.7
6	69	35	52	0	360	.10	45.6
7	69	37	53	0	347	.14	30.6
8	72	42	57	0	330	.11	24.0
9	68	49	58	1.22	67	.09	25.0
10	63	46	54	.08	128	.07	32.3
11	69	43	56	0	328	.05	45.2
12	60	42	51	0	126	.07	18.5
13	67	43	55	0	306	.05	39.4
14	68	48	58	.20	166	.10	41.8
15	48	36	42	0	58	.12	99.5
16	49	31	40	0	305	.04	83.5
17	57	27	42	0	333	.08	31.8
18	64	31	48	.08	154	.10	22.1
19	65	53	59	0	85	.01	51.7
20	67	42	55	.61	286	.12	88.4
21	65	36	51	0	320	.21	63.6
22	68	40	54	0	303	.09	27.0
23	40	22	31	0	138	.05	33.1
24	35	16	26	0	327	-	131.1
25	56	20	38	0	308	-	57.3
26	58	28	43	0	304	-	39.4
27	67	46	57	0	167	.07	48.8
28	75	46	61	0	244	.05	15.1
29	76	47	62	0	254	.05	11.9
30	79	49	64	0	269	.07	12.5
Total	1884	1162	1527	2.19	7,335	*2.45	1383.3
Avg.	62.8	38.7	50.9				46.1

* Evap. adjusted for full month

- Missing data

Table 12. Daily temperatures, precipitation, solar radiation, evaporation, and miles of wind per day for December 1970

Date	Air Temperature			Precip.	Solar radiation	Evaporation	Wind m/d 2.5 ft.
	Max.	Min.	Mean				
1	70	45	58	0	152	.11	12.1
2	75	50	63	0	209	.02	26.9
3	74	49	62	0	203	.10	19.4
4	70	43	57	0	292	.05	56.0
5	69	36	53	0	290	.16	56.8
6	54	40	47	0	294	.17	69.9
7	54	28	41	0	281	-	83.0
8	59	34	47	0	272	.09	51.9
9	70	47	59	0	208	.11	51.5
10	71	50	61	0	134	.06	23.7
11	69	51	60	0	112	.04	15.0
12	62	38	50	.16	127	.03	48.5
13	63	36	50	0	331	.11	85.5
14	58	30	44	0	304	.06	44.2
15	50	39	45	1.55	69	.10	47.4
16	65	40	56	1.50	256	-	98.6
17	57	36	47	0	251	.12	89.3
18	63	34	49	0	280	.08	34.5
19	71	39	52	.03	225	.07	28.5
20	71	58	65	0	145	.08	28.4
21	70	55	63	0	126	.02	27.3
22	71	54	63	0	139	.01	33.8
23	72	58	65	.24	85	.04	75.2
24	58	34	46	0	282	.15	101.7
25	45	29	37	0	63	.06	38.1
26	40	22	31	0	295	-	100.0
27	50	23	37	0	281	-	37.6
28	53	36	45	.09	170	.07	46.1
29	46	38	42	1.22	31	.17	47.2
30	45	35	40	0	166	.07	58.7
31	44	37	41	.51	37	-	82.1
Total	1889	1244	1576	5.30	6,110	*2.40	1618.9
Avg.	60.9	40.1	50.8				52.2

* Evap. adjusted for full month

- Missing data

Annual and
Table 13. Monthly Averages for Temperature and Precipitation from 1855-1952

Date	Temperature			Precipitation	Evaporation
	Avg. Daily Max.	Avg. Daily Min.	Average (°F)	Average (Inches)	Average (Inches)
January	59.0	38.9	49.0	4.80	1.94
February	61.6	40.5	51.5	5.25	2.50
March	67.8	45.7	56.8	6.13	4.39
April	75.4	52.8	64.1	4.37	5.36
May	83.3	60.4	71.9	3.55	7.53
June	89.5	67.7	78.6	4.06	7.48
July	90.0	69.9	80.0	5.34	7.33
August	89.7	69.4	79.6	4.71	6.43
September	86.7	65.4	76.1	3.20	5.53
October	77.9	54.7	66.3	2.58	4.46
November	66.7	44.3	55.5	3.48	2.92
December	58.9	39.3	49.1	5.13	2.30
Year	75.5	54.1	64.8	52.60	58.17

Evaporation based on data from 1947 through 1950 and 1964 through 1970.

Table 14. Six Hourly Temperature and Relative Humidity, January 1970

Date	Midnight		6:00AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	36	100	35	94	38	68	30	100	34.8	90.5
2	28	93	28	92	62	26	40	70	39.5	70.3
3	36	74	33	94	38	46	30	58	34.3	68.0
4	24	70	26	80	49	32	32	64	32.8	61.5
5	35	51	35	62	45	42	43	42	39.5	49.3
6	36	100	35	100	38	100	36	100	36.3	100.0
7	27	90	19	76	24	46	19	50	22.3	65.5
8	12	88	13	93	26	35	22	34	18.3	62.5
9	10	60	5	71	25	36	24	37	16.0	51.0
10	18	74	12	91	36	33	27	44	23.3	60.5
11	29	51	28	58	34	100	36	100	31.8	77.3
12	36	100	35	100	41	100	39	85	37.8	96.3
13	32	94	30	100	47	38	41	33	37.5	66.3
14	35	37	31	54	52	22	45	32	40.8	36.3
15	44	32	37	96	48	83	46	80	43.8	72.8
16	40	69	39	84	55	59	48	78	45.5	72.5
17	44	100	43	100	49	100	48	100	46.0	100.0
18	47	100	47	100	51	90	47	97	48.0	96.8
19	42	100	38	100	41	87	38	100	39.8	96.8
20	35	100	34	100	34	94	32	80	33.8	93.5
21	26	74	18	44	31	28	26	23	25.3	42.3
22	19	40	20	67	38	28	28	47	26.3	45.5
23	35	44	32	100	36	99	35	91	34.5	83.5
24	34	92	30	100	57	32	41	45	40.5	67.3
25	38	80	41	100	60	90	61	100	50.0	92.5
26	63	100	57	100	69	28	56	33	61.3	65.3
27	48	55	39	99	67	25	51	40	51.3	54.8
28	45	82	45	99	65	66	61	78	54.0	81.3
29	59	99	61	100	67	99	54	99	60.3	99.3
30	39	69	33	70	44	34	34	34	37.5	51.8
31	25	75	28	95	53	21	37	41	35.8	58.0
Avg.	34.7	77.2	32.5	87.7	45.8	57.6	38.9	65.0		

Table 15. Six Hourly Temperature and Relative Humidity, February 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	32	97	35	50	48	50	47	98	40.5	73.8
2	48	94	45	98	62	48	58	46	53.3	71.5
3	48	100	27	76	29	52	22	29	31.5	64.3
4	16	42	12	71	38	22	31	24	24.3	39.8
5	27	53	24	90	49	18	39	22	34.8	45.8
6	38	31	31	32	53	20	43	36	41.3	29.8
7	40	42	33	44	59	25	45	41	44.3	38.0
8	38	73	36	92	57	40	55	38	46.5	60.8
9	44	98	39	96	47	43	37	86	41.8	80.8
10	35	76	33	78	46	48	44	41	39.5	60.8
11	37	53	32	74	60	35	57	40	46.5	50.5
12	48	68	28	91	48	40	40	45	41.0	61.0
13	30	83	26	100	56	28	48	33	40.0	61.0
14	36	86	32	100	65	38	59	56	48.0	70.0
15	55	91	52	80	67	66	64	89	59.5	81.5
16	59	100	55	100	53	100	51	100	54.5	100.0
17	49	100	47	100	49	95	50	88	48.8	95.8
18	38	100	39	100	57	72	53	59	46.8	82.8
19	47	100	48	100	62	50	50	40	51.8	72.5
20	35	70	29	76	50	25	42	24	39.0	48.8
21	31	42	26	50	52	32	46	33	38.8	39.3
22	36	34	32	100	61	26	54	30	45.8	47.5
23	50	43	48	68	58	54	52	78	52.0	60.8
24	46	100	44	100	59	50	52	100	50.3	87.5
25	49	100	49	100	50	100	43	76	47.8	94.0
26	29	63	25	70	47	30	41	36	35.5	49.8
27	31	62	28	100	59	28	48	42	41.5	58.0
28	42	98	42	99	65	26	56	32	51.3	63.8
Avg.	39.8	75.0	35.6	83.4	53.8	45.0	47.4	52.2		

Table 16. Six Hourly Temperature and Relative Humidity, March 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	45	86	48	73	69	44	59	55	55.3	64.5
2	46	100	46	100	70	42	64	50	56.5	73.0
3	51	98	53	80	69	56	68	57	60.3	72.8
4	59	72	55	100	67	70	62	66	60.8	77.0
5	56	100	53	100	72	50	63	50	61.0	75.0
6	46	100	37	100	64	34	54	50	50.3	71.0
7	47	66	44	88	48	88	49	100	47.0	85.5
8	49	100	49	98	55	65	53	71	51.5	83.5
9	47	69	44	60	72	24	63	26	56.5	44.8
10	46	82	40	100	68	39	64	37	54.5	64.5
11	53	95	46	100	64	58	61	59	56.0	78.0
12	57	100	56	100	63	89	65	92	60.3	95.3
13	50	99	37	100	43	83	43	72	43.3	88.5
14	33	89	31	71	47	37	45	31	39.0	57.0
15	35	65	31	100	52	35	47	36	41.3	59.0
16	33	55	31	47	50	19	48	18	40.5	34.8
17	38	44	36	50	58	46	50	100	45.5	60.0
18	51	100	53	100	66	70	60	70	57.5	85.0
19	57	100	56	100	68	79	63	100	61.0	94.8
20	63	100	64	100	60	100	55	100	60.5	100.0
21	51	66	43	100	49	100	49	100	48.0	91.5
22	43	100	40	80	42	70	41	68	41.5	79.5
23	34	92	34	100	67	38	55	34	47.5	66.0
24	41	58	38	91	68	34	65	32	53.0	53.8
25	51	73	46	100	68	34	63	44	57.0	62.8
26	55	90	57	100	58	50	51	40	55.3	70.0
27	40	72	41	76	62	23	51	47	48.5	54.5
28	49	51	50	73	61	50	56	100	54.0	68.5
29	57	100	61	96	71	37	62	40	62.8	68.3
30	53	68	51	100	51	100	50	100	51.3	92.0
31	48	100	46	100	64	68	66	55	56.0	80.8
Avg.	47.9	83.6	45.7	89.8	60.8	55.9	56.3	61.3		

Table 17. Six Hourly Temperature and Relative Humidity, April 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	59	93	76	100	78	60	76	52	72.3	76.3
2	70	87	60	100	58	43	54	34	60.5	66.0
3	41	68	40	73	64	26	57	32	50.5	49.8
4	43	87	50	95	71	26	58	45	55.5	63.3
5	47	93	50	64	73	29	64	33	58.5	54.8
6	52	62	47	83	67	33	68	31	58.5	52.3
7	49	69	43	85	69	28	66	20	56.8	50.5
8	53	39	45	62	72	35	70	32	60.0	42.0
9	55	66	46	100	72	54	69	50	60.5	67.5
10	63	86	55	68	62	37	58	58	59.5	62.3
11	57	62	55	59	63	75	59	59	58.5	63.8
12	52	100	53	100	60	99	60	98	56.3	99.3
13	57	100	56	88	76	54	74	55	65.8	74.3
14	63	92	51	100	71	24	66	22	62.8	59.5
15	51	60	47	85	74	27	67	26	59.8	49.5
16	59	64	55	100	61	88	62	91	59.3	85.8
17	59	89	60	91	73	46	66	100	64.5	81.5
18	61	100	61	99	80	51	72	82	68.5	83.0
19	63	100	63	100	79	48	65	100	67.5	87.0
20	63	100	62	84	76	47	72	37	68.3	67.0
21	62	59	57	100	82	39	76	42	69.3	60.0
22	59	100	62	100	82	58	79	53	70.5	77.8
23	67	92	65	100	84	54	77	55	73.3	75.3
24	65	92	67	100	79	70	61	100	68.0	90.5
25	61	100	59	90	70	72	73	92	65.8	88.5
26	66	100	64	96	76	68	67	100	68.3	91.0
27	65	100	69	100	79	70	75	70	72.0	85.0
28	67	100	69	100	83	54	78	58	74.3	78.0
29	70	100	71	100	82	81	79	68	75.5	87.3
30	68	100	70	100	84	54	78	63	75.0	79.3
Avg.	58.9	85.3	57.6	90.7	73.3	51.7	68.2	58.6		

Table 18. Six Hourly Temperature and Relative Humidity, May 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	73	73	68	98	79	54	72	64	73.0	72.3
2	65	78	66	98	76	65	68	92	68.8	83.3
3	61	100	55	100	57	100	55	100	57.0	100.0
4	53	100	55	95	69	54	73	39	62.5	72.0
5	57	63	50	94	57	64	50	94	53.5	78.8
6	62	74	59	86	81	36	81	32	70.8	57.0
7	64	72	56	74	78	38	81	34	69.8	54.5
8	58	90	58	91	81	41	81	35	69.5	64.3
9	61	92	60	100	81	36	77	45	69.8	68.3
10	63	100	64	100	79	50	78	44	71.0	73.5
11	66	86	62	100	80	49	80	46	72.0	70.3
12	64	100	66	86	82	46	81	46	73.3	69.5
13	66	100	65	100	84	38	79	48	73.5	71.5
14	63	100	70	100	85	42	80	42	74.5	71.0
15	68	88	72	88	88	38	72	100	75.0	78.5
16	68	97	70	98	83	45	75	100	74.0	85.0
17	64	100	61	78	78	34	72	32	68.8	61.0
18	56	77	60	60	78	35	76	32	67.5	51.0
19	64	57	63	89	82	40	77	46	71.5	58.0
20	66	62	64	71	84	32	81	38	73.8	50.8
21	63	83	68	72	86	33	83	34	75.0	55.5
22	63	88	73	66	92	32	82	40	77.5	56.5
23	68	97	72	87	89	42	81	52	77.5	69.5
24	66	94	71	76	86	40	76	50	74.8	65.0
25	69	72	74	78	82	47	75	73	75.0	67.5
26	67	100	68	100	82	64	79	80	74.0	86.0
27	67	92	68	62	87	28	80	32	75.5	53.5
28	68	91	71	98	86	43	71	94	74.0	81.5
29	66	100	68	100	70	100	67	100	67.8	100.0
30	68	100	71	100	75	88	67	100	70.3	97.0
31	67	100	69	97	80	60	73	88	72.3	86.3
Avg.	64.3	87.9	65.1	88.5	79.9	48.8	74.9	59.7		

Table 19. Six Hourly Temperature and Relative Humidity, June 1970

Date	Midnight		6:00-AM		Noon		6:00-PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	69	100	71	100	79	59	69	100	72.0	89.8
2	67	100	69	100	75	92	67	100	69.5	98.0
3	65	100	66	100	67	100	64	100	65.5	100.0
4	64	100	67	100	76	67	74	51	70.3	79.5
5	65	82	64	100	75	45	72	51	69.0	69.5
6	59	98	63	100	71	55	65	80	64.5	83.3
7	57	100	64	100	78	48	76	44	68.8	73.0
8	64	90	65	83	81	34	75	44	71.3	62.8
9	62	95	64	89	83	35	78	50	71.8	67.3
10	64	100	66	100	80	46	74	64	71.0	77.5
11	65	100	68	98	80	53	71	59	71.0	77.5
12	64	92	72	90	83	43	76	64	73.8	72.3
13	67	100	77	86	85	61	67	98	74.0	86.3
14	61	100	71	79	85	53	74	70	72.8	75.5
15	68	100	70	99	78	65	75	70	72.8	83.5
16	68	100	67	100	84	52	84	48	75.8	75.0
17	70	100	72	98	88	46	85	52	78.8	74.0
18	70	100	77	90	90	42	86	50	80.8	70.5
19	73	98	78	90	92	43	85	53	82.0	71.0
20	73	100	80	90	92	39	74	72	79.8	75.3
21	71	92	74	93	90	50	84	54	79.8	72.3
22	72	100	81	90	90	45	77	76	80.0	77.8
23	69	100	73	100	89	50	78	76	77.3	81.5
24	72	100	72	100	86	54	71	100	75.3	88.5
25	68	100	69	100	77	72	74	88	72.0	90.0
26	70	100	73	100	83	63	80	72	76.5	83.8
27	70	100	73	100	80	80	77	71	75.0	87.8
28	65	94	68	84	82	43	76	46	72.8	66.8
29	66	75	68	89	84	50	78	44	74.0	64.5
30	65	88	67	92	84	38	84	41	75.0	64.8
Avg.	66.8	96.8	70.3	94.7	82.2	54.1	75.7	66.3		

Table 20. Six Hourly Temperature and Relative Humidity, July 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	67	90	72	91	92	40	89	42	80.0	65.8
2	75	89	75	95	96	38	90	45	84.0	66.8
3	80	80	82	75	95	38	90	43	86.8	59.0
4	75	98	78	99	87	68	69	100	77.3	91.3
5	68	100	72	70	81	38	74	42	73.8	62.5
6	61	90	68	72	82	37	81	35	73.0	58.5
7	62	95	68	73	86	41	86	42	75.5	62.8
8	72	94	70	100	89	46	75	79	76.3	79.8
9	70	100	71	100	84	63	83	60	77.0	80.8
10	71	100	72	100	87	52	84	47	78.5	74.8
11	71	100	75	100	91	51	70	100	76.8	87.8
12	67	100	73	100	88	47	84	45	78.0	73.0
13	70	100	73	100	87	53	78	84	77.0	84.3
14	70	100	71	100	86	54	84	50	77.8	76.0
15	73	98	75	91	89	48	83	56	80.0	73.3
16	72	97	74	96	88	76	76	74	77.5	85.8
17	70	98	74	74	89	40	82	44	78.8	64.0
18	67	99	74	100	90	38	72	100	75.8	84.3
19	68	100	78	86	89	45	76	79	77.8	77.5
20	70	100	74	100	90	53	79	72	78.3	81.3
21	70	100	70	100	86	59	71	100	74.3	89.8
22	68	100	68	100	72	100	74	94	70.5	98.5
23	70	100	72	100	82	70	74	100	74.5	92.5
24	71	100	73	100	86	58	77	90	76.8	87.0
25	72	100	73	100	89	54	80	90	78.5	86.0
26	72	100	78	96	90	48	80	72	80.0	79.0
27	72	100	76	100	87	59	84	61	79.8	80.0
28	71	100	71	100	88	56	82	77	78.0	83.3
29	73	98	71	98	88	52	73	88	76.3	84.0
30	70	98	70	98	85	56	85	60	77.5	78.0
31	71	97	70	98	88	49	81	66	77.5	77.5
Avg.	70.3	97.5	72.9	93.9	87.3	52.5	79.5	68.9		

Table 21. Six Hourly Temperature and Relative Humidity, August 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	73	100	71	100	89	60	71	100	76.0	90.0
2	69	100	68	100	87	62	83	68	76.8	82.5
3	74	94	72	100	90	53	86	63	80.5	77.5
4	73	100	71	100	86	76	74	98	76.0	93.5
5	71	100	70	100	88	50	86	57	78.8	76.8
6	74	100	73	100	90	45	80	66	79.3	77.8
7	71	100	69	100	82	77	77	77	74.8	88.5
8	71	99	72	100	78	98	76	96	74.3	98.3
9	70	100	69	100	80	78	72	100	72.8	94.5
10	71	100	70	100	77	100	75	96	73.3	99.0
11	73	100	67	100	70	98	69	100	69.8	99.5
12	68	100	67	100	81	62	77	70	73.3	83.0
13	69	100	69	100	81	61	81	60	75.0	80.3
14	69	100	68	100	85	51	81	60	75.8	77.8
15	72	100	71	100	82	66	82	66	76.8	83.0
16	71	100	71	100	87	48	84	49	78.3	74.3
17	71	100	68	100	88	52	71	100	74.5	88.0
18	72	100	71	100	86	62	78	73	76.8	83.8
19	70	100	70	100	82	70	80	83	75.5	88.3
20	70	100	70	100	84	70	79	83	75.8	88.3
21	71	100	70	100	88	56	77	90	76.5	86.5
22	71	100	70	100	87	64	82	70	77.5	83.5
23	72	100	71	100	85	70	80	70	77.0	85.0
24	70	100	70	100	78	100	80	94	74.5	98.5
25	73	92	70	100	84	70	79	78	76.5	85.0
26	73	98	71	100	80	76	76	98	75.0	93.0
27	71	100	71	100	72	100	76	94	72.5	98.5
28	72	100	72	100	84	70	76	98	76.0	92.0
29	73	100	72	100	86	68	83	66	78.5	83.5
30	73	100	72	100	90	52	73	100	77.0	88.0
31	73	100	72	100	90	55	82	79	79.3	83.5
Avg.	71.4	99.5	70.3	100.0	83.8	68.4	78.3	80.7		

Table 22. Six Hourly Temperature and Relative Humidity, September 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	73	94	71	94	85	65	80	75	77.3	82.0
2	71	97	69	97	88	57	78	77	76.5	82.0
3	71	97	69	98	86	51	81	58	76.8	76.0
4	71	98	70	100	85	65	80	67	76.5	82.5
5	73	98	71	99	83	84	79	85	76.5	91.5
6	72	98	71	100	87	55	77	92	76.8	86.3
7	70	100	69	100	82	77	71	100	73.0	94.3
8	68	100	69	100	83	64	75	90	73.8	88.5
9	69	100	67	100	83	52	76	71	73.8	80.8
10	71	88	68	100	86	53	76	83	75.3	81.0
11	69	100	68	100	84	59	73	92	73.5	87.8
12	67	100	67	100	88	42	77	82	74.8	81.0
13	69	99	68	99	75	90	72	80	71.0	92.0
14	68	99	66	99	86	58	81	61	75.3	79.3
15	74	93	71	100	81	87	79	68	76.3	87.0
16	70	81	67	100	84	60	78	80	74.8	80.3
17	74	99	70	100	86	60	81	56	77.8	78.8
18	72	100	70	100	90	50	80	70	78.0	80.0
19	71	100	68	100	93	42	82	47	78.5	72.3
20	73	92	69	100	91	48	80	58	78.3	74.5
21	73	97	70	100	91	53	80	68	78.5	79.5
22	74	98	71	100	88	54	79	57	78.0	77.3
23	70	95	70	100	86	55	75	83	75.3	83.3
24	69	100	69	100	85	55	79	68	75.5	80.8
25	69	100	68	100	87	50	76	62	75.0	78.0
26	68	100	67	100	84	63	75	79	73.5	85.5
27	68	99	67	100	83	56	69	87	71.8	85.5
28	63	96	58	88	76	51	65	42	65.5	69.3
29	58	64	52	74	71	40	66	33	61.8	52.8
30	55	65	49	100	79	39	71	39	63.5	60.8
Avg.	69.4	94.9	67.3	98.3	84.5	57.8	76.4	70.3		

Table 23. Six Hourly Temperature and Relative Humidity, October 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	56	100	58	78	82	31	71	37	66.8	61.5
2	56	96	55	100	82	37	71	42	66.0	68.8
3	58	96	60	93	86	34	74	46	69.5	67.3
4	64	55	56	51	77	24	67	23	66.0	38.3
5	57	42	52	53	77	39	63	44	62.3	44.5
6	62	48	59	88	75	59	71	66	66.8	65.3
7	68	87	65	97	69	86	66	100	67.0	92.5
8	66	100	65	100	71	100	70	100	68.0	100.0
9	67	100	67	100	79	64	70	100	70.8	91.0
10	68	100	62	100	70	100	70	100	67.5	100.0
11	66	100	67	100	81	58	71	87	71.3	86.3
12	68	98	66	100	79	65	73	87	71.5	87.5
13	67	99	67	100	77	72	71	76	70.5	86.8
14	68	100	65	100	70	100	71	96	68.5	99.0
15	65	100	66	100	77	63	68	100	69.0	90.8
16	60	100	58	90	68	53	62	47	62.0	72.5
17	49	53	43	86	61	37	54	46	51.8	55.5
18	48	56	46	78	66	53	62	68	55.5	63.8
19	59	76	58	94	66	85	63	100	61.5	88.8
20	60	100	62	100	69	91	62	97	63.3	97.0
21	58	100	58	100	66	70	59	94	60.3	91.0
22	56	100	52	100	71	45	59	76	59.5	80.3
23	54	93	53	99	72	46	62	84	60.3	80.5
24	57	93	59	97	62	100	61	100	59.8	97.5
25	60	100	56	100	68	90	62	93	61.5	95.8
26	57	100	54	100	69	65	62	95	60.5	90.0
27	58	100	55	100	69	50	60	79	60.5	82.3
28	53	96	55	100	63	88	61	97	58.0	95.3
29	60	100	59	100	61	100	62	100	60.5	100.0
30	60	100	59	100	70	65	59	96	62.0	90.3
31	53	100	51	100	68	85	57	100	57.3	96.3
Avg.	59.2	89.9	58.3	93.7	71.6	66.3	65.0	79.9		

Table 24. Six Hourly Temperature and Relative Humidity, November 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	57	100	59	100	64	70	58	94	59.5	91.0
2	52	100	53	100	70	49	56	87	57.8	84.0
3	47	90	37	100	57	43	47	72	47.0	76.3
4	42	80	34	100	47	53	39	59	40.5	73.0
5	35	94	38	99	55	49	48	58	44.0	75.0
6	39	94	35	100	64	33	47	60	46.3	71.8
7	43	99	38	100	66	38	49	79	49.0	79.0
8	43	100	42	100	69	42	51	89	51.3	82.8
9	49	97	48	96	61	78	59	100	54.3	92.8
10	55	100	52	100	59	92	51	94	54.3	96.5
11	46	100	43	100	66	45	51	95	51.5	85.0
12	45	100	45	100	56	80	48	100	48.5	95.0
13	47	100	42	100	64	46	48	93	50.3	84.8
14	49	99	53	100	62	63	52	86	54.0	87.0
15	48	97	41	92	40	70	37	84	41.5	85.8
16	36	67	34	64	46	44	37	67	38.3	60.5
17	31	97	28	100	53	37	41	74	38.3	77.0
18	33	97	35	100	58	81	57	85	45.8	90.8
19	55	100	54	100	58	100	60	100	56.8	100.0
20	57	100	59	99	65	43	51	60	58.0	75.5
21	41	94	35	93	59	34	45	65	45.0	71.5
22	43	73	39	100	63	48	50	74	48.8	73.8
23	52	74	47	88	37	39	33	39	42.3	60.0
24	22	43	16	51	31	42	27	37	24.0	43.3
25	22	57	21	60	42	31	34	37	29.8	46.3
26	29	65	30	62	54	27	48	51	40.3	51.3
27	46	63	46	76	62	59	57	78	52.8	69.0
28	47	100	52	100	72	44	57	78	57.0	80.5
29	50	100	47	100	74	49	57	86	57.0	83.8
30	52	100	48	100	76	48	59	93	58.8	85.3
Avg.	43.8	89.3	41.7	92.7	58.3	52.6	48.5	75.8		

Table 25. Six Hourly Temperature and Relative Humidity, December 1970

Date	Midnight		6:00 AM		Noon		6:00 PM		Average	
	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.	Temp.	R.H.
1	51	100	46	100	63	76	58	100	54.5	94.0
2	56	100	56	100	72	68	58	94	60.5	90.5
3	50	100	52	100	70	66	64	60	59.0	81.5
4	59	98	59	100	66	20	50	22	58.5	60.0
5	41	40	34	58	62	27	50	21	46.8	36.5
6	52	44	40	47	50	30	50	29	48.0	37.5
7	31	56	26	60	51	31	40	38	37.0	46.3
8	37	45	33	48	53	30	48	41	42.8	41.0
9	44	46	44	92	65	67	58	88	52.8	73.3
10	53	100	55	100	59	100	56	99	55.8	99.8
11	53	85	55	99	65	58	58	94	57.8	84.0
12	58	95	58	100	56	100	44	89	54.0	96.0
13	38	97	36	99	47	57	44	48	41.3	75.3
14	38	72	30	100	53	35	41	71	40.5	69.5
15	41	54	39	54	46	57	42	100	42.0	66.3
16	48	100	51	100	63	64	54	70	54.0	83.5
17	47	76	43	78	53	55	42	85	46.3	73.5
18	36	100	34	100	58	56	45	83	43.3	84.8
19	44	87	44	100	67	80	62	89	54.3	89.0
20	58	100	58	100	66	88	63	97	61.3	96.3
21	57	100	56	100	61	100	58	100	58.0	100.0
22	55	100	60	100	67	90	64	100	61.5	97.5
23	62	100	62	100	70	79	68	82	65.5	90.3
24	58	100	45	78	53	35	43	52	49.8	66.3
25	33	82	29	100	39	75	42	61	35.8	79.5
26	29	53	23	59	38	33	30	35	30.0	45.0
27	27	57	22	68	47	35	41	33	34.3	48.3
28	40	48	38	68	52	34	43	100	43.3	62.5
29	42	100	43	100	44	100	46	100	43.8	100.0
30	38	100	36	100	43	75	39	97	39.0	93.0
31	40	100	41	100	42	96	40	77	40.8	93.3
Avg.	45.7	81.8	43.5	87.4	56.2	61.8	49.7	72.7		

Table 26. Soil Temperature and Wind, January 1970

Date	Soil Temperature, fahrenheit						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl.	Miles
	Max.	Min.	Max.	Min.	Max.	Min.	dir.	per day
1	44	43	47	45	45	44	NW	106
2	52	36	51	39	47	39	N	57
3	44	35	45	38	43	39	N	121
4	48	35	47	37	44	38	N	84
5	44	38	44	37	41	36	E	104
6	42	36	42	38	41	37	N	234
7	38	35	42	37	37	38	NW	198
8	32	32	35	35	34	34	W	136
9	32	27	42	32	33	32	W	104
10	32	27	33	32	32	32	N	46
11	33	28	34	32	32	31	E	143
12	39	31	39	34	37	32	N	116
13	49	31	48	33	43	32	NE	132
14	50	33	49	36	43	35	E	96
15	47	33	47	37	43	36	E	123
16	52	39	52	42	47	39	E	124
17	50	39	50	41	52	39	NE	90
18	52	44	52	49	49	43	N	90
19	46	45	47	47	45	45	NW	105
20	40	41	43	44	47	42	W	160
21	40	35	41	37	38	37	N	166
22	40	34	41	37	37	35	N	86
23	40	39	42	36	39	35	NW	126
24	55	37	54	38	48	36	S	82
25	55	39	55	40	51	36	S	143
26	66	44	64	46	58	41	NW	96
27	62	46	60	48	55	47	SE	68
28	65	44	63	48	52	46	S	136
29	62	48	61	49	58	46	S	179
30	55	42	54	45	51	46	NW	192
31	58	37	56	40	50	40	SE	41
Total	1464	1153	1480	1229	1372	1188		3684
Avg.	47.2	37.2	47.7	39.6	44.3	38.3	N	118.8

Table 27. Soil Temperature and Wind, February 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	48	37	48	40	46	39	S	256
2	63	40	61	41	55	40	S	157
3	48	41	48	45	46	46	NW	340
4	46	34	46	37	41	37	SE	48
5	49	33	48	37	44	35	SE	61
6	53	35	52	38	47	35	E	99
7	59	36	57	38	51	37	E	84
8	55	41	54	43	49	40	S	109
9	52	45	52	47	47	42	W	179
10	55	39	53	41	49	41	W	166
11	59	37	57	39	50	39	W	140
12	59	36	57	39	50	38	W	114
13	60	37	57	40	51	40	W	53
14	60	36	59	40	53	40	S	110
15	62	42	61	43	56	40	S	121
16	57	52	58	53	56	53	N	142
17	55	51	56	53	52	51	N	101
18	63	47	62	48	56	48	S	98
19	65	46	64	48	58	47	NW	184
20	57	39	56	42	52	43	N	200
21	57	36	56	39	50	40	N	154
22	63	37	60	39	54	39	W	55
23	57	47	57	46	53	40	N	115
24	60	48	58	49	54	45	N	37
25	55	47	55	49	51	46	NW	238
26	58	37	57	40	50	41	N	109
27	61	37	60	40	53	37	W	47
28	63	37	62	40	56	38	S	63
Total	1599	1130	1571	1194	1430	1157		3580
Avg.	57.0	40.4	56.1	42.6	51.1	41.3	W	127.9

Table 28. Soil Temperature and Wind, March 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	67	50	65	52	58	47	SE	88
2	65	49	64	50	58	48	S	91
3	64	48	63	50	58	47	S	186
4	60	53	65	53	60	52	S	118
5	71	56	70	57	61	54	N	138
6	69	47	67	50	61	51	N	89
7	53	47	54	50	52	50	N	124
8	55	51	56	53	52	50	N	106
9	71	46	69	48	61	48	N	98
10	71	46	68	48	52	47	SW	98
11	61	47	62	50	57	49	E	137
12	65	50	65	52	61	51	W	212
13	50	48	51	50	52	51	W	190
14	62	40	60	41	54	42	W	187
15	64	40	62	42	55	43	W	147
16	68	39	65	41	57	43	NE	119
17	65	39	63	41	55	41	SE	267
18	72	45	69	46	63	44	S	94
19	67	57	66	56	61	52	S	144
20	66	59	66	60	62	57	W	118
21	55	55	57	55	56	55	N	122
22	51	50	52	52	51	51	W	153
23	63	43	62	45	56	45	W	153
24	68	45	66	44	60	43	S	164
25	69	45	67	46	62	42	-	-
26	69	50	67	51	62	52	-	-
27	73	46	72	49	63	49	-	-
28	74	47	72	48	64	46	-	-
29	78	49	76	48	68	47	-	-
30	56	49	58	48	57	47	-	-
31	74	52	72	54	65	53	E	113
Total	2016	1488	1991	1530	1814	1497	-	-
Avg.	65.0	48.0	64.2	49.4	58.5	48.3	-	-

- Missing data

Table 29. Soil Temperature and Wind, April 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	74	53	72	54	67	51	S	255
2	71	62	70	63	66	56	W	259
3	72	47	70	50	68	51	N	105
4	75	48	72	50	66	48	E	40
5	76	53	74	52	67	52	NE	128
6	73	52	73	54	68	52	W	152
7	78	51	78	53	70	50	N	78
8	80	52	76	53	69	51	S	124
9	81	52	79	53	70	51	W	90
10	64	56	65	57	63	55	N	95
11	65	58	65	59	61	59	E	139
12	65	58	65	60	62	56	E	111
13	82	58	78	60	72	58	W	134
14	84	58	81	60	73	57	W	159
15	89	55	85	57	75	58	N	105
16	71	59	70	59	66	56	E	83
17	77	62	74	62	68	62	E	123
18	86	65	83	65	75	62	S	89
19	86	66	83	67	76	64	S	271
20	85	66	84	67	76	65	S	107
21	87	62	85	64	78	64	S	68
22	86	63	83	65	78	62	S	94
23	87	66	85	67	79	64	S	-
24	80	69	78	70	75	66	S	-
25	75	66	74	68	72	67	E	-
26	75	67	75	68	72	64	S	-
27	81	69	80	70	75	68	S	100
28	87	69	85	70	79	67	SW	112
29	89	70	87	72	86	69	W	58
30	88	72	87	73	81	70	S	122
Total	2369	1804	2316	1842	2153	1775		-
Avg.	79.0	60.1	77.2	61.4	71.8	59.2	S	

- Missing data

Table 30. Soil Temperature and Wind, May 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	86	70	85	71	80	69	S	118
2	79	70	79	71	75	71	N	167
3	64	64	66	65	66	66	N	175
4	80	59	77	61	73	61	N	154
5	82	58	80	57	74	60	N	82
6	83	57	82	59	76	59	N	129
7	87	62	85	63	78	63	N	101
8	90	60	88	62	81	63	S	64
9	92	63	89	65	82	64	S	85
10	92	68	90	69	83	69	S	99
11	97	70	94	72	86	70	S	80
12	97	69	94	71	86	71	W	71
13	101	70	98	72	89	72	W	74
14	101	71	99	72	90	73	W	58
15	104	71	100	73	92	73	NE	80
16	96	73	93	75	87	75	SW	106
17	96	69	93	72	86	73	N	167
18	98	64	95	67	87	70	E	141
19	100	64	97	67	89	64	E	89
20	103	69	99	71	91	72	E	72
21	103	72	99	73	91	74	SE	78
22	104	72	99	73	93	74	E	59
23	102	74	100	75	93	76	E	99
24	102	76	99	78	92	80	E	91
25	93	76	91	78	86	80	S	64
26	98	75	95	77	86	78	W	88
27	102	68	99	71	91	74	N	88
28	101	68	98	71	91	72	E	150
29	82	73	80	75	78	77	E	184
30	80	72	78	74	77	74	E	205
31	83	70	82	71	78	72	E	169
Total	2878	2117	2803	2171	2607	2189		3387
Avg.	92.8	68.3	90.4	70.0	84.1	70.6	E	109.3

Table 31. Soil Temperature and Wind, June 1970

Date	Soil Temperature						Wind at 12 ¹	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	86	71	84	72	80	71	SE	166
2	82	71	80	72	77	72	S	159
3	72	70	73	71	71	72	S	116
4	87	69	85	70	86	70	S	109
5	82	69	81	70	77	69	W	109
6	80	66	79	67	75	68	W	98
7	86	65	83	65	78	67	N	107
8	88	60	87	68	80	67	NE	125
9	94	65	92	67	84	67	E	52
10	90	66	89	68	83	68	W	37
11	92	69	90	71	83	71	S	59
12	99	70	97	72	89	72	E	54
13	96	71	94	72	88	72	W	105
14	101	71	98	73	90	75	N	149
15	97	75	94	77	88	75	E	109
16	104	75	100	76	92	77	E	76
17	105	74	102	76	94	76	S	37
18	109	77	105	79	93	80	W	70
19	108	79	103	81	96	82	N	55
20	108	81	104	82	97	81	W	74
21	105	80	102	82	96	82	W	59
22	108	81	105	83	96	84	NW	78
23	108	80	104	82	97	84	N	68
24	104	81	100	82	93	82	S	76
25	87	78	86	80	83	81	S	66
26	102	77	99	79	91	79	W	99
27	96	77	93	78	87	78	W	114
28	101	72	98	74	90	76	N	92
29	99	74	96	76	90	78	E	97
30	106	74	103	75	95	77	E	58
Total	2882	2188	2806	2240	2619	2253		2673
Avg.	96.1	72.9	93.5	74.7	87.3	75.1	W	89.1

Table 32. Soil Temperature and Wind, July 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	109	75	105	76	97	76	N	98
2	111	78	107	80	98	86	N	90
3	110	81	108	82	101	85	N	98
4	104	86	101	88	95	88	S	95
5	100	76	97	79	92	81	N	104
6	104	72	101	75	94	78	N	101
7	103	71	100	74	94	77	E	46
8	104	76	101	78	94	80	W	74
9	100	78	97	80	91	82	S	91
10	99	77	97	79	92	80	W	66
11	108	77	105	78	97	80	W	58
12	105	76	102	79	95	80	S	67
13	105	79	102	81	95	82	S	69
14	106	78	103	80	96	82	W	76
15	106	78	103	80	97	82	W	97
16	103	81	101	83	95	84	W	113
17	103	79	101	81	95	83	W	62
18	104	79	101	81	95	82	S	51
19	96	78	95	80	90	81	S	67
20	99	77	97	79	91	80	W	91
21	89	77	87	78	85	79	-	-
22	82	73	81	75	79	76	-	-
23	88	73	86	75	81	75	-	-
24	92	74	91	75	86	76	E	58
25	97	74	94	75	89	75	-	39
26	95	76	93	79	87	78	-	57
27	97	77	94	79	89	79	E	60
28	99	77	96	78	95	80	S	43
29	97	76	96	79	90	79	W	60
30	96	76	94	77	88	80	W	45
31	103	76	101	78	95	78	W	51
Total	3114	2381	3037	2441	2858	2484	-	-
Avg.	100.5	76.8	98.0	78.7	92.2	80.1	-	-

- Missing data

Table 33. Soil Temperature and Wind, August 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	102	79	99	80	92	79	-	59
2	102	77	100	79	93	80	-	61
3	106	78	104	80	96	79	-	75
4	98	80	97	82	90	82	W	74
5	101	77	98	80	93	80	N	64
6	105	78	103	80	95	78	N	62
7	100	80	98	82	92	83	E	76
8	91	80	90	82	87	82	-	-
9	89	78	89	79	85	80	-	-
10	83	77	83	78	81	79	-	-
11	76	74	77	76	77	77	-	-
12	89	72	87	74	84	75	-	-
13	91	72	90	74	84	74	-	-
14	95	74	93	76	88	76	-	-
15	95	74	93	76	88	77	-	40
16	102	77	100	78	93	78	-	54
17	104	78	102	80	95	79	-	51
18	105	77	103	80	96	80	S	64
19	103	79	101	81	95	82	E	38
20	95	77	93	80	89	82	S	48
21	101	77	99	79	93	80	W	59
22	102	78	100	80	94	80	S	50
23	102	81	100	82	94	81	W	74
24	90	80	89	81	85	82	N	54
25	90	77	89	78	86	79	E	89
26	86	76	85	78	83	79	E	62
27	84	76	83	77	81	78	E	51
28	90	74	88	76	84	76	E	93
29	91	75	90	77	86	77	E	61
30	96	76	95	78	89	79	E	42
31	95	78	93	79	89	78	-	-
Total	2959	2386	2911	2442	2757	2451	-	-
Avg.	95.5	77.0	93.9	78.8	88.9	79.1	-	-

- Missing data

Table 34. Soil Temperature and Wind, September 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl.	Miles
	Max.	Min.	Max.	Min.	Max.	Min.	dir.	per day
1	97	77	95	77	89	79	-	46
2	99	76	98	78	91	79	-	47
3	102	76	100	78	93	79	-	64
4	101	77	99	78	93	79	W	41
5	94	79	92	80	89	81	W	31
6	98	80	95	81	89	82	-	26
7	94	78	91	79	91	81	-	25
8	92	75	91	77	86	78	-	42
9	94	74	93	75	88	76	-	64
10	97	73	95	75	89	75	E	41
11	95	75	73	76	88	77	S	52
12	102	76	100	78	93	78	E	73
13	91	77	90	78	86	78	E	112
14	100	73	97	75	91	77	E	123
15	97	72	94	74	89	76	E	113
16	98	74	95	76	88	79	E	-
17	102	74	98	76	92	78	E	-
18	102	77	99	79	93	80	E	-
19	104	79	102	82	95	83	E	-
20	102	80	99	83	93	82	E	55
21	106	79	103	82	95	83	E	73
22	103	79	101	81	94	83	E	79
23	100	79	98	80	93	82	E	91
24	95	78	93	80	88	82	E	65
25	98	74	94	76	89	78	E	74
26	95	74	93	75	88	78	E	59
27	95	74	92	76	86	77	N	107
28	94	70	92	73	86	76	N	174
29	92	64	90	68	83	72	N	134
30	95	63	92	67	85	70	N	67
Total	2934	2256	2844	2313	2693	2358	-	-
Avg.	97.8	75.2	94.8	77.1	89.8	78.6	-	-

- Missing data

Table 35. Soil Temperature and Wind, October 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	97	64	92	67	87	68	N	76
2	95	67	93	70	86	71	W	60
3	96	68	93	71	87	72	W	87
4	93	68	91	71	84	74	N	155
5	89	65	87	68	82	72	E	135
6	83	64	82	67	79	70	E	165
7	75	66	75	70	74	71	E	175
8	76	69	76	71	74	71	E	160
9	80	68	79	70	76	71	S	131
10	78	70	78	71	76	71	N	61
11	82	70	81	71	77	72	E	124
12	80	69	79	71	76	71	E	126
13	79	69	78	71	76	71	E	120
14	80	69	79	71	77	72	E	65
15	82	68	80	70	76	71	N	90
16	74	64	74	67	72	68	N	206
17	71	54	71	57	68	60	E	123
18	70	53	70	56	67	58	E	131
19	66	57	66	59	65	57	E	167
20	76	61	74	62	70	63	N	116
21	73	64	72	65	69	64	N	79
22	77	59	76	61	71	62	N	96
23	76	58	75	60	71	62	E	66
24	68	57	68	60	67	62	E	106
25	77	64	76	65	71	64	N	45
26	76	61	74	63	70	64	E	85
27	74	60	73	61	70	62	E	136
28	67	59	66	61	65	62	E	134
29	66	60	67	61	65	61	N	76
30	76	63	74	64	71	63	N	96
31	74	58	73	60	69	61	N	127
Total	2426	1966	2392	2032	2288	2061		3519
Avg.	78.3	63.4	77.1	65.6	73.8	66.5	E	113.5

Table 36. Soil Temperature and Wind, November 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl.	Miles
	Max.	Min.	Max.	Min.	Max.	Min.	dir.	per day
1	70	61	69	63	67	64	E	74
2	71	58	70	60	67	61	W	112
3	67	50	66	53	63	56	W	106
4	57	47	57	50	56	52	W	125
5	62	44	62	47	58	49	W	119
6	67	44	66	47	61	48	W	60
7	69	45	68	47	63	47	W	50
8	72	50	71	53	65	51	S	44
9	60	54	61	55	59	55	E	89
10	63	53	64	55	61	55	N	79
11	70	51	69	53	64	53	W	63
12	60	50	60	52	58	52	W	60
13	70	52	69	54	64	53	N	62
14	67	53	65	53	61	52	W	153
15	51	51	53	53	54	54	NW	214
16	58	43	57	46	54	47	N	108
17	61	39	60	42	55	43	S	35
18	59	38	59	41	55	42	S	96
19	62	44	62	45	58	45	S	132
20	68	56	67	57	64	53	W	144
21	63	47	63	49	60	51	N	77
22	66	48	65	50	60	50	S	61
23	50	53	52	55	54	54	N	239
24	45	36	41	40	44	41	N	137
25	53	34	51	38	48	38	S	69
26	60	36	59	39	53	38	SE	91
27	63	47	61	48	56	45	E	61
28	67	49	67	48	61	46	N	44
29	68	52	67	53	62	51	W	37
30	71	54	70	55	64	55	W	25
Total	1890	1439	1871	1501	1769	1501		2766
Avg.	63.0	48.0	62.4	50.0	59.0	50.0	W	92.2

Table 37. Soil Temperature and Wind, December 1970

Date	Soil Temperature						Wind at 12'	
	5 cm.		10 cm.		20 cm.		Prvl. dir.	Miles per day
	Max.	Min.	Max.	Min.	Max.	Min.		
1	63	53	64	54	60	54	S	41
2	70	52	69	54	64	54	W	55
3	69	56	68	57	64	57	W	70
4	69	56	68	57	65	56	N	131
5	66	50	65	51	62	54	N	78
6	61	48	60	49	59	49	N	190
7	58	41	58	44	55	46	N	115
8	59	41	58	43	54	45	E	120
9	65	39	63	43	58	44	E	69
10	66	48	65	50	61	49	NE	34
11	61	56	63	57	60	54	S	76
12	65	55	64	57	60	55	NW	139
13	57	49	58	50	55	51	N	133
14	59	41	59	44	54	46	N	86
15	51	40	51	43	49	45	E	165
16	60	44	60	45	56	46	W	187
17	60	49	60	50	56	48	W	96
18	60	42	60	45	55	46	S	52
19	65	42	64	44	58	45	S	60
20	67	61	66	59	62	52	S	69
21	64	59	65	59	62	58	S	65
22	67	58	66	58	63	57	S	105
23	67	59	66	60	63	58	SW	164
24	62	54	63	56	60	58	N	112
25	62	43	63	46	60	47	NW	136
26	48	43	47	46	45	47	NW	103
27	50	36	49	39	46	40	W	85
28	51	32	51	39	48	39	W	51
29	47	43	48	44	44	42	E	123
30	49	42	50	44	47	47	E	145
31	46	42	47	44	45	42	W	176
Total	1864	1474	1858	1531	1750	1531		3231
Avg.	60.1	47.6	59.9	49.4	56.5	49.4	NW	104.2

Table 39. Cooling Degree Days 1970 - Base 75°

Date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	0	0	0	1	7	7	7	0	0	0
2	0	0	0	0	0	0	12	5	6	0	0	0
3	0	0	0	0	0	0	12	7	6	0	0	0
4	0	0	0	0	0	0	9	6	5	0	0	0
5	0	0	0	0	0	0	0	7	5	0	0	0
6	0	0	0	0	0	0	0	10	6	0	0	0
7	0	0	0	0	0	0	2	4	5	0	0	0
8	0	0	0	0	0	0	5	5	4	0	0	0
9	0	0	0	0	0	0	5	3	3	0	0	0
10	0	0	0	0	0	0	5	1	5	0	0	0
11	0	0	0	0	0	1	6	0	4	0	0	0
12	0	0	0	0	0	0	4	1	4	0	0	0
13	0	0	0	0	0	2	6	2	0	0	0	0
14	0	0	0	0	0	0	4	0	2	0	0	0
15	0	0	0	0	1	0	7	6	3	0	0	0
16	0	0	0	0	0	3	6	7	3	0	0	0
17	0	0	0	0	0	5	6	6	5	0	0	0
18	0	0	0	0	0	7	4	6	6	0	0	0
19	0	0	0	0	0	8	5	5	6	0	0	0
20	0	0	0	0	0	8	6	4	6	0	0	0
21	0	0	0	0	0	7	3	5	6	0	0	0
22	0	0	0	0	2	8	0	5	5	0	0	0
23	0	0	0	0	4	7	2	6	5	0	0	0
24	0	0	0	0	0	4	4	6	4	0	0	0
25	0	0	0	0	0	0	6	3	3	0	0	0
26	0	0	0	0	1	4	6	2	3	0	0	0
27	0	0	0	0	1	3	6	0	1	0	0	0
28	0	0	0	2	3	0	7	4	0	0	0	0
29	0	0	0	3	0	0	7	6	0	0	0	0
30	0	0	0	3	0	1	5	6	0	0	0	0
31	0	0	0	0	0	0	7	7	0	0	0	0
Total	0	0	0	8	12	69	164	142	118	0	0	0

Table 40. Heating Degree Days 1970 - Base 65°

Date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30	23	6	0	0	0	0	0	0	0	5	7
2	26	11	7	8	0	0	0	0	0	0	3	2
3	33	32	5	11	4	0	0	0	0	0	17	3
4	29	37	3	7	1	0	0	0	0	0	23	8
5	24	27	5	4	0	0	0	0	0	0	17	12
6	31	19	13	5	0	0	0	0	0	0	13	18
7	45	15	17	6	0	0	0	0	0	0	12	24
8	45	16	12	4	0	0	0	0	0	0	8	18
9	48	20	6	3	0	0	0	0	0	0	7	6
10	39	22	9	4	0	0	0	0	0	0	11	4
11	27	16	10	5	0	0	0	0	0	0	9	5
12	25	25	5	6	0	0	0	0	0	0	14	15
13	24	22	23	0	0	0	0	0	0	0	10	15
14	22	15	25	2	0	0	0	0	0	0	7	21
15	20	4	23	2	0	0	0	0	0	0	23	20
16	17	11	21	3	0	0	0	0	0	1	25	9
17	19	20	14	0	0	0	0	0	0	10	23	18
18	17	14	1	0	0	0	0	0	0	6	17	16
19	25	15	0	0	0	0	0	0	0	2	6	13
20	34	24	5	0	0	0	0	0	0	0	10	0
21	38	24	16	0	0	0	0	0	0	0	14	2
22	35	19	24	0	0	0	0	0	0	1	11	2
23	29	11	18	0	0	0	0	0	0	0	34	0
24	21	14	11	0	0	0	0	0	0	3	39	19
25	14	24	7	0	0	0	0	0	0	0	27	28
26	5	28	14	0	0	0	0	0	0	1	22	34
27	9	21	12	0	0	0	0	0	0	1	8	28
28	7	10	9	0	0	0	0	0	0	5	4	20
29	11		0	0	0	0	0	0	1	2	3	23
30	31		12	0	0	0	0	0	0	0	1	25
31	24		4		0		0	0		4		24
Total	804	539	337	70	5	0	0	0	1	36	423	439

Table 41. Time of Sunrise at Auburn, Alabama (a.m., CST),
Latitude $32^{\circ} 34'$ N., Longitude $85^{\circ} 31'$ W.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6:47	6:40	6:14	5:33	4:58	4:38	4:41	4:59	5:19	5:39	6:02	6:29
2	6:47	6:39	6:12	5:33	4:57	4:38	4:41	5:00	5:20	5:40	6:03	6:29
3	6:47	6:39	6:11	5:31	4:57	4:38	4:42	5:00	5:21	5:40	6:04	6:30
4	6:48	6:38	6:10	5:29	4:56	4:38	4:42	5:01	5:21	5:41	6:05	6:31
5	6:48	6:37	6:09	5:28	4:55	4:37	4:43	5:02	5:22	5:42	6:06	6:32
6	6:48	6:36	6:07	5:27	4:54	4:37	4:43	5:02	5:23	5:42	6:07	6:33
7	6:48	6:36	6:06	5:26	4:53	4:37	4:43	5:03	5:23	5:43	6:08	6:33
8	6:48	6:35	6:05	5:24	4:52	4:37	4:44	5:04	5:24	5:44	6:08	6:34
9	6:48	6:34	6:04	5:23	4:51	4:37	4:44	5:04	5:24	5:45	6:09	6:35
10	6:48	6:33	6:02	5:22	4:51	4:37	4:45	5:05	5:25	5:45	6:10	6:36
11	6:48	6:32	6:01	5:21	4:50	4:37	4:46	5:06	5:26	5:46	6:11	6:36
12	6:48	6:31	6:00	5:19	4:49	4:37	4:46	5:06	5:26	5:47	6:12	6:37
13	6:48	6:31	5:58	5:18	4:48	4:37	4:47	5:07	5:27	5:48	6:13	6:38
14	6:47	6:30	5:57	5:17	4:48	4:37	4:47	5:08	5:28	5:48	6:14	6:38
15	6:47	6:29	5:56	5:16	4:47	4:37	4:48	5:08	5:28	5:49	6:15	6:39
16	6:47	6:28	5:55	5:14	4:46	4:37	4:49	5:09	5:29	5:50	6:15	6:40
17	6:47	6:27	5:53	5:13	4:45	4:37	4:49	5:10	5:30	5:51	6:16	6:40
18	6:46	6:26	5:52	5:12	4:45	4:37	4:50	5:10	5:30	5:51	6:17	6:41
19	6:46	6:25	5:51	5:11	4:44	4:37	4:50	5:11	5:31	5:52	6:18	6:41
20	6:46	6:24	5:49	5:10	4:44	4:37	4:51	5:11	5:32	5:53	6:19	6:42
21	6:45	6:23	5:48	5:09	4:43	4:38	4:52	5:12	5:32	5:54	6:20	6:42
22	6:45	6:22	5:47	5:08	4:42	4:38	4:52	5:13	5:33	5:55	6:21	6:42
23	6:45	6:20	5:45	5:07	4:42	4:38	4:53	5:13	5:34	5:55	6:22	6:43
24	6:44	6:19	5:44	5:06	4:41	4:38	4:54	5:14	5:34	5:56	6:23	6:44
25	6:44	6:18	5:43	5:04	4:41	4:39	4:54	5:15	5:35	5:57	6:23	6:44
26	6:43	6:17	5:41	5:03	4:41	4:39	4:55	5:15	5:36	5:58	6:24	6:45
27	6:43	6:16	5:40	5:02	4:40	4:39	4:56	5:16	5:36	5:58	6:25	6:45
28	6:42	6:15	5:39	5:01	4:40	4:40	4:56	5:17	5:37	5:59	6:26	6:45
29	6:42	6:14	5:37	5:00	4:39	4:40	4:57	5:17	5:38	6:00	6:27	6:46
30	6:41		5:36	4:59	4:39	4:40	4:58	5:18	5:38	6:01	6:28	6:46
31	6:41		5:36		4:39		4:58	5:19		6:02		6:46

Sunrise and sunset are considered to occur when the upper edge of the disk of the sun appears to be exactly on the horizon, with normal atmospheric conditions, and at zero elevation above the earth's surface in a level region. Times of sunrise and sunset shown in the tables are valid for the remainder of the 20th century.

Table 42. Time of Sunset at Auburn, Alabama (p.m., CST),
Latitude 32° 34' N., Longitude 85° 31' W.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4:50	5:18	5:42	6:05	6:26	6:47	6:57	6:43	6:10	5:30	4:54	4:39
2	4:51	5:19	5:43	6:06	6:27	6:48	6:57	6:42	6:09	5:29	4:54	4:39
3	4:52	5:20	5:44	6:07	6:28	6:49	6:56	6:42	6:08	5:27	4:53	4:39
4	4:53	5:21	5:44	6:07	6:28	6:49	6:56	6:41	6:06	5:26	4:52	4:39
5	4:53	5:21	5:45	6:08	6:29	6:50	6:56	6:40	6:05	5:25	4:51	4:39
6	4:54	5:22	5:46	6:09	6:30	6:50	6:56	6:39	6:04	5:23	4:50	4:39
7	4:55	5:23	5:47	6:09	6:31	6:51	6:56	6:38	6:02	5:22	4:50	4:39
8	4:56	5:24	5:47	6:10	6:31	6:51	6:56	6:37	6:01	5:21	4:49	4:39
9	4:57	5:25	5:48	6:11	6:32	6:52	6:55	6:36	6:00	5:20	4:48	4:39
10	4:58	5:26	5:49	6:12	6:33	6:52	6:55	6:35	5:58	5:18	4:48	4:40
11	4:58	5:27	5:50	6:12	6:33	6:53	6:55	6:34	5:57	5:17	4:47	4:40
12	4:59	5:28	5:51	6:13	6:34	6:53	6:55	6:33	5:56	5:16	4:46	4:40
13	5:00	5:29	5:51	6:14	6:35	6:53	6:54	6:32	5:54	5:15	4:46	4:40
14	5:01	5:29	5:52	6:14	6:36	6:54	6:54	6:31	5:53	5:13	4:45	4:41
15	5:02	5:30	5:53	6:15	6:36	6:54	6:54	6:30	5:52	5:12	4:45	4:41
16	5:03	5:31	5:54	6:16	6:37	6:54	6:53	6:29	5:50	5:11	4:44	4:41
17	5:04	5:32	5:54	6:16	6:38	6:55	6:53	6:28	5:49	5:10	4:43	4:42
18	5:05	5:33	5:55	6:17	6:38	6:55	6:52	6:27	5:48	5:09	4:43	4:42
19	5:06	5:34	5:56	6:18	6:39	6:55	6:52	6:26	5:46	5:08	4:43	4:42
20	5:07	5:34	5:56	6:19	6:40	6:55	6:51	6:25	5:45	5:06	4:42	4:43
21	5:08	5:35	5:57	6:19	6:40	6:55	6:51	6:24	5:44	5:05	4:42	4:43
22	5:09	5:36	5:58	6:20	6:41	6:56	6:50	6:23	5:42	5:04	4:41	4:43
23	5:10	5:37	5:59	6:21	6:42	6:56	6:50	6:21	5:41	5:03	4:41	4:44
24	5:10	5:38	5:59	6:21	6:42	6:56	6:49	6:20	5:40	5:02	4:41	4:45
25	5:11	5:39	6:00	6:22	6:43	6:56	6:48	6:19	5:38	5:01	4:40	4:45
26	5:12	5:39	6:01	6:23	6:43	6:57	6:48	6:18	5:37	5:00	4:40	4:46
27	5:13	5:40	6:02	6:23	6:44	6:57	6:47	6:17	5:35	4:59	4:40	4:47
28	5:14	5:41	6:02	6:24	6:45	6:57	6:46	6:15	5:34	4:58	4:40	4:47
29	5:15	5:42	6:03	6:25	6:45	6:57	6:45	6:14	5:33	4:57	4:39	4:48
30	5:16		6:04	6:26	6:46	6:57	6:45	6:13	5:31	4:56	4:39	4:49
31	5:17		6:04		6:46		6:44	6:12		4:55		4:49

Sunrise and sunset are considered to occur when the upper edge of the disk of the sun appears to be exactly on the horizon, with normal atmospheric conditions, and at zero elevation above the earth's surface in a level region. Times of sunrise and sunset shown in the tables are valid for the remainder of the 20th century.

Table 43. Growing Degree Days for 1970 - Base 40°

Date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	2	19	31	34	36	42	42	42	27	20	18
2	0	14	18	17	30	34	47	40	41	31	22	23
3	0	0	20	14	21	27	47	42	41	33	8	22
4	0	0	22	18	24	33	44	41	40	29	2	17
5	1	0	20	21	25	30	35	42	40	27	8	13
6	0	6	12	20	31	26	33	45	41	28	12	7
7	0	10	8	19	30	29	37	39	40	26	13	1
8	0	9	13	21	30	34	40	40	39	32	17	7
9	0	5	19	22	29	34	40	38	38	33	18	19
10	0	3	16	21	30	34	40	36	40	30	14	21
11	0	9	15	20	33	36	41	30	39	34	16	20
12	0	0	20	19	34	35	39	36	39	34	11	10
13	1	3	2	29	35	37	41	37	35	34	15	10
14	3	10	0	23	35	34	39	34	37	33	18	4
15	5	21	2	23	36	35	42	41	38	33	2	5
16	8	14	4	22	34	38	41	42	38	24	0	16
17	6	5	11	27	30	40	41	41	40	15	2	7
18	8	11	24	32	28	42	39	41	41	19	8	9
19	0	10	25	33	32	43	40	40	41	23	19	12
20	0	1	20	30	34	43	41	39	41	25	15	25
21	0	1	9	30	34	42	38	40	41	25	11	23
22	0	6	1	32	37	43	33	40	40	24	14	23
23	0	14	7	35	39	42	37	41	40	25	0	25
24	4	11	14	32	35	39	39	41	39	22	0	6
25	11	1	18	28	34	35	41	38	38	26	0	0
26	20	0	11	30	36	39	41	37	38	24	3	0
27	16	4	13	34	36	38	41	35	36	24	17	0
28	18	15	16	37	38	34	42	39	29	20	21	5
29	14		25	38	32	33	42	41	24	23	22	2
30	0		13	38	31	36	40	41	26	27	24	0
31	1		21		34		42	42		21		1
Total	116	185	438	796	1001	1081	1245	1221	1142	831	352	351

Table 44. Growing Degree Days for 1970 - Base 45°

Date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	14	26	29	31	32	37	37	22	15	13
2	0	9	13	12	25	29	42	35	36	26	17	18
3	0	0	15	9	16	22	42	37	36	28	3	17
4	0	0	17	13	19	28	39	36	35	24	0	12
5	0	0	15	16	20	25	30	37	35	22	3	8
6	0	1	7	15	26	21	28	40	36	23	7	2
7	0	5	3	14	25	24	32	34	35	21	8	0
8	0	4	8	16	25	29	35	35	34	27	12	2
9	0	0	14	17	24	29	35	33	33	28	13	14
10	0	0	11	16	25	29	35	31	35	25	9	16
11	0	4	10	15	28	31	36	25	34	29	11	15
12	0	0	15	14	29	30	34	31	34	29	6	5
13	0	0	0	24	30	32	36	32	30	29	10	5
14	0	5	0	18	30	29	34	29	32	28	13	0
15	0	16	0	18	31	30	37	36	33	28	0	0
16	3	9	0	17	29	33	36	37	33	19	0	11
17	1	0	6	22	25	35	36	36	35	10	0	2
18	3	6	19	27	23	37	34	36	36	14	3	4
19	0	5	20	28	27	38	35	35	36	18	14	7
20	0	0	15	25	29	38	36	34	36	20	10	20
21	0	0	4	25	29	37	33	35	36	20	6	18
22	0	1	0	27	32	38	28	35	35	19	9	18
23	0	9	2	30	34	37	32	36	35	20	0	20
24	0	6	9	27	30	34	34	36	34	17	0	1
25	6	5	13	23	29	30	36	33	33	21	0	0
26	15	0	6	25	31	34	36	32	33	19	0	0
27	11	0	8	29	31	33	36	30	31	19	12	0
28	13	7	11	32	33	29	37	34	24	15	16	0
29	9		20	33	27	28	37	36	19	18	17	0
30	0		8	33	26	31	35	36	21	22	19	0
31	0		16		29		37	37		16		0
Total	61	92	299	646	846	931	1085	1066	992	676	233	228

Table 45. Growing Degree Days for 1970 - Base 50°

Date	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	9	21	24	26	27	32	32	17	10	8
2	0	4	8	7	20	24	37	30	31	21	12	13
3	0	0	10	4	11	17	37	32	31	23	0	12
4	0	0	12	8	14	23	34	31	30	19	0	7
5	0	0	10	11	15	20	25	32	30	17	0	3
6	0	0	2	10	21	16	23	35	31	18	2	0
7	0	0	0	9	20	19	27	29	30	16	3	0
8	0	0	3	11	20	24	30	30	29	22	7	0
9	0	0	9	12	19	24	30	28	28	23	8	9
10	0	0	6	11	20	24	30	26	30	20	4	11
11	0	0	5	10	23	26	31	20	29	24	6	10
12	0	0	10	9	24	25	29	26	29	24	1	0
13	0	0	0	19	25	27	31	27	25	24	5	0
14	0	0	0	13	25	24	29	24	27	23	8	0
15	0	11	0	13	26	25	32	31	28	23	0	0
16	0	4	0	12	24	28	31	32	28	14	0	6
17	0	0	1	17	20	30	31	31	30	5	0	0
18	0	1	14	22	18	32	29	31	31	9	0	0
19	0	0	15	23	22	33	30	30	31	13	9	2
20	0	0	10	20	24	33	31	29	31	15	5	15
21	0	0	0	20	24	32	28	30	31	15	1	13
22	0	0	0	22	27	33	23	30	30	14	4	13
23	0	4	0	25	29	32	27	31	30	15	0	15
24	0	1	4	22	25	29	29	31	29	12	0	0
25	1	0	8	18	24	25	31	28	28	16	0	0
26	10	0	1	20	26	29	31	27	28	14	0	0
27	6	0	3	24	26	28	31	25	26	14	7	0
28	8	2	6	27	28	24	32	29	19	10	11	0
29	4		15	28	22	23	32	31	14	13	12	0
30	0		3	28	21	26	30	31	16	17	14	0
31	0		11		24		32	32		11		0
Total	29	27	175	496	691	781	930	911	842	521	129	137

Table 46. Precipitation Accumulation and Departure from Average*

Date	Average	Average Accumulation	1970	Accumulation for 1970	Departure for Month	Departure for 1970
Jan.	4.80	4.80	3.52	3.52	-1.28	-1.28
Feb.	5.25	10.05	3.64	7.16	-1.61	-2.89
March	6.13	16.18	9.35	16.51	+3.22	+0.33
April	4.37	20.55	2.90	19.41	-1.47	-1.14
May	3.55	24.10	2.59	22.00	-0.96	-2.10
June	4.06	28.16	2.57	24.57	-1.49	-3.59
July	5.34	33.50	4.39	28.96	-0.95	-4.54
Aug.	4.71	38.21	3.76	32.72	-0.95	-5.49
Sept.	3.20	41.41	.82	33.54	-2.38	-7.87
Oct.	2.58	43.99	8.41	41.95	+5.83	-2.04
Nov.	3.48	47.47	2.19	44.14	-1.29	-3.33
Dec.	5.13	52.60	5.30	49.44	+0.17	-3.16

* Precipitation averages are based on data from 1855 through 1952.

