

Figure 38. Monthly Maximum and Minimum 5-foot Relative Humidity in Percent. January 1950-December 1964

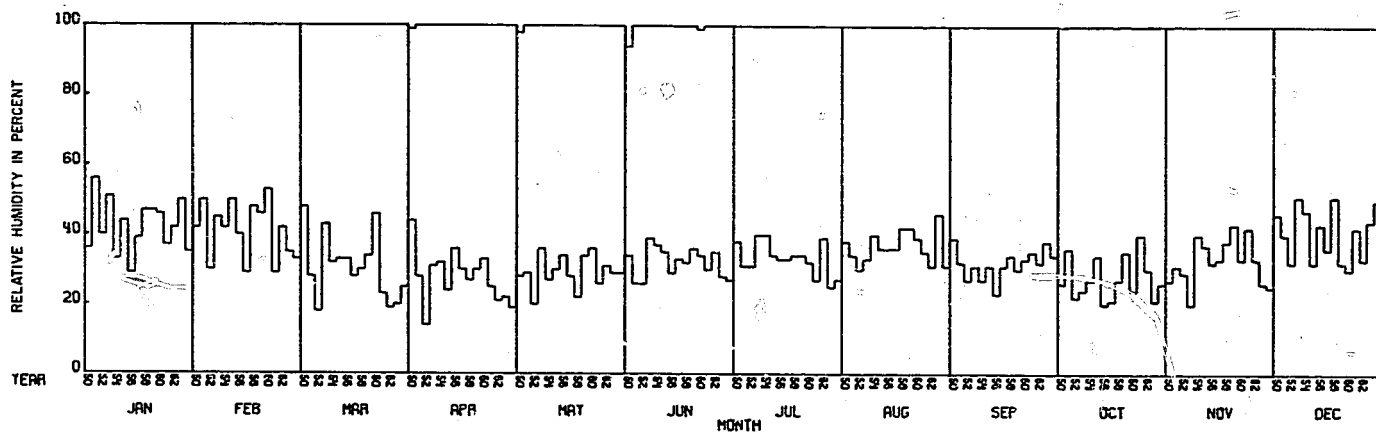


Figure 39. Average of the Daily Maximum and Minimum 5-foot Relative Humidity in Percent. January 1950-December 1964

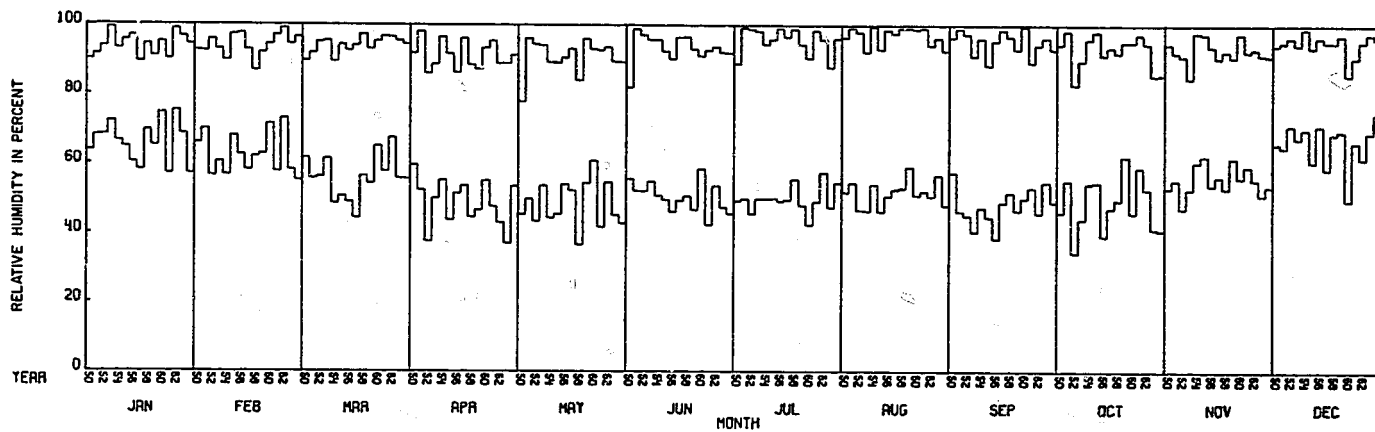


Figure 40. Monthly Mean of 5-foot Relative Humidity in Percent. January 1950-December 1964

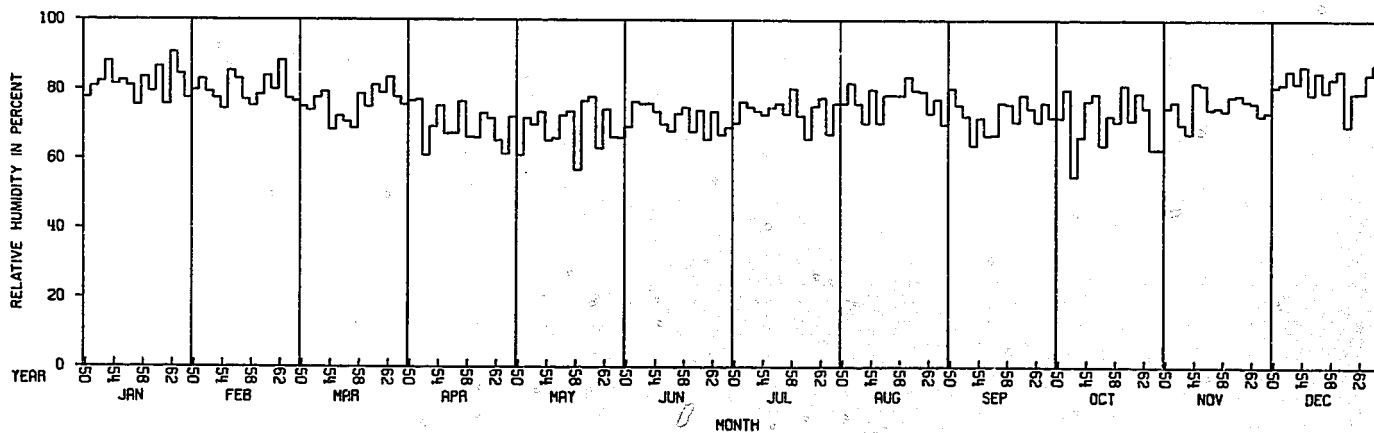


Figure 41. Monthly Average of the Daily Maximum, Mean and Minimum of the Hourly Values of 5-foot* Dewpoint Temperature (°F).
January 1950–December 1964

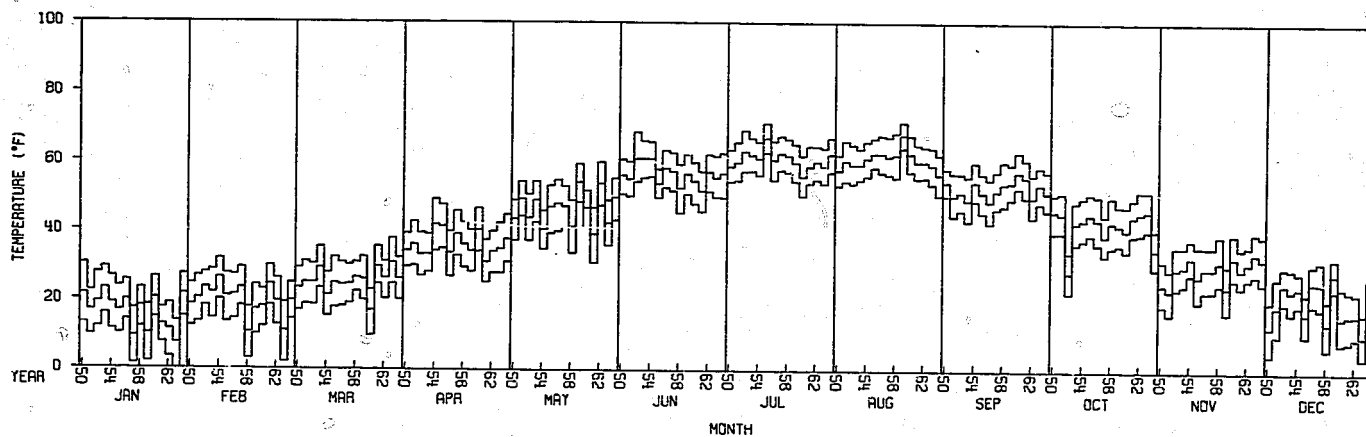
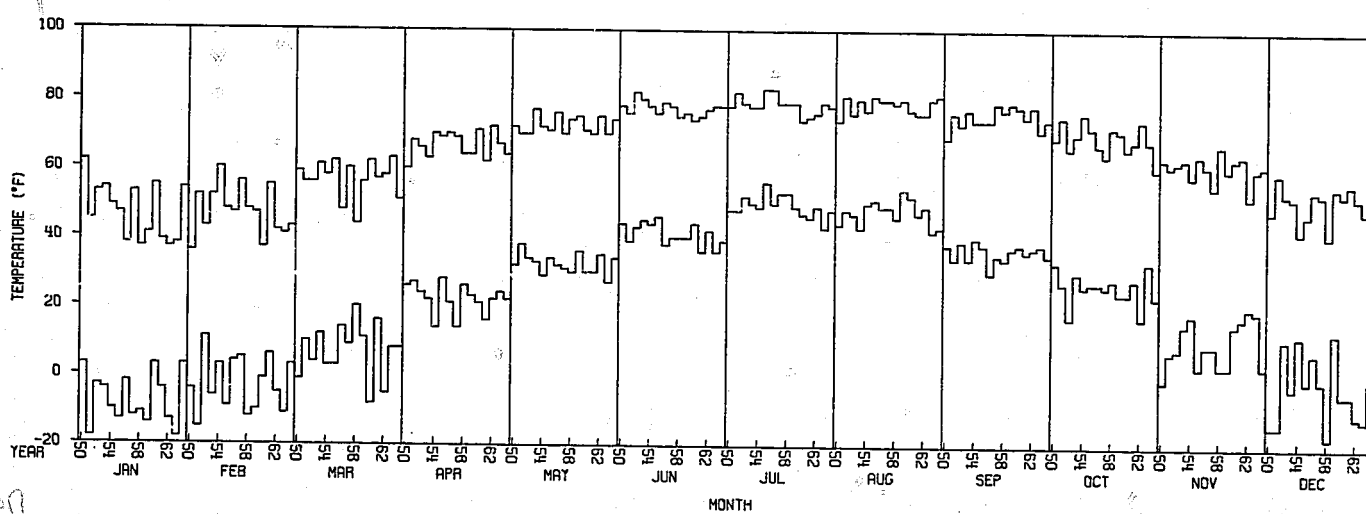


Figure 42. Monthly Maximum and Minimum of Hourly Values of 5-foot* Wet Bulb Temperature (°F). January 1950–December 1964



* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 136. Percentage Frequency Distribution of 2-hour, 11-hour and 23-hour Range of 5-foot Relative Humidity in Percent. January 1950-December 1964

Table with 16 columns: HOUR, 0-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-49, 50-59, 60-69, 70-79, ≥80, MISSING, TOTAL. Rows include individual hour data from 1 to 24 and a TOTAL row at the bottom.

2 HOUR TIME INTERVALS
NUMBER OF OBSERVATIONS = 131494

Table with 16 columns: HOUR, 0-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-49, 50-59, 60-69, 70-79, ≥80, MISSING, TOTAL. Rows include individual hour data from 1 to 24 and a TOTAL row at the bottom.

11 HOUR TIME INTERVALS
NUMBER OF OBSERVATIONS = 131485

Table with 16 columns: HOUR, 0-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-49, 50-59, 60-69, 70-79, ≥80, MISSING, TOTAL. Rows include individual hour data from 1 to 24 and a TOTAL row at the bottom.

23 HOUR TIME INTERVALS
NUMBER OF OBSERVATIONS = 131473

Table 137. Percentile Distribution of Hourly 5-foot Relative Humidity in Percent. January 1950-December 1964

MONTH	0100-0600 PERCENT					0700-1200 PERCENT					1300-1800 PERCENT					1900-2400 PERCENT				
	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90
JAN	70	79	87	96	100	62	71	82	94	100	54	63	74	87	98	68	76	85	95	100
FEB	69	79	89	96	100	58	67	80	91	100	50	59	71	83	95	66	74	84	94	100
MAR	67	76	88	96	100	48	59	72	90	100	40	49	61	81	96	60	69	81	92	100
APR	60	72	85	95	100	40	50	65	82	96	32	40	53	70	92	47	59	74	90	99
MAY	63	72	84	95	100	40	50	62	78	92	34	41	52	67	87	48	59	73	89	97
JUN	71	80	88	96	100	45	53	64	78	91	39	45	54	68	82	56	65	78	90	96
JUL	77	85	93	98	100	46	54	66	79	92	40	46	55	66	80	61	71	82	92	98
AUG	79	88	96	100	100	49	57	69	83	96	43	49	57	68	81	67	76	87	96	100
SEP	72	81	91	98	100	44	52	65	81	94	38	43	52	65	79	60	71	82	92	98
OCT	62	75	88	97	100	42	51	66	85	97	33	41	53	68	90	51	63	78	92	99
NOV	66	75	86	96	100	51	61	75	90	100	43	51	62	77	94	58	67	78	90	98
DEC	72	79	89	97	100	61	71	83	94	100	53	63	75	87	97	66	76	86	95	100
ANNUAL	68	79	89	97	100	47	57	71	87	97	39	48	60	76	91	58	69	81	93	99

Table 138. Percentile Distribution of Hourly 5-foot* Dewpoint Temperature (°F). January 1950-December 1964

MONTH	0100-0600 PERCENT					0700-1200 PERCENT					1300-1800 PERCENT					1900-2400 PERCENT				
	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90
JAN	-5	5	18	26	31	-3	6	18	26	31	-1	8	20	28	32	-4	7	19	26	32
FEB	-1	12	20	27	31	3	13	22	28	33	6	15	23	29	33	2	15	22	28	32
MAR	10	18	25	31	36	12	19	26	31	38	14	19	26	32	39	13	19	26	31	38
APR	23	27	33	42	52	23	28	35	43	53	23	28	35	44	54	23	27	34	42	53
MAY	31	37	44	52	60	33	39	47	55	62	32	39	47	56	62	31	37	45	54	61
JUN	44	49	56	62	66	40	51	58	65	69	45	50	58	64	69	43	49	56	63	67
JUL	52	56	61	65	69	52	57	62	67	70	51	56	61	66	70	52	56	61	66	69
AUG	51	56	60	65	69	52	56	61	66	70	50	55	61	67	70	52	56	61	66	70
SEP	39	45	52	59	64	40	46	52	60	65	39	44	52	60	64	40	46	53	59	64
OCT	27	33	41	49	56	29	34	42	50	57	27	33	41	50	56	27	34	42	49	56
NOV	14	21	28	36	45	15	23	29	37	47	15	22	28	37	47	14	21	28	36	46
DEC	-1	11	20	28	33	1	11	21	28	34	3	12	22	29	35	1	11	21	28	34
ANNUAL	13	24	38	55	63	14	25	39	51	64	15	25	39	55	64	15	25	38	55	63

Table 139. Percentile Distribution of Hourly 5-foot* Wet-Bulb Temperature (°F). January 1950-December 1964

MONTH	0100-0600 PERCENT					0700-1200 PERCENT					1300-1800 PERCENT					1900-2400 PERCENT				
	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90
JAN	3	12	21	29	33	5	13	23	30	34	8	17	26	31	36	5	14	24	29	34
FEB	7	16	24	30	33	11	19	27	32	36	15	22	29	33	38	11	20	26	31	34
MAR	16	22	28	33	39	20	26	31	37	44	23	28	33	39	47	19	25	30	35	42
APR	28	32	38	45	54	32	36	42	50	58	34	39	45	53	61	30	34	40	48	56
MAY	36	42	48	55	62	43	48	54	61	67	44	49	56	63	68	38	44	50	58	64
JUN	48	52	59	64	68	53	58	64	69	73	54	59	65	70	74	49	54	60	66	70
JUL	55	58	63	67	70	60	63	67	70	74	61	64	68	71	75	57	60	64	68	72
AUG	54	57	62	66	70	58	62	66	70	74	59	63	67	72	75	56	60	64	68	72
SEP	43	48	54	61	66	49	53	58	64	70	50	55	60	66	70	46	50	56	62	67
OCT	32	38	44	51	58	37	42	49	56	62	38	44	51	58	63	34	40	46	53	59
NOV	19	25	32	40	47	22	28	35	43	51	23	30	37	45	52	20	27	33	41	50
DEC	6	16	24	31	36	9	18	25	31	38	12	20	27	33	40	8	17	25	31	37
ANNUAL	18	28	42	57	64	21	30	47	61	68	23	32	49	63	70	20	30	44	59	66

Table 140. Percentile Distribution of Hourly 5-foot* Temperature-Humidity Index (°F). January 1950-December 1964

MONTH	0100-0600 PERCENT					0700-1200 PERCENT					1300-1800 PERCENT					1900-2400 PERCENT				
	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90	10	25	50	75	90
JAN	17	24	32	38	41	19	26	33	39	42	21	29	36	40	44	19	26	34	39	42
FEB	20	28	34	39	42	24	31	37	41	44	27	33	39	42	46	23	31	36	39	43
MAR	27	33	38	41	46	31	36	40	45	51	34	39	43	48	55	30	35	39	43	50
APR	37	40	45	52	59	41	45	51	58	64	44	47	54	61	67	39	43	48	55	61
MAY	44	49	54	60	65	49	55	61	67	71	53	57	63	69	73	47	51	57	63	67
JUN	53	57	62	67	69	59	64	69	73	77	61	66	71	75	78	55	60	65	69	73
JUL	59	62	65	68	71	65	68	71	74	77	67	70	73	76	79	61	64	67	71	73
AUG	58	61	65	68	71	64	67	70	73	77	66	69	73	75	79	60	63	67	70	73
SEP	50	54	59	64	68	56	59	64	69	73	58	62	66	71	76	52	56	61	66	70
OCT	41	45	51	57	61	45	50	56	62	67	48	53	59	65	69	43	48	53	59	63
NOV	30	35	41	47	53	33	38	44	50	57	34	39	46	53	59	31	37	42	48	55
DEC	19	27	34	39	43	22	29	35	40	45	25	31	37	42	48	21	29	35	40	44
ANNUAL	29	37	49	61	67	31	39	54	67	73	34	41	56	69	75	31	39	51	63	69

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 141. Monthly Number of Days with 5-foot Relative Humidity in Percent Greater than 89 Percent. January 1950–December 1964

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1950	20	21	19	17			19	30	30	24	22	25	236
1951	18	19	19	27	21	30	31	30	29	29	17	26	296
1952	21	24	24	15	23	25	30	29	28	13	20	27	279
1953	30	21	25	17	23	26	29	21	20	19	11	23	265
1954	23	16	17	26	19	26	25	31	26	28	26	30	293
1955	28	24	24	20	17	20	27	23	12	29	27	24	275
1956	27	26	23	17	18	18	31	31	25	20	20	27	283
1957	15	20	21	25	24	27	27	29	28	25	19	24	284
1958	24	11	27	14	12	26	29	31	28	21	22	26	271
1959	17	17	22	18	23	22	26	31	23	25	19	29	272
1960	25	22	28	19	23	21	13	29	30	28	25	16	279
1961	20	24	27	25	23	18	31	31	13	29	23	20	284
1962	31	28	26	18	22	20	28	25	24	24	22	25	293
1963	26	21	26	17	16	20	17	29	28	17	21	30	268
1964	25	25	25	22	17	22	30	23	20	11	19	26	265
TOTAL	350	319	353	297	281	321	393	423	364	342	313	378	4143

Table 142. Monthly Number of Hours with 5-foot Relative Humidity in Percent Greater than 89 Percent. January 1950–December 1964

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1950	212	190	151	137			139	245	298	183	177	223	2020
1951	174	230	206	291	141	241	281	343	266	300	164	258	2895
1952	247	242	265	133	226	248	254	279	211	72	118	326	2621
1953	404	158	246	120	191	198	190	168	88	141	74	207	2185
1954	254	119	103	201	137	166	186	316	152	250	288	344	2516
1955	234	316	161	165	110	171	218	160	69	295	262	234	2395
1956	273	296	141	103	177	121	266	324	182	156	184	370	2593
1957	144	219	154	258	225	188	189	284	273	210	172	251	2567
1958	279	132	293	150	61	222	304	270	215	205	173	260	2564
1959	188	164	193	122	226	111	186	347	153	296	204	374	2564
1960	352	233	270	184	257	178	70	328	317	191	247	88	2715
1961	158	255	305	211	103	129	290	337	122	278	221	184	2593
1962	485	337	363	138	188	158	233	165	139	210	225	188	2829
1963	310	191	282	88	116	93	120	214	206	100	181	290	2191
1964	194	185	241	221	109	129	202	109	166	46	156	384	2142
TOTAL	3908	3267	3374	2522	2267	2353	3128	3889	2857	2933	2846	3981	37390

Table 143. Number of Hours the 5-foot* Wet-Bulb Temperature (°F) Exceeded Specified Values. January 1950–December 1964

YEAR	WET BULB TEMPERATURES (°F)									
	64	67	68	69	70	71	72	73	74	79
1950	1049	548	381	294	226	171	102	80	49	0
1951	1015	581	444	363	265	193	138	97	58	7
1952	1368	975	827	681	526	421	333	254	170	6
1953	1355	962	839	737	603	491	368	289	204	5
1954	1555	985	816	694	506	395	271	179	104	0
1955	1540	1125	943	812	676	567	449	364	261	41
1956	1512	940	770	656	511	406	280	196	120	3
1957	1391	842	700	593	469	377	276	197	135	2
1958	1237	741	587	495	374	294	214	163	90	0
1959	1832	1286	1072	899	719	581	433	340	237	6
1960	1185	702	539	425	297	230	147	99	43	0
1961	1169	627	452	340	187	113	45	27	8	0
1962	1445	816	619	462	315	224	123	85	41	0
1963	1143	678	544	416	292	223	155	114	73	3
1964	1369	859	713	620	497	389	275	210	135	5
AVERAGE	1344	845	683	566	431	338	241	180	115	5

Table 144. Monthly Number of Cooling Degree Hours Based on a 5-foot* Wet-Bulb Temperature of 50°F. January 1950–December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	191	0	75	175	2895	8003	10227	8933	6062	2887	245	0	39693
1951	0	11	136	1022	3112	6931	10419	9986	4481	2812	100	107	39117
1952	34	0	65	1054	2351	10926	12708	10026	5157	231	586	21	43159
1953	22	9	165	470	4154	10621	12062	10512	4990	1833	436	14	45288
1954	0	173	29	2531	2253	10994	11480	10706	6945	3216	189	0	48516
1955	0	0	126	1582	3972	6561	15472	12718	5605	2551	195	0	48782
1956	0	0	0	1066	4555	10143	10823	11860	4708	2805	801	26	46787
1957	19	73	109	2228	3505	8755	12496	11286	5282	1039	50	6	44848
1958	0	0	0	744	2964	5600	11234	11561	6312	2344	846	0	41605
1959	0	0	42	485	7219	8805	10743	15175	7207	1944	83	63	51766
1960	72	0	181	2101	3284	6621	8045	11635	8075	1384	555	23	41976
1961	0	18	91	214	1877	6254	9802	10057	6085	2076	279	69	36822
1962	0	0	105	1413	6738	8421	10258	10808	4720	3761	8	6	46238
1963	0	0	376	1249	2001	8156	10159	9486	5894	3887	505	0	41713
1964	19	0	2	1087	5367	9115	12055	8629	5588	619	820	0	43301

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 145. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Dewpoint Temperatures (°F) above or below Specified Values

JANUARY 1950-1964													
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	6	9	16	37	38	30	18	13
2	0	0	0	0	0	2	4	10	21	12	6	6	6
3	0	0	0	0	0	0	2	4	12	7	4	9	2
4	0	0	0	0	0	1	1	4	14	6	4	4	5
5	0	0	0	0	0	1	1	1	2	6	8	3	4
6	0	0	0	0	0	0	1	1	2	4	8	3	3
7	0	0	0	0	0	1	0	1	1	2	1	3	1
8	0	0	0	0	0	0	1	1	3	3	2	2	1
9	0	0	0	0	0	0	1	0	3	2	1	2	3
10	0	0	0	0	0	0	2	1	3	2	2	5	4
11	0	0	0	0	0	2	2	1	4	3	0	1	1
12	0	0	0	0	0	1	0	1	4	4	3	3	1
13	0	0	0	0	0	0	1	0	2	2	5	3	2
14	0	0	0	0	0	1	0	0	6	3	1	2	0
15	0	0	0	0	0	0	1	1	1	3	1	1	1
16	0	0	0	0	0	1	1	0	3	1	3	2	1
17	0	0	0	0	0	0	0	1	2	1	3	1	0
18	0	0	0	0	0	0	0	0	1	1	0	4	1
19	0	0	0	0	0	1	1	0	2	4	1	2	2
20	0	0	0	0	0	0	0	1	2	2	1	0	1
21-25	0	0	0	0	0	0	0	2	6	3	4	2	2
26-30	0	0	0	0	0	0	0	2	2	6	8	6	2
31-35	0	0	0	0	0	0	2	3	4	9	8	6	0
36-40	0	0	0	0	0	2	4	1	6	8	4	3	0
41-45	0	0	0	0	0	4	1	4	5	5	2	3	0
46-50	0	0	0	0	0	1	1	0	3	3	0	3	0
>50	0	0	0	0	0	29	41	59	54	44	26	8	0
MAXIMUM PERSIST	0	0	0	0	0	733	699	666	485	467	181	75	30

FEBRUARY 1950-1964													
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	5	8	29	48	43	30	7	6
2	0	0	0	0	0	4	2	13	12	17	3	1	2
3	0	0	0	0	0	5	3	4	14	8	7	0	3
4	0	0	0	0	0	1	1	5	4	6	5	2	0
5	0	0	0	0	0	0	2	5	6	5	5	1	2
6	0	0	0	0	0	0	3	3	4	10	4	3	2
7	0	0	0	0	0	1	3	4	6	5	6	2	2
8	0	0	0	0	0	0	1	2	1	4	3	1	1
9	0	0	0	0	0	1	0	2	2	2	3	1	0
10	0	0	0	0	0	1	0	2	2	1	1	1	4
11	0	0	0	0	0	1	1	0	1	0	2	1	3
12	0	0	0	0	0	0	1	2	4	1	1	1	2
13	0	0	0	0	0	1	0	1	1	2	2	0	0
14	0	0	0	0	0	1	1	4	1	4	4	2	1
15	0	0	0	0	0	0	0	1	3	2	2	3	1
16	0	0	0	0	0	0	2	1	4	2	0	1	0
17	0	0	0	0	0	0	0	2	1	8	3	1	1
18	0	0	0	0	0	1	2	3	0	2	1	2	1
19	0	0	0	0	0	0	0	1	3	2	1	0	0
20	0	0	0	0	0	1	0	3	3	2	0	2	0
21-25	0	0	0	0	0	0	1	4	10	5	6	1	0
26-30	0	0	0	0	0	1	2	3	6	6	2	2	0
31-35	0	0	0	0	0	0	1	5	2	4	2	3	0
36-40	0	0	0	0	0	0	2	4	5	9	4	2	0
41-45	0	0	0	0	0	0	3	1	2	4	1	1	0
46-50	0	0	0	0	0	5	4	5	10	3	4	0	0
>50	0	0	0	0	0	28	39	51	42	32	10	4	0
MAXIMUM PERSIST	0	0	0	0	0	860	819	585	475	192	161	89	18

* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 146. Frequency Distribution of the Number of Consecutive Hourly
5-foot* Dewpoint Temperatures (°F) above or below Specified Values

		MARCH					1950-1964						
NUMBER OF HOURS	-----PERSISTENCE ABOVE----- SPECIFIED TEMPERATURES (°F)					-----PERSISTENCE BELOW----- SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	23	30	41	61	49	17	1	0
2	0	0	0	0	0	5	12	21	23	22	14	2	1
3	0	0	0	0	0	7	8	9	21	21	8	1	0
4	0	0	0	0	0	4	10	4	14	12	1	1	0
5	0	0	0	0	0	3	1	4	10	8	4	1	0
6	0	0	0	0	0	4	6	9	7	3	2	0	0
7	0	0	0	0	0	3	3	3	8	6	2	0	0
8	0	0	0	0	0	5	2	3	4	8	4	0	0
9	0	0	0	0	0	3	3	5	3	4	4	0	0
10	0	0	0	0	0	2	1	3	8	4	0	1	0
11	0	0	0	0	0	1	2	3	1	7	3	0	0
12	0	0	0	0	0	0	1	2	6	3	0	1	0
13	0	0	0	0	0	1	3	2	3	2	1	0	0
14	0	0	0	0	0	0	2	2	0	2	0	0	0
15	0	0	0	0	0	1	2	4	4	7	2	0	0
16	0	0	0	0	0	1	2	3	3	2	4	0	0
17	0	0	0	0	0	0	2	5	4	1	0	1	0
18	0	0	0	0	0	1	4	2	2	3	1	0	0
19	0	0	0	0	0	1	1	2	2	4	0	1	0
20	0	0	0	0	0	0	3	1	4	3	0	0	0
21-25	0	0	0	0	0	6	9	10	6	5	0	0	0
26-30	0	0	0	0	0	1	2	6	4	5	3	1	0
31-35	0	0	0	0	0	1	5	7	4	5	1	0	0
36-40	0	0	0	0	0	5	7	9	9	6	2	0	0
41-45	0	0	0	0	0	4	6	5	6	5	1	0	0
46-50	0	0	0	0	0	3	4	4	0	2	1	0	0
>50	0	0	0	0	0	41	46	44	35	14	1	0	0
MAXIMUM PERSIST	0	0	0	0	0	413	311	310	152	216	112	29	2

		APRIL					1950-1964						
NUMBER OF HOURS	-----PERSISTENCE ABOVE----- SPECIFIED TEMPERATURES (°F)					-----PERSISTENCE BELOW----- SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	5	11	38	54	68	43	36	2	0	0
2	0	0	0	0	5	14	16	23	20	7	1	0	0
3	0	0	0	1	5	7	10	18	19	10	1	0	0
4	0	0	0	1	5	15	13	15	15	7	1	0	0
5	0	0	0	0	3	3	12	7	6	4	0	0	0
6	0	0	0	0	5	9	13	11	7	4	0	0	0
7	0	0	0	0	2	6	10	6	11	5	0	0	0
8	0	0	0	0	2	4	7	5	9	3	0	0	0
9	0	0	0	0	4	7	5	5	6	1	0	0	0
10	0	0	0	0	1	3	2	1	5	1	0	0	0
11	0	0	0	0	1	5	3	4	0	0	0	0	0
12	0	0	0	0	0	4	5	4	6	1	0	0	0
13	0	0	0	0	1	3	3	2	5	1	0	0	0
14	0	0	0	0	0	4	0	4	4	2	0	0	0
15	0	0	0	0	1	2	3	3	4	2	1	0	0
16	0	0	0	0	0	2	1	4	0	1	0	0	0
17	0	0	0	0	0	1	2	4	4	1	0	0	0
18	0	0	0	0	0	2	5	3	4	1	0	0	0
19	0	0	0	0	0	2	0	1	2	0	0	0	0
20	0	0	0	0	0	1	1	2	2	1	0	0	0
21-25	0	0	0	0	1	2	6	11	7	4	0	0	0
26-30	0	0	0	0	0	6	5	8	5	0	0	0	0
31-35	0	0	0	0	0	1	7	5	3	1	0	0	0
36-40	0	0	0	0	0	3	8	2	1	1	0	0	0
41-45	0	0	0	0	0	8	2	7	1	0	0	0	0
46-50	0	0	0	0	0	2	4	2	0	0	0	0	0
>50	0	0	0	0	0	41	30	21	5	1	0	0	0
MAXIMUM PERSIST	0	0	0	4	23	213	165	127	77	57	15	0	0

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 147. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Dewpoint Temperatures (°F) above or below Specified Values

MAY													
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	3	37	36	65	36	33	15	0	0	0	0
2	0	0	0	14	16	33	14	10	7	0	0	0	0
3	0	0	0	5	16	16	6	12	7	1	0	0	0
4	0	0	1	10	13	13	12	5	5	0	0	0	0
5	0	0	0	4	9	11	6	4	7	2	0	0	0
6	0	0	0	3	6	4	7	6	2	0	0	0	0
7	0	0	0	1	10	5	6	7	0	0	0	0	0
8	0	0	0	1	1	3	2	4	0	0	0	0	0
9	0	0	0	3	6	8	4	1	2	0	0	0	0
10	0	0	0	1	1	4	4	1	1	0	0	0	0
11	0	0	0	1	3	4	2	3	0	0	0	0	0
12	0	0	0	0	1	0	2	4	0	0	0	0	0
13	0	0	0	0	1	5	4	3	1	0	0	0	0
14	0	0	0	2	2	3	4	3	0	0	0	0	0
15	0	0	0	1	2	2	2	3	0	0	0	0	0
16	0	0	1	1	1	3	3	0	0	0	0	0	0
17	0	0	0	0	1	1	1	2	0	0	0	0	0
18	0	0	0	0	1	3	3	1	1	0	0	0	0
19	0	0	0	0	0	1	0	1	0	0	0	0	0
20	0	0	0	1	2	2	1	0	0	0	0	0	0
21-25	0	0	0	0	6	6	4	3	0	0	0	0	0
26-30	0	0	0	0	3	3	4	1	0	0	0	0	0
31-35	0	0	0	0	2	1	1	1	0	0	0	0	0
36-40	0	0	0	0	2	2	1	0	0	0	0	0	0
41-45	0	0	0	0	0	1	1	2	0	0	0	0	0
46-50	0	0	0	0	1	2	2	0	0	0	0	0	0
>50	0	0	0	0	4	6	2	1	0	0	0	0	0
MAXIMUM PERSIST	0	0	16	20	84	90	72	65	18	5	0	0	0

JUNE													
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	10	37	79	75	12	6	1	0	0	0	0	0
2	0	2	13	28	27	8	4	2	0	0	0	0	0
3	0	2	9	21	25	2	0	0	9	0	0	0	0
4	0	0	10	16	16	3	0	1	0	0	0	0	0
5	0	1	7	13	8	4	1	1	0	0	0	0	0
6	0	0	7	17	11	1	0	1	0	0	0	0	0
7	0	0	5	15	12	3	0	0	0	0	0	0	0
8	0	0	5	4	3	1	2	0	0	0	0	0	0
9	0	0	0	8	16	1	0	0	0	0	0	0	0
10	0	0	2	6	8	1	0	0	0	0	0	0	0
11	0	0	0	3	5	0	0	0	0	0	0	0	0
12	0	0	0	4	1	0	0	0	0	0	0	0	0
13	0	0	1	6	2	0	0	0	0	0	0	0	0
14	0	0	0	4	6	0	0	0	0	0	0	0	0
15	0	0	0	2	5	0	0	0	0	0	0	0	0
16	0	0	1	3	2	0	0	0	0	0	0	0	0
17	0	0	0	0	4	0	0	0	0	0	0	0	0
18	0	0	0	2	3	1	0	0	0	0	0	0	0
19	0	0	0	0	6	0	0	0	0	0	0	0	0
20	0	0	0	1	1	0	0	0	0	0	0	0	0
21-25	0	0	2	7	6	0	0	0	0	0	0	0	0
26-30	0	0	0	5	3	0	0	0	0	0	0	0	0
31-35	0	0	0	1	2	0	0	0	0	0	0	0	0
36-40	0	0	1	2	8	0	0	0	0	0	0	0	0
41-45	0	0	0	3	7	0	0	0	0	0	0	0	0
46-50	0	0	0	1	3	0	0	0	0	0	0	0	0
>50	0	0	0	4	19	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	0	5	39	93	205	18	8	6	0	0	0	0	0

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 148. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Dewpoint Temperatures ($^{\circ}\text{F}$) above or below Specified Values

NUMBER OF HOURS	JULY					1950-1964							
	PERSISTENCE ABOVE SPECIFIED TEMPERATURES ($^{\circ}\text{F}$)					PERSISTENCE BELOW SPECIFIED TEMPERATURES ($^{\circ}\text{F}$)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	1	17	66	93	105	0	1	0	0	0	0	0	0
2	0	7	23	43	48	1	0	0	0	0	0	0	0
3	0	1	17	23	21	0	0	0	0	0	0	0	0
4	0	0	13	20	26	0	0	0	0	0	0	0	0
5	0	1	7	15	12	0	0	0	0	0	0	0	0
6	0	1	8	12	18	0	0	0	0	0	0	0	0
7	0	1	8	5	6	0	0	0	0	0	0	0	0
8	0	1	6	13	4	1	0	0	0	0	0	0	0
9	0	0	1	12	6	0	0	0	0	0	0	0	0
10	0	0	6	7	10	0	0	0	0	0	0	0	0
11	0	0	0	7	4	0	0	0	0	0	0	0	0
12	0	0	4	4	8	0	0	0	0	0	0	0	0
13	0	0	1	5	7	0	0	0	0	0	0	0	0
14	0	0	1	7	6	0	0	0	0	0	0	0	0
15	0	0	0	3	3	0	0	0	0	0	0	0	0
16	0	0	2	4	3	0	0	0	0	0	0	0	0
17	0	0	0	3	3	0	0	0	0	0	0	0	0
18	0	0	1	5	3	0	0	0	0	0	0	0	0
19	0	0	1	3	1	0	0	0	0	0	0	0	0
20	0	0	0	3	1	0	0	0	0	0	0	0	0
21-25	0	0	1	6	15	0	0	0	0	0	0	0	0
26-30	0	0	1	8	6	0	0	0	0	0	0	0	0
31-35	0	0	0	2	3	0	0	0	0	0	0	0	0
36-40	0	0	0	3	8	0	0	0	0	0	0	0	0
41-45	0	0	0	4	8	0	0	0	0	0	0	0	0
46-50	0	0	1	2	6	0	0	0	0	0	0	0	0
>50	0	0	0	8	30	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	1	8	48	306	319	8	1	0	0	0	0	0	0

NUMBER OF HOURS	AUGUST					1950-1964							
	PERSISTENCE ABOVE SPECIFIED TEMPERATURES ($^{\circ}\text{F}$)					PERSISTENCE BELOW SPECIFIED TEMPERATURES ($^{\circ}\text{F}$)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	15	59	91	113	0	0	0	0	0	0	0	0
2	0	6	35	44	36	0	0	0	0	0	0	0	0
3	0	3	12	26	29	0	0	0	0	0	0	0	0
4	0	1	21	12	18	0	0	0	0	0	0	0	0
5	0	0	4	10	10	0	0	0	0	0	0	0	0
6	0	0	8	15	8	0	0	0	0	0	0	0	0
7	0	0	5	12	9	0	0	0	0	0	0	0	0
8	0	0	11	9	15	0	0	0	0	0	0	0	0
9	0	0	3	8	7	0	0	0	0	0	0	0	0
10	0	0	2	6	10	0	0	0	0	0	0	0	0
11	0	0	3	7	6	0	0	0	0	0	0	0	0
12	0	0	3	7	4	0	0	0	0	0	0	0	0
13	0	1	3	5	3	0	0	0	0	0	0	0	0
14	0	0	1	7	6	0	0	0	0	0	0	0	0
15	0	0	1	4	5	0	0	0	0	0	0	0	0
16	0	0	2	4	3	0	0	0	0	0	0	0	0
17	0	0	1	0	6	0	0	0	0	0	0	0	0
18	0	0	0	5	6	0	0	0	0	0	0	0	0
19	0	0	0	2	2	0	0	0	0	0	0	0	0
20	0	0	1	3	3	0	0	0	0	0	0	0	0
21-25	0	0	3	6	12	0	0	0	0	0	0	0	0
26-30	0	0	0	7	6	0	0	0	0	0	0	0	0
31-35	0	0	0	2	5	0	0	0	0	0	0	0	0
36-40	0	0	1	2	6	0	0	0	0	0	0	0	0
41-45	0	0	0	1	2	0	0	0	0	0	0	0	0
46-50	0	0	1	2	7	0	0	0	0	0	0	0	0
>50	0	0	0	11	32	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	0	13	48	234	322	0	0	0	0	0	0	0	0

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 149. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Dewpoint Temperatures (°F) above or below Specified Values

SEPTEMBER 1950-1964

NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	1	26	45	55	28	5	5	0	0	0	0	0
2	0	1	10	12	23	11	2	4	1	0	0	0	0
3	0	0	6	10	12	7	3	1	0	0	0	0	0
4	0	0	1	7	15	3	3	0	0	0	0	0	0
5	0	0	0	9	8	8	1	1	0	0	0	0	0
6	0	0	3	4	9	3	1	1	0	0	0	0	0
7	0	0	2	3	6	1	0	2	0	0	0	0	0
8	0	0	3	3	14	1	0	0	0	0	0	0	0
9	0	0	0	1	6	2	1	0	0	0	0	0	0
10	0	0	0	2	6	0	0	0	0	0	0	0	0
11	0	0	0	2	3	2	0	0	0	0	0	0	0
12	0	0	0	2	3	1	0	0	0	0	0	0	0
13	0	0	0	0	3	0	0	0	0	0	0	0	0
14	0	0	0	2	2	1	0	0	0	0	0	0	0
15	0	0	0	1	3	0	0	0	0	0	0	0	0
16	0	0	0	1	1	0	0	0	0	0	0	0	0
17	0	0	0	0	3	0	1	0	0	0	0	0	0
18	0	0	0	3	1	0	0	0	0	0	0	0	0
19	0	0	0	1	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	1	0	0	0	0	0	0	0
21-25	0	0	0	0	7	1	0	0	0	0	0	0	0
26-30	0	0	0	1	6	0	0	1	0	0	0	0	0
31-35	0	0	0	3	3	1	2	0	0	0	0	0	0
36-40	0	0	0	2	2	0	0	0	0	0	0	0	0
41-45	0	0	0	1	6	1	0	0	0	0	0	0	0
46-50	0	0	0	0	1	0	0	0	0	0	0	0	0
>50	0	0	0	0	3	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	0	2	8	41	112	41	33	28	2	0	0	0	0

OCTOBER 1950-1964

NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	2	6	13	67	62	41	22	12	1	0	0
2	0	0	1	4	8	20	24	14	6	4	0	0	0
3	0	0	1	2	5	17	14	9	7	4	0	0	0
4	0	0	0	1	2	17	13	4	2	3	0	0	0
5	0	0	0	1	3	14	9	11	6	0	0	0	0
6	0	0	1	0	2	7	5	3	1	1	0	0	0
7	0	0	0	1	2	10	14	4	5	1	0	0	0
8	0	0	0	0	1	4	3	10	4	2	0	0	0
9	0	0	0	0	1	2	3	6	1	0	0	0	0
10	0	0	0	0	1	4	3	3	0	1	0	0	0
11	0	0	0	2	1	7	4	1	0	1	0	0	0
12	0	0	0	0	1	1	3	1	0	0	0	0	0
13	0	0	0	0	5	7	1	1	2	1	0	0	0
14	0	0	0	1	1	3	2	0	2	0	0	0	0
15	0	0	0	0	0	4	1	1	1	0	0	0	0
16	0	0	0	1	1	4	0	2	1	1	0	0	0
17	0	0	0	1	0	4	4	3	2	1	0	0	0
18	0	0	0	0	1	2	2	2	1	0	0	0	0
19	0	0	0	0	1	2	0	1	1	0	0	0	0
20	0	0	0	0	0	2	3	0	2	0	0	0	0
21-25	0	0	0	0	2	6	8	7	4	2	0	0	0
26-30	0	0	0	1	0	4	4	4	1	1	0	0	0
31-35	0	0	0	0	0	5	3	2	1	1	0	0	0
36-40	0	0	0	0	1	6	2	1	0	0	0	0	0
41-45	0	0	0	1	0	2	2	4	1	0	0	0	0
46-50	0	0	0	0	0	1	2	3	0	0	0	0	0
>50	0	0	0	0	3	17	13	9	3	0	0	0	0
MAXIMUM PERSIST	0	0	6	42	75	276	257	163	69	31	1	0	0

* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 150. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Dewpoint Temperatures (°F) above or below Specified Values

		NOVEMBER 1950-1964											
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	1	28	33	33	56	43	10	1	0
2	0	0	0	0	2	13	13	16	22	19	3	1	0
3	0	0	0	0	1	12	5	8	8	14	7	2	0
4	0	0	0	0	0	5	10	4	11	7	3	1	0
5	0	0	0	0	0	2	9	12	3	9	1	0	1
6	0	0	0	0	1	0	2	6	2	10	1	0	0
7	0	0	0	0	0	5	4	11	10	5	2	1	0
8	0	0	0	0	0	2	9	7	3	3	2	1	0
9	0	0	0	0	1	3	2	2	4	5	2	0	1
10	0	0	0	0	1	2	3	2	3	3	3	0	0
11	0	0	0	0	0	3	1	6	3	5	3	0	0
12	0	0	0	0	0	1	1	1	0	3	0	0	0
13	0	0	0	0	0	5	1	1	2	3	0	0	0
14	0	0	0	0	0	1	5	0	2	3	2	0	0
15	0	0	0	0	0	2	2	0	0	3	0	0	0
16	0	0	0	0	0	1	0	3	0	2	2	1	0
17	0	0	0	0	0	2	1	2	1	0	0	0	0
18	0	0	0	0	0	0	3	3	3	1	1	0	0
19	0	0	0	0	0	1	2	0	3	0	0	0	0
20	0	0	0	0	0	0	2	3	3	0	0	0	0
21-25	0	0	0	0	0	8	8	13	13	0	2	1	0
26-30	0	0	0	0	0	5	3	5	6	7	1	0	0
31-35	0	0	0	0	0	3	6	7	7	8	0	0	0
36-40	0	0	0	0	0	5	5	2	4	3	2	0	0
41-45	0	0	0	0	0	2	4	2	6	2	4	1	0
46-50	0	0	0	0	0	2	7	6	6	2	0	0	0
>50	0	0	0	0	0	50	41	44	26	17	2	0	0
MAXIMUM PERSIST	0	0	0	0	10	806	320	293	147	114	61	42	9

		DECEMBER 1950-1964											
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	11	11	19	43	34	23	13	9
2	0	0	0	0	0	4	4	9	20	21	9	5	1
3	0	0	0	0	0	3	4	6	15	11	6	1	2
4	0	0	0	0	0	0	3	5	6	7	3	2	1
5	0	0	0	0	0	1	5	3	5	5	4	3	0
6	0	0	0	0	0	1	0	4	5	4	4	4	0
7	0	0	0	0	0	2	2	1	2	4	5	4	2
8	0	0	0	0	0	0	3	2	4	5	2	4	0
9	0	0	0	0	0	0	0	1	3	3	3	0	0
10	0	0	0	0	0	0	4	2	1	3	3	1	3
11	0	0	0	0	0	1	2	1	2	3	3	5	0
12	0	0	0	0	0	0	0	1	2	0	3	1	1
13	0	0	0	0	0	0	0	0	5	2	2	2	2
14	0	0	0	0	0	0	0	1	1	2	0	1	1
15	0	0	0	0	0	1	1	1	0	3	4	2	1
16	0	0	0	0	0	0	0	0	2	2	3	0	0
17	0	0	0	0	0	1	2	0	0	2	3	1	1
18	0	0	0	0	0	0	0	3	0	1	2	2	0
19	0	0	0	0	0	0	1	0	1	2	0	2	0
20	0	0	0	0	0	1	1	4	1	2	4	4	0
21-25	0	0	0	0	0	2	0	3	5	11	3	7	0
26-30	0	0	0	0	0	2	3	2	5	3	10	2	0
31-35	0	0	0	0	0	0	0	2	3	5	4	2	0
36-40	0	0	0	0	0	1	2	3	4	7	2	1	0
41-45	0	0	0	0	0	2	2	5	5	3	8	0	0
46-50	0	0	0	0	0	1	2	2	4	6	1	1	0
>50	0	0	0	0	0	32	36	49	51	36	14	4	0
MAXIMUM PERSIST	0	0	0	0	0	1280	744	459	340	293	116	81	17

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 151. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Dewpoint Temperatures (°F) above or below Specified Values. January 1950–December 1964

NUMBER OF HOURS	ANNUAL					1950-1964							
	-----PERSISTENCE ABOVE----- SPECIFIED TEMPERATURES (°F)					-----PERSISTENCE BELOW----- SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	1	43	193	356	409	283	255	286	325	255	113	40	28
2	0	16	82	145	165	115	95	122	132	102	36	15	10
3	0	6	45	88	114	76	55	71	103	76	33	13	7
4	0	1	46	67	95	62	66	47	71	48	17	10	6
5	0	2	18	52	53	47	47	49	45	39	22	8	7
6	0	1	27	51	60	29	38	45	30	36	19	10	5
7	0	1	20	37	47	37	42	39	43	28	16	10	5
8	0	1	25	30	40	21	30	34	28	28	13	8	2
9	0	0	4	32	47	27	19	22	24	17	13	3	4
10	0	0	10	22	38	17	19	15	23	15	9	8	11
11	0	0	3	22	23	26	17	19	11	19	11	7	4
12	0	0	7	17	18	8	13	16	22	12	7	6	4
13	0	1	5	16	22	22	13	10	21	13	12	5	4
14	0	0	2	23	23	14	14	14	18	14	5	5	2
15	0	0	1	11	19	12	12	14	13	20	10	6	3
16	0	0	6	14	11	12	9	13	13	11	12	4	1
17	0	0	1	4	17	9	13	19	14	14	9	4	2
18	0	0	1	15	15	10	19	17	12	9	5	8	2
19	0	0	1	6	10	8	5	6	14	12	2	5	2
20	0	0	1	8	7	8	11	14	17	10	5	6	1
21-25	0	0	6	19	49	31	36	53	51	30	15	11	2
26-30	0	0	1	22	24	22	23	32	29	28	24	11	2
31-35	0	0	0	8	15	12	27	32	24	33	15	11	0
36-40	0	0	2	9	27	24	31	22	29	34	14	6	0
41-45	0	0	0	10	23	24	21	30	26	19	16	5	0
46-50	0	0	2	5	18	17	26	22	23	16	6	4	0
>50	0	0	0	23	91	244	248	278	216	144	53	16	0
MAXIMUM PERSIST	1	13	48	306	322	1280	819	666	485	467	181	89	30

* Calculated from 5-foot relative humidity and 5.5 foot temperature.

Table 152. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Wet-Bulb Temperatures (°F) above or below Specified Values

		JANUARY 1950-1964											
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	26	33	48	38	54	32	13	2
2	0	0	0	0	0	14	18	16	23	19	28	7	4
3	0	0	0	0	1	8	9	11	10	11	36	4	0
4	0	0	0	0	0	8	10	13	16	12	20	4	0
5	0	0	0	0	0	6	9	10	12	19	25	4	1
6	0	0	0	0	0	3	6	3	10	10	13	2	0
7	0	0	0	0	0	8	10	11	13	17	12	5	0
8	0	0	0	0	0	8	12	10	18	10	16	4	1
9	0	0	0	0	0	8	7	6	9	10	8	2	1
10	0	0	0	0	0	2	1	6	1	11	6	1	3
11	0	0	0	0	0	7	6	6	10	10	11	1	0
12	0	0	0	0	0	5	6	6	9	12	6	1	0
13	0	0	0	0	0	3	8	6	10	10	10	2	0
14	0	0	0	0	0	3	4	7	14	13	6	3	1
15	0	0	0	0	0	3	5	8	6	10	3	1	0
16	0	0	0	0	0	8	10	10	12	11	5	3	0
17	0	0	0	0	0	9	7	15	15	10	6	2	0
18	0	0	0	0	0	4	4	5	7	4	1	1	0
19	0	0	0	0	0	4	4	6	3	5	5	1	0
20	0	0	0	0	0	2	9	9	9	4	2	0	0
21-25	0	0	0	0	0	9	11	16	19	22	2	2	0
26-30	0	0	0	0	0	5	7	8	17	14	3	0	1
31-35	0	0	0	0	0	5	4	8	8	7	1	0	0
36-40	0	0	0	0	0	5	7	9	11	9	3	3	0
41-45	0	0	0	0	0	2	6	10	8	3	0	0	0
46-50	0	0	0	0	0	6	7	9	6	3	0	0	0
>50	0	0	0	0	0	64	63	53	25	3	1	1	0
MAXIMUM PERSIST	0	0	0	0	3	494	274	222	175	73	62	62	30

		FEBRUARY 1950-1964											
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	18	26	30	32	25	14	2	4
2	0	0	0	0	0	7	9	14	20	12	20	4	1
3	0	0	0	0	0	2	6	4	7	3	21	0	0
4	0	0	0	0	0	7	10	12	12	15	23	2	1
5	0	0	0	0	0	3	7	8	9	9	14	2	0
6	0	0	0	0	0	5	8	8	14	11	7	2	0
7	0	0	0	0	0	6	6	11	12	18	15	1	0
8	0	0	0	0	0	6	6	10	6	7	8	2	0
9	0	0	0	0	0	9	11	13	11	15	11	5	1
10	0	0	0	0	0	4	4	8	9	12	10	3	0
11	0	0	0	0	0	3	7	11	7	9	3	4	0
12	0	0	0	0	0	3	7	7	8	8	2	0	0
13	0	0	0	0	0	3	6	8	9	8	1	2	0
14	0	0	0	0	0	9	11	12	12	7	6	3	0
15	0	0	0	0	0	8	10	5	7	12	4	2	0
16	0	0	0	0	0	3	4	4	13	4	1	1	0
17	0	0	0	0	0	7	10	6	7	5	1	1	0
18	0	0	0	0	0	3	3	3	8	4	0	0	0
19	0	0	0	0	0	1	3	6	4	1	0	0	0
20	0	0	0	0	0	4	3	5	6	5	0	0	0
21-25	0	0	0	0	0	9	14	14	17	12	1	0	0
26-30	0	0	0	0	0	3	6	9	7	10	0	0	0
31-35	0	0	0	0	0	1	5	4	7	4	0	0	0
36-40	0	0	0	0	0	5	5	7	5	4	1	0	0
41-45	0	0	0	0	0	4	4	15	9	1	0	0	0
46-50	0	0	0	0	0	5	8	6	2	0	0	0	0
>50	0	0	0	0	0	54	46	39	15	5	0	0	0
MAXIMUM PERSIST	0	0	0	0	0	546	273	168	132	62	40	17	9

* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 153. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Wet-Bulb Temperatures (°F) above or below Specified Values

NUMBER OF HOURS	MARCH					1950-1964							
	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	2	22	31	40	32	22	6	1	0
2	0	0	0	0	1	16	14	24	17	12	3	1	0
3	0	0	0	0	0	10	5	13	11	5	4	0	0
4	0	0	0	0	1	5	7	10	9	7	4	1	0
5	0	0	0	0	1	3	9	7	13	8	1	0	0
6	0	0	0	0	0	4	8	8	9	4	3	1	0
7	0	0	0	0	0	1	3	12	2	4	5	0	0
8	0	0	0	0	0	6	9	9	8	6	1	0	0
9	0	0	0	0	0	3	9	9	4	3	1	0	0
10	0	0	0	0	1	5	9	10	5	7	1	0	0
11	0	0	0	0	0	2	4	8	6	5	1	0	0
12	0	0	0	0	0	3	7	8	7	5	1	0	0
13	0	0	0	0	0	9	13	10	4	1	1	0	0
14	0	0	0	0	0	12	20	5	6	9	1	0	0
15	0	0	0	0	0	9	8	9	7	4	0	0	0
16	0	0	0	0	0	10	11	14	1	3	1	0	0
17	0	0	0	0	0	12	9	4	6	3	0	0	0
18	0	0	0	0	0	7	7	3	3	1	0	0	0
19	0	0	0	0	0	5	4	5	3	0	0	0	0
20	0	0	0	0	0	3	3	5	3	0	0	0	0
21-25	0	0	0	0	0	5	7	10	4	5	1	0	0
26-30	0	0	0	0	0	2	2	4	5	4	0	0	0
31-35	0	0	0	0	0	3	4	6	5	1	0	0	0
36-40	0	0	0	0	0	6	9	4	7	3	0	0	0
41-45	0	0	0	0	0	6	5	6	1	0	0	0	0
46-50	0	0	0	0	0	0	5	3	1	1	0	0	0
>50	0	0	0	0	0	46	36	28	11	2	0	0	0
MAXIMUM PERSIST	0	0	0	0	10	310	307	183	154	56	22	6	0

NUMBER OF HOURS	APRIL					1950-1964							
	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	1	15	18	41	27	40	8	1	0	0	0
2	0	0	0	2	7	16	9	13	3	2	0	0	0
3	0	0	1	1	7	11	10	11	5	0	0	0	0
4	0	0	0	3	4	9	13	9	3	0	0	0	0
5	0	0	0	4	3	8	6	7	5	1	0	0	0
6	0	0	0	0	4	6	4	10	2	0	0	0	0
7	0	0	0	4	6	9	3	6	1	1	0	0	0
8	0	0	0	2	3	1	15	5	6	0	0	0	0
9	0	0	0	3	9	7	7	4	0	0	0	0	0
10	0	0	0	1	1	10	9	7	0	0	0	0	0
11	0	0	0	0	2	8	5	2	0	1	0	0	0
12	0	0	0	1	0	13	12	10	2	0	0	0	0
13	0	0	0	0	1	11	5	6	1	0	0	0	0
14	0	0	0	1	2	9	10	5	1	1	0	0	0
15	0	0	0	0	2	12	3	2	0	0	0	0	0
16	0	0	0	0	2	9	3	6	0	0	0	0	0
17	0	0	0	0	3	5	3	0	1	0	0	0	0
18	0	0	0	0	0	5	2	1	0	0	0	0	0
19	0	0	0	0	1	3	1	1	0	0	0	0	0
20	0	0	0	0	2	2	4	0	0	0	0	0	0
21-25	0	0	0	0	4	2	2	4	0	0	0	0	0
26-30	0	0	0	0	0	0	2	2	0	0	0	0	0
31-35	0	0	0	0	0	0	1	1	0	0	0	0	0
36-40	0	0	0	0	1	5	3	1	1	0	0	0	0
41-45	0	0	0	0	0	3	3	1	0	0	0	0	0
46-50	0	0	0	0	0	2	2	0	0	0	0	0	0
>50	0	0	0	0	0	10	1	9	0	0	0	0	0
MAXIMUM PERSIST	0	0	3	14	39	117	53	42	37	14	0	0	0

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 154. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Wet-Bulb Temperatures (°F) above or below Specified Values

		MAY					1950-1964							
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)								
	80	75	70	65	60	35	32	30	25	20	10	0	-10	
1	0	4	13	39	39	15	14	3	0	0	0	0	0	
2	0	2	6	14	13	13	7	1	0	0	0	0	0	
3	0	1	3	13	10	9	6	3	0	0	0	0	0	
4	0	0	3	5	7	4	1	0	0	0	0	0	0	
5	0	0	3	4	12	2	4	0	0	0	0	0	0	
6	0	0	2	7	8	3	1	0	0	0	0	0	0	
7	0	0	0	7	6	3	2	0	0	0	0	0	0	
8	0	0	4	6	7	4	0	0	0	0	0	0	0	
9	0	0	3	5	6	1	1	0	0	0	0	0	0	
10	0	0	1	8	9	6	0	1	0	0	0	0	0	
11	0	0	1	3	5	3	0	0	0	0	0	0	0	
12	0	0	0	4	8	2	0	0	0	0	0	0	0	
13	0	0	2	3	2	2	0	0	0	0	0	0	0	
14	0	0	1	2	5	0	0	0	0	0	0	0	0	
15	0	0	0	2	4	1	0	0	0	0	0	0	0	
16	0	0	0	5	5	0	0	0	0	0	0	0	0	
17	0	0	1	3	3	0	1	0	0	0	0	0	0	
18	0	0	0	0	2	0	0	0	0	0	0	0	0	
19	0	0	0	3	1	0	0	0	0	0	0	0	0	
20	0	0	0	3	1	0	0	0	0	0	0	0	0	
21-25	0	0	0	2	6	0	0	0	0	0	0	0	0	
26-30	0	0	0	2	5	0	0	0	0	0	0	0	0	
31-35	0	0	0	2	3	1	0	0	0	0	0	0	0	
36-40	0	0	0	1	7	0	0	0	0	0	0	0	0	
41-45	0	0	0	1	2	0	0	0	0	0	0	0	0	
46-50	0	0	0	0	1	0	0	0	0	0	0	0	0	
>50	0	0	0	0	9	0	0	0	0	0	0	0	0	
MAXIMUM PERSIST	0	3	17	42	158	33	17	10	0	0	0	0	0	

		JUNE					1950-1964							
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)								
	80	75	70	65	60	35	32	30	25	20	10	0	-10	
1	0	39	52	44	60	0	0	0	0	0	0	0	0	
2	0	15	19	24	16	0	0	0	0	0	0	0	0	
3	1	3	16	20	11	0	0	0	0	0	0	0	0	
4	0	9	11	10	4	0	0	0	0	0	0	0	0	
5	0	2	12	10	3	0	0	0	0	0	0	0	0	
6	0	2	12	11	10	0	0	0	0	0	0	0	0	
7	0	2	14	9	5	0	0	0	0	0	0	0	0	
8	0	2	12	13	13	0	0	0	0	0	0	0	0	
9	0	3	7	7	11	0	0	0	0	0	0	0	0	
10	0	4	11	7	4	0	0	0	0	0	0	0	0	
11	0	0	6	8	13	0	0	0	0	0	0	0	0	
12	0	0	7	7	15	0	0	0	0	0	0	0	0	
13	0	0	1	13	7	0	0	0	0	0	0	0	0	
14	0	0	4	6	10	0	0	0	0	0	0	0	0	
15	0	1	2	8	8	0	0	0	0	0	0	0	0	
16	0	0	2	3	6	0	0	0	0	0	0	0	0	
17	0	0	1	8	3	0	0	0	0	0	0	0	0	
18	0	2	4	6	5	0	0	0	0	0	0	0	0	
19	0	0	1	2	1	0	0	0	0	0	0	0	0	
20	0	0	0	4	2	0	0	0	0	0	0	0	0	
21-25	0	0	4	9	15	0	0	0	0	0	0	0	0	
26-30	0	0	0	1	5	0	0	0	0	0	0	0	0	
31-35	0	0	0	1	2	0	0	0	0	0	0	0	0	
36-40	0	0	3	11	6	0	0	0	0	0	0	0	0	
41-45	0	0	1	8	9	0	0	0	0	0	0	0	0	
46-50	0	0	2	2	2	0	0	0	0	0	0	0	0	
>50	0	0	1	13	32	0	0	0	0	0	0	0	0	
MAXIMUM PERSIST	3	18	78	215	350	0	0	0	0	0	0	0	0	

* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 155. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Wet-Bulb Temperatures (°F) above or below Specified Values

		JULY					1950-1964						
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	4	36	81	74	53	0	0	0	0	0	0	0	0
2	2	18	40	29	18	0	0	0	0	0	0	0	0
3	0	8	15	20	11	0	0	0	0	0	0	0	0
4	1	8	12	20	7	0	0	0	0	0	0	0	0
5	0	9	11	13	4	0	0	0	0	0	0	0	0
6	1	4	5	12	9	0	0	0	0	0	0	0	0
7	0	4	12	10	6	0	0	0	0	0	0	0	0
8	0	4	11	11	9	0	0	0	0	0	0	0	0
9	1	0	12	11	4	0	0	0	0	0	0	0	0
10	0	3	11	11	1	0	0	0	0	0	0	0	0
11	0	2	15	11	10	0	0	0	0	0	0	0	0
12	0	3	5	14	8	0	0	0	0	0	0	0	0
13	0	0	12	11	5	0	0	0	0	0	0	0	0
14	0	1	8	5	9	0	0	0	0	0	0	0	0
15	0	1	2	4	7	0	0	0	0	0	0	0	0
16	0	0	3	11	7	0	0	0	0	0	0	0	0
17	0	0	4	14	3	0	0	0	0	0	0	0	0
18	0	0	2	8	7	0	0	0	0	0	0	0	0
19	0	0	1	4	6	0	0	0	0	0	0	0	0
20	0	0	1	4	9	0	0	0	0	0	0	0	0
21-25	0	1	4	15	7	0	0	0	0	0	0	0	0
26-30	0	0	0	4	2	0	0	0	0	0	0	0	0
31-35	0	0	2	8	4	0	0	0	0	0	0	0	0
36-40	0	0	1	12	10	0	0	0	0	0	0	0	0
41-45	0	0	4	8	11	0	0	0	0	0	0	0	0
46-50	0	0	1	4	1	0	0	0	0	0	0	0	0
>50	0	0	2	16	47	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	9	21	120	321	327	0	0	0	0	0	0	0	0

		AUGUST					1950-1964						
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	2	42	63	71	68	0	0	0	0	0	0	0	0
2	1	13	28	36	26	0	0	0	0	0	0	0	0
3	0	7	24	19	12	0	0	0	0	0	0	0	0
4	0	11	10	9	11	0	0	0	0	0	0	0	0
5	0	5	13	8	7	0	0	0	0	0	0	0	0
6	0	4	10	8	3	0	0	0	0	0	0	0	0
7	0	8	12	7	2	0	0	0	0	0	0	0	0
8	0	2	13	11	8	0	0	0	0	0	0	0	0
9	0	2	12	10	7	0	0	0	0	0	0	0	0
10	0	6	6	13	10	0	0	0	0	0	0	0	0
11	0	1	11	16	9	0	0	0	0	0	0	0	0
12	0	0	3	16	11	0	0	0	0	0	0	0	0
13	0	0	6	11	7	0	0	0	0	0	0	0	0
14	0	0	4	11	3	0	0	0	0	0	0	0	0
15	0	0	10	9	4	0	0	0	0	0	0	0	0
16	0	1	6	10	9	0	0	0	0	0	0	0	0
17	0	1	0	6	5	0	0	0	0	0	0	0	0
18	0	0	2	6	2	0	0	0	0	0	0	0	0
19	0	0	3	3	5	0	0	0	0	0	0	0	0
20	0	0	1	3	7	0	0	0	0	0	0	0	0
21-25	0	0	5	7	11	0	0	0	0	0	0	0	0
26-30	0	0	2	4	4	0	0	0	0	0	0	0	0
31-35	0	0	1	5	3	0	0	0	0	0	0	0	0
36-40	0	0	1	5	6	0	0	0	0	0	0	0	0
41-45	0	0	1	12	13	0	0	0	0	0	0	0	0
46-50	0	0	1	3	4	0	0	0	0	0	0	0	0
>50	0	0	5	20	43	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	2	17	113	239	354	0	0	0	0	0	0	0	0

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 156. Frequency Distribution of the Number of Consecutive Hourly
5-foot* Wet-Bulb Temperatures (°F) above or below Specified Values

		SEPTEMBER 1950-1964											
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	10	26	43	42	3	0	0	0	0	0	0	0
2	0	2	8	16	11	0	0	1	0	0	0	0	0
3	0	0	14	15	11	2	0	0	0	0	0	0	0
4	0	0	6	10	9	0	0	0	0	0	0	0	0
5	0	2	4	8	7	1	0	0	0	0	0	0	0
6	0	2	13	10	6	0	1	0	0	0	0	0	0
7	0	0	3	7	10	0	0	0	0	0	0	0	0
8	0	1	5	7	7	1	0	0	0	0	0	0	0
9	0	0	8	11	11	0	0	0	0	0	0	0	0
10	0	0	1	10	9	1	0	0	0	0	0	0	0
11	0	0	5	4	7	0	0	0	0	0	0	0	0
12	0	0	2	10	9	0	0	0	0	0	0	0	0
13	0	0	3	5	3	0	0	0	0	0	0	0	0
14	0	0	3	2	4	0	0	0	0	0	0	0	0
15	0	0	0	2	2	0	0	0	0	0	0	0	0
16	0	0	0	0	6	0	0	0	0	0	0	0	0
17	0	0	0	4	4	0	0	0	0	0	0	0	0
18	0	0	2	3	4	0	0	0	0	0	0	0	0
19	0	0	0	1	2	0	0	0	0	0	0	0	0
20	0	0	1	1	6	0	0	0	0	0	0	0	0
21-25	0	0	2	8	5	0	0	0	0	0	0	0	0
26-30	0	0	0	0	2	0	0	0	0	0	0	0	0
31-35	0	0	0	2	7	0	0	0	0	0	0	0	0
36-40	0	0	0	2	5	0	0	0	0	0	0	0	0
41-45	0	0	0	4	6	0	0	0	0	0	0	0	0
46-50	0	0	0	0	3	0	0	0	0	0	0	0	0
>50	0	0	0	1	14	0	0	0	0	0	0	0	0
MAXIMUM PERSIST	0	8	22	95	137	10	6	2	0	0	0	0	0

		OCTOBER 1950-1964											
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	7	12	20	25	10	10	3	0	0	0	0
2	0	1	2	7	11	15	10	6	4	0	0	0	0
3	0	0	3	8	10	4	3	9	3	0	0	0	0
4	0	0	0	1	8	8	8	4	2	0	0	0	0
5	0	0	0	3	6	8	7	3	0	0	0	0	0
6	0	0	0	1	12	5	6	4	0	1	0	0	0
7	0	0	0	3	10	3	2	3	1	0	0	0	0
8	0	0	0	1	6	8	2	3	1	0	0	0	0
9	0	0	1	1	4	6	1	2	0	0	0	0	0
10	0	0	1	2	3	0	2	1	0	1	0	0	0
11	0	0	1	3	0	3	1	5	1	0	0	0	0
12	0	0	0	0	4	5	5	4	0	0	0	0	0
13	0	0	0	1	4	3	2	6	0	0	0	0	0
14	0	0	0	0	0	3	5	3	0	0	0	0	0
15	0	0	1	2	4	7	7	1	0	0	0	0	0
16	0	0	0	1	0	3	0	0	1	0	0	0	0
17	0	0	0	1	3	2	2	0	0	0	0	0	0
18	0	0	0	0	3	0	0	0	0	0	0	0	0
19	0	0	0	0	0	1	1	1	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21-25	0	0	0	2	2	4	1	0	0	0	0	0	0
25-30	0	0	0	0	1	2	0	0	0	0	0	0	0
31-35	0	0	0	0	0	1	0	1	0	0	0	0	0
36-40	0	0	0	0	0	3	1	0	0	0	0	0	0
41-45	0	0	0	2	0	1	0	1	0	0	0	0	0
46-50	0	0	0	0	2	0	0	0	0	0	0	0	0
>50	0	0	0	0	4	3	2	0	0	0	0	0	0
MAXIMUM PERSIST	0	2	15	45	93	254	93	43	16	10	0	0	0

* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 157. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Wet-Bulb Temperatures (°F) above or below Specified Values

NOVEMBER 1950-1964													
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	3	34	42	33	28	18	7	1	0
2	0	0	0	0	5	13	13	20	13	8	4	0	0
3	0	0	0	0	0	7	10	13	6	5	0	0	0
4	0	0	0	0	1	2	7	14	9	1	0	0	0
5	0	0	0	0	2	9	11	6	4	3	6	1	0
6	0	0	0	1	1	4	13	4	10	3	2	0	0
7	0	0	0	0	0	9	7	6	7	0	1	0	0
8	0	0	0	0	1	7	11	7	4	5	1	0	0
9	0	0	0	0	2	7	4	7	6	6	1	0	0
10	0	0	0	0	0	7	6	8	3	3	1	0	0
11	0	0	0	0	2	3	7	8	3	7	4	0	0
12	0	0	0	0	0	4	7	6	2	4	0	0	0
13	0	0	0	0	0	5	6	2	4	7	0	0	0
14	0	0	0	0	0	4	9	8	6	2	1	0	0
15	0	0	0	0	0	9	8	9	3	2	0	0	0
16	0	0	0	0	0	7	13	4	6	2	1	0	0
17	0	0	0	0	0	9	7	4	6	0	0	0	0
18	0	0	0	0	1	14	3	1	2	2	0	0	0
19	0	0	0	0	0	6	0	3	4	3	0	0	0
20	0	0	0	0	0	5	1	1	1	1	0	0	0
21-25	0	0	0	0	0	8	4	5	2	7	0	0	0
26-30	0	0	0	0	0	2	0	2	7	2	0	0	0
31-35	0	0	0	0	0	4	4	5	3	0	0	0	0
36-40	0	0	0	0	0	3	3	3	3	2	0	0	0
41-45	0	0	0	0	0	5	5	3	1	2	0	0	0
46-50	0	0	0	0	0	1	2	3	0	0	0	0	0
>50	0	0	0	0	0	35	29	26	10	1	0	0	0
MAXIMUM PERSIST	0	0	0	6	18	596	270	181	106	72	16	5	0

DECEMBER 1950-1964													
NUMBER OF HOURS	PERSISTENCE ABOVE SPECIFIED TEMPERATURES (°F)					PERSISTENCE BELOW SPECIFIED TEMPERATURES (°F)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	0	0	0	0	0	22	31	32	41	30	23	4	4
2	0	0	0	0	0	7	13	16	15	16	22	5	3
3	0	0	0	0	0	11	10	16	10	14	22	2	2
4	0	0	0	0	0	5	10	9	9	13	17	2	0
5	0	0	0	0	0	5	7	7	11	10	9	2	0
6	0	0	0	0	0	6	4	5	13	9	16	0	1
7	0	0	0	0	0	14	11	11	14	14	17	3	0
8	0	0	0	0	0	6	7	7	9	11	5	1	0
9	0	0	0	0	0	2	2	3	3	4	12	1	1
10	0	0	0	0	0	5	3	5	8	9	10	1	0
11	0	0	0	0	0	7	9	7	10	12	9	4	0
12	0	0	0	0	0	3	3	6	4	7	2	1	0
13	0	0	0	0	0	4	6	10	6	5	7	3	0
14	0	0	0	0	0	4	2	6	7	8	5	3	0
15	0	0	0	0	0	3	5	6	8	9	4	1	0
16	0	0	0	0	0	5	4	4	7	7	3	2	0
17	0	0	0	0	0	6	12	6	8	9	2	2	0
18	0	0	0	0	0	6	8	5	8	12	5	3	0
19	0	0	0	0	0	4	3	6	5	7	0	0	0
20	0	0	0	0	0	1	3	5	3	6	2	1	0
21-25	0	0	0	0	0	6	7	10	13	13	3	1	0
26-30	0	0	0	0	0	6	5	6	12	9	0	0	0
31-35	0	0	0	0	0	2	5	6	16	10	0	0	0
36-40	0	0	0	0	0	4	6	5	5	6	0	0	0
41-45	0	0	0	0	0	7	9	13	13	4	0	0	0
46-50	0	0	0	0	0	2	3	5	5	2	0	0	0
>50	0	0	0	0	0	54	54	50	22	5	0	0	0
MAXIMUM PERSIST	0	0	0	0	0	319	315	216	215	74	22	21	9

* Calculated from 5-foot relative humidity and 5.5-foot temperature.

Table 158. Frequency Distribution of the Number of Consecutive Hourly 5-foot* Wet-Bulb Temperatures ($^{\circ}\text{F}$) above or below Specified Values. January 1950–December 1964

NUMBER OF HOURS	ANNUAL					1950-1964							
	-----PERSISTENCE ABOVE-----					-----PERSISTENCE BELOW-----							
	SPECIFIED TEMPERATURES ($^{\circ}\text{F}$)					SPECIFIED TEMPERATURES ($^{\circ}\text{F}$)							
	80	75	70	65	60	35	32	30	25	20	10	0	-10
1	6	131	243	298	305	206	214	236	182	150	82	21	10
2	3	51	103	128	108	101	93	111	95	69	77	17	8
3	1	19	76	96	73	64	59	90	52	38	83	6	2
4	1	28	42	58	52	48	66	71	60	48	64	9	1
5	0	18	43	50	45	45	60	48	54	50	55	9	1
6	1	12	42	50	53	36	51	42	58	38	41	5	1
7	0	14	41	47	45	53	44	57	50	54	50	9	0
8	0	9	45	51	54	47	62	51	52	39	31	7	1
9	1	5	43	48	54	43	42	44	33	38	33	8	3
10	0	13	31	52	38	40	34	46	26	43	28	5	3
11	0	3	39	45	48	36	39	47	37	45	28	9	0
12	0	3	17	52	55	38	47	47	32	36	11	2	0
13	0	0	24	44	29	40	46	48	34	31	19	7	0
14	0	1	20	27	33	44	61	46	46	40	19	9	1
15	0	2	15	25	31	52	46	40	31	37	11	4	0
16	0	1	11	30	35	45	45	42	40	27	11	6	0
17	0	1	6	36	24	50	51	35	43	27	9	5	0
18	0	2	10	23	24	39	27	18	28	23	6	4	0
19	0	0	5	13	16	24	16	28	19	16	5	1	0
20	0	0	3	15	27	17	23	25	22	16	4	1	0
21-25	0	1	15	43	50	43	46	59	55	59	7	3	0
26-30	0	0	2	11	19	20	22	31	48	39	3	0	1
31-35	0	0	3	18	19	17	23	31	39	22	1	0	0
36-40	0	0	5	31	35	31	34	29	32	24	4	3	0
41-45	0	0	6	35	41	28	32	49	32	10	0	0	0
46-50	0	0	4	9	13	16	27	26	14	6	0	0	0
>50	0	0	8	50	149	266	231	196	83	22	1	1	0
MAXIMUM PERSIST	9	21	120	321	354	596	315	222	215	74	62	62	30

*Calculated from 5-foot relative humidity and 5.5-foot temperature.

Section 1.4

Precipitation

The precipitation data used in this report were measured by a Bendix-Friez self-recording, weighing-type rain gage from January 1, 1950 until August 7, 1960, and by a Bendix-Friez tipping bucket precipitation gage for the remainder of the period. After August 7, 1960, the weighing gage was continued in operation and used both as a check on and as a substitute for the tipping bucket when the latter was inoperative. A standard 8-inch U.S. Weather Bureau rain gage has been used as an additional check on the precipitation measurements. Both the weighing and tipping bucket gages are unshielded and are located in an open field about 20 feet apart.

Since the meteorology station is manned only from 0830 to 1700 local time, Monday through Friday, snow data are incomplete. No analyses based on snow are presented. Precipitation amounts which were less than 0.01 inches were recorded as a "trace" of precipitation. An hourly observation of precipitation represents the total amount of precipitation which fell in the preceding hour.

1.4.1. Precipitation Amounts

Table 159. Monthly Precipitation Amounts in Inches for Each Year. January 1950-December 1964.

This table gives the amount of precipitation measured during each month and year. The total amount for each year is listed in the column labeled "annual." The monthly average amount of precipitation is listed in the row labeled "mean." It is quite evident from these data that substantially larger amounts of precipitation occur in the spring and summer. Trace amounts are not included in these data.

Figure 43. Monthly Precipitation Amounts in Inches for Each Year. January 1950-December 1964.

This figure is based on the data of Table 159. The salient features of this figure are the variability of precipitation amounts from month to month and the occurrence of larger values in summer than in winter. Strikingly, there are the anomalous rainfall amounts which occurred in October 1954, and September 1961. In both cases over 13 inches of rain fell.

Table 160. Frequency Distribution of the Daily Amounts of Precipitation in Inches. January 1950-December 1964.

Table entries are the number of days in each month with the specified amounts of precipitation. For example, the total number of days with

precipitation amounts of 0.01 to 0.04 inches for the 15 Januaries is 43. The "total" column indicates that on about 30 percent of all days more than a trace was recorded in at least one hour.

Table 161. Monthly Maximum of Daily Amounts of Precipitation in Inches with Day of Occurrence. January 1950–December 1964.

This table gives the maximum daily amount of precipitation in inches measured within the specified month and year and its date of occurrence. The column labeled "annual" contains the maximum daily precipitation amounts for each year.

Table 162. Maximum Precipitation in Inches for Specified Time Intervals. January 1950–December 1964.

This table gives the maximum amount of precipitation measured within the specified time periods of 1, 2, 3, 6, 12, 36 and 48 hours. In determining the entries for this table all combinations of consecutive hours of specified length were examined and the date of the first hour of the first time period containing the maximum precipitation amount was chosen as the date of occurrence.

1.4.2. Frequency of Precipitation and No Precipitation

Table 163. Monthly Number of Hours of Precipitation for Each Year. January 1950–December 1964.

The table entries are the number of hours in each month and year during which precipitation including traces occurred. The column labeled "total" contains the total number of hours with precipitation for each year.

Figure 44. Monthly Number of Hours of Precipitation for Each Year. January 1950–December 1964.

This graph illustrates the data contained in Table 163.

Table 164. Number of Days during which Precipitation Amounts Equalled or Exceeded Specified Values for Each Year. January 1950–December 1964.

This table presents for each year the number of days in each month on which precipitation amounts equalled or exceeded the indicated values. The total number of days for each month on which precipitation amounts were greater than or equal to 0.01 inches are listed in the last column.

Table 165. Frequency Distribution of the Number of Consecutive Hours with Precipitation. January 1950–December 1964.

Table entries are the number of precipitation periods of the indicated duration for each month. An observation recorded as trace was counted as an hour of precipitation. To illustrate a table entry, the number of times that precipitation was recorded for a period of exactly five consecutive hours in the 15 Januaries is given as 17. A precipitation period which began in one month and ended in the next was counted with the data of the month in which it began.

Table 166. Frequency Distribution of the Number of Consecutive Days with Precipitation. January 1950-December 1964.

Table 167. Frequency Distribution of the Number of Consecutive Hours without Precipitation. January 1950-December 1964.

Table 168. Frequency Distribution of the Number of Consecutive Days without Precipitation. January 1950-December 1964.

These tables are constructed like Table 165 with the variable changed as indicated by the table titles. These tables and Table 165 provide information useful for scheduling projects that are dependent on the occurrence of precipitation.

Table 159. Monthly Precipitation Amounts in Inches for Each Year. January 1950–December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	3.52	1.43	0.60	4.82	0.13	5.86	5.72	1.91	1.89	1.20	1.53	1.20	29.81
1951	1.46	2.08	2.39	3.66	5.23	2.71	5.30	4.22	5.19	2.89	3.53	1.40	40.06
1952	1.47	0.10	3.45	2.53	2.99	4.98	3.49	5.18	1.76	0.62	2.62	2.03	31.22
1953	1.36	1.23	3.44	2.95	2.97	7.39	5.91	2.95	2.23	0.94	1.06	2.51	34.94
1954	0.98	1.93	3.79	4.03	2.48	2.44	5.32	5.51	1.00	13.03	1.26	1.30	43.07
1955	1.19	1.66	1.63	2.66	5.55	4.24	2.21	6.26	1.40	4.36	1.22	0.43	32.81
1956	0.25	1.51	0.44	3.44	3.71	1.03	2.54	3.21	0.86	0.49	1.25	1.05	19.78
1957	1.73	1.88	1.78	4.99	3.04	4.15	5.80	5.09	1.07	2.39	2.63	1.93	36.48
1958	0.74	0.34	0.23	1.82	3.36	6.47	3.72	2.96	1.93	2.14	1.09	0.50	25.30
1959	0.87	2.24	3.85	4.66	4.14	2.51	5.45	2.04	2.58	3.69	2.76	2.02	36.81
1960	3.31	1.81	0.65	4.05	2.39	2.70	1.29	1.91	1.60	1.65	1.12	0.36	22.84
1961	0.03	1.09	3.27	3.08	2.01	2.44	3.25	4.24	13.17	2.80	1.77	2.02	39.17
1962	2.39	1.12	1.55	2.66	3.51	3.69	4.16	2.07	1.72	1.35	0.86	0.35	25.43
1963	1.25	0.91	2.58	3.31	2.40	2.44	7.05	1.25	2.17	1.00	1.42	0.75	26.53
1964	0.71	0.63	3.26	5.37	2.31	2.89	3.64	2.67	3.52	0.24	1.72	1.08	28.04
MEAN	1.42	1.33	2.19	3.60	3.08	3.73	4.32	3.43	2.81	2.59	1.72	1.26	31.49

Figure 43. Monthly Precipitation Amounts in Inches for Each Year. January 1950–December 1964

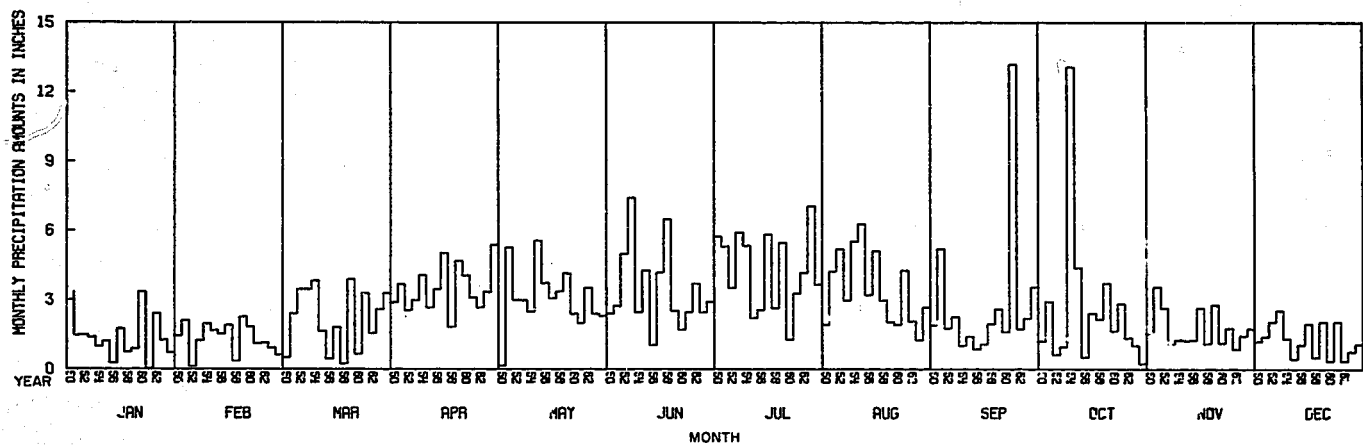


Table 160. Frequency Distribution of the Daily Amounts of Precipitation in Inches. January 1950–December 1964. Number of Observations 5479

MONTH	PRECIPITATION IN INCHES								TOTAL
	.01 -.04	.05 -.09	.10 -.49	.50 -.99	1.00 -1.99	2.00 -2.99	3.00 -3.99	≥4.00	
JAN	43	30	45	5	2	1	0	0	126
FEB	38	23	46	10	0	0	0	0	117
MAR	59	26	59	15	5	0	0	0	164
APR	42	27	68	24	11	1	0	0	173
MAY	36	29	68	20	6	1	0	0	160
JUN	36	23	59	23	9	3	0	1	154
JUL	40	16	50	20	18	2	2	0	148
AUG	27	21	40	15	12	5	0	0	120
SEP	36	8	46	14	9	3	0	0	116
OCT	34	12	42	14	6	0	2	1	111
NOV	33	16	54	13	2	0	0	0	118
DEC	57	37	39	10	0	0	0	0	143
TOTAL	481	268	616	183	80	16	4	2	1650

Table 161. Monthly Maximum of Daily Amounts of Precipitation in Inches with Day of Occurrence. January 1950-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950 DAY	1.41 13	0.46 14	0.34 26	1.45 24	0.08 9	2.32 2	1.92 16	0.83 27	1.04 21	1.01 7	0.38 8	0.50 6	2.32
1951 DAY	1.17 2	0.78 18	0.63 29	1.07 11	2.95 10	1.21 21	3.39 8	1.49 20	2.39 26	0.93 6	0.99 6	0.37 6	3.39
1952 DAY	0.82 19	0.06 4	1.28 18	1.37 12	0.46 22	2.28 13	1.04 7	1.53 9	0.96 1	0.58 14	0.89 25	0.59 20	2.28
1953 DAY	0.31 23	0.69 20	1.20 12	1.10 30	1.04 22	4.23 10	1.68 17	2.04 2	0.68 4	0.58 4	0.52 22	0.78 2	4.23
1954 DAY	0.59 26	0.84 15	1.34 25	1.01 6	0.96 31	0.65 3	2.12 6	1.61 18	0.31 17	4.45 10	0.38 23	0.48 27	4.45
1955 DAY	0.81 5	0.40 26	0.44 3	0.75 20	1.58 24	1.42 9	0.70 23	2.79 5	0.49 27	1.49 5	0.47 15	0.30 2	2.79
1956 DAY	0.11 2	0.52 16	0.17 28	0.88 29	0.97 5	0.43 15	0.82 8	1.26 12	0.26 5	0.23 26	0.35 6	0.23 23	1.26
1957 DAY	0.71 22	0.75 8	0.70 11	0.94 24	0.66 18	1.11 13	3.20 12	2.37 14	0.51 20	1.05 23	0.89 14	0.57 18	3.20
1958 DAY	0.30 21	0.26 27	0.11 5	0.68 5	1.60 31	2.18 8	1.54 2	1.84 15	0.77 17	0.79 22	0.30 25	0.20 8	2.18
1959 DAY	0.23 21	0.71 9	1.37 26	2.95 27	0.81 11	0.83 25	1.54 2	1.36 3	1.06 26	1.06 6	1.79 4	0.98 27	2.95
1960 DAY	2.36 12	0.57 10	0.29 30	1.61 16	1.02 17	0.91 11	0.82 26	0.43 3	1.01 18	0.82 13	0.56 15	0.22 5	2.36
1961 DAY	0.01 2	0.40 3	0.90 13	1.19 24	0.54 25	0.90 19	1.00 28	2.01 1	2.68 13	1.03 19	0.51 3	0.67 23	2.68
1962 DAY	0.60 6	0.32 26	0.42 11	1.25 30	0.79 7	1.04 4	1.25 2	1.44 6	0.66 10	0.29 7	0.43 16	0.20 26	1.44
1963 DAY	0.40 19	0.20 20	0.33 25	1.40 29	1.25 17	0.94 7	2.09 19	0.50 2	0.94 2	0.42 19	1.08 22	0.30 11	2.09
1964 DAY	0.24 19	0.20 12	0.75 25	1.51 5	0.70 8	0.99 19	1.42 18	0.80 21	1.07 20	0.20 8	0.77 27	0.26 2	1.51

Table 162. Maximum Precipitation in Inches for Specified Time Intervals. January 1950-December 1964

MONTH	NUMBER OF HOURS						
	1	2	3	6	12	36	48
JAN	0.44	0.63	0.88	1.16	2.04	2.69	2.69
DAY	25	13	12	11	11	11	10
YEAR	1950	1950	1960	1960	1960	1960	1960
FEB	0.32	0.58	0.76	0.95	1.00	1.07	1.07
DAY	15	8	15	15	15	15	14
YEAR	1954	1957	1954	1954	1954	1954	1954
MAR	0.52	0.68	0.86	1.15	1.43	2.40	2.40
DAY	19	12	12	12	24	24	23
YEAR	1954	1953	1953	1953	1954	1954	1954
APR	1.18	1.34	1.70	2.50	3.00	3.35	3.35
DAY	30	27	27	27	27	27	26
YEAR	1962	1959	1959	1959	1959	1959	1959
MAY	1.12	1.26	1.36	1.56	2.29	3.40	3.43
DAY	24	24	24	24	10	9	9
YEAR	1955	1955	1955	1955	1951	1951	1951
JUN	2.20	3.28	4.00	4.22	4.23	4.23	4.25
DAY	10	10	10	10	9	8	9
YEAR	1953	1953	1953	1953	1953	1953	1953
JUL	1.40	2.00	2.12	2.76	2.90	3.49	3.49
DAY	6	6	6	6	6	12	11
YEAR	1954	1954	1954	1954	1954	1957	1957
AUG	1.92	2.32	2.34	2.40	2.78	2.79	2.79
DAY	14	14	14	5	5	4	4
YEAR	1957	1957	1957	1955	1955	1955	1955
SEP	1.04	1.44	1.82	2.39	2.56	4.66	4.92
DAY	3	13	26	13	13	12	12
YEAR	1961	1961	1951	1961	1961	1961	1961
OCT	1.40	2.44	2.79	3.63	4.98	8.10	8.62
DAY	9	9	9	9	9	9	9
YEAR	1954	1954	1954	1954	1954	1954	1954
NOV	0.42	0.62	0.75	0.97	1.67	1.90	1.95
DAY	10	10	4	10	4	3	3
YEAR	1952	1952	1959	1952	1959	1959	1959
DEC	0.36	0.48	0.56	0.65	0.90	1.29	1.33
DAY	27	27	27	27	22	2	2
YEAR	1959	1959	1959	1959	1961	1953	1953

Table 163. Monthly Number of Hours of Precipitation for Each Year.
January 1950–December 1964

YEAR	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	90	101	105	87	16	48	32	14	9	16	31	75	624
1951	48	40	78	68	78	27	39	28	36	65	82	68	657
1952	49	11	114	53	83	39	32	37	22	10	60	136	646
1953	123	74	100	107	82	39	65	35	40	52	103	116	936
1954	145	92	95	76	69	59	50	62	31	99	93	169	1040
1955	93	100	100	70	85	85	40	26	31	117	97	70	914
1956	74	103	84	68	57	27	50	25	24	25	94	117	748
1957	106	57	77	161	79	79	42	66	38	66	99	93	963
1958	101	32	52	81	59	103	70	26	38	44	49	101	756
1959	94	105	98	90	63	33	88	29	39	83	80	108	910
1960	84	93	73	96	106	120	80	33	24	36	24	13	782
1961	3	57	137	172	42	40	81	60	128	104	78	83	985
1962	147	77	91	59	62	36	77	38	35	58	64	38	782
1963	90	88	133	78	46	49	50	34	36	32	81	89	806
1964	81	90	143	150	47	41	71	40	65	20	61	155	964

Figure 44. Monthly Number of Hours of Precipitation for Each Year.
January 1950–December 1964

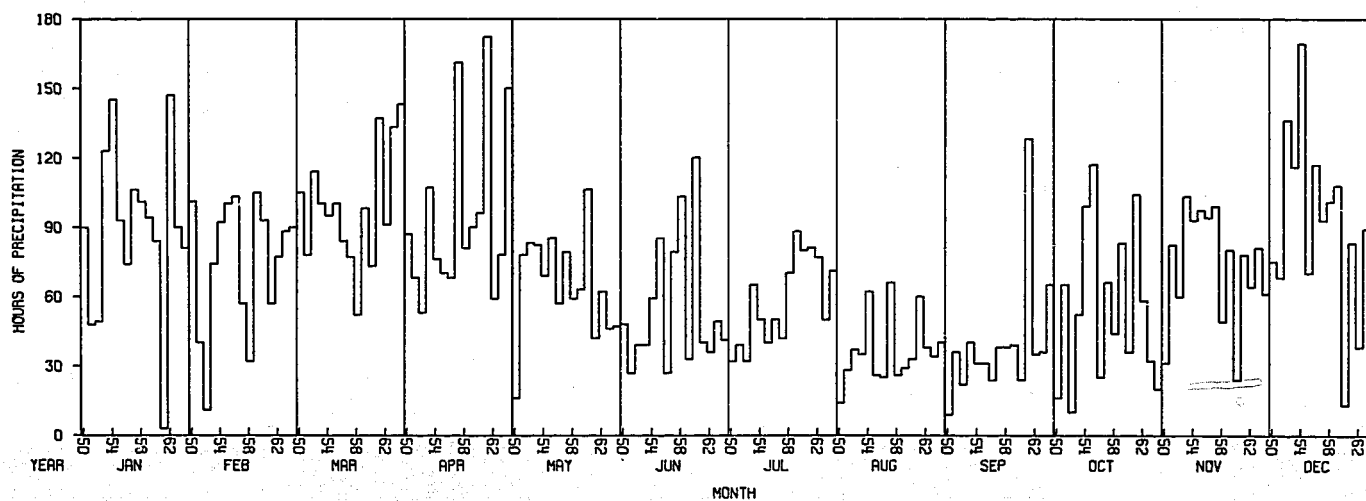


Table 164. Number of Days during Which Precipitation Amounts Equalled or Exceeded Specified Values for Each Year. January 1950-December 1964

DURING THE YEAR 1950						DURING THE YEAR 1951						DURING THE YEAR 1952					
MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES				
	1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01
JAN	1	1	9	10	12	JAN	1	1	1	3	7	JAN	0	1	4	7	8
FEB	0	0	3	6	12	FEB	0	1	4	6	8	FEB	0	0	0	1	2
MAR	0	0	1	2	13	MAR	0	1	9	11	12	MAR	1	2	8	11	13
APR	1	4	7	7	14	APR	1	3	9	9	10	APR	1	2	4	8	8
MAY	0	0	0	1	5	MAY	1	2	7	7	9	MAY	0	0	9	14	15
JUN	3	4	4	6	11	JUN	1	2	5	9	11	JUN	2	2	7	9	14
JUL	3	4	6	7	8	JUL	2	2	4	6	6	JUL	1	2	7	7	11
AUG	0	2	3	4	5	AUG	2	3	5	6	7	AUG	3	4	5	6	7
SEP	1	2	2	3	4	SEP	2	3	6	6	8	SEP	0	1	5	5	6
OCT	1	1	2	3	4	OCT	0	3	6	8	8	OCT	0	1	1	1	3
NOV	0	0	5	5	8	NOV	0	4	6	6	7	NOV	0	2	6	7	7
DEC	0	1	2	7	15	DEC	0	0	5	7	12	DEC	0	2	5	7	10
TOTAL	10	19	44	61	111	TOTAL	10	25	67	84	105	TOTAL	8	19	61	83	104
DURING THE YEAR 1953						DURING THE YEAR 1954						DURING THE YEAR 1955					
MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES				
	1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01
JAN	0	0	4	8	11	JAN	0	1	2	3	6	JAN	0	1	2	4	8
FEB	0	1	2	4	8	FEB	0	1	7	8	10	FEB	0	0	4	5	11
MAR	1	3	6	8	11	MAR	2	3	7	8	9	MAR	0	0	6	6	8
APR	1	2	7	9	11	APR	1	3	8	9	12	APR	0	1	8	10	12
MAY	1	2	6	8	10	MAY	0	2	4	6	7	MAY	2	5	7	8	12
JUN	2	3	7	8	9	JUN	0	2	5	7	11	JUN	1	4	7	7	7
JUL	3	4	7	9	11	JUL	1	4	7	7	8	JUL	0	2	6	7	9
AUG	1	1	6	6	6	AUG	2	4	6	8	11	AUG	2	3	4	4	4
SEP	0	2	5	6	8	SEP	0	0	3	5	8	SEP	0	0	4	4	6
OCT	0	1	3	3	5	OCT	3	5	6	6	13	OCT	2	3	9	9	12
NOV	0	1	3	4	7	NOV	0	0	5	6	11	NOV	0	0	4	8	10
DEC	0	3	4	6	9	DEC	0	0	2	8	12	DEC	0	0	1	2	5
TOTAL	9	23	60	79	106	TOTAL	9	25	62	81	118	TOTAL	7	19	62	74	104
DURING THE YEAR 1956						DURING THE YEAR 1957						DURING THE YEAR 1958					
MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES				
	1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01
JAN	0	0	1	1	7	JAN	0	1	4	8	15	JAN	0	0	3	5	9
FEB	0	1	4	8	10	FEB	0	2	4	5	8	FEB	0	0	1	1	4
MAR	0	0	2	2	11	MAR	0	2	4	5	6	MAR	0	0	1	1	5
APR	0	2	7	8	11	APR	0	3	12	15	16	APR	0	1	6	7	12
MAY	0	3	7	11	14	MAY	0	1	8	10	12	MAY	1	1	7	7	8
JUN	0	0	5	5	8	JUN	1	3	8	11	12	JUN	2	3	10	10	11
JUL	0	1	7	8	10	JUL	2	4	4	4	6	JUL	1	3	5	7	10
AUG	1	3	5	7	9	AUG	2	2	5	7	8	AUG	1	2	3	5	7
SEP	0	0	3	5	6	SEP	0	1	3	4	7	SEP	0	2	4	4	8
OCT	0	0	2	4	5	OCT	1	2	4	4	6	OCT	0	1	5	5	5
NOV	0	0	5	5	8	NOV	0	3	6	6	7	NOV	0	0	4	6	7
DEC	0	0	3	9	13	DEC	0	1	7	7	9	DEC	0	0	1	3	11
TOTAL	1	10	51	73	112	TOTAL	6	25	69	86	112	TOTAL	5	13	50	61	97
DURING THE YEAR 1959						DURING THE YEAR 1960						DURING THE YEAR 1961					
MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES				
	1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01
JAN	0	0	3	7	8	JAN	1	1	4	5	5	JAN	0	0	0	0	3
FEB	0	2	6	7	9	FEB	0	2	5	6	7	FEB	0	0	4	5	6
MAR	1	3	5	8	13	MAR	0	0	2	4	8	MAR	0	2	6	8	13
APR	1	2	6	7	11	APR	1	4	5	8	10	APR	1	1	7	11	15
MAY	0	4	9	13	15	MAY	1	1	5	6	13	MAY	0	1	6	8	11
JUN	0	3	5	5	7	JUN	0	2	6	10	15	JUN	0	2	5	6	9
JUL	2	4	9	12	14	JUL	0	1	3	4	11	JUL	1	2	8	8	13
AUG	1	1	4	5	6	AUG	0	0	8	8	10	AUG	1	3	6	10	15
SEP	1	2	4	4	5	SEP	1	1	3	4	10	SEP	5	7	14	14	17
OCT	1	2	9	10	11	OCT	0	2	3	4	8	OCT	1	2	6	7	10
NOV	1	1	6	7	7	NOV	0	1	4	5	9	NOV	0	1	6	8	10
DEC	0	2	3	4	10	DEC	0	0	1	3	3	DEC	0	1	6	11	11
TOTAL	8	26	69	89	116	TOTAL	4	15	49	67	109	TOTAL	9	22	74	96	133
DURING THE YEAR 1962						DURING THE YEAR 1963						DURING THE YEAR 1964					
MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES					MONTH	PRECIPITATION IN INCHES				
	1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01		1.00	.50	.10	.05	.01
JAN	0	1	7	9	12	JAN	0	0	6	9	9	JAN	0	0	3	4	6
FEB	0	0	3	6	9	FEB	0	0	5	7	7	FEB	0	0	4	4	6
MAR	0	0	5	10	12	MAR	0	0	11	13	16	MAR	0	4	6	8	14
APR	1	2	5	7	8	APR	1	2	5	6	10	APR	2	4	8	10	13
MAY	0	2	9	11	11	MAY	1	1	5	7	9	MAY	0	2	6	7	9
JUN	1	2	8	9	9	JUN	0	1	7	8	10	JUN	0	3	6	8	10
JUL	1	3	8	9	11	JUL	4	4	5	6	9	JUL	1	2	6	7	11
AUG	1	1	2	5	8	AUG	0	1	3	5	9	AUG	0	2	7	7	8
SEP	0	1	6	6	9	SEP	0	2	4	4	6	SEP	2	2	6	6	8
OCT	0	0	4	7	12	OCT	0	0	4	5	7	OCT	0	0	1	1	2
NOV	0	0	3	4	5	NOV	1	1	2	4	7	NOV	0	1	4	4	8
DEC	0	0	1	3	5	DEC	0	0	4	5	8	DEC	0	0	4	4	10
TOTAL	4	12	61	86	111	TOTAL	7	12	61	79	107	TOTAL	5	20	61	70	105

Table 165. Frequency Distribution of the Number of Consecutive Hours with Precipitation. January 1950–December 1964

NUMBER OF HOURS	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	30	26	59	62	50	70	69	57	49	48	44	38	602
2	27	20	49	41	48	51	52	29	38	30	26	29	440
3	20	14	30	24	28	22	37	15	20	15	14	12	251
4	19	17	19	30	25	19	14	10	12	13	14	5	197
5	17	6	16	16	17	6	7	7	9	7	12	14	134
6	12	8	10	14	12	5	15	9	5	6	10	5	111
7	9	10	8	10	7	6	7	2	2	3	7	3	76
8	4	6	9	6	11	8	2	5	4	2	8	5	68
9	7	10	4	10	1	4	3	4	5	8	4	8	68
10	3	6	7	5	1	3	4	3	6	5	6	7	56
11	2	2	7	8	4	3	1	2	4	2	4	4	43
12	8	1	3	2	0	1	5	4	2	4	6	3	39
13	2	7	8	5	2	2	1	1	0	1	3	3	35
14	4	4	2	2	1	1	2	1	0	2	2	6	27
15	4	5	2	4	4	1	1	2	1	0	3	2	29
16	1	2	5	1	1	1	0	0	0	2	0	4	17
17	1	1	1	1	2	0	2	1	1	1	2	5	18
18	1	1	1	2	0	1	0	0	1	0	2	2	11
19	3	2	1	1	0	0	2	0	1	1	1	3	15
20	1	0	3	0	0	1	0	0	0	1	1	0	6
21	0	0	3	2	1	0	0	0	0	0	2	2	10
22	0	0	0	1	0	0	2	0	0	0	2	0	5
23	1	1	3	1	0	1	1	0	0	0	0	1	9
24	0	1	1	0	0	1	0	0	0	0	0	1	4
25	2	0	0	2	2	0	0	0	0	0	0	1	7
26	1	1	1	0	0	2	0	0	0	0	0	2	7
27	0	0	1	0	0	0	0	0	0	0	0	0	1
28	0	1	1	0	1	0	0	0	0	0	0	1	4
29	0	1	0	1	0	0	0	0	0	0	0	1	3
30	1	1	1	1	1	0	0	0	0	0	0	0	5
31	1	0	0	1	1	0	0	0	0	1	0	0	4
32	0	0	0	1	0	0	0	0	0	1	0	0	2
33	0	1	0	0	0	0	0	0	0	0	1	2	4
34	0	0	0	0	0	0	0	0	0	2	0	0	2
35	0	0	0	0	0	0	0	0	0	0	0	1	1
36-40	0	1	0	1	0	0	0	0	1	0	2	5	5
41-45	0	0	0	0	0	0	0	0	0	0	1	1	5
46-50	2	0	0	0	0	0	0	0	0	0	3	1	3
51-55	1	0	0	0	0	0	0	0	0	0	0	0	1
56-60	0	0	1	0	0	0	0	0	0	0	0	0	1
>60	1	0	0	0	0	0	0	0	0	0	0	0	1
MAXIMUM	74	36	60	40	31	26	23	17	19	43	43	50	0

Table 166. Frequency Distribution of the Number of Consecutive Days with Precipitation. January 1950–December 1964

NUMBER OF DAYS	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	44	37	29	32	45	47	35	41	48	40	33	44	487
2	26	25	33	23	19	18	31	24	18	18	26	26	275
3	6	13	14	11	18	12	9	6	8	9	13	6	125
4	5	4	4	5	5	6	2	4	3	4	5	7	54
5	9	1	2	6	3	1	3	0	2	2	1	3	33
5	0	0	5	3	1	1	2	0	0	0	1	3	16
7	1	0	1	1	1	1	0	0	0	0	0	0	5
8	0	1	0	0	0	0	1	1	0	0	0	0	3
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	1	1	0	0	0	0	0	2
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	1	0	0	0	0	0	0	0	0	0	1
15	0	0	0	0	0	0	0	0	0	0	0	0	0
MAXIMUM	7	8	14	7	7	10	10	8	5	5	6	6	0

Table 167. Frequency Distribution of the Number of Consecutive Hours without Precipitation. January 1950–December 1964

NUMBER OF HOURS	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	10	5	24	26	12	13	14	5	12	14	14	17	166
2	7	10	19	16	12	10	14	10	9	12	5	6	130
3	4	10	14	15	14	6	10	6	4	4	3	3	93
4	6	2	13	5	6	8	6	5	8	2	9	2	72
5-9	13	14	26	50	32	30	39	6	12	18	26	17	283
10-14	16	11	26	23	14	21	18	13	11	14	19	11	197
15-19	13	9	16	11	10	8	13	8	7	9	3	6	113
20-24	12	6	13	11	11	9	16	10	6	4	6	10	114
25-29	10	4	10	12	8	10	6	9	9	4	7	6	95
30-34	5	7	5	6	8	10	4	1	4	6	4	7	67
35-39	7	5	5	4	5	5	6	3	5	3	2	5	55
40-44	5	9	8	6	9	7	5	0	3	7	5	9	73
45-49	8	7	4	3	10	6	2	7	3	1	5	9	65
50-74	22	24	23	14	24	17	24	13	12	15	20	18	226
75-99	18	16	20	24	12	18	14	10	16	10	13	15	186
100-149	17	8	16	17	19	17	23	22	18	17	16	17	207
150-199	7	4	6	8	9	10	9	10	13	10	12	7	105
200-299	2	7	5	4	2	5	6	7	4	1	6	3	52
300-399	1	0	0	1	2	0	0	5	1	4	2	5	21
400-499	1	0	0	0	0	0	0	1	1	2	0	0	5
>500	0	1	0	0	0	0	0	1	1	0	0	0	3
MAXIMUM	403	684	236	306	360	299	293	546	522	475	356	390	684

Table 168. Frequency Distribution of the Number of Consecutive Days without Precipitation. January 1950–December 1964

NUMBER OF DAYS	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	29	25	26	20	29	30	18	12	17	22	19	24	271
2	22	21	23	15	19	13	20	17	12	10	15	26	213
3	15	13	19	22	11	17	10	9	13	10	15	9	163
4	8	2	8	6	13	8	11	11	10	11	5	11	104
5	4	7	3	5	7	7	8	13	4	5	4	6	73
6	3	3	1	5	4	6	5	4	9	5	8	5	58
7	3	1	4	2	2	5	2	4	4	4	5	2	38
8	0	3	5	2	1	3	3	2	2	1	2	0	24
9	0	2	1	0	0	1	1	2	1	0	2	1	11
10	3	0	0	1	0	0	1	2	0	0	0	1	8
11	0	2	0	2	1	0	3	1	0	0	1	0	10
12	1	0	0	1	1	0	0	2	0	3	0	1	9
13	0	0	0	0	0	0	0	1	0	1	0	1	3
14	1	0	0	0	1	0	0	0	0	1	2	0	5
15	0	0	0	0	0	0	0	1	0	0	0	2	3
16	1	0	0	0	0	0	0	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0	0	1	0	0	1
18	0	0	0	0	0	0	0	1	1	0	0	0	2
19	0	0	0	0	0	0	0	0	0	1	0	0	1
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	1	0	0	0	1
22	0	0	0	0	0	0	0	1	0	0	0	0	1
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0
>24	0	1	0	0	0	0	0	0	0	0	0	0	1
MAXIMUM	16	27	9	12	14	9	11	22	21	19	14	15	27

Section 1.5

Stability

The difference in air temperature between two levels above ground is a measure of thermodynamic atmospheric stability. From July 1, 1951, to August 5, 1952, a pair of thermopiles consisting of 5 copper-constantan thermocouples was used to obtain the temperature difference between 3.5 and 144 feet. On August 6, 1952, the lower thermopile was raised to 5.5 feet.

On July 1, 1961, additional temperature sensors, installed at 15.2, 34.0 and 72.2 feet, commenced operation. At this time the circuit was modified to allow measurement of the temperature difference through the use of a single copper-constantan thermocouple located at each level.

The lower thermal sensors (5.5 or 3.5 feet) are mounted on a horizontal aluminum boom support by an adjustable mast set at 5.5 (3.5) feet above ground level about 150 feet west of the Meteorology Tower as shown in Figure 2 of Appendix II. The other thermal sensors are mounted on aluminum booms extending horizontally from the Meteorology Tower. Temperature difference measurements for the period July 1, 1951, to December 1, 1960, were recorded on a Honeywell Elektronik Potentiometer recorder and read to the nearest tenth of a degree Celsius. Before November 30, 1956, an averaging interval of 10 minutes was used. After this date the temperature difference measurements were averaged for two minutes. Starting January 1, 1964, the data processing system which automatically computes the 2-minute average by means of a Librascope "ball and disc" integrator provided the data. The temperature difference values recorded in degrees Celsius were converted to degrees Fahrenheit.

Temperature difference values during hours of precipitation were considered missing because of errors due to moisture effects on the sensors. This accounts for a major fraction of the missing data. It is likely that during precipitation the vertical temperature gradient approximates the wet adiabatic lapse rate. The omission of these data, therefore, creates a bias.

Only 144- minus 5.5-foot and 15.2- minus 5.5-foot temperature differences are used in this report.

Tables 169 through 181: Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day. Monthly and Total Period. July 1951-December 1964 (144- minus 5.5-foot). January 1961-December 1964 (15.2- minus 5.5-foot).

These tables present the percentage frequency of occurrence of temperature difference within the indicated intervals for each hour. The column labeled "mean" contains the average of the temperature difference observations for each hour. According to these data, strong inversions rarely, if ever, occur during the early and late afternoon and strong lapse conditions are rare during the dark hours. In 39% of the cases, the temperature was increasing with height between the 144- and 5.5-foot levels.

Table 169. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

JANUARY 1961-1964
NUMBER OF OBSERVATIONS 2976

HOUR	15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)											MISSING	MEAN
	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.03	0.00	1.24	1.58	0.47	0.40	0.17	0.03	0.00	0.00	0.24	0.46
2	0.00	0.03	0.03	1.41	1.34	0.30	0.60	0.17	0.00	0.03	0.00	0.24	0.49
3	0.00	0.03	0.03	1.51	1.18	0.44	0.47	0.17	0.13	0.00	0.00	0.20	0.53
4	0.00	0.03	0.10	1.34	1.41	0.34	0.54	0.10	0.07	0.07	0.00	0.17	0.51
5	0.00	0.03	0.07	1.24	1.68	0.37	0.30	0.17	0.10	0.03	0.03	0.13	0.59
6	0.00	0.03	0.10	1.41	1.41	0.34	0.40	0.10	0.17	0.03	0.00	0.17	0.53
7	0.00	0.00	0.07	1.51	1.44	0.34	0.40	0.17	0.03	0.07	0.00	0.13	0.47
8	0.00	0.10	0.00	2.72	0.97	0.07	0.10	0.07	0.03	0.00	0.00	0.10	0.06
9	0.03	0.20	1.58	2.05	0.13	0.07	0.03	0.00	0.00	0.00	0.00	0.07	-0.44
10	0.07	0.94	1.92	0.94	0.13	0.03	0.03	0.00	0.00	0.00	0.00	0.10	-0.71
11	0.30	1.48	1.48	0.64	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.17	-0.96
12	0.34	1.61	1.38	0.50	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.17	-1.06
13	0.24	1.55	1.51	0.71	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.10	-0.96
14	0.10	1.21	1.68	0.97	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.17	-0.82
15	0.00	0.54	1.78	1.51	0.07	0.00	0.03	0.00	0.00	0.00	0.00	0.24	-0.55
16	0.00	0.00	0.17	2.72	1.04	0.00	0.03	0.00	0.00	0.00	0.00	0.20	-0.04
17	0.00	0.00	0.07	1.51	1.58	0.40	0.40	0.03	0.00	0.00	0.00	0.17	0.33
18	0.00	0.03	0.03	1.14	1.81	0.34	0.54	0.07	0.00	0.00	0.00	0.20	0.42
19	0.00	0.00	0.07	1.34	1.44	0.40	0.50	0.10	0.00	0.03	0.00	0.27	0.48
20	0.00	0.00	0.03	1.31	1.48	0.57	0.40	0.03	0.03	0.07	0.00	0.24	0.48
21	0.00	0.00	0.03	1.48	1.51	0.40	0.47	0.07	0.00	0.00	0.00	0.20	0.41
22	0.00	0.00	0.03	1.34	1.61	0.40	0.37	0.10	0.00	0.03	0.00	0.27	0.44
23	0.00	0.00	0.03	1.41	1.44	0.40	0.47	0.10	0.03	0.00	0.00	0.27	0.46
24	0.00	0.03	0.00	1.34	1.58	0.37	0.47	0.10	0.00	0.00	0.00	0.27	0.43
TOTAL	1.08	7.90	12.20	33.33	25.17	6.08	7.02	1.71	0.64	0.37	0.03	4.47	0.06

JANUARY 1952-1964
NUMBER OF OBSERVATIONS 9672

HOUR	144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)													MISSING	MEAN	
	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.00	0.01	0.11	1.02	0.88	0.49	0.17	0.45	0.20	0.25	0.12	0.01	0.06	0.04	0.35	0.72
2	0.00	0.01	0.11	1.03	0.82	0.50	0.22	0.47	0.18	0.16	0.13	0.10	0.05	0.02	0.37	0.73
3	0.00	0.01	0.13	1.03	0.81	0.44	0.35	0.36	0.19	0.11	0.13	0.08	0.06	0.06	0.38	0.76
4	0.00	0.01	0.20	0.99	0.77	0.52	0.32	0.36	0.17	0.14	0.12	0.04	0.12	0.03	0.37	0.70
5	0.00	0.01	0.17	0.96	0.96	0.44	0.24	0.49	0.09	0.13	0.12	0.03	0.10	0.05	0.36	0.69
6	0.00	0.01	0.17	1.02	0.83	0.43	0.30	0.41	0.11	0.14	0.11	0.06	0.09	0.07	0.39	0.76
7	0.01	0.00	0.21	0.98	0.86	0.44	0.32	0.40	0.13	0.12	0.14	0.05	0.06	0.07	0.35	0.70
8	0.00	0.02	0.39	1.47	0.70	0.40	0.20	0.23	0.14	0.06	0.08	0.03	0.04	0.04	0.35	0.19
9	0.01	0.11	1.26	1.56	0.48	0.12	0.06	0.13	0.01	0.02	0.01	0.01	0.02	0.00	0.35	-0.67
10	0.02	0.36	1.80	1.06	0.32	0.08	0.03	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.41	-1.08
11	0.05	0.68	1.80	0.81	0.22	0.05	0.06	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.44	-1.29
12	0.09	0.78	1.83	0.69	0.18	0.09	0.03	0.04	0.00	0.00	0.01	0.00	0.00	0.00	0.42	-1.35
13	0.07	0.61	1.81	0.91	0.21	0.09	0.03	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.39	-1.28
14	0.03	0.54	1.83	0.93	0.23	0.08	0.05	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.43	-1.20
15	0.00	0.11	1.45	1.64	0.31	0.10	0.05	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.45	-0.88
16	0.00	0.00	0.30	1.74	1.06	0.42	0.16	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.39	-0.38
17	0.00	0.02	0.10	1.03	0.98	0.59	0.34	0.45	0.13	0.11	0.02	0.01	0.00	0.00	0.36	0.25
18	0.00	0.03	0.04	0.91	0.95	0.58	0.26	0.53	0.14	0.28	0.06	0.03	0.00	0.00	0.35	0.53
19	0.00	0.01	0.04	0.97	0.90	0.58	0.19	0.38	0.30	0.19	0.16	0.03	0.02	0.03	0.37	0.70
20	0.00	0.01	0.04	1.10	0.80	0.60	0.19	0.39	0.24	0.25	0.09	0.06	0.02	0.02	0.36	0.66
21	0.00	0.00	0.05	1.14	0.77	0.58	0.16	0.43	0.29	0.24	0.07	0.04	0.05	0.02	0.33	0.67
22	0.00	0.01	0.09	1.06	0.73	0.55	0.30	0.42	0.16	0.19	0.14	0.06	0.04	0.04	0.36	0.77
23	0.00	0.00	0.08	1.09	0.80	0.52	0.29	0.38	0.21	0.19	0.16	0.04	0.05	0.01	0.36	0.67
24	0.00	0.01	0.10	1.04	0.90	0.48	0.12	0.50	0.24	0.21	0.09	0.04	0.04	0.04	0.35	0.68
TOTAL	0.29	3.37	14.12	26.21	16.44	9.19	4.43	7.05	2.97	2.84	1.82	0.77	0.85	0.56	9.10	0.09

Table 170. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference ($^{\circ}\text{F}$) for Each Hour of the Day

FEBRUARY 1961-1964
NUMBER OF OBSERVATIONS 2717

HOUR	15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)											MISSING	MEAN
	≤ -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.04	0.07	0.05	1.51	1.18	0.29	0.48	0.11	0.11	0.07	0.00	0.29	0.52
2	0.04	0.04	0.11	1.33	1.33	0.26	0.41	0.07	0.18	0.07	0.04	0.29	0.51
3	0.00	0.07	0.07	1.33	1.14	0.55	0.33	0.11	0.11	0.11	0.00	0.33	0.60
4	0.04	0.04	0.04	1.55	0.92	0.59	0.37	0.15	0.11	0.00	0.00	0.37	0.47
5	0.04	0.07	0.04	1.55	0.96	0.37	0.63	0.15	0.04	0.04	0.00	0.29	0.47
6	0.04	0.04	0.04	1.77	0.88	0.22	0.59	0.15	0.04	0.07	0.04	0.29	0.56
7	0.04	0.04	0.04	1.66	1.14	0.44	0.33	0.15	0.00	0.04	0.00	0.29	0.38
8	0.04	0.11	0.63	2.51	0.48	0.04	0.04	0.00	0.04	0.00	0.00	0.29	-0.22
9	0.04	0.77	1.33	1.55	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.33	-0.63
10	0.18	1.40	1.33	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	-0.94
11	0.66	1.51	1.00	0.63	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.33	-1.18
12	0.44	1.99	1.11	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	-1.20
13	0.41	1.88	1.36	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	-1.75
14	0.29	1.51	1.51	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	-1.02
15	0.00	1.03	1.66	1.25	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.18	-0.70
16	0.00	0.04	0.81	2.84	0.26	0.00	0.04	0.00	0.00	0.00	0.00	0.18	-0.26
17	0.00	0.03	0.15	2.77	0.81	0.11	0.11	0.04	0.00	0.00	0.00	0.18	0.06
18	0.00	0.07	0.04	1.47	1.40	0.29	0.59	0.04	0.04	0.04	0.00	0.18	0.44
19	0.00	0.11	0.67	1.33	1.62	0.26	0.44	0.07	0.00	0.04	0.00	0.22	0.38
20	0.04	0.00	0.22	1.29	1.29	0.41	0.48	0.18	0.00	0.04	0.00	0.22	0.47
21	0.00	0.04	0.07	1.47	1.18	0.41	0.44	0.15	0.00	0.04	0.11	0.26	0.68
22	0.04	0.00	0.07	1.25	1.47	0.26	0.55	0.18	0.07	0.04	0.00	0.22	0.54
23	0.04	0.00	0.11	1.22	1.47	0.22	0.74	0.11	0.04	0.00	0.04	0.18	0.54
24	0.04	0.04	0.11	1.29	1.44	0.26	0.44	0.26	0.00	0.04	0.04	0.22	0.49
TOTAL	2.43	10.88	11.91	33.92	19.17	5.01	7.01	1.92	0.77	0.63	0.26	6.08	-0.01

FEBRUARY 1952-1964
NUMBER OF OBSERVATIONS 8832

HOUR	144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)													MISSING	MEAN	
	≤ -3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.00	0.01	0.06	0.86	0.89	0.60	0.31	0.48	0.19	0.19	0.16	0.09	0.07	0.06	0.20	0.95
2	0.00	0.01	0.05	0.91	0.88	0.52	0.25	0.58	0.19	0.14	0.16	0.15	0.05	0.08	0.22	0.99
3	0.00	0.01	0.06	0.85	1.04	0.45	0.19	0.53	0.32	0.17	0.08	0.06	0.11	0.08	0.22	0.97
4	0.01	0.00	0.05	0.82	1.06	0.53	0.25	0.37	0.31	0.14	0.16	0.08	0.11	0.06	0.23	0.97
5	0.01	0.00	0.03	0.88	0.99	0.45	0.23	0.53	0.24	0.16	0.14	0.11	0.10	0.05	0.25	0.98
6	0.01	0.00	0.06	0.92	0.93	0.51	0.23	0.40	0.24	0.20	0.12	0.10	0.11	0.08	0.26	1.03
7	0.01	0.00	0.06	1.03	1.01	0.51	0.23	0.42	0.14	0.16	0.10	0.07	0.09	0.08	0.27	0.80
8	0.01	0.02	0.58	1.59	0.94	0.28	0.09	0.14	0.06	0.10	0.01	0.02	0.02	0.01	0.29	-0.20
9	0.00	0.31	1.39	1.46	0.52	0.10	0.05	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.26	-0.92
10	0.07	0.70	1.54	1.28	0.26	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-1.29
11	0.12	1.09	1.40	0.86	0.33	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-1.46
12	0.27	1.09	1.42	0.82	0.27	0.05	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.23	-1.55
13	0.20	0.91	1.70	0.84	0.24	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.23	-1.52
14	0.09	1.10	1.49	1.02	0.19	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.23	-1.48
15	0.02	0.34	1.69	1.52	0.31	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.20	-1.10
16	0.00	0.03	0.88	2.04	0.82	0.12	0.03	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.19	-0.67
17	0.00	0.01	0.16	1.32	1.26	0.66	0.25	0.24	0.09	0.01	0.00	0.00	0.00	0.00	0.17	-0.67
18	0.00	0.01	0.06	0.92	0.97	0.59	0.37	0.57	0.24	0.16	0.07	0.06	0.00	0.01	0.15	0.57
19	0.00	0.01	0.08	0.87	0.87	0.57	0.36	0.51	0.32	0.22	0.10	0.06	0.02	0.01	0.17	0.75
20	0.00	0.01	0.09	0.89	0.88	0.55	0.26	0.62	0.29	0.18	0.09	0.03	0.06	0.02	0.17	0.76
21	0.00	0.01	0.03	0.80	0.92	0.69	0.20	0.54	0.29	0.25	0.10	0.05	0.07	0.05	0.16	0.91
22	0.00	0.00	0.07	0.77	0.88	0.67	0.34	0.42	0.35	0.20	0.14	0.08	0.03	0.06	0.16	0.95
23	0.00	0.00	0.06	0.80	0.94	0.68	0.32	0.41	0.28	0.26	0.12	0.07	0.03	0.05	0.15	0.91
24	0.00	0.00	0.08	0.80	0.91	0.66	0.26	0.41	0.31	0.25	0.14	0.03	0.11	0.05	0.17	0.98
TOTAL	0.84	5.67	13.07	24.86	18.31	9.36	4.27	7.33	3.91	2.80	1.69	1.05	1.00	0.72	5.13	0.10

Table 171. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference ($^{\circ}\text{F}$) for Each Hour of the Day

		MARCH 1961-1964												
		NUMBER OF OBSERVATIONS 2976												
		15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)												
HOURL	≤ -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0	MISSING	MEAN	
1	0.00	0.03	0.00	1.18	1.04	0.34	0.71	0.13	0.10	0.07	0.00	0.57	0.73	
2	0.00	0.00	0.03	1.18	1.11	0.40	0.54	0.13	0.13	0.07	0.00	0.57	0.69	
3	0.00	0.00	0.00	1.18	1.11	0.34	0.60	0.24	0.10	0.03	0.00	0.57	0.70	
4	0.00	0.00	0.00	1.04	1.31	0.24	0.71	0.17	0.03	0.03	0.00	0.64	0.63	
5	0.00	0.60	0.07	1.01	1.34	0.34	0.47	0.13	0.13	0.10	0.00	0.57	0.72	
6	0.00	0.00	0.03	1.14	1.28	0.27	0.54	0.13	0.17	0.00	0.00	0.60	0.63	
7	0.00	0.00	0.13	2.22	0.84	0.13	0.13	0.00	0.07	0.00	0.00	0.64	0.13	
8	0.00	0.30	1.18	1.68	0.44	0.00	0.00	0.03	0.03	0.00	0.00	0.50	-0.32	
9	0.10	0.97	0.97	1.31	0.10	0.00	0.00	0.03	0.03	0.00	0.00	0.64	-0.66	
10	0.27	1.24	0.97	0.74	0.07	0.00	0.10	0.03	0.00	0.00	0.00	0.74	-0.91	
11	0.37	1.38	0.84	0.54	0.10	0.00	0.07	0.00	0.00	0.00	0.00	0.87	-1.06	
12	0.47	1.18	0.94	0.60	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.91	-1.07	
13	0.54	1.18	0.71	0.60	0.10	0.03	0.03	0.00	0.00	0.00	0.00	0.97	-1.10	
14	0.24	1.28	0.87	0.77	0.07	0.00	0.00	0.03	0.00	0.00	0.00	0.91	-0.95	
15	0.00	0.77	1.38	0.87	0.17	0.00	0.03	0.00	0.00	0.00	0.00	0.94	-0.65	
16	0.00	0.40	1.14	1.71	0.13	0.00	0.03	0.00	0.00	0.00	0.00	0.74	-0.44	
17	0.00	0.00	0.47	2.52	0.71	0.03	0.00	0.00	0.00	0.00	0.00	0.44	-0.14	
18	0.00	0.00	0.13	1.14	1.65	0.44	0.34	0.03	0.00	0.00	0.00	0.44	0.35	
19	0.00	0.03	0.03	0.94	1.44	0.47	0.64	0.00	0.10	0.03	0.00	0.47	0.58	
20	0.00	0.00	0.03	0.91	1.34	0.30	0.81	0.13	0.07	0.03	0.00	0.54	0.72	
21	0.00	0.00	0.07	1.01	1.18	0.47	0.64	0.10	0.10	0.07	0.00	0.54	0.69	
22	0.00	0.00	0.03	0.81	1.31	0.50	0.54	0.20	0.07	0.03	0.00	0.67	0.68	
23	0.00	0.03	0.00	0.91	1.14	0.37	0.64	0.20	0.07	0.10	0.00	0.71	0.77	
24	0.00	0.00	0.03	0.91	1.28	0.40	0.57	0.17	0.13	0.00	0.07	0.60	0.84	
TOTAL	1.98	8.80	10.08	26.92	19.25	5.07	8.17	1.95	1.34	0.57	0.07	15.79	0.09	

		MARCH 1952-1964														
		NUMBER OF OBSERVATIONS 9672														
		144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)														
HOURL	≤ -3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	>8.0	MISSING	MEAN
1	0.01	0.00	0.03	0.64	0.75	0.49	0.27	0.45	0.48	0.27	0.12	0.12	0.12	0.05	0.35	1.37
2	0.31	0.00	0.05	0.71	0.62	0.57	0.29	0.50	0.34	0.25	0.23	0.08	0.06	0.09	0.36	1.33
3	0.00	0.01	0.05	0.78	0.62	0.57	0.20	0.50	0.30	0.32	0.26	0.06	0.09	0.06	0.35	1.32
4	0.01	0.01	0.03	0.64	0.72	0.59	0.19	0.49	0.33	0.28	0.18	0.12	0.09	0.08	0.40	1.33
5	0.00	0.02	0.02	0.62	0.88	0.45	0.26	0.49	0.30	0.32	0.11	0.12	0.13	0.05	0.38	1.30
6	0.01	0.00	0.02	0.75	0.79	0.52	0.24	0.52	0.31	0.16	0.17	0.08	0.12	0.08	0.40	1.25
7	0.01	0.01	0.23	1.33	0.88	0.53	0.18	0.30	0.07	0.04	0.05	0.01	0.06	0.02	0.44	0.15
8	0.02	0.30	1.35	1.30	0.43	0.16	0.03	0.06	0.02	0.02	0.02	0.00	0.00	0.00	0.44	-0.88
9	0.13	0.83	1.63	0.75	0.27	0.06	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.43	-1.39
10	0.35	1.16	1.35	0.54	0.21	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.47	-1.72
11	0.50	1.34	1.09	0.51	0.12	0.07	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.49	-1.88
12	0.60	1.24	1.16	0.45	0.11	0.05	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.51	-1.95
13	0.57	1.32	1.06	0.37	0.20	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.55	-1.97
14	0.50	1.18	1.20	0.47	0.22	0.04	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.53	-1.83
15	0.09	0.78	1.63	0.79	0.23	0.08	0.02	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.52	-1.35
16	0.02	0.28	1.45	1.29	0.53	0.09	0.02	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.43	-0.98
17	0.00	0.01	0.43	1.77	1.09	0.34	0.04	0.12	0.01	0.01	0.00	0.00	0.00	0.00	0.34	-0.42
18	0.00	0.01	0.04	0.70	0.93	0.79	0.41	0.55	0.28	0.05	0.05	0.01	0.01	0.01	0.32	0.51
19	0.01	0.00	0.03	0.57	0.82	0.65	0.43	0.57	0.35	0.22	0.13	0.03	0.02	0.01	0.32	0.91
20	0.01	0.00	0.01	0.57	0.78	0.61	0.27	0.63	0.43	0.19	0.12	0.06	0.09	0.02	0.37	1.13
21	0.01	0.00	0.03	0.60	0.80	0.53	0.21	0.66	0.42	0.24	0.11	0.07	0.10	0.02	0.36	1.16
22	0.00	0.01	0.02	0.68	0.65	0.45	0.22	0.68	0.37	0.28	0.17	0.08	0.07	0.06	0.41	1.32
23	0.00	0.01	0.02	0.62	0.68	0.41	0.26	0.57	0.43	0.30	0.17	0.13	0.06	0.06	0.43	1.40
24	0.01	0.00	0.02	0.68	0.72	0.38	0.25	0.58	0.44	0.27	0.14	0.08	0.11	0.06	0.40	1.36
TOTAL	2.87	8.52	12.98	18.15	14.04	8.54	3.86	7.83	4.97	3.22	2.06	1.09	1.17	0.69	10.03	0.08

Table 172. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference ($^{\circ}\text{F}$) for Each Hour of the Day

		APRIL 1961-1964												
		NUMBER OF OBSERVATIONS 2880												
		15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)												
HOOR		≤ -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0	MISSING	MEAN
1		0.00	0.00	0.03	0.42	1.32	0.52	0.69	0.24	0.07	0.07	0.03	0.76	0.98
2		0.00	0.00	0.10	0.45	1.22	0.49	0.73	0.21	0.10	0.03	0.03	0.80	0.92
3		0.00	0.00	0.03	0.49	1.22	0.45	0.59	0.24	0.14	0.07	0.00	0.94	0.96
4		0.00	0.00	0.03	0.45	0.94	0.66	0.76	0.24	0.03	0.10	0.00	0.94	0.96
5		0.00	0.03	0.00	0.42	1.39	0.45	0.56	0.24	0.14	0.07	0.00	0.87	0.92
6		0.00	0.00	0.03	1.32	1.18	0.31	0.35	0.10	0.00	0.00	0.00	0.87	0.40
7		0.00	0.03	1.22	1.91	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.83	-0.32
8		0.07	1.08	1.08	0.80	0.07	0.00	0.07	0.00	0.00	0.00	0.00	1.01	-0.76
9		0.31	1.39	0.90	0.49	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.97	-1.08
10		0.69	1.39	0.80	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	-1.32
11		0.69	1.74	0.63	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	-1.43
12		0.83	1.49	0.63	0.31	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.87	-1.45
13		0.90	1.25	0.83	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	-1.48
14		0.42	1.42	0.94	0.28	0.03	0.00	0.00	0.00	0.00	0.00	0.00	1.08	-1.19
15		0.17	1.15	1.15	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	-0.95
16		0.07	0.97	1.25	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.87	-0.77
17		0.00	0.17	1.01	1.91	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.73	-0.34
18		0.00	0.00	0.00	1.22	1.67	0.38	0.17	0.00	0.00	0.00	0.00	0.73	0.26
19		0.00	0.00	0.00	0.52	1.15	0.42	1.01	0.17	0.10	0.00	0.00	0.80	0.91
20		0.00	0.00	0.00	0.31	0.90	0.73	1.08	0.14	0.10	0.03	0.00	0.87	1.02
21		0.00	0.00	0.00	0.24	1.01	0.56	1.04	0.28	0.14	0.00	0.00	0.90	1.06
22		0.00	0.00	0.07	0.42	1.04	0.31	0.97	0.28	0.00	0.21	0.00	0.87	1.15
23		0.00	0.03	0.03	0.38	1.08	0.42	0.73	0.35	0.14	0.07	0.03	0.90	1.10
24		0.00	0.00	0.00	0.42	1.04	0.59	0.90	0.24	0.14	0.03	0.03	0.76	1.07
TOTAL		4.17	12.15	10.76	15.35	15.97	6.28	9.69	2.74	1.11	0.69	0.14	20.94	0.03

		APRIL 1952-1964															
		NUMBER OF OBSERVATIONS 9360															
		144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)															
HOOR		≤ -3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	>8.0	MISSING	MEAN
1		0.00	0.01	0.00	0.37	0.56	0.50	0.21	0.57	0.33	0.33	0.19	0.15	0.19	0.15	0.60	2.05
2		0.00	0.01	0.04	0.31	0.65	0.46	0.22	0.49	0.28	0.30	0.22	0.14	0.18	0.24	0.62	2.21
3		0.00	0.01	0.03	0.38	0.61	0.49	0.21	0.50	0.20	0.31	0.15	0.17	0.21	0.20	0.67	2.13
4		0.00	0.00	0.04	0.38	0.67	0.43	0.22	0.45	0.29	0.22	0.19	0.14	0.19	0.27	0.66	2.20
5		0.00	0.00	0.04	0.38	0.74	0.44	0.19	0.49	0.26	0.25	0.20	0.10	0.15	0.27	0.66	2.05
6		0.00	0.01	0.06	0.69	1.03	0.42	0.24	0.33	0.17	0.24	0.11	0.03	0.12	0.09	0.64	1.02
7		0.01	0.11	1.21	1.25	0.58	0.16	0.03	0.10	0.02	0.00	0.00	0.02	0.00	0.00	0.68	-0.73
8		0.15	1.06	1.20	0.81	0.18	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	-1.54
9		0.60	1.05	1.20	0.51	0.12	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.67	-1.93
10		0.89	1.13	0.99	0.41	0.05	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.65	-2.17
11		1.15	1.13	0.89	0.32	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.62	-2.41
12		1.20	1.14	0.89	0.25	0.02	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.64	-2.45
13		1.26	1.06	0.90	0.30	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.60	-2.47
14		0.74	1.26	1.13	0.31	0.07	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	-2.14
15		0.41	0.97	1.28	0.66	0.16	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.64	-1.74
16		0.06	0.74	1.24	0.99	0.43	0.11	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	-1.25
17		0.01	0.07	0.81	1.40	0.76	0.47	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.50	-0.61
18		0.00	0.01	0.05	0.50	1.16	0.79	0.35	0.47	0.22	0.06	0.02	0.00	0.00	0.00	0.51	0.39
19		0.00	0.03	0.01	0.34	0.61	0.56	0.24	0.73	0.46	0.29	0.19	0.05	0.10	0.00	0.57	1.41
20		0.01	0.03	0.00	0.32	0.56	0.49	0.28	0.63	0.49	0.28	0.21	0.12	0.13	0.03	0.59	1.64
21		0.02	0.01	0.02	0.32	0.57	0.45	0.29	0.59	0.36	0.36	0.14	0.21	0.17	0.05	0.60	1.82
22		0.02	0.01	0.03	0.33	0.49	0.46	0.26	0.58	0.30	0.33	0.25	0.12	0.25	0.11	0.64	2.04
23		0.02	0.00	0.02	0.40	0.45	0.48	0.30	0.44	0.28	0.34	0.27	0.15	0.20	0.15	0.67	2.16
24		0.02	0.02	0.01	0.32	0.59	0.41	0.31	0.51	0.33	0.31	0.25	0.11	0.20	0.17	0.61	2.05
TOTAL		6.57	9.88	12.10	12.28	11.11	7.25	3.45	6.96	4.07	3.62	2.39	1.51	2.09	1.72	14.99	0.16

Table 173. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

MAY 1961-1964
NUMBER OF OBSERVATIONS 2976

HOUR	15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)											MISSING	MEAN
	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.00	0.00	0.37	1.11	0.54	1.28	0.24	0.24	0.13	0.00	0.27	1.23
2	0.00	0.00	0.00	0.54	1.14	0.57	1.08	0.17	0.20	0.17	0.00	0.30	1.13
3	0.00	0.00	0.00	0.47	1.28	0.50	0.97	0.37	0.07	0.07	0.03	0.40	1.05
4	0.00	0.00	0.00	0.40	1.28	0.64	0.94	0.27	0.17	0.00	0.10	0.37	1.15
5	0.00	0.03	0.00	0.54	1.41	0.64	0.71	0.17	0.17	0.03	0.07	0.40	0.93
6	0.00	0.00	0.27	2.72	0.74	0.03	0.07	0.00	0.00	0.00	0.00	0.37	-0.08
7	0.00	0.24	1.92	1.58	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-0.50
8	0.10	1.38	1.55	0.64	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.47	-0.94
9	0.13	1.98	1.11	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	-1.07
10	0.24	2.15	1.11	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	-1.21
11	0.47	2.15	0.84	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	-1.23
12	0.37	2.08	1.18	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.40	-1.30
13	0.30	2.02	1.08	0.30	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.40	-1.15
14	0.20	0.84	1.68	0.97	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-0.77
15	0.03	1.55	1.21	0.91	0.07	0.00	0.03	0.00	0.00	0.03	0.00	0.34	-0.76
16	0.00	0.60	2.02	0.81	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.40	-0.62
17	0.03	0.13	1.51	1.58	0.60	0.07	0.00	0.00	0.00	0.00	0.00	0.24	-0.32
18	0.00	0.07	0.20	1.38	1.65	0.30	0.27	0.03	0.00	0.00	0.00	0.27	0.20
19	0.00	0.00	0.00	0.37	1.14	0.64	1.38	0.30	0.17	0.03	0.00	0.13	1.10
20	0.00	0.00	0.00	0.30	0.84	0.60	1.34	0.64	0.13	0.07	0.03	0.20	1.33
21	0.00	0.00	0.00	0.27	0.84	0.71	1.14	0.50	0.27	0.20	0.00	0.24	1.45
22	0.00	0.00	0.00	0.27	1.01	0.71	1.11	0.40	0.30	0.17	0.00	0.20	1.38
23	0.00	0.00	0.00	0.24	1.18	0.77	1.01	0.44	0.07	0.13	0.13	0.20	1.41
24	0.00	0.00	0.00	0.34	1.21	0.77	0.87	0.50	0.17	0.10	0.10	0.10	1.35
TOTAL	1.88	15.22	15.66	16.26	16.10	7.49	12.20	4.03	1.95	1.14	0.47	7.59	0.17

MAY 1952-1964
NUMBER OF OBSERVATIONS 9672

HOUR	144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)													MISSING	MEAN	
	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.01	0.00	0.01	0.23	0.31	0.45	0.26	0.57	0.29	0.36	0.24	0.18	0.29	0.24	0.73	2.74
2	0.00	0.01	0.01	0.27	0.37	0.37	0.32	0.52	0.35	0.32	0.23	0.18	0.27	0.22	0.73	2.57
3	0.00	0.01	0.01	0.23	0.39	0.45	0.27	0.54	0.43	0.24	0.29	0.14	0.23	0.20	0.73	2.51
4	0.00	0.01	0.02	0.26	0.39	0.40	0.28	0.56	0.39	0.23	0.24	0.14	0.27	0.26	0.71	2.62
5	0.00	0.01	0.02	0.30	0.38	0.58	0.27	0.64	0.33	0.19	0.22	0.11	0.13	0.27	0.71	2.29
6	0.00	0.00	0.31	1.01	0.94	0.50	0.13	0.22	0.06	0.09	0.08	0.05	0.05	0.02	0.69	0.30
7	0.00	0.23	1.44	1.16	0.37	0.16	0.03	0.04	0.00	0.02	0.01	0.00	0.00	0.00	0.71	-0.91
8	0.13	0.94	1.66	0.52	0.23	0.01	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.63	-1.53
9	0.39	1.26	1.27	0.48	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	-1.87
10	0.48	1.49	1.16	0.30	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	-2.04
11	0.60	1.38	1.04	0.27	0.12	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	-2.12
12	0.65	1.49	0.91	0.30	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	-2.15
13	0.49	1.46	1.13	0.27	0.08	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	-2.05
14	0.23	1.13	1.28	0.60	0.20	0.05	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.66	-1.62
15	0.20	0.82	1.33	0.64	0.29	0.17	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.65	-1.39
16	0.03	0.50	1.32	0.81	0.33	0.26	0.09	0.08	0.01	0.01	0.00	0.00	0.00	0.00	0.72	-1.01
17	0.01	0.12	0.85	0.91	0.88	0.34	0.10	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.70	-0.50
18	0.00	0.00	0.12	0.56	0.98	0.73	0.42	0.52	0.12	0.01	0.00	0.01	0.00	0.00	0.68	0.32
19	0.00	0.00	0.01	0.25	0.42	0.58	0.38	0.89	0.39	0.36	0.14	0.04	0.02	0.00	0.67	1.42
20	0.00	0.00	0.01	0.26	0.29	0.52	0.25	0.80	0.49	0.40	0.20	0.10	0.11	0.05	0.69	1.94
21	0.01	0.00	0.01	0.29	0.28	0.37	0.29	0.59	0.49	0.43	0.25	0.14	0.20	0.10	0.71	2.31
22	0.01	0.01	0.02	0.26	0.38	0.29	0.25	0.63	0.41	0.34	0.37	0.16	0.19	0.13	0.71	2.43
23	0.01	0.00	0.00	0.26	0.38	0.37	0.25	0.54	0.43	0.35	0.26	0.22	0.23	0.16	0.71	2.49
24	0.00	0.02	0.00	0.27	0.31	0.47	0.23	0.63	0.25	0.35	0.32	0.16	0.29	0.20	0.68	2.63
TOTAL	3.25	10.88	13.96	10.68	8.54	7.18	3.92	8.04	4.47	3.72	2.85	1.63	2.27	1.84	16.77	0.38

Table 174. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

JUNE 1961-1964
NUMBER OF OBSERVATIONS 2880

HOUR	15.2- MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)											MISSING	MEAN
	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.00	0.03	0.21	0.94	0.52	1.15	0.28	0.24	0.31	0.21	0.28	1.91
2	0.00	0.00	0.03	0.31	0.94	0.59	0.80	0.45	0.31	0.28	0.17	0.28	1.74
3	0.00	0.07	0.03	0.31	0.97	0.42	1.15	0.35	0.35	0.21	0.03	0.28	1.45
4	0.00	0.00	0.00	0.42	1.08	0.56	0.76	0.42	0.35	0.21	0.10	0.28	1.52
5	0.00	0.00	0.00	0.76	1.11	0.63	0.69	0.31	0.10	0.17	0.07	0.31	1.10
6	0.00	0.00	1.35	2.08	0.28	0.07	0.00	0.00	0.00	0.00	0.00	0.38	-0.33
7	0.00	0.83	2.33	0.52	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.35	-0.75
8	0.03	1.49	1.98	0.31	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.31	-0.91
9	0.21	2.40	0.90	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-1.26
10	0.56	2.57	0.59	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-1.43
11	0.38	2.43	0.97	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-1.35
12	0.80	2.53	0.49	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	-1.52
13	0.59	1.91	1.04	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	-1.30
14	0.21	1.56	1.46	0.38	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.49	-1.00
15	0.31	1.60	1.35	0.35	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.49	-1.12
16	0.14	1.53	1.39	0.45	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.52	-0.93
17	0.00	0.83	1.35	1.35	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.38	-0.58
18	0.00	0.00	0.59	2.01	0.76	0.10	0.17	0.00	0.00	0.00	0.00	0.52	-0.04
19	0.00	0.03	0.00	0.66	0.97	0.56	1.18	0.21	0.14	0.00	0.00	0.42	0.89
20	0.03	0.00	0.00	0.21	0.66	0.49	1.35	0.56	0.10	0.17	0.21	0.38	1.70
21	0.03	0.00	0.00	0.17	0.69	0.35	1.35	0.38	0.38	0.17	0.17	0.45	1.86
22	0.03	0.00	0.00	0.21	0.76	0.35	1.08	0.56	0.28	0.21	0.24	0.45	1.89
23	0.03	0.00	0.00	0.24	0.80	0.49	1.01	0.45	0.21	0.45	0.14	0.35	1.89
24	0.03	0.00	0.03	0.31	0.83	0.56	1.08	0.28	0.35	0.31	0.14	0.24	1.67
TOTAL	3.40	19.79	15.94	12.08	11.46	5.73	11.77	4.24	2.81	2.50	1.49	8.78	0.22

JUNE 1952-1964
NUMBER OF OBSERVATIONS 9360

HOUR	144 MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)													MISSING	MEAN	
	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.00	0.00	0.00	0.06	0.29	0.36	0.28	0.65	0.48	0.43	0.42	0.16	0.30	0.45	0.29	3.41
2	0.00	0.00	0.00	0.09	0.27	0.40	0.32	0.57	0.38	0.52	0.34	0.21	0.29	0.46	0.32	3.47
3	0.00	0.00	0.03	0.13	0.29	0.41	0.24	0.52	0.44	0.50	0.24	0.27	0.33	0.46	0.32	3.49
4	0.00	0.00	0.01	0.14	0.34	0.29	0.20	0.68	0.47	0.32	0.36	0.18	0.32	0.53	0.31	3.58
5	0.00	0.00	0.02	0.19	0.47	0.42	0.35	0.68	0.31	0.34	0.30	0.16	0.22	0.35	0.34	2.73
6	0.00	0.01	0.52	1.12	0.78	0.34	0.20	0.35	0.20	0.13	0.04	0.03	0.01	0.01	0.41	0.18
7	0.00	0.61	1.52	0.93	0.51	0.11	0.05	0.06	0.00	0.00	0.01	0.00	0.00	0.00	0.36	-1.08
8	0.07	1.38	1.39	0.68	0.20	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.33	-1.54
9	0.34	1.51	1.36	0.44	0.07	0.06	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.35	-1.83
10	0.56	1.55	1.36	0.27	0.12	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	-2.00
11	0.72	1.50	1.22	0.38	0.04	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	-2.09
12	0.75	1.46	1.27	0.33	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	-2.10
13	0.59	1.50	1.24	0.33	0.12	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.34	-2.02
14	0.33	1.14	1.31	0.58	0.26	0.12	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.35	-1.61
15	0.30	1.04	1.09	0.71	0.37	0.18	0.05	0.09	0.01	0.00	0.01	0.00	0.00	0.00	0.32	-1.40
16	0.09	0.77	1.07	0.81	0.53	0.25	0.09	0.16	0.04	0.00	0.00	0.00	0.00	0.00	0.36	-1.00
17	0.01	0.25	0.84	0.93	0.76	0.49	0.24	0.21	0.15	0.01	0.00	0.00	0.00	0.00	0.28	-0.40
18	0.00	0.01	0.30	0.66	0.85	0.64	0.33	0.68	0.21	0.11	0.02	0.01	0.00	0.00	0.33	0.40
19	0.01	0.02	0.03	0.07	0.43	0.41	0.40	1.00	0.72	0.42	0.19	0.10	0.04	0.00	0.33	1.73
20	0.04	0.00	0.01	0.05	0.35	0.22	0.21	0.69	0.69	0.56	0.47	0.17	0.30	0.07	0.31	2.73
21	0.03	0.00	0.01	0.05	0.18	0.33	0.22	0.59	0.49	0.69	0.46	0.24	0.30	0.19	0.37	3.12
22	0.03	0.00	0.00	0.07	0.17	0.36	0.28	0.58	0.44	0.49	0.52	0.24	0.29	0.33	0.36	3.35
23	0.01	0.01	0.02	0.05	0.22	0.33	0.31	0.60	0.46	0.46	0.38	0.20	0.44	0.34	0.32	3.44
24	0.02	0.00	0.02	0.06	0.27	0.35	0.29	0.60	0.44	0.63	0.27	0.17	0.42	0.36	0.27	3.33
TOTAL	3.90	12.75	14.65	9.16	7.98	6.27	4.19	8.82	5.94	5.61	4.04	2.14	3.26	3.57	7.74	0.74

Table 175. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

JULY 1961-1964
NUMBER OF OBSERVATIONS 2976

HOUR	15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)											MISSING	MEAN
	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.00	0.00	0.44	0.97	0.54	0.87	0.37	0.30	0.17	0.10	0.40	1.42
2	0.00	0.00	0.00	0.47	1.21	0.44	0.84	0.30	0.20	0.13	0.07	0.50	1.27
3	0.00	0.00	0.00	0.50	1.04	0.67	0.74	0.24	0.20	0.13	0.07	0.57	1.25
4	0.00	0.00	0.00	0.54	1.08	0.50	0.77	0.37	0.20	0.13	0.00	0.57	1.18
5	0.00	0.00	0.00	0.57	1.41	0.37	0.60	0.30	0.24	0.10	0.00	0.57	1.05
6	0.00	0.07	0.64	2.22	0.44	0.07	0.03	0.03	0.00	0.00	0.00	0.67	-0.17
7	0.00	0.91	1.68	0.84	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.64	-0.70
8	0.00	1.75	1.22	0.47	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.60	-0.96
9	0.27	2.12	0.94	0.24	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.57	-1.22
10	0.64	2.05	0.84	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	-1.41
11	0.81	2.05	0.71	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	-1.50
12	0.81	1.98	0.74	0.13	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.47	-1.48
13	0.67	2.05	0.71	0.17	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.54	-1.45
14	0.24	2.05	1.14	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.47	-1.18
15	0.40	1.78	1.21	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	-1.18
16	0.17	1.88	1.41	0.27	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-1.04
17	0.00	1.11	1.71	0.77	0.13	0.03	0.00	0.00	0.00	0.00	0.00	0.40	-0.73
18	0.00	0.00	1.14	2.02	0.47	0.07	0.00	0.03	0.00	0.00	0.00	0.44	-0.22
19	0.00	0.00	0.00	0.71	1.08	0.97	0.77	0.13	0.10	0.00	0.00	0.40	0.75
20	0.00	0.00	0.00	0.27	0.71	0.64	1.34	0.34	0.30	0.24	0.03	0.30	1.56
21	0.00	0.00	0.00	0.27	0.81	0.81	1.18	0.24	0.34	0.20	0.03	0.30	1.48
22	0.00	0.00	0.00	0.27	0.87	0.47	1.21	0.34	0.44	0.10	0.10	0.37	1.56
23	0.00	0.00	0.00	0.24	1.21	0.54	0.97	0.30	0.34	0.27	0.03	0.27	1.42
24	0.00	0.00	0.00	0.30	1.18	0.71	0.84	0.37	0.20	0.20	0.13	0.24	1.43
TOTAL	4.00	19.79	14.15	12.57	12.94	6.82	10.22	3.36	2.86	1.68	0.57	11.06	0.06

JULY 1951-1964
NUMBER OF OBSERVATIONS 10416

HOUR	144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)														MISSING	MEAN
	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	>8.0		
1	0.00	0.00	0.00	0.07	0.29	0.27	0.24	0.59	0.28	0.50	0.37	0.18	0.48	0.43	0.47	3.77
2	0.00	0.00	0.00	0.10	0.32	0.25	0.28	0.60	0.31	0.40	0.32	0.25	0.34	0.52	0.49	3.67
3	0.00	0.00	0.01	0.15	0.25	0.34	0.19	0.57	0.33	0.36	0.41	0.23	0.36	0.45	0.51	3.60
4	0.00	0.00	0.02	0.17	0.18	0.36	0.28	0.53	0.28	0.41	0.35	0.31	0.31	0.43	0.55	3.56
5	0.00	0.01	0.01	0.15	0.36	0.35	0.36	0.54	0.22	0.41	0.30	0.20	0.33	0.38	0.56	3.17
6	0.00	0.01	0.29	0.64	0.97	0.51	0.17	0.43	0.20	0.11	0.13	0.04	0.04	0.05	0.58	0.65
7	0.01	0.43	1.38	0.91	0.47	0.23	0.51	0.09	0.00	0.00	0.00	0.00	0.00	0.63	-0.99	
8	0.09	1.18	1.38	0.64	0.16	0.05	0.03	0.01	0.01	0.01	0.00	0.01	0.00	0.60	-1.49	
9	0.40	1.25	1.30	0.44	0.10	0.06	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.59	-1.86	
10	0.52	1.49	1.13	0.38	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	-2.03	
11	0.60	1.41	1.24	0.32	0.07	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.48	-2.02	
12	0.59	1.43	1.26	0.31	0.09	0.04	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.44	-2.04	
13	0.67	1.31	1.27	0.31	0.10	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.48	-2.05	
14	0.38	1.14	1.36	0.50	0.22	0.08	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.44	-1.72	
15	0.23	1.08	1.11	0.76	0.30	0.11	0.05	0.08	0.00	0.00	0.00	0.00	0.00	0.46	-1.46	
16	0.14	0.83	0.98	0.95	0.45	0.17	0.06	0.12	0.02	0.00	0.00	0.00	0.00	0.45	-1.14	
17	0.00	0.29	0.87	0.86	0.87	0.36	0.20	0.12	0.06	0.01	0.00	0.00	0.00	0.52	-0.57	
18	0.00	0.01	0.16	0.67	0.97	0.68	0.53	0.48	0.12	0.04	0.01	0.00	0.00	0.48	0.28	
19	0.01	0.00	0.01	0.05	0.30	0.35	0.34	1.08	0.80	0.45	0.30	0.07	0.04	0.50	1.89	
20	0.01	0.00	0.01	0.06	0.18	0.34	0.17	0.69	0.52	0.60	0.50	0.27	0.30	0.43	3.01	
21	0.01	0.00	0.00	0.06	0.22	0.34	0.17	0.64	0.47	0.46	0.50	0.24	0.41	0.43	3.26	
22	0.01	0.00	0.00	0.05	0.24	0.32	0.22	0.60	0.38	0.54	0.38	0.32	0.36	0.45	3.45	
23	0.01	0.00	0.00	0.06	0.20	0.36	0.25	0.57	0.39	0.54	0.29	0.36	0.43	0.44	3.43	
24	0.01	0.00	0.00	0.05	0.27	0.35	0.22	0.59	0.42	0.40	0.36	0.30	0.41	0.44	3.53	
TOTAL	3.69	11.86	13.80	8.66	7.68	5.95	3.83	8.37	4.81	5.24	4.12	2.78	3.80	3.49	11.92	0.84

Table 176. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

AUGUST 1961-1964
NUMBER OF OBSERVATIONS 2976

HOUR	15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)											MISSING	MEAN
	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.00	0.00	0.30	1.01	0.57	1.24	0.44	0.24	0.03	0.00	0.34	1.22
2	0.00	0.00	0.00	0.47	0.97	0.54	1.21	0.30	0.13	0.10	0.03	0.40	1.22
3	0.00	0.00	0.00	0.37	1.01	0.50	1.01	0.34	0.17	0.24	0.03	0.50	1.34
4	0.00	0.00	0.00	0.57	0.84	0.71	1.01	0.27	0.20	0.07	0.03	0.47	1.14
5	0.00	0.00	0.00	0.57	1.08	0.71	1.01	0.17	0.13	0.07	0.03	0.40	1.01
6	0.00	0.00	0.13	2.05	0.94	0.20	0.27	0.10	0.00	0.03	0.00	0.44	0.24
7	0.00	0.07	1.85	1.68	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.50	-0.46
8	0.03	1.78	1.18	0.60	0.07	0.00	0.03	0.00	0.00	0.00	0.00	0.47	-0.95
9	0.24	2.12	1.14	0.27	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-1.20
10	0.57	2.18	0.71	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	-1.41
11	0.74	1.95	0.81	0.37	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.27	-1.35
12	0.87	2.12	0.64	0.24	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.27	-1.54
13	0.67	2.08	0.81	0.34	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.24	-1.31
14	0.24	1.71	1.44	0.37	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-1.05
15	0.10	1.51	1.55	0.57	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-0.94
16	0.00	1.31	1.71	0.67	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.40	-0.83
17	0.00	0.37	1.71	1.34	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.34	-0.47
18	0.00	0.00	0.20	1.71	1.18	0.47	0.20	0.03	0.00	0.00	0.00	0.37	0.22
19	0.00	0.00	0.00	0.27	0.87	0.84	1.14	0.37	0.30	0.13	0.00	0.24	1.32
20	0.00	0.00	0.03	0.17	0.60	0.54	1.51	0.54	0.34	0.17	0.03	0.24	1.60
21	0.00	0.00	0.00	0.27	0.67	0.57	1.31	0.64	0.37	0.13	0.03	0.17	1.57
22	0.00	0.00	0.00	0.20	0.74	0.74	1.04	0.74	0.30	0.20	0.00	0.20	1.54
23	0.00	0.00	0.00	0.37	0.57	0.67	1.21	0.54	0.40	0.07	0.07	0.27	1.57
24	0.00	0.00	0.00	0.30	0.91	0.57	1.24	0.54	0.17	0.13	0.03	0.27	1.40
TOTAL	3.46	17.20	13.91	14.48	12.10	7.69	13.51	5.01	2.76	1.38	0.30	8.20	0.17

AUGUST 1951-1964
NUMBER OF OBSERVATIONS 10416

HOUR	144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)													MISSING	MEAN	
	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.00	0.00	0.00	0.07	0.28	0.33	0.21	0.60	0.46	0.50	0.39	0.32	0.43	0.31	0.27	3.49
2	0.00	0.00	0.00	0.10	0.26	0.41	0.24	0.61	0.36	0.45	0.43	0.24	0.40	0.36	0.30	3.45
3	0.00	0.00	0.00	0.11	0.22	0.47	0.30	0.50	0.42	0.43	0.44	0.29	0.35	0.32	0.33	3.36
4	0.00	0.00	0.01	0.08	0.38	0.39	0.23	0.62	0.38	0.42	0.28	0.27	0.37	0.40	0.32	3.37
5	0.00	0.00	0.00	0.10	0.32	0.46	0.29	0.58	0.38	0.50	0.29	0.24	0.39	0.32	0.31	3.24
6	0.00	0.03	0.06	0.43	0.77	0.49	0.16	0.68	0.43	0.24	0.18	0.10	0.13	0.11	0.36	1.58
7	0.00	0.09	1.03	1.37	0.71	0.28	0.15	0.13	0.03	0.02	0.00	0.00	0.00	0.00	0.36	-0.58
8	0.06	1.04	1.61	0.83	0.26	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.32	-1.43
9	0.36	1.39	1.42	0.58	0.11	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.27	-1.81
10	0.59	1.56	1.26	0.42	0.08	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.23	-1.98
11	0.84	1.36	1.16	0.50	0.03	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.24	-2.09
12	0.84	1.33	1.26	0.38	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.23	-2.11
13	0.73	1.56	1.19	0.41	0.06	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	-2.10
14	0.24	1.41	1.47	0.59	0.18	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	-1.73
15	0.12	1.14	1.44	0.82	0.30	0.09	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.22	-1.45
16	0.01	0.65	1.35	1.03	0.56	0.25	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.24	-1.06
17	0.01	0.10	0.82	1.10	0.83	0.69	0.19	0.19	0.03	0.00	0.00	0.00	0.00	0.00	0.21	-0.41
18	0.00	0.00	0.03	0.27	0.71	0.84	0.63	0.88	0.37	0.15	0.01	0.01	0.00	0.00	0.26	0.85
19	0.00	0.00	0.00	0.06	0.31	0.30	0.23	0.98	0.65	0.62	0.36	0.23	0.14	0.07	0.21	2.54
20	0.00	0.00	0.00	0.06	0.20	0.26	0.19	0.76	0.66	0.71	0.33	0.27	0.34	0.18	0.21	3.14
21	0.00	0.00	0.00	0.03	0.23	0.31	0.14	0.70	0.59	0.62	0.41	0.30	0.36	0.29	0.18	3.41
22	0.00	0.00	0.00	0.03	0.24	0.26	0.24	0.64	0.58	0.53	0.48	0.25	0.42	0.31	0.19	3.51
23	0.00	0.00	0.01	0.05	0.25	0.23	0.23	0.65	0.50	0.41	0.61	0.20	0.48	0.34	0.20	3.61
24	0.00	0.00	0.01	0.03	0.26	0.31	0.24	0.61	0.49	0.53	0.43	0.30	0.36	0.38	0.22	3.55
TOTAL	3.81	11.66	14.12	9.42	7.61	6.44	3.80	9.30	6.35	6.14	4.67	3.00	4.19	3.38	6.11	0.93

Table 177. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference ($^{\circ}$ F) for Each Hour of the Day

SEPTEMBER 1961-1964
NUMBER OF OBSERVATIONS 2880

HOUR	15.2- MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}$ F)											MISSING	MEAN
	≤ -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.00	0.00	0.38	1.11	0.66	0.94	0.28	0.07	0.24	0.03	0.45	1.29
2	0.00	0.00	0.00	0.35	0.94	0.66	0.83	0.42	0.31	0.07	0.03	0.56	1.34
3	0.00	0.00	0.03	0.38	1.04	0.56	0.94	0.42	0.10	0.03	0.07	0.59	1.18
4	0.00	0.00	0.03	0.45	1.11	0.69	0.76	0.28	0.14	0.24	0.00	0.45	1.17
5	0.00	0.00	0.03	0.52	1.11	0.38	1.18	0.28	0.07	0.14	0.03	0.42	1.13
6	0.00	0.00	0.10	0.90	0.94	0.59	0.90	0.24	0.07	0.03	0.00	0.38	0.79
7	0.00	0.03	1.22	2.33	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.31	-0.32
8	0.00	0.97	1.91	0.83	0.10	0.00	0.03	0.00	0.00	0.00	0.00	0.31	-0.71
9	0.24	1.91	1.32	0.35	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.31	-1.12
10	0.45	2.01	1.08	0.28	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.31	-1.29
11	0.52	2.12	0.87	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	-1.33
12	0.59	2.15	0.87	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-1.35
13	0.42	2.12	1.04	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	-1.30
14	0.24	1.91	1.22	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	-1.07
15	0.03	0.80	1.74	1.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-0.67
16	0.00	0.52	1.74	1.28	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.52	-0.58
17	0.00	0.00	0.45	2.05	0.73	0.24	0.14	0.03	0.00	0.00	0.00	0.52	0.03
18	0.00	0.00	0.00	0.52	0.94	0.49	1.11	0.21	0.24	0.17	0.00	0.49	1.22
19	0.00	0.00	0.00	0.49	0.42	0.42	1.22	0.45	0.35	0.17	0.14	0.52	1.79
20	0.00	0.00	0.00	0.45	0.42	0.35	1.15	0.45	0.38	0.24	0.14	0.59	1.91
21	0.00	0.00	0.00	0.45	0.52	0.31	1.01	0.56	0.35	0.35	0.03	0.59	1.82
22	0.00	0.00	0.00	0.31	0.83	0.24	1.11	0.35	0.35	0.24	0.10	0.63	1.69
23	0.00	0.00	0.03	0.31	0.83	0.42	0.94	0.35	0.31	0.17	0.14	0.66	1.63
24	0.00	0.00	0.00	0.35	0.83	0.56	1.01	0.35	0.28	0.03	0.14	0.63	1.50
TOTAL	2.50	14.55	13.68	15.38	12.40	6.60	13.30	4.65	3.02	2.15	0.87	10.90	0.33

SEPTEMBER 1951-1964
NUMBER OF OBSERVATIONS 10080

HOUR	144 MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}$ F)													MISSING	MEAN	
	≤ -3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.00	0.01	0.03	0.11	0.29	0.48	0.31	0.51	0.38	0.42	0.34	0.21	0.30	0.48	0.33	3.36
2	0.00	0.00	0.02	0.16	0.25	0.45	0.26	0.58	0.38	0.44	0.32	0.19	0.34	0.41	0.40	3.29
3	0.00	0.00	0.03	0.15	0.32	0.43	0.29	0.58	0.36	0.43	0.33	0.19	0.37	0.36	0.36	3.19
4	0.00	0.02	0.01	0.17	0.39	0.45	0.26	0.44	0.47	0.36	0.38	0.19	0.40	0.32	0.34	3.08
5	0.00	0.02	0.01	0.16	0.46	0.34	0.31	0.48	0.46	0.34	0.35	0.27	0.33	0.36	0.31	3.12
6	0.01	0.00	0.00	0.24	0.53	0.50	0.30	0.49	0.37	0.39	0.34	0.19	0.29	0.26	0.29	2.63
7	0.01	0.02	0.63	1.18	0.77	0.49	0.24	0.21	0.13	0.08	0.07	0.00	0.02	0.00	0.33	-0.05
8	0.02	0.73	1.70	1.00	0.26	0.10	0.02	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.29	-1.24
9	0.33	1.14	1.59	0.65	0.16	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-1.71
10	0.56	1.42	1.36	0.49	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	-1.95
11	0.74	1.23	1.48	0.41	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.25	-2.06
12	0.71	1.43	1.30	0.43	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	-2.10
13	0.78	1.32	1.37	0.38	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	-2.13
14	0.42	1.29	1.25	0.72	0.20	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	-1.74
15	0.03	0.78	1.33	0.99	0.54	0.21	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.26	-1.16
16	0.00	0.37	1.03	1.01	0.68	0.49	0.14	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.29	-0.67
17	0.00	0.01	0.16	0.66	0.86	0.77	0.46	0.66	0.22	0.08	0.00	0.00	0.00	0.00	0.28	0.41
18	0.00	0.00	0.02	0.13	0.26	0.47	0.35	0.76	0.56	0.64	0.38	0.15	0.19	0.04	0.23	2.36
19	0.00	0.00	0.02	0.14	0.22	0.28	0.23	0.47	0.55	0.64	0.56	0.27	0.42	0.14	0.25	3.25
20	0.00	0.00	0.02	0.12	0.22	0.28	0.25	0.46	0.42	0.51	0.59	0.28	0.53	0.23	0.29	3.52
21	0.01	0.00	0.01	0.11	0.25	0.38	0.19	0.48	0.39	0.50	0.51	0.23	0.52	0.35	0.27	3.61
22	0.01	0.00	0.01	0.10	0.27	0.35	0.25	0.53	0.43	0.40	0.47	0.21	0.48	0.42	0.27	3.62
23	0.00	0.01	0.01	0.10	0.25	0.50	0.19	0.60	0.34	0.47	0.34	0.18	0.42	0.50	0.29	3.63
24	0.00	0.01	0.01	0.12	0.28	0.53	0.24	0.53	0.38	0.46	0.37	0.15	0.39	0.43	0.30	3.41
TOTAL	3.63	9.81	13.38	9.72	7.72	7.57	4.27	7.96	5.81	6.13	5.31	2.69	4.96	4.27	6.78	1.14

Table 178. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference ($^{\circ}$ F) for Each Hour of the Day

		OCTOBER 1961-1964 NUMBER OF OBSERVATIONS 2976												
		15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}$ F)												
HOUR	≤ -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0	MISSING	MEAN	
1	0.00	0.00	0.03	0.47	1.04	0.47	0.84	0.30	0.27	0.30	0.07	0.37	1.46	
2	0.00	0.00	0.03	0.54	0.84	0.60	0.91	0.37	0.30	0.13	0.03	0.40	1.29	
3	0.00	0.00	0.00	0.54	0.97	0.57	0.67	0.57	0.30	0.03	0.03	0.47	1.22	
4	0.00	0.03	0.03	0.47	0.97	0.60	0.87	0.44	0.20	0.10	0.07	0.37	1.25	
5	0.00	0.10	0.00	0.47	1.18	0.60	0.81	0.30	0.10	0.13	0.07	0.40	1.08	
6	0.03	0.03	0.03	0.54	1.18	0.60	0.74	0.30	0.10	0.20	0.00	0.40	1.03	
7	0.07	0.03	0.24	1.85	0.84	0.27	0.17	0.10	0.03	0.07	0.00	0.50	0.24	
8	0.10	0.37	1.58	1.61	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.44	-0.57	
9	0.13	1.48	1.55	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-0.96	
10	0.03	1.98	1.41	0.30	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.40	-1.05	
11	0.27	2.15	1.24	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	-1.18	
12	0.20	2.32	0.91	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	-1.16	
13	0.30	1.58	1.44	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	-1.08	
14	0.03	1.44	1.38	0.94	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.34	-0.87	
15	0.00	0.07	0.94	2.39	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.30	-0.25	
16	0.00	0.03	0.64	1.75	1.08	0.30	0.07	0.00	0.00	0.00	0.00	0.30	-0.00	
17	0.00	0.00	0.00	0.47	1.01	0.67	1.28	0.30	0.10	0.10	0.00	0.24	1.07	
18	0.00	0.00	0.00	0.37	0.50	0.67	1.24	0.67	0.17	0.17	0.03	0.34	1.55	
19	0.00	0.00	0.00	0.37	0.50	0.67	1.14	0.37	0.30	0.34	0.07	0.40	1.67	
20	0.00	0.00	0.00	0.37	0.60	0.57	1.38	0.34	0.30	0.24	0.07	0.30	1.62	
21	0.00	0.00	0.00	0.40	0.84	0.54	1.28	0.47	0.20	0.17	0.00	0.27	1.37	
22	0.00	0.00	0.00	0.47	0.71	0.81	1.08	0.34	0.30	0.20	0.07	0.20	1.48	
23	0.00	0.00	0.00	0.47	0.77	0.54	1.31	0.44	0.27	0.13	0.03	0.20	1.38	
24	0.00	0.00	0.03	0.44	1.08	0.47	1.01	0.34	0.24	0.34	0.00	0.24	1.36	
TOTAL	1.18	11.63	11.49	17.14	14.65	8.97	14.82	5.68	3.19	2.65	0.54	8.06	0.50	

		OCTOBER 1951-1964 NUMBER OF OBSERVATIONS 13416														
		144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}$ F)														
HOUR	≤ -3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	>8.0	MISSING	MEAN
1	0.00	0.00	0.04	0.21	0.41	0.43	0.25	0.65	0.31	0.30	0.29	0.17	0.41	0.37	0.32	3.11
2	0.00	0.00	0.01	0.27	0.48	0.39	0.19	0.62	0.36	0.28	0.30	0.18	0.34	0.39	0.35	3.04
3	0.00	0.00	0.01	0.28	0.41	0.43	0.26	0.58	0.37	0.23	0.30	0.18	0.31	0.42	0.38	3.00
4	0.00	0.00	0.02	0.28	0.45	0.37	0.27	0.59	0.35	0.33	0.21	0.12	0.40	0.41	0.37	3.09
5	0.00	0.00	0.02	0.21	0.40	0.50	0.24	0.61	0.35	0.33	0.28	0.12	0.29	0.44	0.37	3.07
6	0.01	0.00	0.05	0.21	0.48	0.41	0.33	0.56	0.29	0.30	0.31	0.15	0.24	0.44	0.39	2.97
7	0.01	0.01	0.12	0.65	0.94	0.43	0.27	0.39	0.18	0.21	0.12	0.08	0.13	0.21	0.40	1.40
8	0.02	0.23	1.31	1.46	0.47	0.10	0.02	0.04	0.05	0.02	0.03	0.01	0.01	0.00	0.41	-0.83
9	0.06	1.02	1.71	0.88	0.09	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.36	-1.50
10	0.37	1.32	1.42	0.57	0.09	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	-1.82
11	0.66	1.29	1.33	0.44	0.10	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	-1.98
12	0.61	1.27	1.30	0.59	0.06	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.33	-1.93
13	0.56	1.24	1.32	0.56	0.10	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.39	-1.90
14	0.20	1.01	1.56	0.81	0.12	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.40	-1.58
15	0.00	0.10	1.22	1.53	0.56	0.30	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.40	-0.76
16	0.00	0.00	0.24	1.02	1.07	0.70	0.32	0.37	0.03	0.00	0.00	0.00	0.00	0.00	0.42	-0.03
17	0.00	0.00	0.02	0.20	0.45	0.45	0.44	0.94	0.57	0.39	0.13	0.11	0.07	0.00	0.39	1.61
18	0.00	0.00	0.01	0.13	0.43	0.32	0.28	0.60	0.44	0.65	0.34	0.20	0.27	0.12	0.37	2.67
19	0.00	0.00	0.01	0.16	0.42	0.36	0.25	0.51	0.46	0.53	0.47	0.14	0.29	0.19	0.36	2.78
20	0.00	0.00	0.01	0.18	0.41	0.38	0.22	0.51	0.37	0.54	0.43	0.18	0.26	0.34	0.33	3.03
21	0.00	0.00	0.01	0.19	0.40	0.36	0.31	0.48	0.41	0.43	0.34	0.21	0.32	0.35	0.36	3.03
22	0.00	0.00	0.01	0.24	0.36	0.38	0.23	0.58	0.44	0.41	0.32	0.18	0.33	0.36	0.33	3.10
23	0.00	0.00	0.00	0.26	0.42	0.36	0.24	0.61	0.40	0.33	0.36	0.23	0.29	0.36	0.30	3.08
24	0.00	0.01	0.00	0.23	0.38	0.44	0.26	0.60	0.37	0.42	0.31	0.16	0.23	0.45	0.30	3.10
TOTAL	2.51	7.49	11.74	11.56	9.50	7.24	4.44	9.30	5.76	5.69	4.52	2.44	4.18	4.87	8.77	1.25

Table 179. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference ($^{\circ}\text{F}$) for Each Hour of the Day

		NOVEMBER 1961-1964 NUMBER OF OBSERVATIONS 2880												
		15.2- MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)												
HOOR	≤ -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0	MISSING	MEAN	
1	0.00	0.07	0.00	0.94	1.18	0.59	0.59	0.31	0.07	0.07	0.00	0.35	0.77	
2	0.00	0.03	0.00	1.08	0.90	0.66	0.73	0.14	0.17	0.10	0.00	0.35	0.83	
3	0.00	0.03	0.10	0.94	1.08	0.56	0.76	0.14	0.10	0.03	0.03	0.38	0.78	
4	0.00	0.03	0.03	1.04	1.18	0.45	0.59	0.24	0.07	0.10	0.00	0.42	0.71	
5	0.00	0.07	0.00	1.35	1.01	0.31	0.63	0.28	0.07	0.03	0.00	0.42	0.64	
6	0.00	0.03	0.14	1.22	1.11	0.45	0.49	0.10	0.17	0.00	0.03	0.42	0.60	
7	0.00	0.07	0.07	1.49	1.32	0.28	0.17	0.10	0.10	0.03	0.00	0.52	0.41	
8	0.07	0.07	0.66	2.67	0.21	0.00	0.07	0.00	0.00	0.00	0.00	0.42	-0.28	
9	0.07	0.73	1.77	1.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.49	-0.69	
10	0.21	1.39	1.28	0.66	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.59	-0.98	
11	0.24	1.56	1.39	0.38	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.52	-1.04	
12	0.49	1.28	1.32	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	-1.06	
13	0.10	1.77	1.28	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	-0.99	
14	0.00	1.11	1.70	0.83	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.49	-0.80	
15	0.00	0.03	1.04	2.47	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.49	-0.33	
16	0.00	0.00	0.00	1.53	1.42	0.38	0.38	0.00	0.00	0.00	0.00	0.45	0.33	
17	0.00	0.00	0.00	0.90	1.01	0.49	0.69	0.24	0.24	0.07	0.00	0.52	0.99	
18	0.00	0.00	0.00	0.76	1.04	0.24	1.18	0.31	0.17	0.00	0.00	0.45	1.00	
19	0.00	0.00	0.00	0.83	1.01	0.49	0.90	0.21	0.17	0.07	0.03	0.45	0.96	
20	0.00	0.00	0.00	0.97	0.90	0.28	1.01	0.28	0.10	0.07	0.03	0.52	0.97	
21	0.00	0.00	0.03	1.08	0.87	0.42	0.83	0.24	0.14	0.07	0.00	0.49	0.84	
22	0.00	0.00	0.07	0.66	1.15	0.73	0.52	0.31	0.21	0.03	0.07	0.42	0.97	
23	0.00	0.00	0.07	0.87	1.11	0.45	0.80	0.24	0.14	0.00	0.07	0.42	0.94	
24	0.00	0.03	0.00	0.76	1.08	0.56	0.76	0.28	0.14	0.07	0.03	0.45	0.95	
TOTAL	1.18	8.33	10.97	25.66	17.85	7.36	11.11	3.44	2.08	0.76	0.31	10.94	0.28	

		NOVEMBER 1951-1964 NUMBER OF OBSERVATIONS 10080														
		144- MINUS 5.5-FOOT TEMPERATURE DIFFERENCE ($^{\circ}\text{F}$)														
HOOR	≤ -3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	>8.0	MISSING	MEAN
1	0.00	0.03	0.02	0.65	0.65	0.49	0.32	0.58	0.37	0.21	0.18	0.14	0.12	0.13	0.29	1.52
2	0.00	0.02	0.04	0.65	0.67	0.54	0.23	0.53	0.41	0.27	0.14	0.09	0.15	0.12	0.32	1.53
3	0.00	0.03	0.02	0.60	0.68	0.43	0.31	0.55	0.39	0.27	0.18	0.12	0.13	0.13	0.35	1.62
4	0.00	0.02	0.03	0.64	0.77	0.42	0.23	0.58	0.28	0.33	0.14	0.10	0.14	0.15	0.35	1.57
5	0.00	0.01	0.03	0.67	0.71	0.56	0.26	0.53	0.30	0.26	0.16	0.11	0.13	0.11	0.34	1.46
6	0.00	0.02	0.05	0.60	0.73	0.61	0.30	0.53	0.29	0.22	0.11	0.11	0.14	0.15	0.33	1.43
7	0.01	0.01	0.05	0.80	0.87	0.56	0.26	0.40	0.26	0.21	0.08	0.04	0.09	0.15	0.39	1.12
8	0.02	0.02	0.76	1.60	0.78	0.16	0.10	0.17	0.07	0.06	0.01	0.02	0.02	0.02	0.36	-0.30
9	0.02	0.48	1.76	1.15	0.30	0.05	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.36	-1.16
10	0.12	1.11	1.60	0.71	0.13	0.04	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-1.56
11	0.30	1.19	1.54	0.55	0.12	0.04	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-1.71
12	0.30	1.12	1.61	0.58	0.10	0.05	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.38	-1.70
13	0.16	1.20	1.64	0.65	0.08	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.36	-1.64
14	0.03	0.79	1.79	0.97	0.15	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	-1.35
15	0.00	0.01	0.88	1.92	0.78	0.09	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.43	-0.70
16	0.00	0.00	0.06	0.84	1.11	0.86	0.36	0.44	0.09	0.00	0.00	0.00	0.00	0.00	0.41	0.15
17	0.00	0.01	0.02	0.56	0.68	0.57	0.33	0.61	0.42	0.30	0.20	0.07	0.01	0.02	0.39	1.18
18	0.00	0.00	0.02	0.63	0.67	0.50	0.23	0.49	0.40	0.50	0.26	0.14	0.02	0.02	0.31	1.44
19	0.00	0.01	0.00	0.63	0.56	0.54	0.32	0.45	0.40	0.35	0.30	0.17	0.11	0.02	0.33	1.56
20	0.00	0.01	0.04	0.63	0.63	0.61	0.19	0.55	0.30	0.40	0.28	0.15	0.10	0.02	0.27	1.44
21	0.00	0.01	0.04	0.63	0.69	0.60	0.21	0.51	0.33	0.27	0.25	0.19	0.10	0.07	0.28	1.46
22	0.00	0.01	0.03	0.63	0.74	0.52	0.34	0.46	0.36	0.25	0.20	0.07	0.22	0.06	0.30	1.44
23	0.00	0.02	0.01	0.63	0.72	0.59	0.28	0.57	0.29	0.20	0.22	0.09	0.17	0.09	0.31	1.44
24	0.00	0.02	0.02	0.63	0.67	0.53	0.28	0.57	0.34	0.31	0.09	0.10	0.16	0.11	0.36	1.47
TOTAL	0.95	6.15	12.04	18.56	14.05	9.40	4.65	8.57	5.27	4.38	2.78	1.70	1.80	1.36	8.34	0.50

Table 180. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

		DECEMBER 1961-1964 NUMBER OF OBSERVATIONS 2976												
		15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)												
HOOR	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0	MISSING	MEAN	
1	0.00	0.00	0.00	1.71	1.38	0.13	0.17	0.20	0.07	0.00	0.03	0.47	0.45	
2	0.00	0.00	0.03	1.48	1.41	0.24	0.34	0.07	0.07	0.03	0.00	0.50	0.42	
3	0.00	0.00	0.03	1.71	1.31	0.13	0.27	0.10	0.07	0.03	0.00	0.50	0.37	
4	0.00	0.00	0.03	1.78	1.28	0.20	0.27	0.07	0.03	0.03	0.00	0.47	0.34	
5	0.00	0.00	0.00	1.98	1.08	0.17	0.27	0.10	0.03	0.00	0.00	0.54	0.28	
6	0.00	0.00	0.00	2.15	0.84	0.17	0.27	0.13	0.03	0.03	0.00	0.54	0.31	
7	0.00	0.00	0.00	2.22	0.81	0.24	0.13	0.13	0.03	0.03	0.00	0.57	0.25	
8	0.00	0.00	0.13	2.86	0.34	0.10	0.03	0.03	0.03	0.00	0.00	0.64	-0.06	
9	0.00	0.30	1.34	1.92	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.57	-0.47	
10	0.00	0.84	1.41	1.28	0.07	0.03	0.03	0.00	0.00	0.00	0.00	0.50	-0.64	
11	0.07	1.24	1.68	0.64	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.50	-0.85	
12	0.07	1.38	1.58	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	-0.93	
13	0.00	1.28	1.44	0.81	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.57	-0.82	
14	0.00	0.74	1.78	0.94	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.60	-0.69	
15	0.00	0.07	1.55	1.71	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.60	-0.39	
16	0.00	0.00	0.00	2.39	0.91	0.17	0.23	0.00	0.00	0.00	0.00	0.57	0.08	
17	0.00	0.00	0.00	1.75	0.91	0.30	0.40	0.07	0.07	0.07	0.00	0.60	0.47	
18	0.00	0.00	0.00	1.65	0.81	0.44	0.47	0.00	0.07	0.10	0.00	0.64	0.51	
19	0.00	0.00	0.00	1.81	0.97	0.27	0.30	0.07	0.10	0.03	0.07	0.54	0.56	
20	0.00	0.00	0.03	1.68	1.18	0.17	0.34	0.03	0.07	0.03	0.10	0.54	0.56	
21	0.00	0.00	0.00	1.71	1.08	0.34	0.20	0.17	0.00	0.10	0.00	0.57	0.46	
22	0.00	0.00	0.00	1.68	1.18	0.17	0.24	0.13	0.07	0.07	0.00	0.64	0.45	
23	0.00	0.00	0.03	1.71	1.21	0.17	0.17	0.17	0.10	0.00	0.03	0.57	0.45	
24	0.00	0.00	0.00	1.75	1.21	0.17	0.24	0.20	0.00	0.03	0.00	0.57	0.40	
TOTAL	0.13	5.85	11.09	39.95	18.41	3.60	4.27	1.68	0.84	0.60	0.24	13.34	0.06	

		DECEMBER 1951-1964 NUMBER OF OBSERVATIONS 10416															
		144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)															
HOOR	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	>8.0	MISSING	MEAN	
1	0.00	0.01	0.03	0.86	0.84	0.60	0.33	0.44	0.18	0.11	0.13	0.06	0.04	0.09	0.45	0.87	
2	0.00	0.01	0.04	0.82	0.89	0.51	0.36	0.52	0.14	0.09	0.11	0.10	0.06	0.07	0.47	0.86	
3	0.00	0.01	0.04	0.88	0.84	0.55	0.32	0.49	0.16	0.11	0.12	0.04	0.07	0.08	0.46	0.86	
4	0.00	0.01	0.03	0.84	0.96	0.51	0.30	0.44	0.14	0.16	0.10	0.07	0.04	0.08	0.49	0.81	
5	0.00	0.01	0.03	0.93	0.91	0.53	0.26	0.36	0.20	0.15	0.13	0.04	0.04	0.09	0.49	0.85	
6	0.00	0.01	0.05	0.99	0.84	0.53	0.21	0.39	0.21	0.12	0.08	0.07	0.08	0.09	0.50	0.86	
7	0.00	0.00	0.07	0.97	0.91	0.43	0.29	0.39	0.16	0.12	0.05	0.07	0.11	0.08	0.52	0.84	
8	0.00	0.01	0.32	1.41	0.85	0.40	0.14	0.16	0.07	0.08	0.06	0.01	0.05	0.05	0.56	0.15	
9	0.00	0.11	1.18	1.56	0.49	0.12	0.06	0.03	0.01	0.05	0.00	0.01	0.02	0.01	0.52	-0.68	
10	0.00	0.51	1.58	1.08	0.29	0.05	0.04	0.05	0.00	0.01	0.01	0.00	0.00	0.00	0.55	-1.11	
11	0.02	0.74	1.71	0.78	0.22	0.07	0.01	0.03	0.02	0.00	0.01	0.00	0.00	0.00	0.57	-1.32	
12	0.05	0.85	1.62	0.81	0.15	0.05	0.00	0.04	0.02	0.00	0.01	0.00	0.00	0.00	0.57	-1.37	
13	0.04	0.79	1.61	0.84	0.20	0.06	0.03	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.55	-1.31	
14	0.01	0.43	1.61	1.26	0.18	0.05	0.03	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.57	-1.14	
15	0.01	0.03	1.04	1.74	0.63	0.11	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.51	-0.73	
16	0.00	0.00	0.09	1.30	1.03	0.64	0.25	0.34	0.03	0.04	0.00	0.00	0.00	0.00	0.46	-0.02	
17	0.00	0.00	0.05	0.94	0.79	0.55	0.26	0.52	0.25	0.16	0.10	0.04	0.02	0.01	0.49	0.64	
18	0.00	0.00	0.07	0.86	0.85	0.44	0.22	0.58	0.22	0.18	0.11	0.06	0.05	0.02	0.51	0.78	
19	0.00	0.01	0.03	0.88	0.86	0.51	0.25	0.53	0.22	0.13	0.12	0.06	0.07	0.03	0.46	0.82	
20	0.00	0.01	0.02	0.80	1.03	0.46	0.29	0.53	0.15	0.16	0.14	0.04	0.04	0.05	0.45	0.80	
21	0.00	0.01	0.03	0.84	0.92	0.60	0.25	0.45	0.22	0.13	0.08	0.04	0.11	0.03	0.47	0.78	
22	0.00	0.01	0.04	0.90	0.84	0.58	0.18	0.39	0.26	0.16	0.12	0.04	0.10	0.04	0.50	0.85	
23	0.00	0.01	0.02	0.89	0.84	0.59	0.27	0.41	0.22	0.16	0.08	0.01	0.12	0.07	0.48	0.85	
24	0.00	0.01	0.06	0.83	0.83	0.57	0.35	0.41	0.23	0.15	0.08	0.03	0.07	0.08	0.49	0.86	
TOTAL	0.12	3.58	11.35	24.02	17.23	9.48	4.75	7.57	3.15	2.31	1.63	0.76	1.05	0.93	12.07	0.21	

Table 181. Percentage Frequency and Mean of 15.2- minus 5.5-foot and 144- minus 5.5-foot Temperature Difference (°F) for Each Hour of the Day

JANUARY 1961 - DECEMBER 1964
NUMBER OF OBSERVATIONS 35064

HOURL	15.2-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)											MISSING	MEAN
	≤-2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 6.0	>6.0		
1	0.00	0.02	0.01	0.76	1.16	0.47	0.78	0.26	0.15	0.12	0.04	0.40	1.04
2	0.00	0.01	0.03	0.80	1.11	0.48	0.75	0.23	0.18	0.10	0.03	0.43	1.00
3	0.00	0.02	0.03	0.81	1.11	0.47	0.71	0.27	0.15	0.08	0.03	0.48	0.95
4	0.00	0.01	0.03	0.84	1.12	0.51	0.70	0.25	0.13	0.09	0.03	0.46	0.92
5	0.00	0.03	0.02	0.91	1.23	0.44	0.65	0.22	0.11	0.08	0.03	0.44	0.82
6	0.01	0.02	0.24	1.63	0.94	0.27	0.39	0.12	0.06	0.03	0.01	0.46	0.38
7	0.01	0.19	0.90	1.65	0.60	0.14	0.11	0.05	0.02	0.02	0.00	0.47	-0.10
8	0.04	0.79	1.10	1.47	0.24	0.02	0.03	0.01	0.01	0.00	0.00	0.46	-0.55
9	0.15	1.37	1.24	0.88	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.46	-0.90
10	0.33	1.68	1.12	0.55	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.44	-1.11
11	0.46	1.81	1.04	0.39	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.42	-1.21
12	0.52	1.84	0.98	0.37	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.42	-1.26
13	0.43	1.72	1.10	0.42	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.46	-1.17
14	0.18	1.40	1.40	0.65	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.48	-0.95
15	0.09	0.91	1.38	1.17	0.12	0.00	0.01	0.00	0.00	0.00	0.00	0.49	-0.70
16	0.03	0.61	1.02	1.44	0.47	0.07	0.06	0.00	0.00	0.00	0.00	0.46	-0.42
17	0.00	0.22	0.71	1.57	0.70	0.20	0.25	0.06	0.03	0.02	0.00	0.40	0.03
18	0.00	0.61	0.20	1.28	1.16	0.35	0.52	0.12	0.06	0.04	0.00	0.42	0.49
19	0.00	0.01	0.01	0.80	1.05	0.54	0.89	0.21	0.15	0.07	0.03	0.40	0.95
20	0.01	0.00	0.03	0.68	0.91	0.47	1.02	0.31	0.16	0.12	0.05	0.41	1.16
21	0.00	0.00	0.02	0.73	0.93	0.49	0.91	0.32	0.19	0.13	0.03	0.41	1.14
22	0.01	0.00	0.02	0.66	1.06	0.48	0.82	0.33	0.20	0.13	0.05	0.43	1.15
23	0.01	0.01	0.03	0.70	1.07	0.46	0.83	0.31	0.18	0.12	0.06	0.42	1.13
24	0.01	0.01	0.02	0.71	1.14	0.50	0.79	0.30	0.15	0.11	0.06	0.38	1.08
TOTAL	2.28	12.68	12.66	21.88	16.29	6.40	10.27	3.37	1.95	1.26	0.44	10.52	0.17

JULY 1951 - DECEMBER 1964
NUMBER OF OBSERVATIONS 118392

HOURL	144-MINUS 5.5-FOOT TEMPERATURE DIFFERENCE (°F)													MISSING	MEAN	
	≤-3.0	-2.9- -2.0	-1.9- -1.0	-0.9- -0.5	-0.4- 0.0	0.1- 0.5	0.6- 1.0	1.1- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0			>8.0
1	0.00	0.01	0.03	0.42	0.53	0.45	0.26	0.55	0.33	0.32	0.25	0.15	0.24	0.24	0.39	2.30
2	0.00	0.01	0.03	0.45	0.54	0.45	0.26	0.55	0.31	0.30	0.24	0.16	0.21	0.25	0.41	2.28
3	0.00	0.01	0.03	0.46	0.53	0.45	0.26	0.52	0.33	0.29	0.25	0.15	0.22	0.24	0.42	2.25
4	0.00	0.01	0.04	0.45	0.59	0.44	0.25	0.51	0.32	0.28	0.23	0.15	0.23	0.25	0.43	2.25
5	0.00	0.01	0.03	0.46	0.63	0.46	0.27	0.53	0.29	0.28	0.22	0.14	0.20	0.23	0.42	2.10
6	0.00	0.01	0.13	0.71	0.80	0.48	0.23	0.45	0.24	0.20	0.15	0.09	0.12	0.12	0.44	1.25
7	0.01	0.13	0.66	1.05	0.74	0.36	0.17	0.24	0.09	0.08	0.05	0.03	0.05	0.05	0.46	0.08
8	0.05	0.58	1.14	1.11	0.45	0.15	0.06	0.07	0.04	0.03	0.02	0.01	0.01	0.01	0.44	-0.88
9	0.22	0.87	1.42	0.87	0.23	0.06	0.02	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.43	-1.44
10	0.38	1.15	1.38	0.62	0.15	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.43	-1.73
11	0.53	1.20	1.33	0.51	0.12	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-1.87
12	0.55	1.22	1.32	0.49	0.11	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.41	-1.90
13	0.51	1.19	1.35	0.51	0.12	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-1.87
14	0.26	1.03	1.44	0.73	0.18	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.42	-1.59
15	0.12	0.60	1.29	1.15	0.40	0.13	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.42	-1.17
16	0.03	0.35	0.83	1.14	0.72	0.37	0.13	0.16	0.02	0.01	0.00	0.00	0.00	0.00	0.41	-0.66
17	0.00	0.07	0.43	0.96	0.84	0.52	0.25	0.37	0.16	0.09	0.04	0.02	0.01	0.00	0.39	0.11
18	0.00	0.01	0.08	0.57	0.81	0.61	0.37	0.59	0.28	0.24	0.11	0.06	0.05	0.02	0.38	0.95
19	0.00	0.01	0.02	0.41	0.55	0.47	0.30	0.67	0.47	0.37	0.25	0.11	0.11	0.04	0.38	1.67
20	0.01	0.01	0.02	0.41	0.52	0.44	0.23	0.60	0.42	0.40	0.29	0.15	0.19	0.10	0.37	2.01
21	0.01	0.00	0.02	0.42	0.51	0.46	0.22	0.55	0.40	0.39	0.27	0.16	0.23	0.15	0.38	2.15
22	0.01	0.01	0.03	0.42	0.50	0.43	0.26	0.54	0.37	0.35	0.30	0.15	0.23	0.19	0.39	2.26
23	0.00	0.01	0.02	0.43	0.51	0.45	0.26	0.53	0.35	0.33	0.27	0.16	0.25	0.20	0.39	2.29
24	0.01	0.01	0.03	0.42	0.53	0.45	0.25	0.54	0.35	0.36	0.24	0.14	0.23	0.23	0.38	2.27
TOTAL	2.70	8.47	13.10	15.17	11.61	7.81	4.16	8.11	4.81	4.34	3.19	1.82	2.59	2.32	9.82	0.55

Section 1.6

Direct and Diffuse Solar Radiation

Since September 1950, a 50-junction Eppley pyranometer mounted 6 feet above ground was used to obtain measurements of the intensity of solar and sky radiation received on a horizontal surface. These data were recorded on a Leeds and Northrup Micromax recorder in Langleys (g-cal/cm²) per minute. Prior to September 1, 1960, 20-minute averages of solar radiation for the first, second and third 20-minute intervals of each hour were obtained by the "equal area" method from the recorder charts. These averages were used to compute the total radiation received within the hour. After September 1, 1960, the total radiation received for the hour was obtained by means of a Librascope "ball and disc" integrator used as a component of the automatic data processing system.² Hourly amounts of solar radiation are recorded to the nearest tenth of a Langley for the time period 0400 CST to 2000 CST each day. The factory and Weather Bureau calibrations of the pyranometer were assumed to be correct and to remain constant; no calibration was made at this station. The glass on the instrument is cleaned daily.

During the spring and fall of the year the Meteorology Smoke Stack, which has a diameter of 18 inches and is located 155 feet east of the pyranometer (see Figure 2 of Appendix II), causes a shadow effect to occur. This error in the hourly totals was small enough to be neglected.

1.6.1. Daily Totals of Solar Radiation

Table 182. Monthly Maximum of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964.

This table gives the maximum of daily totals of direct and diffuse solar radiation for each month and year. A blank in the table indicates that no data are available for the month. A daily total was considered missing if one hourly observation in the hours 0500 through 2000 CST was missing.

Table 183. Monthly Mean of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964.

Table entries are the mean monthly values of daily totals of direct and diffuse solar radiation in Langleys. A blank indicates missing data. The average daily total based on the entire period is 348 Langleys.

Table 184. Monthly Minimum of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964.

This table is constructed like Table 183 but presents the minimum of daily totals of solar radiation.

Figure 45. Maximum, Minimum and Mean of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964.

This figure is a graphical presentation of the data in Tables 182 through 184.

Figure 46. Percentile Distribution of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964.

This figure presents the 10-, 25-, 50-, 75- and 90-percentile values and mean of the daily totals of direct and diffuse solar radiation.

Table 185. Percentile Distribution of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964.

This table gives for each month and year the 10-, 25-, 50-, 75- and 90-percentile values of the daily totals of direct or diffuse solar radiation.

1.6.2. Hourly Totals of Solar Radiation

Table 186. Average Hourly Solar Radiation on a Horizontal Surface in Langleys. September 1950-December 1964.

This table presents the mean of the direct and diffuse solar and sky radiation measured each hour of each month.

Figure 47. Percentile Distribution of Hourly Amounts of Solar Radiation on a Horizontal Surface in Langleys. September 1950-December 1964.

This figure shows the "annual march" of the hourly solar radiation pattern. The 10-, 25-, 50-, 75- and 90-percentile curves of hourly totals of solar radiation are presented.

Table 182. Monthly Maximum of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950									620	443	290	279	
1951	265	391	590	689		789	785	688	628	484	378	276	789
1952	315	435	586	712	816	815	802	724	616	476	361	261	816
1953	314	460	594	736	777	794	752	675	615	459	328	265	794
1954	317	389	566	681	773	796	755	677	612	477	352	259	796
1955	345	406	639	731	775	804	716	706	646	464	338	234	804
1956	314	468	611	709	802	795	745	679	632	495	286	267	802
1957	334	430	560	713	787	818	778	701	580	447	314	225	818
1958	290	409	510	712	727	733	674	642	576	444	322	299	733
1959	319	432	578	697	695	753	748	613	593	441	303	217	753
1960	283	478	587	653	750	775	744	668	557	467	302	277	775
1961	341	349	502	630	732	735	723	591	493	384	259	223	735
1962	265	424	483	680	730	756	723	630	552	380	277	253	756
1963	317	452	537	636	739	790	741	689	540	458	331	247	790
1964	278	449	555	640	748	738	759	681	577	456	312	286	759
HIGH	345	478	639	736	816	818	802	724	646	495	378	299	818

Table 183. Monthly Mean of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950									362	288	171	157	
1951	150	190	299	326		530	543	444	426	293	196	151	325
1952	148	219	330	472	463	609	599	509	455	337	201	99	370
1953	130	243	295	365	503	608	589	540	462	315	186	150	364
1954	151	247	355	409	538	588	589	480	422	232	173	133	360
1955	169	188	378	449	526	538	565	556	439	281	185	132	368
1956	170	244	328	393	511	605	509	495	477	342	179	120	364
1957	201	230	354	353	476	584	557	490	397	265	132	116	347
1958	174	295	275	414	581	471	446	487	392	319	182	160	350
1959	186	259	332	394	489	600	525	465	399	225	149	109	345
1960	128	222	392	423	449	521	592	442	372	271	178	167	348
1961	181	186	220	307	474	571	463	432	324	222	131	102	303
1962	174	192	259	462	472	570	449	487	403	262	159	142	336
1963	157	264	270	463	514	621	560	449	391	309	173	166	361
1964	165	270	329	353	555	573	507	503	381	308	187	124	355
MEAN	163	232	316	400	503	571	535	485	407	284	172	135	348

Table 184. Monthly Minimum of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950									127	20	11	16	
1951	5	23	46	57		131	96	167	100	29	10	33	5
1952	29	39	32	42	98	211	326	156	76	79	8	11	8
1953	15	38	28	55	81	315	178	311	233	3	48	15	3
1954	22	34	23	66	165	131	273	134	82	25	24	5	5
1955	18	1	25	41	95	79	280	178	112	35	55	20	1
1956	15	22	12	56	73	261	140	154	294	73	25	27	12
1957	10	58	39	78	110	123	131	152	86	22	6	1	1
1958	19	52	81	43	168	119	116	112	52	48	9	31	9
1959	23	33	25	84	184	416	217	215	67	44	4	11	4
1960	4	19	71	63	112	113	194	76	98	36	12	31	4
1961	37	33	13	47	52	276	80	49	13	4	12	3	3
1962	7	34	23	88	91	246	101	99	120	38	31	42	7
1963	22	92	24	182	122	421	55	141	87	45	19	39	19
1964	31	86	44	13	168	325	138	276	51	95	33	19	13
LOW	4	1	12	13	52	79	55	49	13	3	4	1	1

Figure 45. Maximum, Minimum and Mean of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964

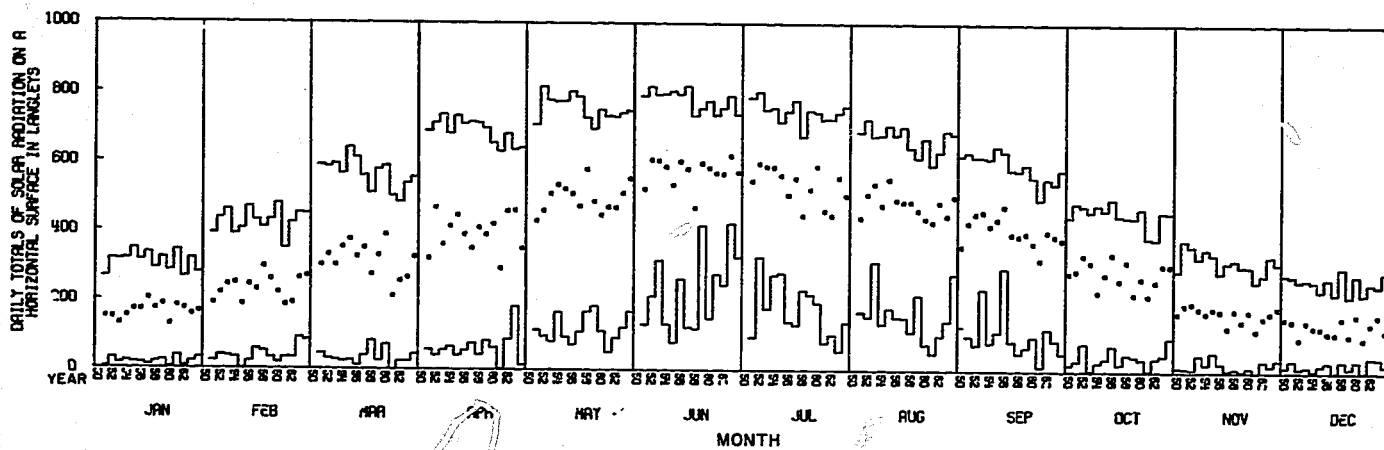


Figure 46. Percentile Distribution of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964

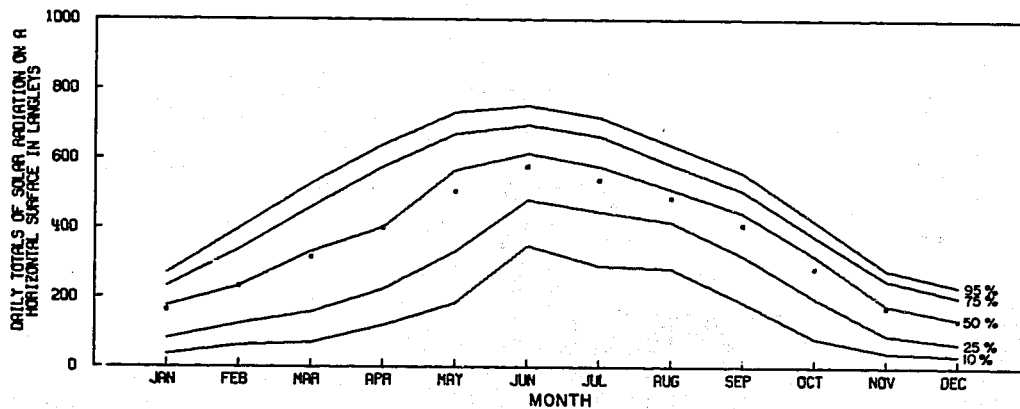


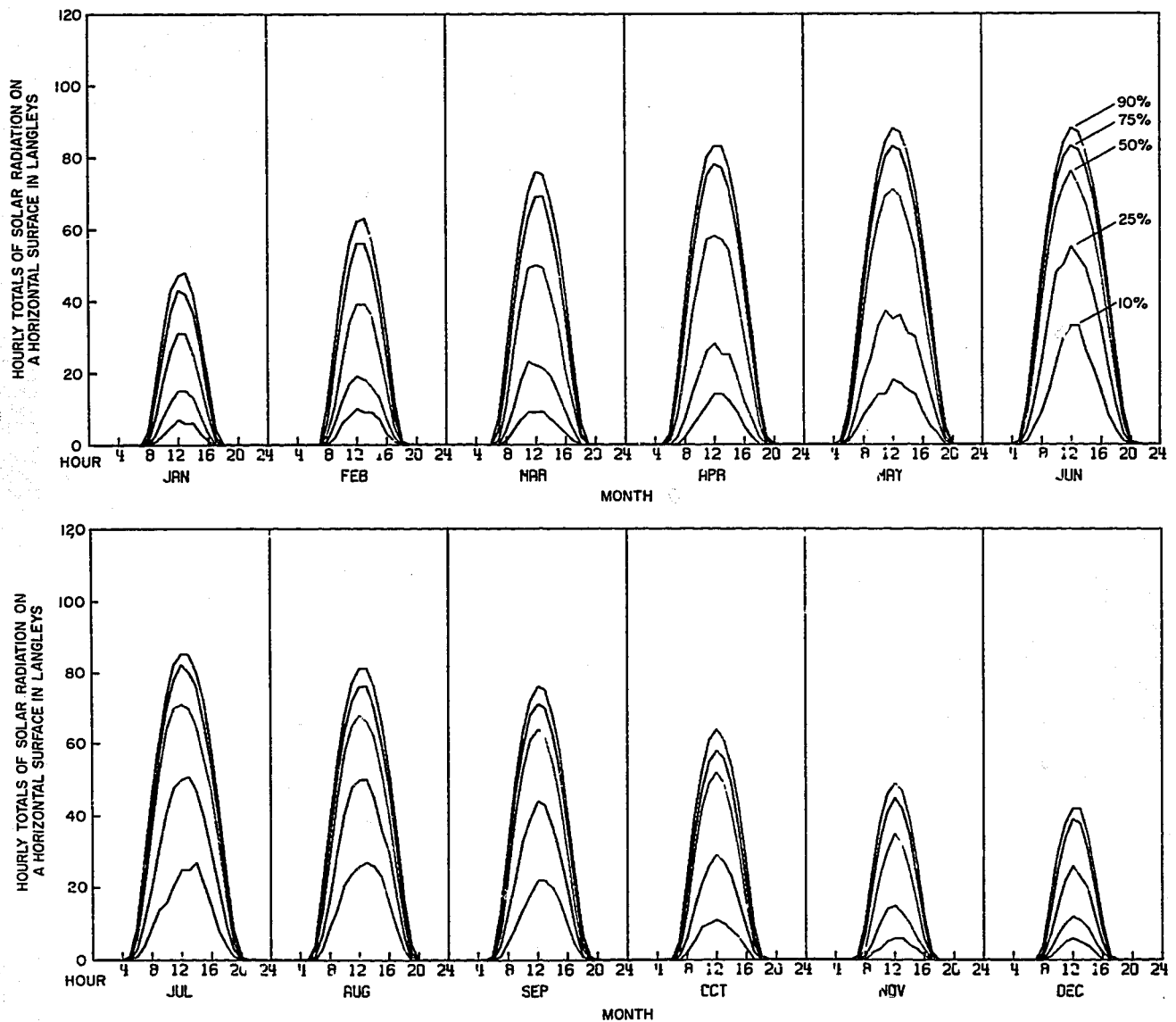
Table 185. Percentile Distribution of Daily Totals of Solar Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. September 1950-December 1964

FOR THE YEAR 1950						FOR THE YEAR 1951						FOR THE YEAR 1952						FOR THE YEAR 1953					
MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT				
	10	25	50	75	90		10	25	50	75	90		10	25	50	75	90		10	25	50	75	90
JAN						JAN	7	80	135	228	259	JAN	30	65	139	207	255	JAN	24	34	112	192	222
FEB						FEB	28	88	178	280	342	FEB	75	140	188	278	361	FEB	44	114	232	381	421
MAR						MAR	57	86	280	446	565	MAR	44	117	330	468	514	MAR	41	105	259	466	522
APR						APR	64	171	308	401	599	APR	80	229	512	653	679	APR	62	210	318	509	673
MAY						MAY		115	337	505	664	MAY	154	239	400	632	747	MAY	181	287	557	687	748
JUN						JUN	144	360	558	664	733	JUN	295	446	666	741	786	JUN	435	512	613	699	746
JUL						JUL	210	320	576	692	771	JUL	368	445	621	731	740	JUL	391	505	603	683	715
AUG						AUG	200	315	445	554	636	AUG	299	424	541	653	651	AUG	377	484	552	577	632
SEP	128	222	369	469	568	SEP	148	328	465	536	560	SEP	132	413	474	545	579	SEP	341	385	458	530	584
OCT	77	186	305	371	378	OCT	68	235	347	382	393	OCT	127	286	341	412	441	OCT	112	246	342	377	411
NOV	34	91	162	251	272	NOV	20	93	194	260	325	NOV	21	100	245	275	314	NOV	49	77	195	259	300
DEC	47	70	147	228	245	DEC	44	79	136	220	246	DEC	16	29	60	150	221	DEC	24	60	153	220	240
ANNUAL						ANNUAL	79	154	296	477	629	ANNUAL	75	172	361	553	679	ANNUAL	63	180	359	549	648
FOR THE YEAR 1954						FOR THE YEAR 1955						FOR THE YEAR 1956						FOR THE YEAR 1957					
MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT				
	10	25	50	75	90		10	25	50	75	90		10	25	50	75	90		10	25	50	75	90
JAN	26	58	143	209	258	JAN	33	50	173	229	287	JAN	30	76	183	224	252	JAN	31	109	205	266	296
FEB	44	131	292	345	367	FEB	41	55	162	289	353	FEB	44	110	233	330	436	FEB	64	87	193	375	417
MAR	74	124	383	503	521	MAR	79	185	400	527	583	MAR	50	207	329	435	468	MAR	69	240	385	455	498
APR	141	246	429	540	591	APR	166	208	512	622	665	APR	110	212	349	569	672	APR	99	158	340	447	636
MAY	243	339	558	698	742	MAY	156	281	574	738	751	MAY	137	299	586	739	754	MAY	134	219	480	693	759
JUN	135	470	633	704	756	JUN	118	386	613	683	744	JUN	383	535	641	709	747	JUN	280	400	601	737	812
JUL	315	476	594	704	740	JUL	323	471	595	665	687	JUL	297	373	488	635	695	JUL	170	396	610	703	739
AUG	149	335	504	613	617	AUG	311	526	582	624	669	AUG	266	366	495	594	639	AUG	222	373	521	607	635
SEP	206	280	451	530	563	SEP	185	305	485	555	588	SEP	339	403	473	541	591	SEP	169	241	455	501	529
OCT	59	105	205	349	376	OCT	70	162	307	379	424	OCT	195	252	346	390	445	OCT	78	146	261	393	417
NOV	42	69	173	263	294	NOV	85	111	196	248	264	NOV	61	89	204	224	273	NOV	16	39	124	194	253
DEC	40	67	111	183	232	DEC	28	66	139	175	196	DEC	29	46	88	193	219	DEC	16	46	98	185	207
ANNUAL	69	162	339	545	667	ANNUAL	79	175	338	574	665	ANNUAL	77	204	352	539	648	ANNUAL	69	166	316	505	684
FOR THE YEAR 1958						FOR THE YEAR 1959						FOR THE YEAR 1960						FOR THE YEAR 1961					
MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT				
	10	25	50	75	90		10	25	50	75	90		10	25	50	75	90		10	25	50	75	90
JAN	57	113	181	226	237	JAN	48	75	211	252	277	JAN	18	50	98	200	235	JAN	57	114	179	225	293
FEB	67	204	344	382	397	FEB	68	143	268	353	416	FEB	19	82	201	304	385	FEB	43	113	167	285	302
MAR	95	136	258	362	438	MAR	123	197	309	463	527	MAR	188	252	423	480	514	MAR	34	68	193	335	439
APR	109	252	436	562	605	APR	143	187	387	569	629	APR	89	238	469	607	631	APR	57	135	244	436	586
MAY	304	415	647	678	708	MAY	254	379	487	601	653	MAY	124	246	453	658	680	MAY	145	259	571	649	697
JUN	191	269	470	639	704	JUN	435	498	601	682	724	JUN	208	331	538	686	748	JUN	423	473	612	649	676
JUL	230	306	443	569	604	JUL	269	401	547	609	660	JUL	442	483	627	674	703	JUL	179	318	462	580	632
AUG	332	418	493	560	581	AUG	220	385	504	538	580	AUG	89	337	458	536	608	AUG	190	300	482	531	551
SEP	181	300	419	480	529	SEP	199	278	421	504	552	SEP	141	274	368	463	518	SEP	86	149	365	445	472
OCT	64	261	340	384	415	OCT	53	92	190	341	380	OCT	49	110	296	373	425	OCT	17	36	254	325	346
NOV	49	108	207	249	291	NOV	9	26	147	234	269	NOV	42	77	191	249	274	NOV	15	65	113	185	241
DEC	37	96	171	213	228	DEC	12	38	100	147	202	DEC	92	105	161	210	232	DEC	15	34	91	140	186
ANNUAL	108	206	340	493	623	ANNUAL	69	190	331	517	608	ANNUAL	79	179	317	497	649	ANNUAL	56	133	279	466	615
FOR THE YEAR 1962						FOR THE YEAR 1963						FOR THE YEAR 1964											
MONTH	PERCENT					MONTH	PERCENT					MONTH	PERCENT										
	10	25	50	75	90		10	25	50	75	90		10	25	50	75	90						
JAN	44	110	205	232	255	JAN	27	62	149	233	269	JAN	37	81	159	221	243						
FEB	50	124	163	249	325	FEB	109	164	266	351	399	FEB	99	169	284	334	407						
MAR	79	102	235	375	420	MAR	59	71	266	382	488	MAR	59	160	357	421	469						
APR	206	326	531	606	637	APR	286	336	498	565	612	APR	96	195	365	482	602						
MAY	148	336	506	582	636	MAY	171	267	570	660	704	MAY	275	404	591	655	716						
JUN	348	482	570	689	712	JUN	451	542	629	693	733	JUN	367	460	574	679	715						
JUL	117	284	514	592	634	JUL	315	492	582	651	691	JUL	237	365	544	633	662						
AUG	317	411	536	556	576	AUG	195	303	460	538	611	AUG	299	376	496	596	644						
SEP	188	287	437	485	512	SEP	183	303	422	468	524	SEP	202	258	410	495	519						
OCT	69	185	285	338	358	OCT	168	233	305	400	410	OCT	185	221	330	350	376						
NOV	48	73	158	215	252	NOV	31	101	173	226	258	NOV	61	100	225	246	269						
DEC	47	72	141	191	225	DEC	65	109	172	227	233	DEC	28	44	102	181	224						
ANNUAL	92	164	304	512	606	ANNUAL	101	201	337	522	636	ANNUAL	95	208	334	505	640						

Table 186. Average Hourly Solar Radiation on a Horizontal Surface in Langleys. September 1950-December 1964

HOUR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.2	0.6	0.2	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	1.2	5.3	7.2	5.2	2.0	0.4	0.0	0.0	0.0
7	0.1	0.1	2.5	9.0	17.6	20.0	17.5	12.0	7.1	2.3	0.3	0.1
8	1.5	4.1	12.2	20.6	30.8	33.7	30.9	25.7	20.2	12.5	4.6	1.5
9	8.8	14.1	24.4	32.9	42.9	47.0	43.3	39.4	34.3	24.9	13.3	8.2
10	17.6	24.3	35.7	42.5	52.3	57.4	54.4	51.0	45.3	35.3	21.7	16.1
11	24.9	32.7	43.7	49.8	58.0	64.0	60.5	57.9	52.5	41.5	27.7	22.2
12	29.2	37.3	45.9	53.2	60.5	67.1	63.0	60.8	56.1	44.3	30.0	25.1
13	29.0	37.5	45.4	52.0	59.4	65.5	63.0	59.9	55.2	41.8	28.2	23.9
14	24.6	33.7	39.8	48.0	54.1	60.4	58.8	56.2	49.4	35.7	23.2	19.5
15	17.5	26.0	32.0	39.8	47.6	53.0	51.3	47.6	40.2	26.6	15.2	12.6
16	8.8	16.2	22.1	28.7	36.3	42.4	41.0	37.0	27.9	14.9	6.3	4.8
17	1.7	5.7	11.0	17.2	24.2	29.4	29.0	23.6	14.3	4.4	0.7	0.5
18	0.1	0.4	2.3	6.3	12.2	16.4	15.9	10.5	3.3	0.3	0.0	0.1
19	0.0	0.0	0.0	0.6	2.6	5.3	4.7	1.6	0.1	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0

Figure 47. Percentile Distribution of Hourly Amounts of Solar Radiation on a Horizontal Surface in Langleys. September 1950-December 1964



Section 1.7

Net Radiation

A Beckman and Whitely Net Radiometer mounted on top of a 6-foot pole and a Honeywell Recorder were used to measure and record net radiation beginning on June 1, 1956 to the present. The location of the pole, shown in Figure 2 of Appendix II, is in a grass field at the Meteorology Site. This instrument is designed to measure the net flux of solar, sky, and terrestrial radiation near the surface. The magnitude of the net radiation flux directed downward is a measure of the amount of heat per unit area available to heat the earth's surface and air in contact with the surface, to evaporate soil and surface water (dew), and to support photosynthesis. Similarly, the magnitude of net radiation flux directed upward is a measure of the heat lost by the earth's surface.

Atmospheric radiation can be split into two classes by wavelength: short (0.29 to 4.0 microns) solar wavelengths and much longer infrared wavelengths (4 to 70 microns) associated with bodies at terrestrial temperatures. The downward flux of radiation includes both solar energy arriving as direct rays, energy scattered from dust, air and water vapor molecules, as well as energy reflected from and transmitted through clouds. The downward flux also contains infrared radiation emitted by clouds, water vapor, ozone and carbon dioxide.

The upward flux measured by this instrument includes reflected solar radiation plus long-wave radiation emitted from the surface.

Hourly measurements of radiation were read to the nearest tenth of a Langley (g-cal/cm^2) and represent the total net radiation received during the hour preceding the time of measurement. Net radiation values were obtained from the pen and ink traces from June 1, 1956, to August 7, 1960. The equal area method was used to obtain 20-minute averages which were combined to obtain a 1-hour total. Beginning on August 8, 1960, the hourly totals were recorded automatically by the data processing system.

During the sunlit portion of the day, the net radiation is primarily positive, i.e., the net amount of radiation is directed toward the earth. During the dark hours the radiation flux is directed away from the earth.

When the sensing element of the radiometer becomes wet because of fog or precipitation, spurious readings result, and the net radiation data are considered missing. The following tables are, therefore, representative of nonprecipitation conditions.

Table 187. Average Hourly Net Radiation on a Horizontal Surface in Langleys. June 1956-December 1964.

Table entries are average hourly totals of net radiation for each month. The maximum average hourly net radiation occurs at about noon in all seasons and the minimum occurs just after sunset.

Table 188. Mean Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. June 1956-December 1964.

Table 189. Mean Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 2100-0300 CST. June 1956-December 1964.

Table 190. Maximum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. June 1956-December 1964.

Table 191. Maximum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 2100-0300 CST. June 1956-December 1964.

Table 192. Minimum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. June 1956-December 1964.

Table 193. Minimum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 2100-0300 CST. June 1956-December 1964.

Tables 188 and 189 give the average of the daily totals of net radiation measured within the indicated time periods for each month and year. During the hours 0400-2000 CST the values are positive with the exception of a few in December and January. Highest values of incoming net radiation occur in June and lowest in December. In the dark hours 2100-0300 CST the mean values are negative, indicating net outgoing radiation, and the difference between summer and winter is very small. The annual mean values show appreciable variability for the eight years of record and range from 153.5 to 202.5 Langleys in the daytime and from -31.7 to -26.5 during the night hours. Tables 190 and 191 show the maximum daily totals of net radiation for the daytime and nighttime hours, and Tables 192 and 193 show the minimum daily totals for the same time periods.

Figure 48. Percentile Distribution of Hourly Amounts of Net Radiation on a Horizontal Surface in Langleys. June 1956-December 1964.

This graph illustrates the 10-, 25-, 50-, 75- and 90-percentile values of hourly amounts of net radiation for each month and year.

Table 187. Average Hourly Net Radiation on a Horizontal Surface in Langleys. June 1956-December 1964

HOUR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-3.4	-3.6	-3.9	-4.4	-4.5	-4.1	-3.8	-3.9	-3.9	-4.4	-4.1	-3.7
2	-3.4	-3.7	-4.0	-4.4	-4.4	-4.2	-3.8	-3.8	-3.9	-4.3	-4.1	-3.6
3	-3.5	-3.8	-4.1	-4.3	-4.4	-4.0	-3.8	-3.9	-3.9	-4.3	-4.2	-3.6
4	-3.4	-3.5	-4.0	-4.3	-4.4	-3.9	-3.8	-3.8	-3.8	-4.3	-3.9	-3.6
5	-3.4	-3.4	-4.0	-4.3	-4.0	-3.1	-3.2	-3.7	-3.7	-4.2	-4.0	-3.6
6	-3.5	-3.3	-3.9	-3.2	0.4	2.1	0.6	-1.7	-3.4	-4.2	-3.9	-3.4
7	-3.5	-3.1	-2.1	3.4	8.9	11.4	9.0	5.1	0.8	-2.3	-3.7	-3.5
8	-2.7	-1.2	3.8	13.0	18.9	22.2	19.5	14.9	10.3	4.1	-0.8	-2.6
9	0.0	3.6	11.9	23.9	30.4	33.2	29.3	26.6	20.3	12.5	4.9	0.8
10	3.8	8.8	19.6	33.5	39.6	42.9	39.3	35.6	29.1	20.8	11.1	5.0
11	7.1	13.1	25.4	40.0	44.2	49.4	44.7	42.1	34.7	25.7	15.1	8.3
12	9.0	15.8	27.9	41.8	48.0	51.6	46.3	44.4	37.5	27.7	16.6	10.2
13	9.1	16.1	28.0	40.2	46.2	49.7	46.8	43.2	36.0	25.6	15.0	9.3
14	7.0	14.2	23.9	36.5	41.9	45.5	43.0	39.6	30.9	20.7	11.0	6.5
15	3.4	9.6	18.0	28.6	34.9	38.2	36.1	32.4	23.9	13.0	5.3	2.4
16	-0.6	3.8	10.5	18.3	24.4	28.2	27.0	22.8	14.5	4.4	-0.7	-1.9
17	-3.3	-1.5	2.6	8.2	13.5	17.4	16.9	12.6	4.8	-2.4	-4.0	-3.9
18	-3.9	-4.0	-2.9	-0.2	3.8	7.1	7.0	3.0	-2.2	-4.7	-4.1	-3.9
19	-3.8	-4.1	-4.3	-4.6	-2.9	-0.9	-0.8	-2.9	-4.2	-4.5	-4.1	-3.6
20	-3.6	-3.9	-4.4	-5.0	-4.9	-4.2	-3.9	-4.1	-4.2	-4.5	-3.9	-3.7
21	-3.5	-3.8	-4.1	-4.7	-4.6	-4.3	-4.0	-4.0	-4.1	-4.5	-4.0	-3.8
22	-3.5	-3.8	-4.1	-4.7	-4.5	-4.4	-3.9	-4.0	-4.1	-4.5	-3.9	-3.7
23	-3.5	-3.8	-4.1	-4.6	-4.5	-4.2	-3.9	-3.9	-4.2	-4.6	-3.9	-3.6
24	-3.3	-3.9	-4.0	-4.5	-4.5	-4.1	-3.9	-3.9	-4.0	-4.5	-4.0	-3.6

Table 188. Mean Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. June 1956-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	4.1	77.5	158.6	235.8	309.7	386.2	358.7	336.2	224.7	123.6	37.0	3.6	202.5
1958	-0.2	35.7	154.3	301.7	386.5	418.3	375.7	346.9	248.8	151.1	46.3	7.0	182.6
1959	-2.7	56.3	167.7	329.3	351.0	448.9	450.6	313.4	234.2	126.4	37.4	16.1	190.5
1960	6.5	18.6	69.1	294.7	384.4	441.3	407.1	311.7	208.2	126.6	50.9	10.1	153.5
1961	24.0	73.6	168.7	279.3	363.7	431.1	386.4	332.3	243.8	146.6	57.9	8.3	189.4
1962	-2.6	57.0	146.5	306.8	351.9	400.3	368.6	330.0	240.8	129.8	49.7	21.2	195.2
1963	5.5	55.3	168.1	301.6	372.0	429.2	375.7	280.4	229.5	138.2	51.7	-25.5	195.7
1964	20.3	69.0	169.9	260.3	369.4	355.3	333.5	284.2	159.4	103.2	38.2	4.7	201.1

Table 189. Mean Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 2100-0300 CST. June 1956-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	-19.7	-21.2	-27.5	-24.0	-26.4	-28.0	-21.4	-35.1	-34.6	-37.3	-26.8	-32.6	-27.9
1958	-21.7	-34.6	-28.5	-36.8	-41.2	-36.9	-26.0	-28.3	-33.5	-37.9	-33.1	-27.0	-31.7
1959	-23.5	-30.9	-33.9	-37.0	-28.4	-30.5	-35.6	-28.9	-32.4	-28.9	-28.7	-23.2	-29.8
1960	-24.4	-24.7	-29.6	-39.8	-30.0	-34.4	-34.5	-23.1	-19.2	-29.7	-27.3	-28.4	-28.2
1961	-28.7	-21.5	-35.0	-37.9	-36.9	-30.4	-27.5	-30.9	-33.6	-32.8	-26.9	-21.8	-29.8
1962	-21.7	-19.0	-24.1	-34.2	-25.1	-26.1	-26.1	-26.4	-33.4	-27.0	-29.4	-24.9	-26.5
1963	-20.6	-28.7	-29.7	-31.7	-29.3	-30.0	-29.8	-30.3	-29.4	-32.8	-30.4	-30.7	-29.5
1964	-37.5	-41.0	-31.8	-37.3	-32.2	-28.8	-26.7	-27.0	-29.8	-29.3	-25.2	-28.5	-29.9

Table 190. Maximum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. June 1956-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	48.0	138.9	237.1	361.6	406.8	447.7	443.2	399.5	329.7	184.2	67.1	18.0	447.7
1958	69.9	197.7	256.6	397.6	441.0	487.9	490.2	443.5	325.5	204.9	86.6	68.1	490.2
1959	45.3	176.9	306.8	422.9	516.6	550.2	525.8	480.3	322.5	172.4	99.4	50.9	550.2
1960	78.1	75.3	231.5	384.7	474.1	510.0	495.0	404.9	324.6	220.8	114.0	48.8	510.0
1961	56.2	155.6	281.8	391.9	446.8	492.9	466.4	377.4	318.2	194.2	106.1	34.9	492.9
1962	33.4	135.8	273.2	396.5	456.4	501.0	477.0	414.9	316.3	185.8	84.8	66.5	501.0
1963	50.9	147.8	260.5	350.7	453.4	495.5	455.3	425.7	297.6	206.2	82.8	38.5	495.5
1964	57.2	168.7	236.6	333.2	435.4	451.8	430.0	430.4	294.0	230.3	97.9	42.4	451.8

Table 191. Maximum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 2100-0300 CST. June 1956-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	0.0	4.2	-1.2	-4.5	0.0	-1.8	-2.4	-11.5	-13.1	-13.3	-8.6	-4.9	4.2
1958	2.4	-6.9	-8.3	-4.9	-19.7	-9.1	-4.8	-8.0	-18.3	-6.6	-3.0	-4.4	2.4
1959	9.0	-2.6	-3.2	-5.4	-7.3	-14.2	-20.7	-7.2	1.2	-6.1	-2.6	3.8	9.0
1960	-1.8	1.8	-7.9	-10.3	-4.9	-20.9	-17.6	-14.4	-1.8	-1.8	-0.6	0.0	1.8
1961	-1.2	-2.1	-1.2	-18.0	-13.7	-1.8	-10.3	-13.2	-6.3	-0.6	0.0	0.0	0.0
1962	3.5	0.0	1.4	-8.0	-6.8	-3.6	-1.8	-6.0	-11.8	-1.8	-7.0	2.8	3.5
1963	0.9	-1.3	-4.3	-7.3	-3.2	-12.0	-2.4	-3.6	-7.9	-6.7	-4.2	-4.4	0.9
1964	-12.2	-12.9	0.0	-3.6	-7.3	-8.4	-3.6	-6.6	0.0	-4.4	10.2	6.3	12.2

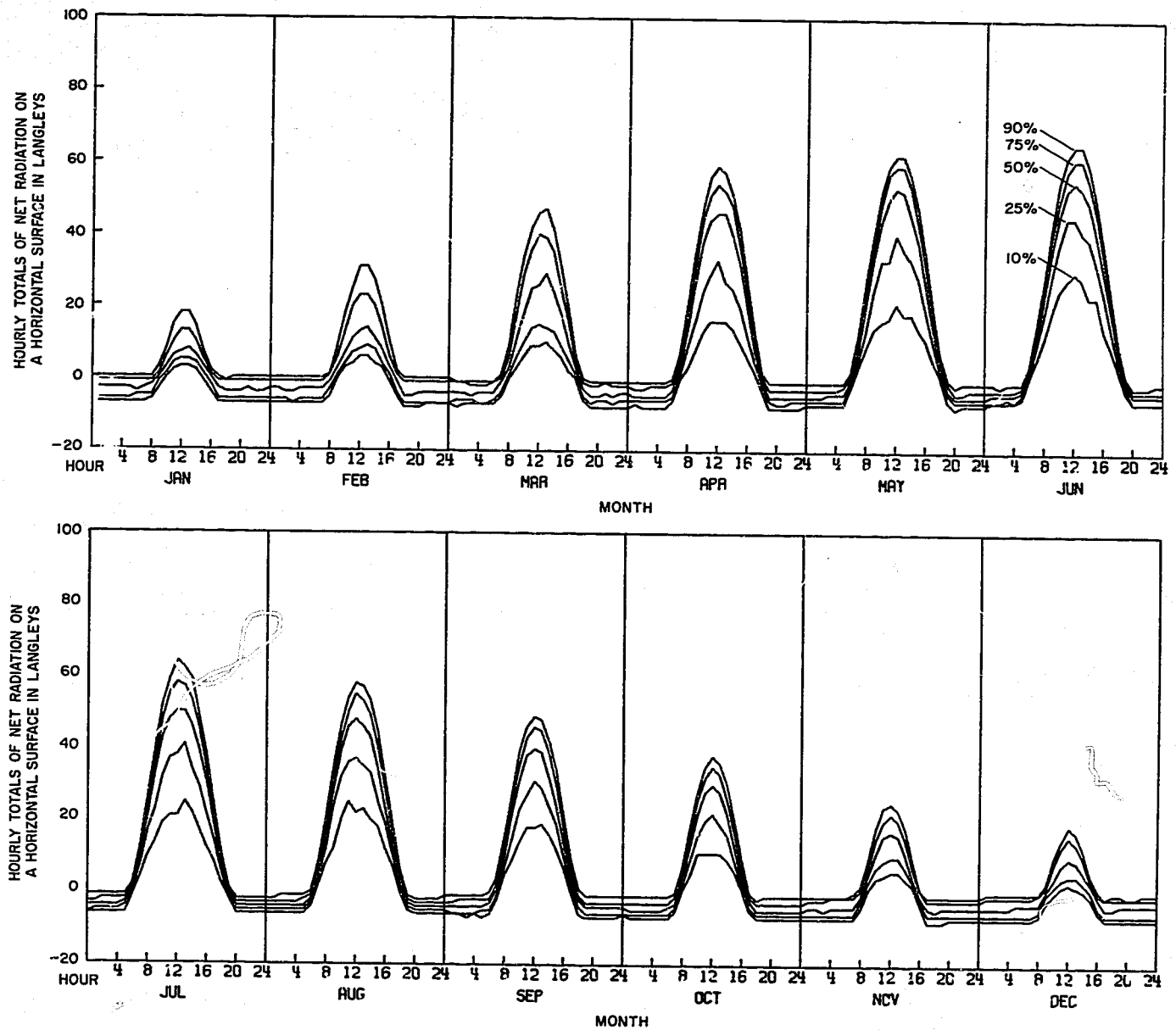
Table 192. Minimum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 0400-2000 CST. June 1956-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	-40.2	12.9	79.3	86.2	56.4	302.6	213.2	215.3	112.8	51.5	10.9	-27.9	-40.2
1958	-59.6	-43.9	41.7	174.4	241.0	279.6	209.6	246.0	135.0	101.5	-3.0	-59.8	-59.8
1959	-63.8	-35.5	30.2	255.8	155.2	276.2	352.3	158.9	54.9	44.9	-39.3	-10.2	-63.8
1960	-41.3	-41.2	6.7	53.4	216.2	291.0	223.8	202.4	52.5	11.7	5.2	-70.1	-70.1
1961	-8.4	-30.9	67.7	115.6	130.6	342.5	287.3	173.2	104.7	39.0	9.6	-32.5	-32.5
1962	-39.0	8.2	13.5	130.8	182.6	145.2	119.0	216.1	75.5	67.6	14.1	-17.5	-39.0
1963	-56.4	-1.0	7.6	203.8	94.0	360.2	257.6	136.9	145.5	68.3	23.0	-83.1	-83.1
1964	-9.7	-17.9	38.1	95.7	144.0	176.7	179.0	145.4	47.1	6.1	-28.3	-61.2	-61.2

Table 193. Minimum Daily Totals of Net Radiation on a Horizontal Surface in Langleys during the Hours 2100-0300 CST. June 1956-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	-42.7	-49.5	-51.3	-45.4	-47.6	-47.4	-40.4	-47.6	-49.5	-55.3	-56.7	-62.7	-62.7
1958	-51.4	-56.0	-56.2	-52.7	-55.2	-52.5	-40.2	-44.7	-53.3	-54.8	-56.0	-56.3	-56.3
1959	-57.3	-60.8	-63.7	-57.7	-46.5	-50.8	-50.6	-43.3	-73.3	-58.1	-53.2	-50.4	-73.3
1960	-55.7	-56.0	-55.5	-62.2	-52.1	-50.6	-47.0	-43.4	-39.8	-59.6	-62.6	-55.6	-62.6
1961	-52.5	-46.6	-63.3	-60.6	-58.0	-47.4	-50.0	-53.5	-58.1	-49.9	-52.7	-55.7	-63.3
1962	-53.1	-52.5	-49.1	-60.2	-40.9	-45.3	-50.4	-41.6	-56.6	-54.2	-50.3	-57.2	-60.2
1963	-45.2	-53.2	-56.5	-55.6	-51.9	-59.8	-52.6	-48.7	-52.5	-56.7	-62.3	-49.7	-62.3
1964	-62.0	-60.2	-61.7	-60.6	-54.7	-56.6	-53.7	-52.2	-60.6	-54.6	-63.1	-61.6	-63.1

Figure 48. Percentile Distribution of Hourly Amounts of Net Radiation on a Horizontal Surface in Langley's. June 1956-December 1964



Section 1.8

Atmospheric Pressure

A Bendix-Friez microbarograph located in the Meteorology Building was used to measure atmospheric pressure. The pressure readings obtained from the 7-day chart trace of the microbarograph represent time averages taken over a period of several minutes because of the response time of the instrument. The barograph was checked each week with a mercurial barometer, the ivory point of which is 746 feet above sea level. Hourly readings to the nearest 0.01 inch of mercury were made. Calibration corrections and time corrections were distributed proportionately over 7 days of the chart record.

1.8.1. Maximum, Minimum and Mean Station Pressure

Table 194. Maximum Station Pressure in Inches of Mercury.
January 1950-December 1964.

Table 195. Mean Station Pressure in Inches of Mercury.
January 1950-December 1964.

Table 196. Minimum Station Pressure in Inches of Mercury.
January 1950-December 1964.

These tables present the maximum, mean and minimum atmospheric pressure in inches of mercury for each month and year. Tables 194 and 196 show that the highest maximum and lowest minimum occurred in the cold months. The highest pressure recorded was 30.04 inches and the lowest 28.16 inches, a range of 1.88 inches. The highest average monthly pressures generally occur in fall and winter and the lowest in spring.

Figure 49. Mean Station Pressure in Inches of Mercury for Each Month and Year. Presents the data of Table 195 in graphical form.

1.8.2. Range of Station Pressure

Information on atmospheric pressure change is needed in the atomic energy industry for the evaluation of hazards where leakage from a reactor building is of concern since the magnitude and nature of pressure changes determine how much radioactive material is released. The atmospheric pressure at a station undergoes change for a number of reasons. The most important is the passage of the large scale pressure systems - highs and lows. Smaller scale systems such as thunderstorms, squall lines and convective showers also produce pressure changes. Superimposed on all of these is the semidiurnal pressure wave, that is, an oscillation with a 12-hour periodicity. Tables 197-208 present range data based on the absolute daily extremes; Table 209 is based on hourly observations.

Table 197. Daily Maximum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 198. Daily Mean Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 199. Daily Minimum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 200. 2-day Maximum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 201. 2-day Mean Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 202. 2-day Minimum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 203. 3-day Maximum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 204. 3-day Mean Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 205. 3-day Minimum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 206. 7-day Maximum Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 207. 7-day Mean Pressure Range in Inches of Mercury.
January 1950-December 1964.

Table 208. 7-day Minimum Pressure Range in Inches of Mercury.
January 1950-December 1964.

The daily pressure ranges were calculated by subtracting the daily minimum from the daily maximum pressure. Similarly, the 2-, 3- and 7-day ranges are the differences between the largest daily maximum and smallest daily minimum pressure in 2-, 3- or 7-consecutive-day periods. When the range period extended from one month or year into the next, the range was considered with the month and year in which it began.

The general pattern shown by all of these tables is that the maximum and mean pressure ranges are largest in the colder months and the minima are smallest in the summer. These tables, similar to all tables in this

publication, can be used to construct figures or charts by which intermediate values may be interpolated. The basic data are presented here and can be analyzed in various forms.

Table 209. Percentage Frequency Distribution of 2-hour, 11-hour and 23-hour Range of Station Pressure in Inches of Mercury Beginning with Indicated Hour. Total Period. January 1950-December 1964.

This table presents the percentage frequency distribution of 2-hour, 11-hour and 23-hour range of pressure. The 2-hour range distribution shows that in 93 percent of the cases, the change in pressure is less than 0.06 inches in 2 hours. The 50-percentile values for the 11- and 23-hour range distributions are in the 0.08- to 0.09-inch and 0.15- to 0.19-inch intervals, respectively.

Table 194. Maximum Station Pressure in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MAXIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	29.83	29.67	29.62	29.65	29.65	29.30	29.42	29.46	29.57	29.48	29.57	29.62	29.83
1951	29.85	29.94	29.75	29.52	29.55	29.42	29.42	29.54	29.60	29.61	29.67	29.88	29.94
1952	29.71	29.54	29.76	29.55	29.39	29.39	29.44	29.52	29.52	29.76	29.68	29.64	29.76
1953	29.66	29.65	29.68	29.30	29.58	29.46	29.48	29.45	29.60	29.57	29.78	29.73	29.78
1954	29.70	29.72	29.70	29.76	29.36	29.36	29.41	29.43	29.48	29.86	29.74	29.77	29.86
1955	29.63	29.93	29.49	29.61	29.46	29.45	29.45	29.37	29.59	29.59	29.67	29.85	29.93
1956	29.82	29.82	29.63	29.58	29.60	29.41	29.36	29.44	29.65	29.76	29.56	29.77	29.82
1957	29.76	29.66	29.51	29.52	29.49	29.48	29.46	29.64	29.67	29.66	29.76	29.79	29.79
1958	29.94	29.62	29.48	29.65	29.58	29.51	29.42	29.32	29.47	29.65	29.89	29.73	29.94
1959	29.89	30.04	29.65	29.62	29.66	29.42	29.47	29.40	29.62	29.54	29.74	29.67	30.04
1960	29.62	29.68	29.78	29.60	29.34	29.42	29.50	29.47	29.48	29.47	29.67	29.83	29.93
1961	29.93	29.82	29.54	29.50	29.56	29.54	29.45	29.50	29.60	29.58	29.65	29.81	29.93
1962	29.85	29.79	29.39	29.74	29.50	29.45	29.43	29.44	29.56	29.56	29.79	29.79	29.89
1963	29.78	29.80	29.65	29.52	29.58	29.60	29.41	29.44	29.60	29.52	29.52	29.88	29.88
1964	29.69	29.76	29.58	29.67	29.53	29.44	29.44	29.39	29.50	29.67	29.72	29.93	29.93

Table 195. Mean Station Pressure in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	29.28	29.28	29.18	29.15	29.17	29.16	29.20	29.25	29.27	29.20	29.18	29.20	29.22
1951	29.22	29.32	29.14	29.06	29.14	29.13	29.21	29.21	29.21	29.26	29.25	29.17	29.19
1952	29.24	29.16	29.13	29.21	29.14	29.15	29.25	29.21	29.28	29.31	29.21	29.19	29.21
1953	29.13	29.16	29.18	29.21	29.13	29.19	29.25	29.27	29.19	29.30	29.27	29.14	29.19
1954	29.29	29.39	29.16	29.26	29.16	29.13	29.19	29.22	29.18	29.24	29.21	29.19	29.19
1955	29.21	29.32	29.14	29.11	29.18	29.16	29.22	29.21	29.26	29.12	29.15	29.33	29.20
1956	29.32	29.20	29.17	29.38	29.21	29.21	29.17	29.18	29.25	29.32	29.18	29.19	29.21
1957	29.36	29.31	29.16	29.26	29.20	29.12	29.21	29.29	29.25	29.37	29.18	29.17	29.24
1958	29.21	29.18	29.26	29.16	29.22	29.15	29.20	29.15	29.24	29.27	29.19	29.35	29.22
1959	29.28	29.27	29.15	29.18	29.22	29.20	29.26	29.20	29.28	29.17	29.25	29.26	29.23
1960	29.26	29.19	29.30	29.13	29.06	29.18	29.22	29.30	29.27	29.20	29.22	29.36	29.23
1961	29.31	29.26	29.12	29.05	29.26	29.18	29.20	29.28	29.25	29.26	29.28	29.21	29.22
1962	29.29	29.22	29.21	29.23	29.19	29.23	29.20	29.20	29.26	29.19	29.32	29.28	29.23
1963	29.29	29.24	29.14	29.17	29.25	29.18	29.20	29.23	29.31	29.32	29.20	29.30	29.24
1964	29.13	29.13	29.15	29.13	29.19	29.17	29.20	29.17	29.26	29.30	29.26	29.25	29.20
MEAN	29.25	29.22	29.17	29.14	29.18	29.17	29.21	29.23	29.25	29.26	29.22	29.24	29.21

Figure 49. Mean Station Pressure in Inches of Mercury for Each Month and Year. January 1950-December 1964

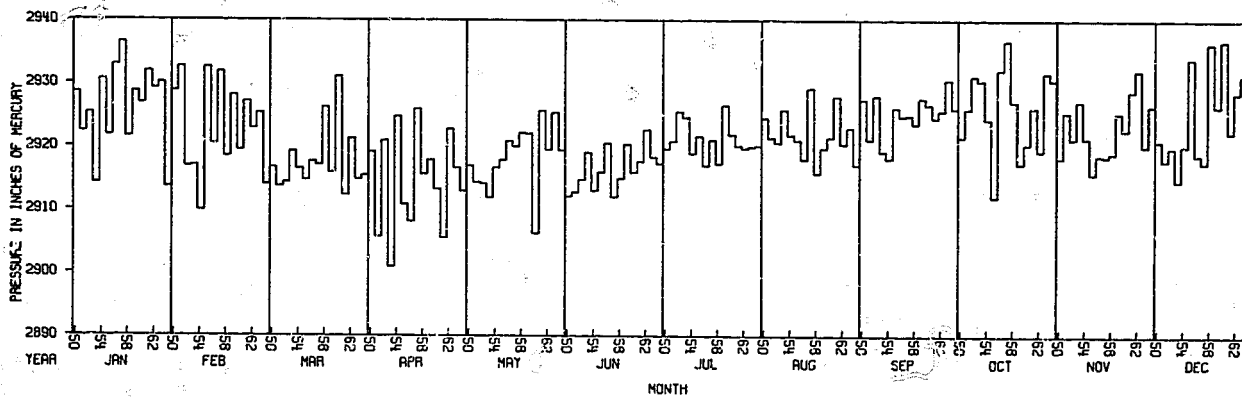


Table 196. Minimum Station Pressure in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MINIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	28.61	28.78	28.20	28.57	28.57	28.93	28.91	29.02	29.00	28.92	28.68	28.72	28.20
1951	28.69	28.77	28.53	28.52	28.61	28.86	28.83	28.91	28.73	28.82	28.33	28.49	28.33
1952	28.51	28.65	28.51	28.59	28.75	28.92	29.01	28.85	28.86	28.91	28.51	28.89	28.51
1953	28.80	28.46	28.66	28.48	28.57	28.86	28.80	28.99	28.87	28.95	28.62	28.58	28.46
1954	28.79	28.64	28.53	28.75	28.74	28.58	28.94	28.88	28.80	28.81	28.59	28.72	28.53
1955	28.82	28.85	28.27	28.37	28.82	28.49	28.95	28.03	28.84	28.44	28.52	28.79	28.27
1956	28.86	28.37	28.55	28.49	28.78	28.91	28.90	28.85	28.86	28.96	28.63	28.67	28.37
1957	28.91	28.92	28.58	28.55	28.76	28.74	28.86	29.04	28.86	28.83	28.58	28.46	28.36
1958	28.61	28.45	28.97	28.44	28.83	28.79	28.96	28.94	28.94	28.86	28.69	28.58	28.44
1959	28.56	28.55	28.24	28.47	28.89	28.96	28.96	29.01	28.74	28.38	28.61	28.67	28.24
1960	28.72	28.22	28.54	28.72	28.62	28.70	28.86	29.00	29.04	28.44	28.50	28.86	28.22
1961	29.00	28.70	28.54	28.38	28.75	28.81	29.04	29.08	28.74	28.98	28.62	28.74	28.38
1962	28.40	28.70	28.49	28.69	28.84	29.06	29.01	29.00	28.99	28.78	28.66	28.86	28.40
1963	28.64	28.76	28.53	28.62	28.84	28.79	28.86	28.86	28.74	28.98	28.64	28.55	28.53
1964	28.16	28.50	28.22	28.66	28.61	28.74	28.94	28.80	28.85	28.83	28.60	28.45	28.16

Table 197. Daily Maximum Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MAXIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.78	0.51	0.79	0.51	0.42	0.25	0.32	0.16	0.35	0.28	0.69	0.55	0.79
1951	0.59	0.61	0.60	0.50	0.24	0.29	0.31	0.29	0.51	0.43	0.65	0.73	0.73
1952	0.71	0.61	0.81	0.51	0.42	0.29	0.28	0.30	0.29	0.37	0.74	0.36	0.81
1953	0.66	0.81	0.52	0.63	0.43	0.27	0.30	0.16	0.39	0.36	0.46	0.56	0.81
1954	0.58	0.59	0.54	0.45	0.43	0.32	0.31	0.22	0.40	0.39	0.73	0.60	0.73
1955	0.47	0.52	0.74	0.57	0.31	0.34	0.23	0.32	0.47	0.43	0.77	0.46	0.77
1956	0.44	0.70	0.71	0.47	0.45	0.18	0.25	0.29	0.33	0.38	0.69	0.59	0.71
1957	0.65	0.55	0.38	0.47	0.52	0.25	0.26	0.36	0.33	0.44	0.84	0.65	0.84
1958	0.55	0.48	0.23	0.80	0.36	0.49	0.20	0.25	0.41	0.28	0.60	0.57	0.80
1959	0.72	0.89	1.10	0.64	0.52	0.25	0.28	0.24	0.32	0.52	0.46	0.45	1.10
1960	0.54	0.79	0.58	0.52	0.43	0.39	0.28	0.23	0.30	0.39	0.48	0.58	0.79
1961	0.83	0.52	0.64	0.66	0.41	0.28	0.25	0.14	0.52	0.32	0.64	0.68	0.83
1962	0.72	0.60	0.56	0.39	0.41	0.13	0.19	0.24	0.29	0.44	0.57	0.73	0.73
1963	0.53	0.91	0.67	0.72	0.52	0.25	0.40	0.37	0.46	0.27	0.60	0.56	0.91
1964	0.99	0.52	1.04	0.79	0.36	0.41	0.23	0.37	0.38	0.48	0.72	0.58	1.04

Table 198. Daily Mean Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.39	0.22	0.28	0.21	0.16	0.13	0.11	0.08	0.11	0.13	0.25	0.22	0.19
1951	0.25	0.28	0.24	0.20	0.13	0.13	0.13	0.13	0.16	0.18	0.26	0.32	0.20
1952	0.33	0.21	0.27	0.15	0.15	0.13	0.12	0.13	0.12	0.18	0.19	0.17	0.18
1953	0.23	0.28	0.22	0.20	0.18	0.16	0.11	0.08	0.17	0.13	0.17	0.25	0.18
1954	0.28	0.26	0.24	0.22	0.13	0.14	0.12	0.11	0.15	0.19	0.21	0.26	0.19
1955	0.25	0.23	0.25	0.18	0.15	0.11	0.09	0.10	0.15	0.19	0.28	0.24	0.19
1956	0.19	0.24	0.25	0.21	0.22	0.09	0.10	0.12	0.16	0.16	0.25	0.23	0.19
1957	0.25	0.21	0.16	0.19	0.16	0.13	0.10	0.10	0.15	0.14	0.28	0.30	0.18
1958	0.18	0.17	0.10	0.20	0.16	0.16	0.11	0.11	0.15	0.14	0.23	0.26	0.16
1959	0.25	0.31	0.29	0.19	0.15	0.11	0.12	0.09	0.15	0.17	0.23	0.17	0.19
1960	0.25	0.25	0.24	0.20	0.14	0.13	0.11	0.10	0.12	0.18	0.22	0.21	0.18
1961	0.18	0.23	0.28	0.20	0.19	0.12	0.08	0.07	0.15	0.15	0.20	0.24	0.17
1962	0.28	0.31	0.21	0.18	0.13	0.08	0.09	0.10	0.13	0.16	0.18	0.21	0.17
1963	0.21	0.26	0.29	0.21	0.14	0.12	0.11	0.13	0.14	0.12	0.18	0.21	0.18
1964	0.27	0.23	0.30	0.24	0.14	0.14	0.09	0.14	0.14	0.16	0.23	0.27	0.20

Table 199. Daily Minimum Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MINIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.05	0.04	0.08	0.06	0.04	0.05	0.05	0.04	0.05	0.05	0.08	0.05	0.04
1951	0.08	0.10	0.06	0.04	0.06	0.04	0.04	0.05	0.05	0.06	0.07	0.07	0.04
1952	0.09	0.07	0.04	0.04	0.06	0.05	0.04	0.05	0.05	0.06	0.05	0.05	0.04
1953	0.04	0.06	0.06	0.07	0.05	0.07	0.04	0.03	0.08	0.05	0.06	0.05	0.03
1954	0.10	0.10	0.07	0.05	0.01	0.06	0.06	0.04	0.05	0.05	0.03	0.06	0.01
1955	0.06	0.05	0.08	0.06	0.05	0.04	0.04	0.05	0.08	0.02	0.06	0.04	0.02
1956	0.06	0.07	0.04	0.03	0.06	0.05	0.03	0.05	0.05	0.05	0.06	0.04	0.03
1957	0.08	0.10	0.04	0.04	0.03	0.03	0.04	0.03	0.05	0.04	0.04	0.04	0.03
1958	0.05	0.03	0.03	0.06	0.04	0.03	0.03	0.04	0.06	0.05	0.04	0.06	0.03
1959	0.05	0.07	0.06	0.06	0.04	0.05	0.05	0.04	0.06	0.03	0.06	0.05	0.03
1960	0.05	0.05	0.03	0.05	0.04	0.04	0.04	0.05	0.04	0.03	0.04	0.08	0.03
1961	0.05	0.09	0.05	0.03	0.05	0.06	0.04	0.03	0.07	0.04	0.05	0.05	0.03
1962	0.10	0.12	0.03	0.04	0.04	0.03	0.04	0.03	0.04	0.03	0.03	0.04	0.03
1963	0.06	0.07	0.08	0.04	0.05	0.05	0.04	0.03	0.04	0.04	0.06	0.08	0.03
1964	0.04	0.06	0.07	0.09	0.05	0.04	0.03	0.05	0.05	0.05	0.03	0.05	0.03

Table 200. 2-day Maximum Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MAXIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	1.03	0.77	1.13	0.80	0.71	0.28	0.41	0.26	0.47	0.45	0.77	0.55	1.13
1951	0.89	0.84	0.82	0.63	0.44	0.47	0.48	0.42	0.64	0.51	0.80	0.90	0.90
1952	0.99	0.64	1.01	0.75	0.47	0.39	0.36	0.44	0.41	0.61	0.97	0.52	1.01
1953	0.77	0.88	0.64	0.82	0.64	0.41	0.45	0.27	0.58	0.51	0.59	0.71	0.88
1954	0.83	0.88	0.89	0.81	0.53	0.57	0.39	0.33	0.58	0.59	0.90	0.97	0.97
1955	0.81	0.78	0.82	0.77	0.43	0.40	0.37	0.48	0.65	0.58	0.95	0.81	0.95
1956	0.78	1.00	0.78	0.67	0.66	0.31	0.34	0.50	0.50	0.53	0.77	0.87	1.00
1957	0.82	0.63	0.66	0.67	0.60	0.38	0.39	0.51	0.45	0.66	1.08	0.96	1.08
1958	0.81	0.60	0.33	1.04	0.49	0.61	0.34	0.33	0.58	0.50	0.66	0.86	1.04
1959	0.90	1.37	1.15	0.76	0.73	0.32	0.40	0.35	0.63	0.88	0.88	0.65	1.37
1960	0.68	1.16	0.76	0.69	0.58	0.57	0.42	0.34	0.39	0.70	0.74	0.79	1.16
1961	0.93	0.85	0.82	0.90	0.74	0.42	0.34	0.27	0.67	0.45	0.80	0.88	0.93
1962	0.96	0.78	0.71	0.67	0.44	0.23	0.32	0.35	0.41	0.60	0.80	0.84	0.96
1963	0.77	1.01	0.90	0.79	0.60	0.38	0.53	0.49	0.58	0.45	0.80	0.95	1.01
1964	1.03	0.95	1.07	0.88	0.54	0.60	0.34	0.49	0.42	0.77	1.10	0.78	1.10

Table 201. 2-day Mean Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.64	0.39	0.48	0.33	0.29	0.19	0.18	0.14	0.19	0.22	0.42	0.33	0.32
1951	0.41	0.48	0.39	0.35	0.23	0.21	0.21	0.22	0.27	0.28	0.43	0.54	0.34
1952	0.53	0.36	0.44	0.26	0.24	0.21	0.19	0.21	0.20	0.29	0.34	0.26	0.29
1953	0.35	0.45	0.37	0.33	0.32	0.26	0.18	0.12	0.29	0.22	0.29	0.42	0.30
1954	0.44	0.44	0.40	0.36	0.22	0.22	0.18	0.17	0.24	0.34	0.35	0.43	0.32
1955	0.39	0.39	0.40	0.31	0.24	0.19	0.17	0.16	0.25	0.31	0.47	0.40	0.31
1956	0.33	0.40	0.40	0.36	0.34	0.15	0.17	0.20	0.27	0.25	0.42	0.41	0.31
1957	0.40	0.33	0.28	0.29	0.28	0.22	0.17	0.18	0.25	0.25	0.46	0.48	0.30
1958	0.31	0.29	0.15	0.33	0.27	0.24	0.16	0.18	0.25	0.26	0.37	0.44	0.27
1959	0.41	0.53	0.47	0.32	0.26	0.17	0.20	0.14	0.26	0.30	0.39	0.30	0.31
1960	0.38	0.43	0.36	0.33	0.23	0.21	0.20	0.18	0.21	0.29	0.38	0.35	0.30
1961	0.31	0.37	0.45	0.33	0.32	0.21	0.14	0.12	0.26	0.24	0.35	0.41	0.29
1962	0.46	0.49	0.37	0.31	0.21	0.14	0.15	0.19	0.21	0.26	0.31	0.37	0.29
1963	0.36	0.42	0.47	0.35	0.25	0.20	0.16	0.20	0.25	0.20	0.30	0.39	0.30
1964	0.44	0.40	0.46	0.40	0.23	0.25	0.16	0.23	0.22	0.27	0.39	0.48	0.33

Table 202. 2-day Minimum Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MINIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.18	0.13	0.20	0.08	0.09	0.07	0.06	0.07	0.08	0.08	0.14	0.14	0.06
1951	0.12	0.19	0.08	0.11	0.07	0.07	0.08	0.07	0.08	0.12	0.09	0.16	0.07
1952	0.14	0.12	0.09	0.06	0.08	0.12	0.08	0.09	0.06	0.11	0.07	0.09	0.06
1953	0.09	0.15	0.16	0.10	0.08	0.12	0.06	0.05	0.09	0.09	0.08	0.07	0.05
1954	0.22	0.14	0.08	0.08	0.07	0.08	0.07	0.06	0.13	0.12	0.08	0.13	0.06
1955	0.12	0.15	0.11	0.09	0.11	0.06	0.07	0.07	0.10	0.07	0.20	0.09	0.06
1956	0.12	0.11	0.12	0.06	0.14	0.06	0.05	0.09	0.08	0.08	0.14	0.09	0.05
1957	0.15	0.06	0.07	0.10	0.07	0.08	0.06	0.06	0.06	0.08	0.11	0.19	0.06
1958	0.07	0.05	0.06	0.11	0.12	0.06	0.05	0.09	0.12	0.10	0.10	0.11	0.05
1959	0.10	0.14	0.16	0.14	0.08	0.07	0.08	0.06	0.08	0.08	0.12	0.08	0.06
1960	0.13	0.09	0.08	0.08	0.06	0.06	0.09	0.07	0.07	0.10	0.10	0.15	0.06
1961	0.08	0.10	0.17	0.05	0.09	0.09	0.07	0.06	0.08	0.09	0.12	0.12	0.05
1962	0.15	0.23	0.12	0.11	0.09	0.06	0.06	0.06	0.07	0.04	0.04	0.09	0.04
1963	0.11	0.23	0.20	0.07	0.12	0.10	0.07	0.05	0.06	0.08	0.13	0.11	0.05
1964	0.18	0.14	0.11	0.18	0.06	0.09	0.07	0.07	0.07	0.08	0.06	0.12	0.06

Table 203. 3-day Maximum Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MAXIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	1.16	0.84	1.31	0.84	1.05	0.28	0.47	0.33	0.47	0.46	0.81	0.64	1.31
1951	0.91	1.00	0.89	0.67	0.59	0.47	0.59	0.51	0.85	0.54	1.08	1.12	1.12
1952	1.03	0.65	1.09	0.96	0.55	0.44	0.36	0.51	0.51	0.61	1.10	0.52	1.10
1953	0.77	0.98	0.85	0.82	0.80	0.56	0.45	0.27	0.67	0.61	0.72	0.84	0.98
1954	0.83	0.95	1.03	0.81	0.62	0.65	0.45	0.36	0.68	0.76	1.05	1.02	1.05
1955	0.81	0.85	1.01	0.86	0.50	0.45	0.45	0.58	0.73	0.67	0.97	0.92	1.01
1956	0.78	1.09	0.80	0.73	0.66	0.36	0.42	0.53	0.51	0.64	0.87	0.97	1.09
1957	0.85	0.65	0.66	0.92	0.64	0.49	0.50	0.55	0.53	0.77	1.15	0.97	1.15
1958	0.87	0.73	0.36	1.04	0.61	0.63	0.37	0.39	0.61	0.76	0.89	1.07	1.07
1959	1.08	1.38	1.32	0.81	0.77	0.40	0.40	0.37	0.70	1.00	1.06	0.87	1.38
1960	0.68	1.36	0.77	0.69	0.62	0.61	0.51	0.37	0.39	0.79	0.97	0.84	1.36
1961	0.93	0.90	0.86	0.99	0.75	0.48	0.38	0.35	0.78	0.56	0.92	0.95	0.99
1962	1.27	0.92	0.81	0.79	0.44	0.28	0.37	0.40	0.43	0.64	0.97	0.93	1.27
1963	0.94	1.04	1.01	0.85	0.60	0.43	0.53	0.50	0.66	0.50	0.88	1.07	1.07
1964	1.15	1.13	1.34	0.95	0.55	0.66	0.39	0.56	0.45	0.84	1.12	1.06	1.34

Table 204. 3-day Mean Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.78	0.51	0.61	0.43	0.38	0.22	0.23	0.17	0.25	0.29	0.50	0.41	0.40
1951	0.52	0.61	0.51	0.44	0.32	0.26	0.26	0.29	0.36	0.36	0.56	0.69	0.43
1952	0.64	0.45	0.58	0.33	0.30	0.26	0.24	0.28	0.26	0.36	0.42	0.32	0.37
1953	0.43	0.59	0.47	0.42	0.41	0.34	0.23	0.16	0.38	0.28	0.39	0.54	0.39
1954	0.54	0.56	0.51	0.46	0.27	0.27	0.24	0.22	0.30	0.44	0.44	0.54	0.40
1955	0.49	0.50	0.51	0.40	0.29	0.25	0.23	0.20	0.32	0.42	0.62	0.52	0.40
1956	0.44	0.50	0.49	0.47	0.43	0.19	0.22	0.26	0.33	0.31	0.53	0.52	0.39
1957	0.49	0.40	0.35	0.35	0.35	0.29	0.22	0.24	0.31	0.34	0.61	0.60	0.38
1958	0.40	0.37	0.20	0.43	0.33	0.29	0.20	0.22	0.32	0.34	0.47	0.56	0.34
1959	0.54	0.67	0.59	0.40	0.32	0.22	0.25	0.18	0.35	0.39	0.50	0.41	0.40
1960	0.46	0.58	0.45	0.43	0.29	0.28	0.26	0.23	0.26	0.37	0.49	0.46	0.38
1961	0.40	0.49	0.53	0.43	0.40	0.28	0.18	0.16	0.34	0.31	0.44	0.52	0.37
1962	0.59	0.60	0.49	0.39	0.26	0.18	0.20	0.23	0.26	0.34	0.40	0.47	0.37
1963	0.47	0.50	0.59	0.45	0.34	0.26	0.24	0.26	0.33	0.26	0.37	0.52	0.38
1964	0.55	0.49	0.58	0.50	0.28	0.32	0.21	0.30	0.28	0.35	0.53	0.60	0.42

Table 205. 3-day Minimum Pressure Range in Inches of Mercury. January 1950-December 1964

YEAR	MONTH												ANNUAL MINIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.31	0.30	0.23	0.10	0.13	0.07	0.10	0.09	0.08	0.11	0.16	0.17	0.07
1951	0.20	0.35	0.10	0.15	0.14	0.10	0.13	0.14	0.10	0.15	0.13	0.27	0.10
1952	0.24	0.20	0.16	0.12	0.12	0.13	0.11	0.13	0.10	0.12	0.13	0.12	0.10
1953	0.15	0.23	0.20	0.13	0.10	0.17	0.09	0.07	0.18	0.11	0.13	0.24	0.07
1954	0.27	0.19	0.18	0.17	0.11	0.11	0.09	0.11	0.14	0.19	0.15	0.17	0.09
1955	0.24	0.28	0.12	0.10	0.13	0.07	0.10	0.10	0.14	0.08	0.36	0.17	0.07
1956	0.13	0.20	0.22	0.10	0.20	0.09	0.09	0.13	0.18	0.12	0.29	0.27	0.09
1957	0.15	0.21	0.10	0.12	0.08	0.19	0.09	0.08	0.07	0.13	0.16	0.26	0.07
1958	0.08	0.10	0.09	0.14	0.19	0.06	0.05	0.11	0.16	0.11	0.14	0.26	0.05
1959	0.19	0.21	0.23	0.15	0.12	0.10	0.12	0.11	0.15	0.15	0.16	0.14	0.10
1960	0.18	0.17	0.15	0.13	0.11	0.06	0.11	0.13	0.09	0.12	0.19	0.27	0.06
1961	0.17	0.19	0.20	0.10	0.14	0.10	0.10	0.08	0.10	0.11	0.20	0.14	0.08
1962	0.31	0.33	0.14	0.13	0.10	0.10	0.09	0.11	0.10	0.07	0.09	0.11	0.07
1963	0.19	0.29	0.25	0.09	0.16	0.11	0.08	0.09	0.10	0.08	0.18	0.18	0.08
1964	0.20	0.24	0.21	0.22	0.09	0.09	0.14	0.12	0.08	0.09	0.12	0.21	0.08

Table 206. 7-day Maximum Pressure Range in Inches of Mercury. January 1950–December 1964

YEAR	MONTH												ANNUAL MAXIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	1.18	0.84	1.35	0.91	1.08	0.37	0.48	0.52	0.57	0.55	0.81	0.83	1.35
1951	0.94	1.00	1.12	0.89	0.70	0.52	0.59	0.52	0.87	0.98	1.30	1.39	1.39
1952	1.18	1.08	1.19	0.96	0.64	0.46	0.56	0.64	0.62	0.74	1.17	0.68	1.19
1953	1.06	1.19	1.02	0.90	0.85	0.63	0.48	0.35	0.73	0.61	0.98	0.94	1.19
1954	0.84	0.95	1.12	1.01	0.72	0.67	0.46	0.38	0.79	1.04	1.12	1.02	1.12
1955	0.90	1.02	1.22	1.24	0.61	0.69	0.50	0.58	0.75	1.02	1.01	1.06	1.24
1956	0.85	1.15	1.00	0.92	0.82	0.41	0.44	0.65	0.79	0.73	0.91	1.03	1.15
1957	0.85	0.71	0.96	0.93	0.73	0.55	0.60	0.56	0.68	0.83	1.27	1.33	1.33
1958	0.93	1.03	0.90	1.04	0.68	0.72	0.40	0.46	0.61	0.86	1.31	1.14	1.31
1959	1.38	1.38	1.35	1.06	0.77	0.42	0.48	0.39	0.70	1.16	1.07	0.97	1.38
1960	0.82	1.36	0.96	0.87	0.72	0.69	0.64	0.47	0.51	1.03	1.13	0.84	1.36
1961	0.93	0.90	0.86	0.99	0.79	0.72	0.40	0.37	0.86	1.03	1.03	1.08	1.08
1962	1.45	1.05	1.11	1.05	0.64	0.39	0.42	0.46	0.47	0.70	1.11	0.93	1.45
1963	1.05	1.04	1.09	0.85	0.62	0.58	0.53	0.58	0.89	0.50	0.88	1.16	1.16
1964	1.33	1.26	1.34	0.95	0.78	0.66	0.50	0.57	0.63	0.84	1.12	1.48	1.48

Table 207. 7-day Mean Pressure Range in Inches of Mercury. January 1950–December 1964

YEAR	MONTH												ANNUAL MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	1.00	0.69	0.93	0.71	0.54	0.26	0.36	0.28	0.40	0.43	0.67	0.60	0.57
1951	0.75	0.85	0.76	0.61	0.50	0.40	0.37	0.43	0.56	0.55	0.82	1.01	0.63
1952	0.87	0.64	0.80	0.49	0.42	0.38	0.37	0.44	0.43	0.54	0.63	0.48	0.54
1953	0.61	0.88	0.65	0.65	0.58	0.49	0.34	0.25	0.60	0.44	0.64	0.72	0.57
1954	0.71	0.76	0.79	0.68	0.41	0.35	0.37	0.31	0.45	0.70	0.68	0.72	0.58
1955	0.69	0.74	0.77	0.64	0.44	0.41	0.34	0.30	0.47	0.67	0.85	0.75	0.59
1956	0.67	0.75	0.70	0.68	0.58	0.30	0.31	0.40	0.50	0.44	0.69	0.78	0.57
1957	0.68	0.53	0.56	0.48	0.54	0.43	0.35	0.39	0.44	0.55	0.90	0.88	0.56
1958	0.58	0.60	0.33	0.66	0.49	0.42	0.29	0.31	0.42	0.55	0.73	0.76	0.51
1959	0.87	0.93	0.92	0.61	0.48	0.33	0.35	0.27	0.52	0.68	0.76	0.62	0.61
1960	0.62	0.89	0.65	0.63	0.42	0.51	0.38	0.31	0.37	0.56	0.77	0.65	0.56
1961	0.61	0.73	0.70	0.68	0.59	0.43	0.27	0.26	0.56	0.51	0.69	0.70	0.56
1962	0.90	0.82	0.77	0.57	0.40	0.26	0.31	0.33	0.35	0.53	0.64	0.68	0.55
1963	0.80	0.67	0.81	0.69	0.50	0.42	0.36	0.37	0.53	0.37	0.51	0.86	0.57
1964	0.86	0.71	0.83	0.66	0.44	0.47	0.32	0.44	0.42	0.53	0.85	0.90	0.62

Table 208. 7-day Minimum Pressure Range in Inches of Mercury. January 1950–December 1964

YEAR	MONTH												ANNUAL MINIMUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	0.50	0.46	0.41	0.39	0.24	0.07	0.23	0.19	0.14	0.29	0.45	0.36	0.07
1951	0.41	0.59	0.32	0.38	0.34	0.26	0.18	0.29	0.29	0.30	0.48	0.56	0.18
1952	0.43	0.31	0.45	0.22	0.25	0.23	0.27	0.31	0.20	0.35	0.22	0.31	0.20
1953	0.39	0.56	0.39	0.28	0.33	0.34	0.24	0.16	0.30	0.21	0.37	0.46	0.16
1954	0.59	0.34	0.43	0.34	0.18	0.20	0.29	0.19	0.27	0.38	0.21	0.54	0.18
1955	0.53	0.54	0.36	0.36	0.27	0.16	0.17	0.17	0.27	0.37	0.59	0.38	0.16
1956	0.36	0.46	0.38	0.51	0.40	0.18	0.19	0.19	0.31	0.13	0.43	0.50	0.13
1957	0.36	0.26	0.27	0.23	0.24	0.29	0.16	0.19	0.22	0.20	0.37	0.57	0.16
1958	0.30	0.30	0.15	0.19	0.30	0.16	0.21	0.20	0.29	0.30	0.42	0.47	0.15
1959	0.37	0.59	0.40	0.38	0.21	0.20	0.21	0.16	0.23	0.26	0.35	0.27	0.16
1960	0.31	0.56	0.42	0.37	0.20	0.28	0.24	0.23	0.23	0.26	0.48	0.39	0.20
1961	0.25	0.52	0.52	0.37	0.32	0.24	0.17	0.16	0.29	0.22	0.38	0.39	0.16
1962	0.52	0.55	0.42	0.30	0.14	0.13	0.21	0.25	0.19	0.31	0.34	0.33	0.13
1963	0.50	0.48	0.48	0.45	0.36	0.26	0.25	0.21	0.24	0.18	0.28	0.42	0.18
1964	0.36	0.34	0.55	0.31	0.21	0.28	0.18	0.26	0.22	0.26	0.38	0.44	0.18

Table 209. Percentage Frequency Distribution of 2-hour, 11-hour and 23-hour Range of Station Pressure in Inches of Mercury Beginning with Indicated Hour. January 1950-December 1964.

HOUR	PRESSURE IN INCHES OF MERCURY													MISSING	TOTAL	
	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	.15	.20			.25
1	0.993	1.358	0.789	0.410	0.242	0.132	0.148	0.053	0.024	0.003	0.000	0.000	0.000	0.000	0.015	4.167
2	0.973	1.318	0.822	0.384	0.281	0.147	0.148	0.049	0.028	0.003	0.000	0.000	0.000	0.000	0.015	4.167
3	0.875	1.246	0.850	0.504	0.310	0.131	0.147	0.059	0.026	0.002	0.001	0.000	0.000	0.000	0.016	4.167
4	0.727	1.115	0.969	0.525	0.373	0.167	0.179	0.060	0.035	0.001	0.001	0.000	0.000	0.000	0.017	4.167
5	0.598	1.107	0.931	0.584	0.411	0.211	0.192	0.073	0.040	0.002	0.001	0.000	0.000	0.000	0.017	4.167
6	0.690	1.088	0.968	0.558	0.377	0.164	0.192	0.071	0.040	0.002	0.000	0.000	0.000	0.000	0.017	4.167
7	0.800	1.268	0.865	0.509	0.281	0.152	0.167	0.065	0.042	0.000	0.000	0.000	0.000	0.000	0.017	4.167
8	0.881	1.256	0.845	0.448	0.287	0.149	0.187	0.056	0.040	0.001	0.001	0.000	0.000	0.000	0.016	4.167
9	0.780	1.312	0.884	0.495	0.273	0.158	0.148	0.065	0.034	0.003	0.000	0.000	0.000	0.000	0.014	4.167
10	0.598	1.136	0.873	0.532	0.396	0.206	0.252	0.094	0.059	0.006	0.000	0.000	0.000	0.000	0.014	4.167
11	0.446	0.856	0.811	0.623	0.466	0.296	0.392	0.160	0.092	0.011	0.001	0.000	0.000	0.000	0.014	4.167
12	0.430	0.867	0.887	0.597	0.535	0.316	0.345	0.105	0.065	0.004	0.001	0.000	0.000	0.000	0.014	4.167
13	0.520	1.026	0.938	0.664	0.443	0.240	0.217	0.068	0.034	0.002	0.000	0.000	0.000	0.000	0.014	4.167
14	0.624	1.113	1.037	0.542	0.381	0.173	0.196	0.052	0.030	0.004	0.000	0.000	0.000	0.000	0.014	4.167
15	0.755	1.258	0.921	0.516	0.321	0.141	0.146	0.060	0.033	0.002	0.000	0.000	0.000	0.000	0.014	4.167
16	0.951	1.164	0.885	0.458	0.306	0.143	0.164	0.049	0.031	0.001	0.001	0.001	0.001	0.000	0.014	4.167
17	0.915	1.269	0.792	0.451	0.305	0.179	0.152	0.056	0.029	0.005	0.001	0.000	0.000	0.000	0.014	4.167
18	0.877	1.202	0.872	0.475	0.354	0.148	0.154	0.049	0.022	0.003	0.000	0.000	0.000	0.000	0.014	4.167
19	0.827	1.216	0.951	0.489	0.327	0.150	0.125	0.043	0.023	0.002	0.000	0.000	0.000	0.000	0.014	4.167
20	0.949	1.297	0.890	0.426	0.272	0.132	0.117	0.042	0.024	0.003	0.000	0.000	0.000	0.000	0.014	4.167
21	1.107	1.399	0.744	0.373	0.242	0.106	0.117	0.041	0.019	0.004	0.000	0.000	0.000	0.000	0.014	4.167
22	1.142	1.306	0.796	0.364	0.238	0.118	0.113	0.049	0.023	0.002	0.000	0.000	0.000	0.000	0.014	4.167
23	1.008	1.366	0.767	0.409	0.256	0.135	0.135	0.038	0.035	0.002	0.000	0.000	0.000	0.000	0.015	4.166
24	0.981	1.321	0.827	0.385	0.280	0.140	0.133	0.049	0.034	0.002	0.000	0.000	0.000	0.000	0.015	4.166
TOTAL	19.447	28.862	20.913	11.721	7.955	4.032	4.266	1.506	0.863	0.069	0.006	0.001	0.000	0.000	0.359	100.00

2 HOUR TIME INTERVALS
NUMBER OF OBSERVATIONS = 131494

HOUR	PRESSURE IN INCHES OF MERCURY													MISSING	TOTAL
	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	.15	.20		
1	0.002	0.040	0.217	0.342	0.385	0.387	0.685	0.523	0.757	0.375	0.197	0.111	0.130	0.017	4.167
2	0.002	0.020	0.123	0.247	0.359	0.399	0.737	0.559	0.840	0.407	0.198	0.118	0.142	0.017	4.167
3	0.002	0.014	0.053	0.168	0.332	0.369	0.809	0.697	0.893	0.406	0.204	0.110	0.144	0.017	4.167
4	0.002	0.014	0.075	0.162	0.277	0.360	0.773	0.669	0.933	0.444	0.226	0.116	0.144	0.017	4.167
5	0.002	0.016	0.072	0.158	0.301	0.367	0.733	0.665	0.921	0.424	0.228	0.119	0.142	0.017	4.167
6	0.001	0.012	0.089	0.185	0.332	0.374	0.688	0.602	0.903	0.465	0.233	0.122	0.144	0.017	4.167
7	0.002	0.021	0.122	0.230	0.340	0.359	0.646	0.574	0.887	0.468	0.231	0.133	0.135	0.017	4.167
8	0.001	0.027	0.144	0.240	0.347	0.338	0.618	0.557	0.894	0.463	0.243	0.140	0.138	0.017	4.167
9	0.001	0.024	0.148	0.253	0.331	0.345	0.624	0.560	0.893	0.469	0.250	0.125	0.129	0.015	4.167
10	0.001	0.024	0.135	0.231	0.316	0.373	0.644	0.582	0.900	0.443	0.249	0.132	0.122	0.016	4.167
11	0.002	0.028	0.118	0.240	0.359	0.380	0.697	0.585	0.841	0.431	0.228	0.123	0.119	0.015	4.167
12	0.002	0.030	0.141	0.321	0.393	0.411	0.724	0.545	0.744	0.406	0.210	0.113	0.112	0.015	4.167
13	0.004	0.060	0.243	0.404	0.447	0.394	0.680	0.461	0.690	0.379	0.186	0.100	0.103	0.015	4.167
14	0.008	0.091	0.326	0.413	0.450	0.368	0.628	0.431	0.673	0.391	0.157	0.108	0.106	0.015	4.166
15	0.020	0.141	0.354	0.453	0.405	0.366	0.590	0.418	0.678	0.349	0.167	0.109	0.102	0.015	4.166
16	0.024	0.158	0.373	0.431	0.400	0.354	0.575	0.444	0.664	0.349	0.175	0.096	0.106	0.015	4.166
17	0.024	0.165	0.387	0.428	0.418	0.314	0.618	0.398	0.677	0.348	0.173	0.093	0.108	0.015	4.166
18	0.021	0.161	0.383	0.437	0.410	0.332	0.568	0.424	0.681	0.353	0.176	0.088	0.116	0.016	4.166
19	0.011	0.173	0.360	0.435	0.412	0.334	0.564	0.427	0.710	0.341	0.184	0.088	0.112	0.016	4.166
20	0.008	0.150	0.357	0.411	0.411	0.309	0.592	0.442	0.694	0.370	0.193	0.090	0.122	0.016	4.166
21	0.011	0.132	0.367	0.391	0.418	0.310	0.596	0.434	0.715	0.364	0.199	0.097	0.116	0.017	4.166
22	0.009	0.117	0.356	0.365	0.393	0.331	0.621	0.444	0.706	0.368	0.208	0.105	0.125	0.017	4.166
23	0.005	0.106	0.345	0.362	0.382	0.333	0.638	0.434	0.734	0.361	0.221	0.104	0.125	0.017	4.166
24	0.006	0.068	0.297	0.373	0.382	0.376	0.637	0.465	0.731	0.360	0.225	0.109	0.136	0.017	4.166
TOTAL	0.167	1.790	5.625	7.681	8.999	8.583	15.688	12.249	18.759	9.492	4.954	2.648	2.974	0.390	100.00

11 HOUR TIME INTERVALS
NUMBER OF OBSERVATIONS = 131485

HOUR	PRESSURE IN INCHES OF MERCURY													MISSING	TOTAL
	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	.15	.20		
1	0.000	0.001	0.005	0.017	0.065	0.130	0.415	0.506	0.961	0.462	0.288	0.649	0.019	4.167	
2	0.000	0.000	0.007	0.013	0.061	0.138	0.429	0.489	0.955	0.440	0.305	0.666	0.021	4.167	
3	0.000	0.000	0.006	0.011	0.070	0.141	0.421	0.485	0.957	0.438	0.305	0.674	0.021	4.167	
4	0.000	0.000	0.005	0.016	0.072	0.154	0.410	0.491	0.940	0.441	0.307	0.689	0.021	4.167	
5	0.000	0.000	0.005	0.023	0.092	0.165	0.418	0.458	0.946	0.432	0.307	0.691	0.021	4.167	
6	0.000	0.000	0.006	0.034	0.103	0.170	0.421	0.439	0.936	0.409	0.300	0.688	0.021	4.167	
7	0.000	0.000	0.007	0.046	0.110	0.173	0.402	0.440	0.907	0.426	0.315	0.322	0.701	0.021	4.167
8	0.000	0.000	0.013	0.040	0.100	0.165	0.391	0.443	0.918	0.408	0.345	0.710	0.021	4.167	
9	0.000	0.000	0.012	0.042	0.097	0.148	0.396	0.447	0.907	0.433	0.407	0.354	0.707	0.020	4.167
10	0.000	0.001	0.013	0.046	0.088	0.143	0.388	0.457	0.900	0.428	0.421	0.342	0.720	0.020	4.167
11	0.000	0.001	0.012	0.054	0.091	0.137	0.412	0.451	0.902	0.608	0.425	0.329	0.725	0.019	4.167
12	0.000	0.000	0.010	0.059	0.112	0.157	0.452	0.428	0.888	0.589	0.434	0.320	0.700	0.019	4.167
13	0.000	0.001	0.012	0.052	0.141	0.166	0.451	0.417	0.869	0.619	0.421	0.316	0.682	0.019	4.167
14	0.000	0.002	0.011	0.046	0.117	0.153	0.434	0.414	0.899	0.631	0.443	0.307	0.691	0.018	4.167
15	0.000	0.001	0.008	0.049	0.087	0.133	0.421	0.437	0.949	0.650	0.444	0.303	0.677	0.019	4.167
16	0.000	0.001	0.007	0.033	0.075	0.117	0.389	0.459	0.957	0.672	0.478	0.286	0.671	0.019	4.167
17	0.000	0.001	0.005	0.030	0.068	0.106	0.367	0.462	1.000	0.682	0.466	0.313	0.643	0.019	4.167
18	0.000	0.001	0.008	0.027	0.060	0.100	0.351	0.470	1.012	0.686	0.471	0.310	0.643	0.019	4.167
19	0.000	0.001	0.010	0.024	0.059	0.114	0.361	0.481	1.026	0.678	0.470	0.300	0.624	0.019	4.167
20	0.001	0.000	0.008	0.024	0.065	0.123	0.354	0.482	1.017	0.686	0.451	0.300			

Section 1.9

Soil Temperature

Soil temperatures were measured with Leeds and Northrup 100-ohm copper resistance thermometers (Thermohms) located 1, 10, 20, 50, 100, 305 (10 feet), and 884 cm (29 feet) below a pasture-type plant surface. This plant cover was mowed periodically during the growing season. Measurements began on November 5, 1952; however, only data since January 1, 1953 have been used in this report. On March 3, 1953, the sensor at 29 feet failed because of a break in the circuit below ground level and remained inoperative until July 17, 1953, when it was replaced approximately 18 feet northeast of the original site. The location of these sensors is indicated in Figure 2 of Appendix II. The soil temperatures are recorded sequentially by a stepping switch on a single-pen Leeds and Northrup Micromax Recorder. A soil temperature sounding, i.e., a sequence of soil temperature readings beginning at 1 cm and progressing to 29 feet, is made twice each hour. Each sounding takes 30 minutes to complete. Temperatures at 50 cm, 100 cm, 10 feet, and 29 feet are recorded once each cycle; the others are read several times. Only the values measured closest to the hour were used in this report. A reference signal is used to indicate drift, if any, in the recording system.

Originally, soil temperatures were read from the strip charts to the nearest tenth of a degree Celsius. Since September 1957, the automatic data processing system² has been used to convert the sensor output into temperature values, again to the nearest tenth degree Celsius. All soil temperatures in this report are expressed in degrees Fahrenheit.

Tables 210 through 213. Average Hourly Soil Temperature (°F).
January 1953–December 1964.

Each table entry is the average value for the indicated hour and month for the entire 12 years of record. The diurnal temperature cycle in the soil is the result primarily of the diurnal cycle of net radiation, modified by many other factors such as phase change of water (dew, frost and evaporation), insulating effect of a snow cover (when present), plant cover, advection, and rainfall. The maximum average 1-cm soil temperature usually occurs at 1300 or 1400 CST, the minimum at sunrise.

In the winter, when the soil is usually frozen and often covered with snow, the amplitude of the temperature cycle is very small at all levels. During the rest of the year, the amplitude of the cycle decreases with depth, and the time of extremes is retarded. At 50 cm in midsummer, the lowest temperatures occur at midday and the highest near midnight or early morning; that is, a nearly 180° phase shift has occurred in the temperature wave. The daily cycle is not perceptible at or below 100 cm.

Table 214. Annual Average Soil Temperature ($^{\circ}\text{F}$) at Each Depth. January 1953–December 1964.

The annual average temperatures show a sharp decrease from the 1- to the 10-cm level and remain almost unchanged below. The data also show a year-to-year temperature variability still exists even at 29 feet. A steady cooling of the upper soil layers persisted for 10 years, followed by two warmer years. This pattern is reflected at 10 and 29 feet.

Tables 215 and 216. Monthly Average Number of Hours per Year of Soil Temperature ($^{\circ}\text{F}$) Equal to or Greater than Indicated. January 1953–December 1964.

Table 217. Monthly Average Number of Hours per Year of Soil Temperature ($^{\circ}\text{F}$) Less than Indicated. January 1953–December 1964.

No rounding of temperature values was used in these tables. Certain values in these tables are phenologically significant, as soil temperature controls the germination of the seed, and to a lesser degree, plant growth. In the 12 years of record, no temperature equal to or below 32.3°F was observed at 100 cm or below, i.e., the soil was not frozen within this period at this level. No values of 45°F or less were observed at 29 feet.

Figure 50. Monthly Maximum, Average Maximum, Average, Average Minimum, Minimum and Average Daily Range of Soil Temperature ($^{\circ}\text{F}$). January 1953–December 1964.

The daily maximum and minimum values are the highest and lowest of the hourly observations for the day. The daily range is the difference between the daily maximum and minimum. This figure contains a graph for each depth. Plotted on each graph are six curves which are from top to bottom: the maximum of the hourly soil temperatures for each month, the monthly average of the daily maximum soil temperatures, the monthly average of hourly soil temperatures, the monthly average of the daily minimum soil temperatures, the minimum of the hourly soil temperature for each month, and the monthly average of the daily range of soil temperature.

Figures 51 and 52. Average Monthly Soil Temperature ($^{\circ}\text{F}$) at Each Depth for Each Year. January 1953–December 1964.

These curves show the variation with depth of phase and amplitude of soil temperature for each year. During the fall and winter months of some years, the average monthly values at the 1- and 10-cm levels are sufficiently close to make the curves indistinguishable.

The amplitude of the annual wave decreases with depth, and the time of extremes is retarded. At the 29-foot level the phase shift results in a reversal of seasonal air temperatures; that is, the highest temperatures occur in winter and the lowest in summer.

Figure 53. Annual Maximum, Minimum, Average, and Extreme Range of Soil Temperature ($^{\circ}\text{F}$) at Each Depth. January 1953–December 1964.

This figure contains a graph for each year. Plotted on each graph and appropriately labeled are four curves: (1) the annual maximum of the hourly soil temperatures, (2) the annual minimum of the hourly soil temperatures, (3) the annual average of the hourly soil temperatures, (4) the difference between the annual maximum and annual minimum soil temperature.

Table 210. Average Hourly Soil Temperature (°F).
January 1953-December 1964

1 CM DEPTH

HOUR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	31.0	31.4	35.0	45.8	57.3	67.1	71.5	70.8	64.4	54.2	42.4	33.5
2	31.0	31.3	34.9	45.5	56.8	66.6	71.0	70.3	64.0	53.9	42.2	33.4
3	30.9	31.2	34.8	45.2	56.4	66.1	70.5	69.8	63.5	53.6	42.0	33.3
4	30.9	31.2	34.7	45.0	56.0	65.7	70.1	69.5	63.1	53.3	41.8	33.3
5	30.8	31.1	34.5	44.7	55.7	65.4	69.7	69.1	62.7	53.0	41.6	33.3
6	30.8	31.0	34.5	44.5	55.8	65.6	69.8	69.0	62.5	52.7	41.5	33.2
7	30.7	31.0	34.4	44.8	56.4	66.3	70.6	69.6	62.8	52.7	41.3	33.2
8	30.7	31.0	34.7	45.7	57.6	67.7	72.0	70.8	63.8	53.3	41.5	33.1
9	30.8	31.2	35.2	47.0	59.3	69.7	74.0	72.7	65.6	54.6	42.0	33.2
10	31.0	31.4	35.9	48.7	61.3	72.0	76.4	75.1	67.8	56.2	42.8	33.4
11	31.2	31.7	36.8	50.2	63.4	74.4	78.7	77.4	70.1	58.0	43.7	33.7
12	31.3	31.9	37.6	51.7	65.1	76.4	80.6	79.3	72.0	59.5	44.6	34.0
13	31.5	32.2	38.3	52.7	66.3	77.6	81.8	80.6	73.2	60.4	45.1	34.2
14	31.6	32.3	38.6	53.1	66.6	78.0	82.2	81.0	73.6	60.6	45.3	34.3
15	31.7	32.3	38.6	53.0	66.4	77.6	81.9	80.7	73.1	60.2	45.2	34.3
16	31.6	32.2	38.3	52.4	65.6	76.7	81.0	79.8	72.2	59.4	44.8	34.2
17	31.6	32.1	37.8	51.5	64.5	75.5	79.8	78.5	70.9	58.4	44.2	34.0
18	31.5	32.0	37.2	50.5	63.3	74.1	78.4	77.1	69.4	57.4	43.7	33.9
19	31.4	31.9	36.7	49.5	62.1	72.7	76.9	75.6	68.0	56.6	43.3	33.8
20	31.3	31.8	36.3	48.7	61.0	71.3	75.5	74.4	67.0	56.0	43.0	33.7
21	31.2	31.8	36.0	48.0	60.1	70.3	74.4	73.4	66.2	55.5	42.8	33.6
22	31.2	31.6	35.8	47.5	59.3	69.4	73.5	72.6	65.6	55.0	42.8	33.6
23	31.1	31.6	35.6	47.0	58.7	68.6	72.7	71.9	65.0	54.6	42.5	33.5
24	31.0	31.5	35.4	46.6	58.1	68.0	72.1	71.3	64.4	54.3	42.1	33.4

10 CM DEPTH

HOUR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	30.7	31.3	35.0	46.1	57.4	67.2	71.7	71.1	65.0	54.7	42.7	33.5
2	30.7	31.2	34.9	45.8	57.0	66.7	71.1	70.7	64.6	54.4	42.5	33.5
3	30.6	31.2	34.8	45.5	56.6	66.2	70.7	70.2	64.2	54.1	42.4	33.4
4	30.6	31.1	34.7	45.2	56.2	65.8	70.3	69.9	63.8	53.9	42.4	33.4
5	30.6	31.1	34.6	45.0	55.9	65.4	69.9	69.5	63.5	53.6	42.0	33.3
6	30.5	31.0	34.5	44.8	55.7	65.2	69.7	69.2	63.2	53.4	41.9	33.3
7	30.5	31.1	34.4	44.7	55.8	65.4	69.8	69.3	63.1	53.2	41.8	33.3
8	30.4	31.0	34.4	44.8	56.2	66.0	70.4	69.8	63.4	53.3	41.7	33.2
9	30.4	31.0	34.5	45.3	57.0	67.0	71.4	70.6	64.1	53.7	41.8	33.2
10	30.5	31.1	34.8	46.1	58.1	68.4	72.8	71.9	65.3	54.5	42.2	33.3
11	30.6	31.2	35.1	47.1	59.5	70.1	74.4	73.4	66.7	55.6	42.7	33.4
12	30.7	31.3	35.6	48.1	60.8	71.7	75.9	75.0	68.2	56.8	43.3	33.5
13	30.8	31.4	36.1	49.0	62.0	73.1	77.2	76.3	69.4	57.7	43.8	33.7
14	30.9	31.5	36.4	49.8	62.8	74.0	78.1	77.1	70.2	58.3	44.2	33.8
15	31.0	31.6	36.7	50.1	63.2	74.4	78.5	77.4	70.4	58.6	44.4	33.9
16	31.0	31.6	36.7	50.2	63.1	74.3	78.4	77.3	70.3	58.4	44.3	33.9
17	31.0	31.6	36.7	50.0	62.7	73.7	77.9	76.8	69.7	58.0	44.0	33.8
18	31.0	31.6	36.5	49.6	62.1	72.9	77.1	76.1	69.0	57.4	43.7	33.8
19	30.9	31.6	36.2	49.0	61.4	72.0	76.2	75.2	68.1	56.8	43.4	33.7
20	30.9	31.5	36.0	48.5	60.6	71.0	75.2	74.3	67.3	56.3	43.2	33.7
21	30.8	31.5	35.8	48.0	59.9	70.1	74.3	73.4	66.6	55.8	43.0	33.6
22	30.8	31.4	35.6	47.6	59.3	69.3	73.5	72.8	66.0	55.4	42.8	33.5
23	30.8	31.4	35.5	47.2	58.7	68.6	72.8	72.1	65.5	55.0	42.6	33.5
24	30.7	31.4	35.3	46.8	58.2	68.0	72.2	71.6	65.1	54.7	42.4	33.5

Table 211. Average Hourly Soil Temperature (°F).
January 1953–December 1964

20 CM DEPTH

HOUR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	32.0	31.9	35.5	46.5	57.8	67.7	72.5	72.3	66.9	56.8	44.9	35.2
2	32.0	31.9	35.5	46.3	57.6	67.4	72.2	72.0	66.6	56.6	44.8	35.2
3	32.0	31.9	35.4	46.2	57.4	67.1	71.9	71.7	66.4	56.4	44.7	35.2
4	32.0	31.9	35.3	46.0	57.2	66.9	71.6	71.5	66.1	56.3	44.6	35.1
5	32.0	31.9	35.3	45.8	56.9	66.6	71.3	71.2	65.9	56.1	44.5	35.1
6	32.0	31.9	35.2	45.7	56.7	66.3	71.1	71.0	65.7	55.9	44.4	35.1
7	32.0	31.9	35.2	45.5	56.5	66.1	70.9	70.8	65.5	55.8	44.3	35.1
8	31.9	31.9	35.2	45.4	56.4	65.9	70.7	70.6	65.3	55.6	44.2	35.1
9	31.9	31.9	35.1	45.3	56.3	65.9	70.7	70.6	65.2	55.5	44.1	35.0
10	31.9	31.9	35.1	45.3	56.4	66.0	70.8	70.7	65.2	55.5	44.1	35.0
11	31.9	31.9	35.1	45.4	56.6	66.3	71.0	70.8	65.4	55.6	44.1	35.0
12	31.9	31.9	35.2	45.6	56.9	66.6	71.3	71.2	65.7	55.8	44.2	35.0
13	31.9	31.9	35.3	45.9	57.3	67.2	71.9	71.6	66.1	56.1	44.3	35.0
14	31.9	31.9	35.4	46.2	57.8	67.7	72.4	72.1	66.5	56.4	44.4	35.1
15	31.9	31.9	35.6	46.6	58.2	68.2	72.9	72.6	67.0	56.8	44.6	35.1
16	32.0	32.0	35.7	46.9	58.6	68.7	73.3	73.0	67.3	57.0	44.8	35.1
17	32.0	32.0	35.9	47.2	58.9	69.0	73.6	73.3	67.6	57.2	44.9	35.1
18	32.0	32.0	35.9	47.4	59.1	69.2	73.8	73.5	67.7	57.3	44.9	35.1
19	32.0	32.0	36.0	47.4	59.1	69.3	73.9	73.5	67.7	57.3	44.9	35.1
20	32.0	32.0	36.0	47.5	59.1	69.2	73.8	73.5	67.6	57.2	44.9	35.1
21	32.0	32.1	36.0	47.4	59.0	69.1	73.6	73.3	67.4	57.1	44.8	35.1
22	32.0	32.0	35.9	47.3	58.9	68.8	73.4	73.0	67.2	57.0	44.7	35.1
23	32.0	32.0	35.9	47.2	58.7	68.6	73.1	72.8	67.0	56.8	44.6	35.1
24	32.0	32.0	35.8	47.0	58.4	68.3	72.8	72.5	66.7	56.7	44.5	35.1

50 CM DEPTH

HOUR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	35.3	34.2	36.2	44.4	54.5	63.4	68.7	69.8	66.4	58.3	48.4	39.2
2	35.3	34.2	36.2	44.5	54.5	63.4	68.7	69.8	66.4	58.3	48.4	39.2
3	35.3	34.2	36.2	44.5	54.5	63.5	68.8	69.8	66.4	58.3	48.4	39.1
4	35.3	34.2	36.2	44.5	54.6	63.5	68.8	69.8	66.4	58.3	48.3	39.1
5	35.3	34.2	36.2	44.6	54.6	63.5	68.8	69.8	66.4	58.3	48.3	39.1
6	35.3	34.2	36.2	44.6	54.6	63.5	68.8	69.8	66.4	58.3	48.3	39.1
7	35.3	34.2	36.2	44.6	54.6	63.5	68.8	69.8	66.3	58.3	48.3	39.1
8	35.3	34.2	36.2	44.6	54.6	63.5	68.7	69.8	66.3	58.2	48.3	39.1
9	35.3	34.2	36.2	44.6	54.6	63.5	68.7	69.8	66.3	58.2	48.2	39.1
10	35.3	34.2	36.2	44.6	54.6	63.5	68.7	69.7	66.3	58.2	48.2	39.1
11	35.3	34.2	36.3	44.6	54.5	63.5	68.7	69.7	66.2	58.2	48.2	39.1
12	35.3	34.2	36.3	44.6	54.5	63.4	68.6	69.7	66.2	58.1	48.2	39.1
13	35.3	34.2	36.3	44.6	54.5	63.4	68.6	69.6	66.1	58.1	48.2	39.1
14	35.3	34.2	36.3	44.6	54.5	63.4	68.6	69.6	66.1	58.1	48.1	39.1
15	35.2	34.2	36.3	44.5	54.5	63.3	68.5	69.6	66.1	58.0	48.1	39.1
16	35.2	34.2	36.3	44.5	54.4	63.3	68.5	69.5	66.0	58.0	48.1	39.0
17	35.2	34.2	36.3	44.5	54.4	63.3	68.5	69.5	66.0	58.0	48.1	39.0
18	35.2	34.2	36.3	44.6	54.5	63.4	68.5	69.6	66.0	58.0	48.1	39.0
19	35.2	34.2	36.3	44.6	54.5	63.4	68.5	69.6	66.0	58.0	48.1	39.0
20	35.2	34.2	36.3	44.6	54.5	63.4	68.6	69.6	66.0	58.0	48.0	39.0
21	35.2	34.2	36.3	44.6	54.6	63.5	68.6	69.6	66.0	58.0	48.0	39.0
22	35.2	34.2	36.3	44.7	54.6	63.5	68.6	69.7	66.0	58.0	48.0	39.0
23	35.2	34.2	36.3	44.7	54.7	63.6	68.7	69.7	66.1	58.0	48.0	39.0
24	35.2	34.2	36.3	44.8	54.7	63.6	68.7	69.7	66.1	58.0	48.0	39.0