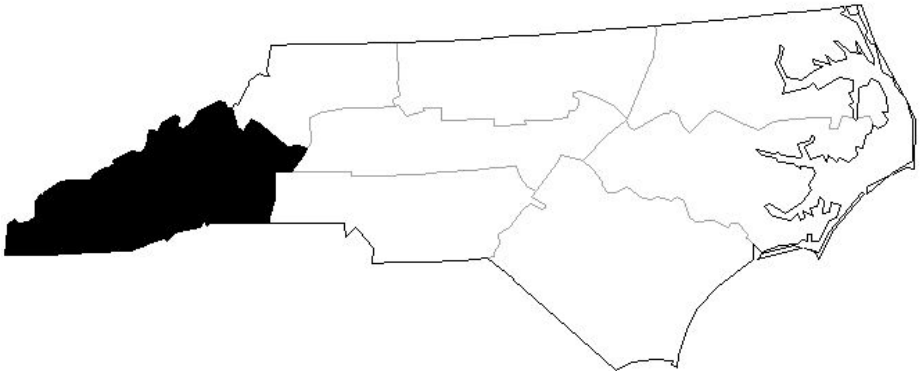
CLIMATOGRAPHY OF THE UNITED STATES NO. 84

Daily Station Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1971 - 2000



Division 01 Southern Mountains

31
NORTH CAROLINA

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
ASHEVILLE, NC

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

United States Climate Normals 1971-2000

Station Name: ANDREWS NORTH CAROLINA Station Number: 310184

Latitude: 35B 12* 05 (Longitude: -083B 50* 19 (Elevation (feet): 1749

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	30	43	22	0	0.19
2	56	30	43	22	0	0.19
3	55	30	42	23	0	0.19
4	55	30	42	23	0	0.19
5	55	30	42	23	0	0.19
6	55	29	42	23	0	0.19
7	53	29	41	24	0	0.19
8	53	29	41	24	0	0.18
9	53	29	41	24	0	0.19
10	53	29	41	24	0	0.19
11	53	28	41	24	0	0.19
12	52	28	40	25	0	0.19
13	52	28	40	25	0	0.19
14	52	28	40	25	0	0.19
15	52	28	40	25	0	0.19
16	51	28	40	25	0	0.19
17	51	27	39	26	0	0.19
18	51	27	39	26	0	0.19
19	51	27	39	26	0	0.19
20	51	27	39	26	0	0.19
21	51	27	39	26	0	0.19
22	50	27	39	26	0	0.20
23	50	26	38	27	0	0.20
24	50	26	38	27	0	0.20
25	50	26	38	27	0	0.20
26	50	26	38	27	0	0.20
27	50	26	38	27	0	0.20
28	49	26	38	27	0	0.21
29	49	26	38	27	0	0.21
30	48	26	37	28	0	0.21
31	48	26	37	28	0	0.21
MTH	51.8	27.7	39.8	782	0	6.02
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	26	37	28	0	0.22
2	48	26	37	28	0	0.22
3	48	26	37	28	0	0.22
4	48	26	37	28	0	0.22
5	48	26	37	28	0	0.22
6	48	26	37	28	0	0.23
7	48	26	37	28	0	0.23
8	48	26	37	28	0	0.23
9	48	25	37	28	0	0.23
10	48	25	37	28	0	0.23
11	48	25	37	28	0	0.23
12	48	25	37	28	0	0.23
13	48	25	37	28	0	0.23
14	48	25	37	28	0	0.23
15	48	25	37	28	0	0.24
16	48	25	36	29	0	0.24
17	49	25	37	28	0	0.24
18	49	25	37	28	0	0.24
19	49	25	37	28	0	0.24
20	49	25	37	28	0	0.24
21	49	25	37	28	0	0.24
22	49	25	37	28	0	0.24
23	49	25	37	28	0	0.24
24	49	25	37	28	0	0.23
25	49	25	37	28	0	0.23
26	49	25	37	28	0	0.23
27	49	25	37	28	0	0.23
28	49	25	37	28	0	0.23
29	49	25	37	28	0	0.23
30	50	25	37	28	0	0.23
31	50	25	37	28	0	0.23
MTH	48.6	25.3	37.0	869	0	7.17
	51.0	26.7	38.9	2351	0	19.28

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	26	38	27	0	0.23
2	50	26	38	27	0	0.22
3	50	26	38	27	0	0.22
4	50	26	38	27	0	0.22
5	50	26	38	27	0	0.22
6	51	26	38	27	0	0.22
7	51	26	38	27	0	0.22
8	51	26	39	26	0	0.22
9	51	26	39	26	0	0.22
10	52	26	39	26	0	0.22
11	52	26	39	26	0	0.21
12	52	26	39	26	0	0.21
13	52	26	39	26	0	0.21
14	52	27	40	25	0	0.21
15	53	27	40	25	0	0.21
16	53	27	40	25	0	0.21
17	53	27	40	25	0	0.21
18	53	28	41	24	0	0.21
19	54	28	41	24	0	0.22
20	54	28	41	24	0	0.22
21	54	28	41	24	0	0.22
22	54	28	41	24	0	0.22
23	55	29	42	23	0	0.22
24	55	29	42	23	0	0.22
25	55	29	42	23	0	0.22
26	56	30	43	22	0	0.22
27	56	30	43	22	0	0.22
28	56	30	43	22	0	0.22
MTH	52.7	27.3	40.0	700	0	6.09

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	31	43	22	0	0.23
2	57	31	44	21	0	0.23
3	57	31	44	21	0	0.23
4	57	32	44	21	0	0.23
5	58	32	45	20	0	0.23
6	58	32	45	20	0	0.23
7	58	32	45	20	0	0.23
8	59	32	45	20	0	0.23
9	59	33	46	19	0	0.23
10	59	33	46	19	0	0.23
11	59	33	46	19	0	0.23
12	59	33	46	19	0	0.23
13	60	34	47	18	0	0.23
14	60	34	47	18	0	0.23
15	60	34	47	18	0	0.23
16	61	34	48	17	0	0.23
17	61	35	48	17	0	0.23
18	61	35	48	17	0	0.23
19	61	35	48	17	0	0.23
20	61	35	48	17	0	0.23
21	62	35	49	16	0	0.23
22	62	36	49	16	0	0.22
23	62	36	49	16	0	0.22
24	62	36	49	16	0	0.22
25	63	36	50	15	0	0.22
26	63	36	50	15	0	0.22
27	64	36	50	15	0	0.21
28	64	36	50	15	0	0.21
29	64	37	51	14	0	0.21
30	65	37	51	14	0	0.21
31	65	37	51	14	0	0.20
MTH	60.6	34.2	47.4	546	0	6.97
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	38	51	14	0	0.20
2	65	38	51	14	0	0.20
3	66	38	52	13	0	0.19
4	66	38	52	13	0	0.19
5	67	38	52	13	0	0.19
6	67	38	52	13	0	0.19
7	67	38	52	13	0	0.18
8	67	38	53	12	0	0.18
9	67	38	53	12	0	0.18
10	67	39	53	12	0	0.18
11	67	39	53	12	0	0.18
12	68	39	54	11	0	0.17
13	68	39	54	11	0	0.17
14	69	39	54	11	0	0.17
15	69	39	54	11	0	0.17
16	69	39	54	11	0	0.17
17	69	40	55	10	0	0.17
18	70	40	55	10	0	0.17
19	70	40	55	10	0	0.17
20	70	41	56	9	0	0.16
21	70	41	56	9	0	0.16
22	70	42	56	9	0	0.16
23	70	42	56	9	0	0.16
24	71	42	57	8	0	0.16
25	71	42	57	8	0	0.16
26	71	43	57	8	0	0.16
27	71	43	57	8	0	0.16
28	72	43	58	8	1	0.16
29	72	44	58	8	1	0.16
30	72	44	58	8	1	0.16
MTH	68.8	40.1	54.5	318	3	5.18
	68.4	41.2	54.9	996	64	17.52

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	45	59	7	1	0.16
2	73	46	59	7	1	0.16
3	73	46	59	7	1	0.16
4	73	46	59	7	1	0.17
5	74	46	60	6	1	0.17
6	74	46	60	6	1	0.17
7	74	46	60	6	1	0.17
8	74	47	61	5	1	0.17
9	74	47	61	5	1	0.17
10	75	47	61	5	1	0.17
11	75	48	62	5	2	0.17
12	75	48	62	5	2	0.17
13	75	49	62	5	2	0.17
14	75	49	62	5	2	0.17
15	75	49	62	5	2	0.17
16	76	49	63	4	2	0.17
17	76	50	63	4	2	0.17
18	76	50	63	4	2	0.17
19	77	50	64	3	2	0.18
20	77	51	64	3	2	0.18
21	77	51	64	3	2	0.18
22	77	51	64	3	2	0.18
23	78	52	65	3	3	0.18
24	78	52	65	3	3	0.18
25	78	52	65	3	3	0.18
26	78	52	65	3	3	0.18
27	79	53	66	2	3	0.18
28	79	53	66	2	3	0.18
29	79	53	66	2	3	0.18
30	79	53	66	2	3	0.18
31	79	53	66	2	3	0.18
MTH	76.0	49.4	62.7	132	61	5.37

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Station Name: ANDREWS NORTH CAROLINA Station Number: 310184

Latitude: 35 B 12 * 05 (Longitude: -083 B 50* 19 (Elevation (feet): 1749

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	55	67	2	4	0.18
2	80	55	67	2	4	0.19
3	81	55	68	1	4	0.19
4	81	55	68	1	4	0.19
5	81	55	68	1	4	0.19
6	81	55	68	1	4	0.19
7	81	56	68	1	4	0.19
8	81	56	68	1	4	0.19
9	82	56	69	1	5	0.19
10	82	56	69	1	5	0.19
11	82	56	69	1	5	0.19
12	82	56	69	1	5	0.19
13	83	57	70	0	5	0.19
14	83	57	70	0	5	0.19
15	83	57	70	0	5	0.19
16	83	57	70	0	5	0.19
17	83	58	71	0	6	0.19
18	83	58	71	0	6	0.19
19	83	58	71	0	6	0.18
20	83	59	71	0	6	0.18
21	83	59	71	0	6	0.18
22	83	59	71	0	6	0.18
23	83	59	71	0	6	0.18
24	83	60	72	0	7	0.18
25	84	60	72	0	7	0.18
26	84	60	72	0	7	0.18
27	84	60	72	0	7	0.18
28	84	60	72	0	7	0.17
29	84	60	72	0	7	0.17
30	84	60	72	0	7	0.17
MTH	82.5	57.5	70.0	14	163	5.54
SUMMER SEASON:						

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	61	73	0	8	0.17
2	85	61	73	0	8	0.17
3	85	61	73	0	8	0.17
4	85	61	73	0	8	0.16
5	85	61	73	0	8	0.16
6	85	61	73	0	8	0.16
7	85	61	73	0	8	0.16
8	85	62	74	0	9	0.16
9	85	62	74	0	9	0.16
10	86	62	74	0	9	0.16
11	86	62	74	0	9	0.16
12	86	62	74	0	9	0.16
13	86	62	74	0	9	0.16
14	86	62	74	0	9	0.16
15	86	62	74	0	9	0.16
16	86	62	74	0	9	0.16
17	86	62	74	0	9	0.16
18	86	62	74	0	9	0.16
19	86	62	74	0	9	0.16
20	86	62	74	0	9	0.16
21	86	62	74	0	9	0.16
22	86	62	74	0	9	0.16
23	86	62	74	0	9	0.16
24	86	62	74	0	9	0.16
25	86	62	74	0	9	0.16
26	86	62	74	0	9	0.16
27	86	62	74	0	9	0.16
28	86	62	74	0	9	0.16
29	86	62	74	0	9	0.16
30	86	62	74	0	9	0.16
31	86	62	74	0	9	0.17
MTH	85.7	61.8	73.8	0	272	5.00
	84.4	59.9	72.2	14	676	16.04

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	62	74	0	9	0.17
2	86	62	74	0	9	0.17
3	86	62	74	0	9	0.17
4	86	62	74	0	9	0.17
5	86	62	74	0	9	0.17
6	86	62	74	0	9	0.17
7	86	61	74	0	9	0.18
8	86	61	74	0	9	0.18
9	86	61	74	0	9	0.18
10	86	61	73	0	8	0.18
11	86	61	73	0	8	0.18
12	86	61	73	0	8	0.18
13	86	61	73	0	8	0.18
14	86	61	73	0	8	0.18
15	86	61	73	0	8	0.18
16	85	61	73	0	8	0.18
17	85	61	73	0	8	0.18
18	85	60	73	0	8	0.18
19	85	60	73	0	8	0.18
20	84	60	72	0	7	0.18
21	84	60	72	0	7	0.18
22	84	60	72	0	7	0.18
23	84	60	72	0	7	0.18
24	84	60	72	0	7	0.18
25	84	59	72	0	7	0.18
26	84	59	72	0	7	0.18
27	84	59	72	0	7	0.18
28	83	59	71	0	6	0.18
29	83	59	71	0	6	0.18
30	83	59	71	0	6	0.17
31	83	59	71	0	6	0.17
MTH	85.0	60.5	72.8	0	241	5.50

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	59	71	0	6	0.17
2	83	59	71	0	6	0.17
3	82	59	70	0	5	0.17
4	82	59	70	0	5	0.17
5	82	59	70	0	5	0.17
6	82	57	70	0	5	0.17
7	82	57	70	0	5	0.16
8	82	57	70	0	5	0.16
9	82	56	69	0	4	0.16
10	82	56	69	0	4	0.16
11	82	56	69	0	4	0.16
12	81	55	68	1	4	0.16
13	81	55	68	1	4	0.15
14	81	55	68	1	4	0.15
15	80	54	67	1	3	0.15
16	80	54	67	1	3	0.15
17	80	54	67	1	3	0.15
18	80	54	67	1	3	0.15
19	79	53	66	2	3	0.14
20	79	53	66	2	3	0.14
21	79	53	66	2	3	0.14
22	78	53	66	2	3	0.14
23	78	52	65	2	2	0.13
24	78	51	64	3	2	0.13
25	78	50	64	3	2	0.13
26	77	50	64	3	2	0.13
27	77	49	63	4	2	0.13
28	77	49	63	4	2	0.12
29	76	49	63	4	2	0.12
30	76	48	62	5	2	0.12
MTH	80.0	54.2	67.1	43	106	4.45
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	48	62	5	2	0.12
2	75	48	61	5	1	0.11
3	75	48	61	5	1	0.11
4	74	47	60	6	1	0.11
5	74	47	60	6	1	0.11
6	74	46	60	6	1	0.11
7	74	44	59	7	1	0.11
8	74	44	59	7	1	0.11
9	73	43	58	8	1	0.10
10	73	43	58	8	1	0.10
11	72	43	58	8	1	0.10
12	72	42	57	9	1	0.10
13	72	42	57	9	1	0.10
14	71	42	57	9	1	0.10
15	71	41	56	9	0	0.10
16	71	41	56	9	0	0.11
17	70	40	55	10	0	0.11
18	70	40	55	10	0	0.11
19	70	40	55	10	0	0.11
20	69	40	55	10	0	0.11
21	69	39	54	11	0	0.11
22	69	39	54	11	0	0.11
23	68	39	54	11	0	0.12
24	68	38	53	12	0	0.12
25	68	38	53	12	0	0.12
26	67	38	53	12	0	0.12
27	67	37	52	13	0	0.13
28	67	37	52	13	0	0.13
29	66	37	52	13	0	0.13
30	66	37	52	13	0	0.14
31	65	37	51	14	0	0.14
MTH	70.7	41.5	56.1	291	15	3.51
	70.4	43.1	56.8	868	121	13.29
	68.6	42.7	55.7	4229	861	66.13

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	37	51	14	0	0.14
2	65	37	51	14	0	0.15
3	65	37	51	14	0	0.15
4	64	37	50	15	0	0.16
5	64	37	50	15	0	0.16
6	64	36	50	15	0	0.16
7	64	35	49	16	0	0.16
8	63	35	49	16	0	0.17
9	63	35	49	16	0	0.17
10	62	35	49	16	0	0.17
11	62	34	48	17	0	0.18
12	62	34	48	17	0	0.18
13	61	34	48	17	0	0.18
14	61	34	48	17	0	0.18
15	60	34	47	18	0	0.18
16	60	34	47	18	0	0.18
17	60	34	47	18	0	0.19
18	60	33	47	18	0	0.19
19	59	33	46	19	0	0.19
20	59	33	46	19	0	0.19
21	59	33	46	19	0	0.19
22	58	32	45	20	0	0.19
23	58	32	45	20	0	0.19
24	58	32	45	20	0	0.19
25	58	32	45	20	0	0.19
26	57	31	44	21	0	0.19
27	57	31	44	21	0	0.19
28	57	31	44	21	0	0.19
29	56	31	44	21	0	0.19
30	56	30	43	22	0	0.19
MTH	60.6	33.8	47.2	534	0	5.33

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Station Name: ANDREWS NORTH CAROLINA Station Number: 310184

Latitude: 35B 12* 05(Longitude: -083B 50* 19(Elevation (feet): 1749

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.11	1.05	1.27	1.23	1.10	0.69	0.94	0.84	0.28	0.12	1.88	0.91	38.16
0.010	1.38	1.28	1.54	1.44	1.31	0.88	1.13	1.04	0.39	0.18	2.10	1.12	40.37
0.050	2.34	2.11	2.50	2.15	2.05	1.60	1.82	1.78	0.88	0.49	2.80	1.93	46.84
0.100	3.02	2.69	3.15	2.63	2.55	2.13	2.29	2.31	1.28	0.78	3.23	2.50	50.57
0.200	4.02	3.52	4.10	3.29	3.27	2.92	2.96	3.07	1.93	1.29	3.82	3.35	55.35
0.300	4.87	4.23	4.90	3.83	3.86	3.61	3.53	3.73	2.53	1.77	4.28	4.07	58.98
0.400	5.70	4.91	5.66	4.35	4.43	4.28	4.07	4.36	3.14	2.28	4.71	4.76	62.20
0.500	6.54	5.60	6.44	4.87	5.00	4.98	4.62	5.02	3.79	2.84	5.14	5.48	65.32
0.600	7.47	6.36	7.28	5.42	5.62	5.75	5.22	5.73	4.53	3.49	5.58	6.27	68.55
0.700	8.56	7.24	8.27	6.07	6.35	6.66	5.92	6.57	5.42	4.29	6.09	7.19	72.11
0.800	9.96	8.37	9.53	6.88	7.27	7.84	6.81	7.65	6.60	5.36	6.73	8.38	76.43
0.900	12.13	10.13	11.48	8.13	8.68	9.68	8.19	9.32	8.49	7.11	7.67	10.23	82.70
0.950	14.14	11.74	13.26	9.26	9.97	11.40	9.45	10.87	10.29	8.80	8.52	11.94	88.13
0.990	18.44	15.17	17.06	11.63	12.70	15.11	12.12	14.19	14.25	12.59	10.25	15.60	98.93
0.995	20.19	16.57	18.60	12.59	13.81	16.63	13.21	15.54	15.89	14.18	10.94	17.10	103.08

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ASHEVILLE RGNL AP NORTH CAROLINA Station Number: 310300

Latitude: 35° 26* 09 (Longitude: -082° 32* 21 (Elevation (feet): 2140

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	31	42	23	0	0.12
2	53	31	42	23	0	0.12
3	53	31	42	23	0	0.12
4	53	31	42	23	0	0.11
5	52	31	41	24	0	0.11
6	51	31	41	24	0	0.11
7	51	30	40	25	0	0.11
8	51	30	40	25	0	0.11
9	50	30	40	25	0	0.11
10	50	30	40	25	0	0.11
11	50	30	40	25	0	0.11
12	50	29	39	26	0	0.11
13	49	29	39	26	0	0.11
14	49	29	39	26	0	0.11
15	49	29	39	26	0	0.10
16	49	29	39	26	0	0.10
17	49	28	39	26	0	0.10
18	49	28	39	26	0	0.10
19	48	28	38	27	0	0.10
20	48	28	38	27	0	0.10
21	48	28	38	27	0	0.11
22	48	28	38	27	0	0.11
23	48	27	38	27	0	0.11
24	48	27	38	27	0	0.11
25	47	27	37	28	0	0.11
26	47	27	37	28	0	0.11
27	47	27	37	28	0	0.11
28	47	27	37	28	0	0.11
29	47	27	37	28	0	0.11
30	47	27	37	28	0	0.11
31	46	27	37	28	0	0.12
MTH	49.3	28.8	39.0	805	0	3.39

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	26	36	29	0	0.12
2	46	26	36	29	0	0.12
3	46	26	36	29	0	0.12
4	46	26	36	29	0	0.12
5	46	26	36	29	0	0.12
6	46	26	36	29	0	0.12
7	46	26	36	29	0	0.13
8	46	26	36	29	0	0.13
9	46	26	36	29	0	0.13
10	46	26	36	29	0	0.13
11	45	26	35	30	0	0.13
12	45	26	35	30	0	0.13
13	45	26	35	30	0	0.13
14	45	26	35	30	0	0.13
15	45	25	35	30	0	0.13
16	45	25	35	30	0	0.13
17	46	25	36	29	0	0.13
18	46	25	36	29	0	0.13
19	46	25	36	29	0	0.13
20	46	26	36	29	0	0.13
21	46	26	36	29	0	0.14
22	46	26	36	29	0	0.14
23	46	26	36	29	0	0.14
24	46	26	36	29	0	0.14
25	46	26	36	29	0	0.14
26	46	26	36	29	0	0.14
27	46	26	36	29	0	0.14
28	47	26	36	29	0	0.14
29	47	26	36	29	0	0.14
30	47	26	36	29	0	0.13
31	47	26	36	29	0	0.13
MTH	45.9	25.8	35.8	905	0	4.06
WINTER SEASON:	48.4	27.6	37.9	2439	0	11.28

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	26	36	29	0	0.14
2	47	26	36	29	0	0.13
3	48	26	37	28	0	0.13
4	48	26	37	28	0	0.13
5	48	26	37	28	0	0.13
6	48	26	37	28	0	0.13
7	48	26	37	28	0	0.13
8	49	26	38	27	0	0.13
9	49	26	38	27	0	0.13
10	50	26	38	27	0	0.13
11	50	27	38	27	0	0.13
12	50	27	38	27	0	0.13
13	50	27	38	27	0	0.14
14	50	28	39	26	0	0.14
15	50	28	39	26	0	0.14
16	50	28	39	26	0	0.14
17	50	28	39	26	0	0.14
18	51	28	39	26	0	0.14
19	51	29	40	25	0	0.14
20	51	30	41	24	0	0.14
21	51	30	41	24	0	0.14
22	51	30	41	24	0	0.14
23	52	30	41	24	0	0.14
24	52	31	41	24	0	0.14
25	52	31	41	24	0	0.14
26	52	31	41	24	0	0.14
27	53	31	42	23	0	0.15
28	53	31	42	23	0	0.15
MTH	50.0	28.0	39.0	729	0	3.83

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	31	42	23	0	0.15
2	54	31	43	22	0	0.15
3	54	31	43	22	0	0.15
4	54	31	43	22	0	0.15
5	54	31	43	22	0	0.15
6	55	31	43	22	0	0.15
7	55	32	44	21	0	0.15
8	55	34	45	20	0	0.15
9	55	34	45	20	0	0.15
10	56	34	45	20	0	0.15
11	56	34	45	20	0	0.16
12	57	34	46	19	0	0.16
13	57	34	46	19	0	0.15
14	57	35	46	19	0	0.15
15	57	35	46	19	0	0.15
16	58	35	46	19	0	0.15
17	58	35	46	19	0	0.15
18	59	36	47	18	0	0.15
19	59	36	47	18	0	0.15
20	59	36	47	18	0	0.15
21	59	36	47	18	0	0.15
22	60	37	48	17	0	0.15
23	60	37	48	17	0	0.15
24	60	37	48	17	0	0.15
25	60	37	48	17	0	0.14
26	61	38	49	16	0	0.14
27	61	38	49	16	0	0.14
28	61	38	49	16	0	0.14
29	62	38	50	15	0	0.14
30	62	38	50	15	0	0.14
31	62	38	50	15	0	0.13
MTH	57.7	34.9	46.3	581	0	4.59

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	38	50	15	0	0.13
2	63	38	50	15	0	0.13
3	63	39	51	14	0	0.13
4	63	39	51	14	0	0.12
5	64	39	51	14	0	0.12
6	64	39	51	14	0	0.12
7	64	40	52	13	0	0.12
8	65	40	52	13	0	0.12
9	65	40	52	13	0	0.12
10	65	40	52	13	0	0.12
11	65	41	53	12	0	0.11
12	66	41	53	12	0	0.11
13	66	41	53	12	0	0.11
14	66	41	53	12	0	0.11
15	67	42	54	11	0	0.11
16	67	42	54	11	0	0.11
17	67	42	54	11	0	0.11
18	67	42	55	10	0	0.11
19	68	42	55	10	0	0.11
20	68	43	56	9	0	0.11
21	68	43	56	9	0	0.11
22	68	43	56	9	0	0.11
23	68	44	56	9	0	0.11
24	68	45	57	9	1	0.12
25	69	45	57	9	1	0.12
26	70	45	58	8	1	0.12
27	70	45	58	8	1	0.12
28	70	45	58	8	1	0.12
29	70	45	58	8	1	0.12
30	70	46	58	8	1	0.12
MTH	66.5	41.8	54.1	333	7	3.50
SPRING SEASON:	65.9	42.5	54.1	1048	49	12.50

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	70	46	58	7	0	0.12
2	70	46	58	7	0	0.13
3	70	46	58	7	0	0.13
4	70	46	58	7	0	0.13
5	71	46	58	7	0	0.13
6	71	47	59	7	1	0.13
7	72	48	60	6	1	0.13
8	72	48	60	6	1	0.14
9	72	49	60	6	1	0.14
10	72	49	60	6	1	0.14
11	72	49	60	6	1	0.14
12	73	50	61	5	1	0.14
13	73	50	61	5	1	0.14
14	73	50	61	5	1	0.14
15	73	50	61	5	1	0.14
16	73	51	62	4	1	0.14
17	73	52	62	4	1	0.15
18	74	52	63	3	1	0.15
19	75	52	63	3	1	0.15
20	75	52	64	3	2	0.15
21	75	52	64	3	2	0.15
22	75	52	64	3	2	0.15
23	75	53	64	3	2	0.15
24	76	53	65	2	2	0.15
25	76	53	65	2	2	0.15
26	76	53	65	2	2	0.15
27	76	54	65	2	2	0.15
28	76	55	66	2	3	0.15
29	76	55	66	2	3	0.15
30	77	55	66	2	3	0.15
31	77	55	66	2	3	0.15
MTH	73.5	50.6	62.0	134	42	4.41

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ASHEVILLE RGNL AP NORTH CAROLINA Station Number: 310300

Latitude: 35B 26* 09 (Longitude: -082B 32* 21 (Elevation (feet): 2140

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	77	55	66	2	3	0.15
2	77	55	66	2	3	0.15
3	78	55	66	2	3	0.15
4	78	55	66	2	3	0.15
5	78	55	66	2	3	0.15
6	78	55	66	2	3	0.15
7	78	55	66	2	3	0.15
8	79	56	67	2	4	0.15
9	79	57	68	1	4	0.15
10	79	57	68	1	4	0.15
11	79	57	68	1	4	0.15
12	80	58	69	1	5	0.15
13	80	58	69	1	5	0.15
14	80	58	69	1	5	0.15
15	80	58	69	1	5	0.15
16	80	59	69	1	5	0.15
17	80	59	69	1	5	0.15
18	81	60	70	1	6	0.15
19	81	60	71	0	6	0.15
20	81	60	71	0	6	0.14
21	81	60	71	0	6	0.14
22	81	60	71	0	6	0.14
23	82	61	72	0	7	0.14
24	82	61	72	0	7	0.14
25	82	61	72	0	7	0.14
26	82	61	72	0	7	0.14
27	82	61	72	0	7	0.14
28	82	61	72	0	7	0.14
29	82	61	72	0	7	0.14
30	82	61	72	0	7	0.13
MTH	80.0	58.3	69.2	26	153	4.38

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	61	72	0	7	0.13
2	82	62	72	0	7	0.13
3	82	62	72	0	7	0.13
4	82	62	72	0	7	0.13
5	82	62	72	0	7	0.13
6	82	62	72	0	7	0.13
7	82	62	72	0	7	0.13
8	82	62	72	0	7	0.13
9	83	63	73	0	8	0.13
10	83	63	73	0	8	0.12
11	83	63	73	0	8	0.12
12	83	63	73	0	8	0.12
13	83	63	73	0	8	0.12
14	84	63	73	0	8	0.12
15	84	63	73	0	8	0.12
16	84	63	73	0	8	0.12
17	84	63	73	0	8	0.12
18	84	63	73	0	8	0.12
19	84	63	73	0	8	0.12
20	84	63	73	0	8	0.12
21	84	63	73	0	8	0.12
22	84	63	73	0	8	0.12
23	84	63	74	0	9	0.12
24	84	63	74	0	9	0.12
25	84	63	74	0	9	0.12
26	84	63	74	0	9	0.13
27	84	63	74	0	9	0.13
28	84	63	74	0	9	0.13
29	84	63	74	0	9	0.13
30	84	63	74	0	9	0.13
31	84	63	74	0	9	0.13
MTH	83.3	62.7	73.0	0	249	3.87
SUMMER SEASON:	81.7	61.0	71.4	26	614	12.55

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	63	73	0	8	0.13
2	83	63	73	0	8	0.13
3	83	63	73	0	8	0.13
4	83	63	73	0	8	0.13
5	83	63	73	0	8	0.14
6	83	63	73	0	8	0.14
7	83	63	73	0	8	0.14
8	83	63	73	0	8	0.14
9	83	63	73	0	8	0.14
10	83	63	73	0	8	0.14
11	82	63	73	0	8	0.14
12	82	62	72	0	7	0.14
13	82	62	72	0	7	0.14
14	82	62	72	0	7	0.14
15	82	62	72	0	7	0.14
16	82	62	72	0	7	0.14
17	82	62	72	0	7	0.14
18	82	62	72	0	7	0.14
19	81	62	72	0	7	0.14
20	81	61	71	0	6	0.14
21	81	61	71	0	6	0.14
22	81	61	71	0	6	0.14
23	81	61	71	0	6	0.14
24	81	61	71	0	6	0.14
25	81	61	71	0	6	0.14
26	80	61	71	0	6	0.14
27	80	61	71	0	6	0.14
28	80	60	70	0	5	0.14
29	80	60	70	0	5	0.14
30	80	60	70	0	5	0.14
31	80	60	70	0	5	0.14
MTH	81.7	61.8	71.8	0	212	4.30

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	59	69	1	5	0.14
2	79	59	69	1	5	0.14
3	79	59	69	1	5	0.14
4	79	59	69	1	5	0.14
5	79	59	69	1	5	0.13
6	78	59	68	1	4	0.13
7	78	58	68	1	4	0.13
8	78	58	68	1	4	0.13
9	78	58	68	1	4	0.13
10	77	57	67	2	4	0.13
11	77	57	67	2	4	0.13
12	77	57	67	2	4	0.13
13	77	57	67	2	4	0.13
14	76	57	66	2	3	0.13
15	76	56	66	2	3	0.13
16	76	56	66	2	3	0.12
17	76	55	65	3	3	0.12
18	75	55	65	3	3	0.12
19	75	55	65	3	3	0.12
20	75	54	65	3	3	0.12
21	75	54	65	3	3	0.12
22	74	53	64	3	2	0.12
23	74	53	64	3	2	0.12
24	74	52	63	4	2	0.11
25	74	52	63	4	2	0.11
26	73	52	63	4	2	0.11
27	73	51	62	5	2	0.11
28	73	51	62	5	2	0.11
29	72	51	62	5	2	0.11
30	72	50	61	5	1	0.11
MTH	76.0	55.4	65.7	76	98	3.72
AUTUMN SEASON:	66.8	44.7	55.8	944	106	10.71
ANNUAL:	65.7	44.0	54.8	4457	769	47.04

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	48	60	6	1	0.11
2	72	48	60	6	1	0.10
3	71	48	59	7	1	0.10
4	71	47	59	7	1	0.10
5	71	47	59	7	1	0.10
6	70	47	58	8	1	0.10
7	70	47	58	8	1	0.10
8	70	46	58	8	1	0.10
9	69	45	57	8	0	0.10
10	69	45	57	8	0	0.10
11	69	45	57	8	0	0.10
12	68	44	56	9	0	0.10
13	68	44	56	9	0	0.10
14	68	44	56	9	0	0.10
15	67	43	55	10	0	0.10
16	67	43	55	10	0	0.10
17	67	43	55	10	0	0.10
18	66	43	55	10	0	0.10
19	66	42	54	11	0	0.10
20	66	42	54	11	0	0.10
21	65	42	54	11	0	0.10
22	65	41	53	12	0	0.10
23	65	41	53	12	0	0.10
24	64	41	53	12	0	0.10
25	64	40	52	13	0	0.10
26	64	40	52	13	0	0.11
27	64	40	52	13	0	0.11
28	63	40	52	13	0	0.11
29	63	39	51	14	0	0.11
30	63	39	51	14	0	0.11
31	62	39	51	14	0	0.11
MTH	67.1	43.3	55.2	311	8	3.17

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	39	50	15	0	0.12
2	62	39	50	15	0	0.12
3	61	38	50	15	0	0.12
4	61	38	49	16	0	0.12
5	61	38	49	16	0	0.12
6	60	37	49	16	0	0.13
7	60	37	49	16	0	0.13
8	60	37	49	16	0	0.13
9	59	37	48	17	0	0.13
10	59	37	48	17	0	0.13
11	59	36	48	17	0	0.13
12	58	36	47	18	0	0.13
13	58	36	47	18	0	0.13
14	58	36	47	18	0	0.13
15	57	36	47	18	0	0.13
16	57	35	46	19	0	0.13
17	57	35	46	19	0	0.13
18	57	35	46	19	0	0.13
19	56	34	45	20	0	0.13
20	56	34	45	20	0	0.13
21	56	34	45	20	0	0.13
22	55	34	45	20	0	0.13
23	55	33	44	21	0	0.13
24	55	33	44	21	0	0.13
25	55	33	44	21	0	0.13
26	54	33	44	21	0	0.13
27	54	32	43	22	0	0.13
28	54	32	43	22	0	0.12
29	53	32	43	22	0	0.12
30	53	32	43	22	0	0.12
MTH	57.4	35.3	46.4	557	0	3.82

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ASHEVILLE RGNL AP NORTH CAROLINA Station Number: 310300

Latitude: 35° 26* 09(Longitude: -082° 32* 21(Elevation (feet): 2140

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.51	0.28	0.65	0.22	0.57	0.38	0.23	0.38	0.21	0.00	0.86	0.36	26.15
0.010	0.65	0.38	0.82	0.31	0.72	0.51	0.32	0.50	0.29	0.00	1.01	0.47	27.77
0.050	1.18	0.81	1.43	0.70	1.30	1.03	0.73	1.02	0.69	0.23	1.54	0.89	32.57
0.100	1.57	1.17	1.86	1.01	1.72	1.44	1.08	1.42	1.02	0.56	1.89	1.22	35.34
0.200	2.15	1.73	2.51	1.53	2.35	2.08	1.65	2.05	1.56	1.06	2.39	1.71	38.92
0.300	2.65	2.24	3.07	2.00	2.89	2.66	2.17	2.61	2.07	1.53	2.80	2.14	41.64
0.400	3.14	2.75	3.61	2.48	3.42	3.23	2.71	3.17	2.58	2.02	3.18	2.57	44.07
0.500	3.65	3.30	4.17	2.99	3.98	3.83	3.28	3.76	3.14	2.55	3.57	3.01	46.42
0.600	4.21	3.91	4.78	3.57	4.58	4.51	3.93	4.42	3.77	3.17	4.00	3.51	48.86
0.700	4.88	4.65	5.50	4.26	5.30	5.31	4.71	5.21	4.53	3.92	4.49	4.10	51.55
0.800	5.74	5.63	6.43	5.19	6.23	6.37	5.76	6.25	5.55	4.94	5.11	4.86	54.83
0.900	7.08	7.19	7.88	6.67	7.68	8.05	7.43	7.89	7.18	6.60	6.06	6.07	59.61
0.950	8.34	8.66	9.22	8.07	9.03	9.63	9.03	9.43	8.73	8.20	6.92	7.20	63.74
0.990	11.04	11.90	12.11	11.18	11.94	13.08	12.55	12.79	12.17	11.80	8.74	9.66	72.01
0.995	12.14	13.24	13.29	12.47	13.13	14.51	14.02	14.19	13.61	13.31	9.48	10.67	75.19

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ASHEVILLE NORTH CAROLINA Station Number: 310301

Latitude: 35° 36* 00(Longitude: -082° 32* 00(Elevation (feet): 2240

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	33	43	22	0	0.09
2	53	33	43	22	0	0.09
3	53	33	43	22	0	0.09
4	52	33	42	23	0	0.09
5	52	33	42	23	0	0.09
6	52	32	42	23	0	0.09
7	51	31	41	24	0	0.09
8	51	31	41	24	0	0.09
9	51	31	41	24	0	0.08
10	51	31	41	24	0	0.08
11	51	31	41	24	0	0.08
12	50	30	40	25	0	0.08
13	50	30	40	25	0	0.08
14	50	30	40	25	0	0.08
15	50	30	40	25	0	0.08
16	49	30	40	25	0	0.08
17	49	29	39	26	0	0.08
18	49	29	39	26	0	0.08
19	49	29	39	26	0	0.08
20	49	29	39	26	0	0.08
21	48	29	39	26	0	0.08
22	48	28	38	27	0	0.08
23	48	28	38	27	0	0.08
24	48	28	38	27	0	0.08
25	48	28	38	27	0	0.08
26	47	28	38	27	0	0.08
27	47	28	38	27	0	0.08
28	47	27	37	28	0	0.08
29	47	27	37	28	0	0.09
30	47	27	37	28	0	0.09
31	47	27	37	28	0	0.09
MTH	49.6	29.8	39.7	784	0	2.59
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	27	37	28	0	0.09
2	46	27	37	28	0	0.09
3	46	27	37	28	0	0.09
4	46	27	37	28	0	0.09
5	46	27	37	28	0	0.09
6	46	27	36	29	0	0.09
7	46	27	36	29	0	0.09
8	46	27	36	29	0	0.09
9	46	27	36	29	0	0.09
10	46	27	36	29	0	0.10
11	46	26	36	29	0	0.10
12	46	26	36	29	0	0.10
13	46	26	36	29	0	0.10
14	45	26	36	29	0	0.10
15	46	26	36	29	0	0.10
16	46	26	36	29	0	0.10
17	46	26	36	29	0	0.10
18	46	26	36	29	0	0.10
19	46	26	36	29	0	0.10
20	46	26	36	29	0	0.10
21	46	26	36	29	0	0.10
22	46	26	36	29	0	0.10
23	46	26	36	29	0	0.10
24	46	26	36	29	0	0.10
25	46	27	37	28	0	0.10
26	46	27	37	28	0	0.11
27	46	27	37	28	0	0.11
28	47	27	37	28	0	0.11
29	47	27	37	28	0	0.11
30	47	27	37	28	0	0.11
31	47	27	37	28	0	0.11
MTH	46.1	26.6	36.4	887	0	3.07
	48.6	28.5	38.6	2379	0	8.85

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	28	37	28	0	0.11
2	47	28	37	28	0	0.11
3	48	28	38	27	0	0.11
4	48	28	38	27	0	0.11
5	48	28	38	27	0	0.11
6	48	28	38	27	0	0.11
7	49	28	38	27	0	0.11
8	49	28	38	27	0	0.11
9	49	28	39	26	0	0.11
10	49	28	39	26	0	0.11
11	49	28	39	26	0	0.11
12	50	28	39	26	0	0.11
13	50	28	39	26	0	0.11
14	50	28	39	26	0	0.11
15	50	29	40	25	0	0.11
16	51	29	40	25	0	0.11
17	51	29	40	25	0	0.11
18	51	29	40	25	0	0.12
19	51	30	41	24	0	0.12
20	51	30	41	24	0	0.12
21	52	30	41	24	0	0.12
22	52	30	41	24	0	0.12
23	52	30	41	24	0	0.12
24	52	31	42	23	0	0.12
25	53	31	42	23	0	0.12
26	53	31	42	23	0	0.12
27	53	31	42	23	0	0.12
28	54	32	43	22	0	0.12
MTH	50.3	29.1	39.7	708	0	3.19

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	33	43	22	0	0.12
2	54	33	43	22	0	0.12
3	54	33	44	21	0	0.12
4	55	33	44	21	0	0.13
5	55	34	44	21	0	0.13
6	55	34	44	21	0	0.13
7	55	34	45	20	0	0.13
8	56	34	45	20	0	0.13
9	56	34	45	20	0	0.13
10	56	34	45	20	0	0.13
11	57	35	46	19	0	0.13
12	57	35	46	19	0	0.13
13	57	35	46	19	0	0.13
14	57	36	47	18	0	0.13
15	58	36	47	18	0	0.13
16	58	36	47	18	0	0.13
17	58	36	47	18	0	0.13
18	59	37	48	17	0	0.13
19	59	37	48	17	0	0.13
20	59	37	48	17	0	0.13
21	59	37	48	17	0	0.13
22	60	38	49	16	0	0.12
23	60	38	49	16	0	0.12
24	60	38	49	16	0	0.12
25	61	38	50	15	0	0.12
26	61	39	50	15	0	0.12
27	61	39	50	15	0	0.12
28	61	39	50	15	0	0.12
29	62	39	51	14	0	0.12
30	62	40	51	14	0	0.12
31	62	40	51	14	0	0.11
MTH	58.0	36.2	47.1	555	0	3.89
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	41	51	14	0	0.12
2	63	42	52	13	0	0.11
3	63	42	52	13	0	0.11
4	63	42	52	13	0	0.11
5	64	42	53	12	0	0.11
6	64	42	53	12	0	0.11
7	65	42	53	12	0	0.11
8	65	42	53	12	0	0.11
9	65	42	54	11	0	0.11
10	65	43	54	11	0	0.11
11	66	43	54	11	0	0.11
12	66	43	54	11	0	0.10
13	66	43	55	10	0	0.10
14	66	43	55	10	0	0.10
15	67	43	55	10	0	0.10
16	67	43	55	10	0	0.10
17	67	44	56	9	0	0.10
18	68	44	56	9	0	0.10
19	68	44	56	9	0	0.10
20	68	44	56	9	0	0.10
21	68	45	57	8	0	0.10
22	69	45	57	8	0	0.10
23	69	45	57	8	0	0.10
24	69	45	57	8	0	0.10
25	69	46	58	8	1	0.10
26	70	46	58	8	1	0.10
27	70	46	58	8	1	0.11
28	70	47	59	7	1	0.11
29	70	47	59	7	1	0.11
30	71	47	59	7	1	0.11
MTH	66.8	43.8	55.3	298	6	3.16
	66.3	44.0	55.2	978	76	10.58

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	71	47	59	7	1	0.11
2	71	48	59	6	0	0.11
3	71	49	60	6	1	0.11
4	72	49	60	6	1	0.11
5	72	49	60	6	1	0.11
6	72	49	61	5	1	0.11
7	72	50	61	5	1	0.11
8	73	50	62	5	2	0.11
9	73	50	62	5	2	0.11
10	73	50	62	5	2	0.11
11	73	51	62	5	2	0.11
12	73	51	62	5	2	0.11
13	73	51	62	5	2	0.11
14	74	52	63	4	2	0.11
15	74	52	63	4	2	0.11
16	74	52	63	4	2	0.11
17	74	52	63	4	2	0.12
18	74	52	63	4	2	0.12
19	75	53	64	4	3	0.12
20	75	53	64	4	3	0.12
21	75	54	65	3	3	0.12
22	76	54	65	3	3	0.12
23	76	54	65	3	3	0.12
24	76	54	65	3	3	0.12
25	76	55	66	2	3	0.12
26	77	55	66	2	3	0.12
27	77	55	66	2	3	0.12
28	77	55	66	2	3	0.12
29	77	56	67	2	4	0.11
30	78	56	67	2	4	0.11
31	78	56	67	2	4	0.11
MTH	74.3	52.1	63.2	125	70	3.53

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ASHEVILLE NORTH CAROLINA Station Number: 310301

Latitude: 35B 36* 00 (Longitude: -082B 32* 00 (Elevation (feet): 2240

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	57	67	2	4	0.12
2	78	57	67	2	4	0.12
3	78	57	67	1	3	0.11
4	79	58	68	1	4	0.11
5	79	58	68	1	4	0.11
6	79	58	68	1	4	0.11
7	80	58	69	1	5	0.11
8	80	58	69	1	5	0.11
9	80	58	69	1	5	0.11
10	80	58	69	1	5	0.11
11	80	58	69	1	5	0.11
12	80	59	70	0	5	0.11
13	81	59	70	0	5	0.11
14	81	59	70	0	5	0.11
15	81	60	71	0	6	0.11
16	81	60	71	0	6	0.11
17	81	60	71	0	6	0.11
18	81	60	71	0	6	0.11
19	82	60	71	0	6	0.11
20	82	60	71	0	6	0.11
21	82	60	71	0	6	0.11
22	82	61	72	0	7	0.11
23	82	61	72	0	7	0.10
24	82	61	72	0	7	0.10
25	82	62	72	0	7	0.10
26	82	62	72	0	7	0.10
27	82	62	72	0	7	0.10
28	82	62	72	0	7	0.10
29	83	62	73	0	8	0.10
30	83	62	73	0	8	0.10
MTH	80.8	59.6	70.2	13	170	3.24

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	62	73	0	8	0.10
2	84	62	73	0	8	0.10
3	84	63	73	0	8	0.10
4	84	63	73	0	8	0.10
5	84	63	73	0	8	0.10
6	84	63	74	0	9	0.10
7	84	63	74	0	9	0.10
8	84	63	74	0	9	0.10
9	84	63	74	0	9	0.09
10	84	63	74	0	9	0.09
11	84	63	74	0	9	0.09
12	84	63	74	0	9	0.09
13	84	63	74	0	9	0.09
14	84	64	74	0	9	0.09
15	84	64	74	0	9	0.09
16	84	64	74	0	9	0.09
17	84	64	74	0	9	0.09
18	85	64	74	0	9	0.09
19	85	64	74	0	9	0.09
20	85	64	74	0	9	0.09
21	85	64	74	0	9	0.09
22	85	64	74	0	9	0.10
23	85	64	75	0	10	0.10
24	85	64	75	0	10	0.10
25	85	64	75	0	10	0.10
26	84	64	74	0	9	0.10
27	84	64	74	0	9	0.10
28	84	64	74	0	9	0.10
29	84	64	74	0	9	0.10
30	84	64	74	0	9	0.10
31	84	64	74	0	9	0.10
MTH	84.3	63.5	73.9	0	277	2.97
SUMMER SEASON:	82.6	61.8	72.3	13	685	9.55

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	64	74	0	9	0.10
2	84	64	74	0	9	0.10
3	84	64	74	0	9	0.10
4	84	64	74	0	9	0.10
5	84	63	74	0	9	0.10
6	84	63	74	0	9	0.10
7	84	63	74	0	9	0.10
8	84	63	74	0	9	0.11
9	84	63	74	0	9	0.11
10	84	63	73	0	8	0.11
11	84	63	73	0	8	0.11
12	84	63	73	0	8	0.11
13	84	63	73	0	8	0.11
14	84	63	73	0	8	0.11
15	84	63	73	0	8	0.11
16	83	63	73	0	8	0.11
17	83	62	73	0	8	0.11
18	83	62	73	0	8	0.11
19	82	62	72	0	7	0.11
20	82	62	72	0	7	0.11
21	82	62	72	0	7	0.11
22	82	62	72	0	7	0.11
23	82	62	72	0	7	0.11
24	82	62	72	0	7	0.11
25	82	61	72	0	7	0.11
26	81	61	71	0	6	0.11
27	81	61	71	0	6	0.11
28	81	61	71	0	6	0.11
29	81	61	71	0	6	0.11
30	81	61	71	0	6	0.11
31	81	60	71	0	6	0.11
MTH	82.9	62.4	72.7	0	238	3.34

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	60	70	0	5	0.11
2	80	60	70	0	5	0.11
3	80	60	70	0	5	0.11
4	80	60	70	0	5	0.11
5	80	60	70	0	5	0.11
6	79	60	70	0	5	0.11
7	79	60	69	0	4	0.11
8	79	59	69	0	4	0.11
9	79	59	69	0	4	0.11
10	78	58	68	1	4	0.11
11	78	58	68	1	4	0.10
12	78	58	68	1	4	0.10
13	77	57	67	1	3	0.10
14	77	57	67	1	3	0.10
15	77	57	67	1	3	0.10
16	77	57	67	1	3	0.10
17	77	56	67	1	3	0.10
18	76	56	66	2	3	0.10
19	76	56	66	2	3	0.10
20	76	55	65	2	2	0.10
21	76	54	65	2	2	0.10
22	75	54	65	2	2	0.10
23	75	54	65	2	2	0.09
24	75	53	64	3	2	0.09
25	74	53	64	3	2	0.09
26	74	53	64	3	2	0.09
27	74	52	63	4	2	0.09
28	74	52	63	4	2	0.09
29	73	52	63	4	2	0.09
30	73	51	62	4	1	0.08
MTH	76.9	56.4	66.7	45	96	3.01
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	51	62	5	2	0.08
2	73	51	62	5	2	0.08
3	72	51	61	5	1	0.08
4	72	51	61	6	2	0.08
5	71	50	60	6	1	0.08
6	71	50	60	6	1	0.08
7	70	49	59	7	1	0.08
8	70	48	59	7	1	0.08
9	70	47	59	7	1	0.08
10	69	47	58	8	1	0.08
11	69	47	58	8	1	0.07
12	69	46	57	9	1	0.07
13	69	45	57	9	1	0.07
14	68	45	57	9	1	0.07
15	68	44	56	10	1	0.07
16	68	44	56	10	1	0.07
17	67	44	56	10	1	0.07
18	67	43	55	10	0	0.07
19	67	43	55	10	0	0.07
20	66	43	55	10	0	0.07
21	66	43	55	10	0	0.08
22	66	42	54	11	0	0.08
23	65	42	54	11	0	0.08
24	65	42	54	11	0	0.08
25	65	41	53	12	0	0.08
26	65	41	53	12	0	0.08
27	64	41	53	12	0	0.08
28	63	41	52	13	0	0.08
29	63	41	52	13	0	0.08
30	63	41	52	13	0	0.09
31	63	40	52	13	0	0.09
MTH	67.7	45.0	56.4	288	20	2.40
AUTUMN SEASON:	67.4	46.0	56.8	864	116	8.34
ANNUAL:	66.2	45.1	55.7	4234	877	37.32

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	40	51	14	0	0.09
2	62	40	51	14	0	0.09
3	62	40	51	14	0	0.09
4	61	40	50	15	0	0.09
5	61	40	50	15	0	0.09
6	61	40	50	15	0	0.10
7	60	40	50	15	0	0.10
8	60	38	49	16	0	0.10
9	60	38	49	16	0	0.10
10	60	38	49	16	0	0.10
11	59	38	49	16	0	0.10
12	59	37	48	17	0	0.10
13	59	37	48	17	0	0.10
14	58	37	48	17	0	0.10
15	58	36	47	18	0	0.10
16	58	36	47	18	0	0.10
17	57	36	47	18	0	0.10
18	57	36	47	18	0	0.10
19	56	36	46	19	0	0.10
20	56	36	46	19	0	0.10
21	56	36	46	19	0	0.10
22	56	35	46	19	0	0.10
23	55	35	45	20	0	0.10
24	55	35	45	20	0	0.10
25	55	35	45	20	0	0.10
26	54	34	44	21	0	0.10
27	54	34	44	21	0	0.10
28	54	34	44	21	0	0.10
29	54	33	44	21	0	0.09
30	53	33	43	22	0	0.09
MTH	57.8	36.8	47.3	531	0	2.93

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ASHEVILLE NORTH CAROLINA Station Number: 310301

Latitude: 35° 36* 00(Longitude: -082° 32* 00(Elevation (feet): 2240

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.44	0.26	0.58	0.27	0.54	0.46	0.37	0.21	0.10	0.00	0.67	0.26	21.20
0.010	0.55	0.34	0.72	0.37	0.67	0.57	0.47	0.30	0.16	0.00	0.79	0.34	22.47
0.050	0.96	0.72	1.24	0.75	1.14	1.00	0.85	0.67	0.43	0.20	1.19	0.66	26.18
0.100	1.25	1.01	1.61	1.04	1.48	1.31	1.13	0.97	0.68	0.46	1.46	0.90	28.33
0.200	1.68	1.48	2.15	1.50	1.97	1.77	1.56	1.46	1.11	0.85	1.84	1.28	31.08
0.300	2.05	1.90	2.62	1.92	2.39	2.16	1.93	1.91	1.53	1.20	2.15	1.61	33.17
0.400	2.41	2.32	3.07	2.33	2.80	2.54	2.29	2.36	1.96	1.56	2.45	1.94	35.04
0.500	2.78	2.77	3.54	2.76	3.22	2.93	2.67	2.85	2.44	1.96	2.75	2.29	36.84
0.600	3.19	3.27	4.05	3.25	3.68	3.37	3.08	3.40	3.00	2.41	3.07	2.67	38.70
0.700	3.67	3.87	4.65	3.83	4.22	3.88	3.58	4.07	3.68	2.97	3.44	3.13	40.77
0.800	4.29	4.65	5.42	4.59	4.91	4.53	4.21	4.94	4.60	3.71	3.91	3.73	43.27
0.900	5.26	5.91	6.62	5.80	5.99	5.56	5.21	6.35	6.09	4.91	4.63	4.67	46.91
0.950	6.15	7.09	7.73	6.94	6.99	6.51	6.14	7.69	7.54	6.07	5.29	5.55	50.07
0.990	8.07	9.67	10.12	9.42	9.12	8.55	8.15	10.64	10.77	8.66	6.67	7.48	56.35
0.995	8.86	10.75	11.09	10.45	10.00	9.38	8.97	11.87	12.13	9.74	7.23	8.27	58.77

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BENT CREEK NORTH CAROLINA Station Number: 310724

Latitude: 35 B 30 * 19 (Longitude: -082 B 35* 42 (Elevation (feet): 2110

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	32	43	22	0	0.12
2	54	32	43	22	0	0.12
3	53	32	42	23	0	0.12
4	53	31	42	23	0	0.12
5	53	31	42	23	0	0.11
6	53	30	41	24	0	0.11
7	53	30	41	24	0	0.11
8	53	30	41	24	0	0.11
9	53	30	41	24	0	0.11
10	52	29	40	25	0	0.11
11	51	29	40	25	0	0.11
12	51	29	40	25	0	0.10
13	51	29	40	25	0	0.10
14	50	29	40	25	0	0.10
15	50	28	39	26	0	0.10
16	50	28	39	26	0	0.10
17	50	28	39	26	0	0.10
18	49	28	39	26	0	0.10
19	49	28	39	26	0	0.10
20	49	28	39	26	0	0.10
21	48	28	38	27	0	0.10
22	48	28	38	27	0	0.10
23	48	28	38	27	0	0.10
24	48	28	38	27	0	0.10
25	48	27	38	27	0	0.10
26	48	27	38	27	0	0.11
27	48	27	38	27	0	0.11
28	47	27	37	28	0	0.11
29	47	27	37	28	0	0.11
30	47	27	37	28	0	0.11
31	47	27	37	28	0	0.11
MTH	50.2	28.8	39.5	791	0	3.31

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	27	37	28	0	0.11
2	47	27	37	28	0	0.12
3	47	27	37	28	0	0.12
4	47	27	37	28	0	0.12
5	47	27	37	28	0	0.12
6	47	27	37	28	0	0.12
7	47	27	37	28	0	0.12
8	47	27	37	28	0	0.12
9	47	27	37	28	0	0.13
10	47	26	37	28	0	0.13
11	47	26	37	28	0	0.13
12	47	26	36	29	0	0.13
13	47	26	36	29	0	0.13
14	47	26	36	29	0	0.13
15	47	26	36	29	0	0.13
16	47	26	36	29	0	0.13
17	47	26	36	29	0	0.13
18	47	26	36	29	0	0.13
19	47	26	37	28	0	0.13
20	47	26	37	28	0	0.13
21	47	26	37	28	0	0.14
22	47	26	37	28	0	0.14
23	47	26	37	28	0	0.14
24	47	26	37	28	0	0.14
25	47	26	37	28	0	0.14
26	48	26	37	28	0	0.14
27	48	26	37	28	0	0.14
28	48	26	37	28	0	0.14
29	48	26	37	28	0	0.13
30	48	26	37	28	0	0.13
31	48	26	37	28	0	0.13
MTH	47.2	26.3	36.8	875	0	4.02

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	26	37	28	0	0.13
2	49	26	38	27	0	0.13
3	49	26	38	27	0	0.13
4	50	27	38	27	0	0.13
5	50	27	38	27	0	0.13
6	50	27	38	27	0	0.13
7	50	27	38	27	0	0.13
8	50	27	38	27	0	0.13
9	50	27	39	26	0	0.13
10	51	27	39	26	0	0.13
11	51	27	39	26	0	0.13
12	51	27	39	26	0	0.14
13	51	27	39	26	0	0.14
14	51	28	40	25	0	0.14
15	52	28	40	25	0	0.14
16	52	28	40	25	0	0.14
17	52	28	40	25	0	0.14
18	52	29	41	24	0	0.14
19	53	29	41	24	0	0.14
20	53	29	41	24	0	0.14
21	53	29	41	24	0	0.15
22	53	29	41	24	0	0.15
23	53	29	41	24	0	0.15
24	54	30	42	23	0	0.15
25	54	30	42	23	0	0.15
26	54	30	42	23	0	0.15
27	55	30	43	22	0	0.16
28	55	31	43	22	0	0.16
MTH	51.7	28.0	39.9	704	0	3.91

WINTER SEASON: 49.7 27.7 38.7 2370 0 11.24

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	32	43	22	0	0.16
2	55	32	43	22	0	0.16
3	56	32	44	21	0	0.16
4	56	32	44	21	0	0.17
5	57	32	44	21	0	0.17
6	57	32	44	21	0	0.17
7	57	33	45	20	0	0.17
8	57	33	45	20	0	0.17
9	57	33	45	20	0	0.17
10	58	33	46	19	0	0.17
11	58	34	46	19	0	0.17
12	58	34	46	19	0	0.17
13	58	34	46	19	0	0.17
14	59	34	47	18	0	0.18
15	59	34	47	18	0	0.18
16	60	34	47	18	0	0.17
17	60	34	47	18	0	0.17
18	60	35	48	17	0	0.17
19	61	35	48	17	0	0.17
20	61	35	48	17	0	0.17
21	61	35	48	17	0	0.17
22	62	36	49	16	0	0.17
23	62	36	49	16	0	0.17
24	62	36	49	16	0	0.17
25	62	36	49	16	0	0.16
26	63	37	50	15	0	0.16
27	63	37	50	15	0	0.16
28	63	37	50	15	0	0.16
29	64	37	51	14	0	0.16
30	64	37	51	14	0	0.15
31	64	37	51	14	0	0.15
MTH	59.7	34.5	47.1	555	0	5.17

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	38	51	14	0	0.15
2	65	38	51	14	0	0.14
3	66	38	52	13	0	0.14
4	66	38	52	13	0	0.14
5	66	38	52	13	0	0.14
6	66	39	52	13	0	0.13
7	68	39	53	12	0	0.13
8	68	39	53	12	0	0.13
9	68	39	53	12	0	0.13
10	68	39	53	12	0	0.13
11	68	39	54	11	0	0.13
12	68	40	54	11	0	0.13
13	69	40	54	11	0	0.12
14	69	40	55	10	0	0.12
15	69	40	55	10	0	0.12
16	69	41	55	10	0	0.12
17	69	41	55	10	0	0.12
18	70	41	56	9	0	0.12
19	70	41	56	9	0	0.12
20	70	42	56	9	0	0.12
21	70	42	56	9	0	0.12
22	71	42	57	8	0	0.12
23	71	43	57	8	0	0.12
24	71	43	57	8	0	0.12
25	71	43	57	8	0	0.12
26	71	43	57	8	0	0.12
27	71	43	57	8	0	0.13
28	72	44	58	8	1	0.13
29	72	45	59	7	1	0.13
30	72	45	59	7	1	0.13
MTH	69.0	40.8	54.9	307	3	3.82

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	46	59	7	1	0.13
2	73	46	59	7	1	0.13
3	73	47	60	6	1	0.13
4	73	47	60	6	1	0.14
5	73	47	60	6	1	0.14
6	73	47	60	6	1	0.14
7	74	48	61	5	1	0.14
8	74	48	61	5	1	0.14
9	74	48	61	5	1	0.14
10	74	48	61	5	1	0.14
11	75	48	62	4	1	0.14
12	75	49	62	4	1	0.14
13	75	49	62	4	1	0.14
14	75	49	62	4	1	0.14
15	75	49	62	4	1	0.15
16	75	50	63	4	2	0.15
17	76	50	63	4	2	0.15
18	76	50	63	4	2	0.15
19	76	50	63	4	2	0.15
20	76	51	64	3	2	0.15
21	76	51	64	3	2	0.15
22	77	51	64	3	2	0.15
23	77	51	64	3	2	0.14
24	77	52	65	2	2	0.14
25	77	53	65	2	2	0.14
26	77	53	65	2	2	0.14
27	78	53	66	2	3	0.14
28	78	53	66	2	3	0.14
29	78	54	66	2	3	0.14
30	78	54	66	2	3	0.14
31	78	54	66	2	3	0.14
MTH	75.5	49.9	62.7	122	52	4.39

SPRING SEASON: 68.0 41.7 54.9 984 55 13.38

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BENT CREEK NORTH CAROLINA Station Number: 310724

Latitude: 35 B 30 * 19 (Longitude: -082 B 35* 42 (Elevation (feet): 2110

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	56	67	1	3	0.14
2	79	56	67	1	3	0.14
3	79	56	67	1	3	0.14
4	79	56	67	1	3	0.13
5	80	56	68	1	4	0.13
6	80	56	68	1	4	0.13
7	80	56	68	1	4	0.13
8	80	56	68	1	4	0.13
9	80	56	68	1	4	0.13
10	80	56	68	1	4	0.13
11	80	56	68	1	4	0.13
12	80	57	68	1	4	0.13
13	80	57	68	1	4	0.13
14	81	57	69	1	5	0.13
15	81	58	70	0	5	0.13
16	81	58	70	0	5	0.13
17	81	58	70	0	5	0.13
18	82	58	70	0	5	0.12
19	82	58	70	0	5	0.12
20	82	58	70	0	5	0.12
21	82	59	71	0	6	0.12
22	82	59	71	0	6	0.12
23	82	59	71	0	6	0.12
24	82	59	71	0	6	0.12
25	83	59	71	0	6	0.12
26	83	59	71	0	6	0.12
27	83	59	71	0	6	0.12
28	83	59	71	0	6	0.12
29	83	60	72	0	7	0.12
30	83	60	72	0	7	0.13
MTH	81.1	57.6	69.4	14	145	3.81

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	61	72	0	7	0.12
2	84	61	72	0	7	0.12
3	84	61	72	0	7	0.12
4	84	61	72	0	7	0.12
5	84	61	72	0	7	0.13
6	84	61	73	0	8	0.13
7	84	61	73	0	8	0.13
8	84	62	73	0	8	0.13
9	84	62	73	0	8	0.13
10	84	62	73	0	8	0.13
11	84	62	73	0	8	0.13
12	84	62	73	0	8	0.13
13	84	62	73	0	8	0.13
14	84	62	73	0	8	0.13
15	84	62	73	0	8	0.13
16	84	62	73	0	8	0.13
17	84	62	73	0	8	0.13
18	84	62	73	0	8	0.13
19	85	62	74	0	9	0.13
20	85	62	74	0	9	0.13
21	85	62	74	0	9	0.13
22	85	63	74	0	9	0.13
23	85	63	74	0	9	0.13
24	85	63	74	0	9	0.13
25	84	63	74	0	9	0.13
26	84	63	74	0	9	0.12
27	84	63	74	0	9	0.12
28	84	62	73	0	8	0.12
29	84	62	73	0	8	0.12
30	84	62	73	0	8	0.12
31	84	62	73	0	8	0.12
MTH	84.2	62.0	73.1	0	252	3.93
SUMMER SEASON:	82.7	60.2	71.5	14	612	11.66

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	62	73	0	8	0.13
2	84	62	73	0	8	0.12
3	84	62	73	0	8	0.12
4	84	62	73	0	8	0.12
5	84	62	73	0	8	0.12
6	84	62	73	0	8	0.12
7	84	62	73	0	8	0.12
8	84	62	73	0	8	0.12
9	84	62	73	0	8	0.12
10	83	62	73	0	8	0.12
11	83	62	73	0	8	0.12
12	83	62	72	0	7	0.12
13	83	62	72	0	7	0.12
14	83	62	72	0	7	0.12
15	83	62	72	0	7	0.12
16	83	61	72	0	7	0.13
17	83	61	72	0	7	0.13
18	83	61	72	0	7	0.13
19	82	61	72	0	7	0.13
20	82	61	72	0	7	0.13
21	82	61	72	0	7	0.13
22	82	60	71	0	6	0.13
23	82	60	71	0	6	0.13
24	82	60	71	0	6	0.13
25	82	60	71	0	6	0.13
26	82	60	71	0	6	0.13
27	81	60	71	0	6	0.13
28	81	60	71	0	6	0.13
29	81	59	70	0	5	0.14
30	81	59	70	0	5	0.14
31	81	59	70	0	5	0.14
MTH	82.7	61.1	71.9	0	215	3.92

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	59	70	0	5	0.14
2	81	59	70	0	5	0.14
3	80	59	70	0	5	0.14
4	80	59	69	0	4	0.14
5	80	59	69	0	4	0.14
6	80	59	69	0	4	0.14
7	80	58	69	0	4	0.14
8	79	57	68	1	4	0.14
9	79	57	68	1	4	0.15
10	79	57	68	1	4	0.15
11	79	57	68	1	4	0.15
12	78	56	67	1	3	0.14
13	78	56	67	1	3	0.14
14	78	56	67	1	3	0.14
15	78	55	67	1	3	0.14
16	77	55	66	2	3	0.14
17	77	55	66	2	3	0.14
18	77	54	66	2	3	0.14
19	77	54	66	2	3	0.14
20	77	53	65	2	2	0.14
21	76	53	65	2	2	0.14
22	76	52	64	3	2	0.14
23	76	52	64	3	2	0.13
24	75	52	64	3	2	0.13
25	75	51	63	4	2	0.13
26	75	51	63	4	2	0.13
27	75	51	63	4	2	0.13
28	74	51	63	4	2	0.12
29	74	50	62	4	1	0.12
30	73	49	61	5	1	0.12
MTH	77.5	54.9	66.2	54	91	4.12
AUTUMN SEASON:	68.4	44.4	56.5	883	104	11.49
ANNUAL:	67.2	43.5	55.4	4251	771	47.77

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	49	61	5	1	0.12
2	73	48	60	5	0	0.11
3	73	48	60	6	1	0.11
4	72	48	60	6	1	0.11
5	72	47	60	6	1	0.11
6	72	46	59	7	1	0.11
7	71	46	59	7	1	0.10
8	71	46	59	7	1	0.10
9	71	45	58	8	1	0.10
10	71	45	58	8	1	0.10
11	70	45	58	8	1	0.10
12	70	45	58	8	1	0.10
13	70	44	57	8	0	0.10
14	69	43	56	9	0	0.10
15	69	43	56	9	0	0.10
16	69	43	56	9	0	0.10
17	68	42	55	10	0	0.10
18	68	42	55	10	0	0.10
19	68	42	55	10	0	0.10
20	67	41	54	11	0	0.10
21	67	41	54	11	0	0.10
22	67	41	54	11	0	0.10
23	66	41	54	11	0	0.10
24	66	40	53	12	0	0.10
25	66	40	53	12	0	0.11
26	65	40	53	12	0	0.11
27	65	39	52	13	0	0.11
28	65	39	52	13	0	0.11
29	65	39	52	13	0	0.11
30	64	39	52	13	0	0.12
31	64	38	51	14	0	0.12
MTH	68.6	43.1	55.9	292	11	3.26

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	38	51	14	0	0.12
2	64	38	51	14	0	0.13
3	63	38	50	15	0	0.13
4	63	38	50	15	0	0.13
5	63	38	50	15	0	0.13
6	62	38	50	15	0	0.14
7	61	38	49	16	*	0.14
8	61	37	49	16	*	0.14
9	61	37	49	16	*	0.14
10	61	37	49	16	*	0.14
11	60	37	49	17	*	0.14
12	60	36	48	17	*	0.14
13	60	36	48	17	*	0.14
14	59	36	48	17	*	0.14
15	59	35	47	18	*	0.14
16	59	35	47	18	*	0.15
17	59	35	47	18	*	0.14
18	58	35	47	19	*	0.14
19	58	34	46	19	*	0.14
20	58	34	46	19	*	0.14
21	57	34	46	19	*	0.14
22	57	33	45	20	*	0.14
23	57	33	45	20	0	0.14
24	56	33	45	20	0	0.14
25	56	33	45	20	0	0.14
26	55	33	44	21	0	0.14
27	55	33	44	21	0	0.13
28	55	32	44	21	0	0.13
29	54	32	43	22	0	0.13
30	54	32	43	22	0	0.13
MTH	59.0	35.3	47.2	537	2	4.11

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BENT CREEK NORTH CAROLINA Station Number: 310724

Latitude: 35° 30* 19(Longitude: -082° 35* 42(Elevation (feet): 2110

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.43	0.28	0.75	0.38	0.54	0.48	0.50	0.24	0.08	0.02	0.62	0.22	26.42
0.010	0.56	0.39	0.93	0.50	0.69	0.61	0.63	0.34	0.14	0.03	0.77	0.31	28.07
0.050	1.07	0.84	1.62	0.98	1.26	1.11	1.15	0.77	0.44	0.17	1.32	0.68	32.97
0.100	1.45	1.20	2.11	1.34	1.68	1.47	1.52	1.12	0.75	0.35	1.71	0.98	35.80
0.200	2.03	1.77	2.84	1.89	2.30	2.02	2.08	1.70	1.32	0.73	2.28	1.47	39.45
0.300	2.54	2.29	3.47	2.39	2.85	2.49	2.57	2.23	1.89	1.17	2.78	1.91	42.24
0.400	3.04	2.81	4.07	2.87	3.39	2.95	3.04	2.76	2.51	1.67	3.25	2.36	44.72
0.500	3.57	3.37	4.70	3.38	3.94	3.43	3.54	3.34	3.21	2.27	3.74	2.84	47.12
0.600	4.15	4.00	5.38	3.95	4.56	3.95	4.08	3.99	4.02	2.99	4.28	3.38	49.61
0.700	4.85	4.75	6.19	4.62	5.28	4.58	4.73	4.77	5.03	3.93	4.91	4.03	52.37
0.800	5.75	5.74	7.23	5.50	6.23	5.39	5.56	5.81	6.42	5.25	5.72	4.89	55.73
0.900	7.17	7.33	8.85	6.89	7.70	6.65	6.86	7.48	8.70	7.50	6.98	6.26	60.61
0.950	8.50	8.83	10.35	8.19	9.07	7.83	8.07	9.07	10.94	9.76	8.14	7.56	64.85
0.990	11.39	12.12	13.57	11.01	12.04	10.36	10.69	12.56	15.99	14.99	10.64	10.43	73.31
0.995	12.57	13.48	14.89	12.18	13.26	11.40	11.76	14.02	18.14	17.24	11.66	11.63	76.58

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BLACK MOUNTAIN 2 W NORTH CAROLINA Station Number: 310843

Latitude: 35 B 36 * 26 (Longitude: -082 B 20* 57 (Elevation (feet): 2290

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	29	41	24	0	0.12
2	53	29	41	24	0	0.12
3	53	29	41	24	0	0.12
4	52	29	40	25	0	0.12
5	52	29	40	25	0	0.11
6	52	29	40	25	0	0.11
7	52	27	40	25	0	0.11
8	51	27	39	26	0	0.11
9	51	27	39	26	0	0.11
10	51	27	39	26	0	0.11
11	51	27	39	26	0	0.11
12	50	26	38	27	0	0.11
13	50	26	38	27	0	0.11
14	50	26	38	27	0	0.10
15	50	26	38	27	0	0.10
16	50	26	38	27	0	0.10
17	49	25	37	28	0	0.10
18	49	25	37	28	0	0.10
19	49	25	37	28	0	0.10
20	49	25	37	28	0	0.10
21	49	25	37	28	0	0.10
22	48	25	37	28	0	0.11
23	48	24	36	29	0	0.11
24	48	24	36	29	0	0.11
25	48	24	36	29	0	0.11
26	48	24	36	29	0	0.11
27	48	24	36	29	0	0.11
28	47	24	36	29	0	0.11
29	47	24	36	29	0	0.11
30	47	24	36	29	0	0.11
31	47	24	36	29	0	0.12
MTH	49.8	26.0	37.9	840	0	3.38
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	24	35	30	0	0.12
2	47	24	35	30	0	0.12
3	47	24	35	30	0	0.12
4	47	24	35	30	0	0.12
5	47	24	35	30	0	0.12
6	46	24	35	30	0	0.12
7	46	24	35	30	0	0.13
8	46	24	35	30	0	0.13
9	46	24	35	30	0	0.13
10	46	24	35	30	0	0.13
11	46	24	35	30	0	0.13
12	46	24	35	30	0	0.13
13	46	24	35	30	0	0.13
14	46	24	35	30	0	0.13
15	46	23	35	30	0	0.13
16	46	23	35	30	0	0.13
17	46	23	35	30	0	0.13
18	46	23	35	30	0	0.13
19	46	23	35	30	0	0.14
20	46	23	35	30	0	0.14
21	46	23	35	30	0	0.14
22	46	23	35	30	0	0.14
23	47	23	35	30	0	0.14
24	47	23	35	30	0	0.14
25	47	23	35	30	0	0.14
26	47	23	35	30	0	0.13
27	47	23	35	30	0	0.13
28	47	23	35	30	0	0.13
29	47	23	35	30	0	0.13
30	47	23	35	30	0	0.13
31	47	23	35	30	0	0.13
MTH	46.5	23.5	35.0	930	0	4.04
	48.8	24.8	36.8	2537	0	11.18

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	24	35	30	0	0.13
2	48	24	36	29	0	0.13
3	48	24	36	29	0	0.13
4	48	24	36	29	0	0.13
5	48	24	36	29	0	0.13
6	48	24	36	29	0	0.13
7	48	24	36	29	0	0.13
8	48	24	36	29	0	0.13
9	49	24	36	29	0	0.13
10	49	24	37	28	0	0.13
11	49	24	37	28	0	0.13
12	49	24	37	28	0	0.13
13	50	25	37	28	0	0.13
14	50	25	37	28	0	0.13
15	50	25	37	28	0	0.13
16	50	25	38	27	0	0.13
17	51	25	38	27	0	0.13
18	51	25	38	27	0	0.13
19	51	25	38	27	0	0.14
20	51	26	39	26	0	0.14
21	51	26	39	26	0	0.14
22	52	26	39	26	0	0.14
23	52	26	39	26	0	0.14
24	52	26	39	26	0	0.14
25	53	27	40	25	0	0.14
26	53	27	40	25	0	0.14
27	53	27	40	25	0	0.15
28	53	28	41	24	0	0.15
MTH	50.1	25.1	37.6	767	0	3.76

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	28	41	24	0	0.15
2	54	29	41	24	0	0.15
3	54	29	41	24	0	0.16
4	55	29	42	23	0	0.16
5	55	29	42	23	0	0.16
6	55	29	42	23	0	0.16
7	55	30	43	22	0	0.16
8	56	30	43	22	0	0.16
9	56	30	43	22	0	0.16
10	56	30	43	22	0	0.16
11	57	31	44	21	0	0.16
12	57	31	44	21	0	0.16
13	57	31	44	21	0	0.16
14	57	31	44	21	0	0.16
15	58	32	45	20	0	0.16
16	58	32	45	20	0	0.16
17	58	32	45	20	0	0.16
18	58	32	45	20	0	0.16
19	59	33	46	19	0	0.16
20	59	33	46	19	0	0.16
21	59	33	46	19	0	0.16
22	59	33	46	19	0	0.16
23	60	34	47	18	0	0.16
24	60	34	47	18	0	0.16
25	60	34	47	18	0	0.16
26	61	34	48	17	0	0.16
27	61	35	48	17	0	0.15
28	61	35	48	17	0	0.15
29	61	35	48	17	0	0.15
30	62	35	49	16	0	0.15
31	62	35	49	16	0	0.15
MTH	57.9	31.9	44.9	623	0	4.89
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	36	49	16	0	0.14
2	63	36	49	16	0	0.14
3	63	36	49	16	0	0.14
4	63	36	50	15	0	0.14
5	64	36	50	15	0	0.13
6	64	37	50	15	0	0.13
7	64	37	50	15	0	0.13
8	64	37	51	14	0	0.13
9	64	37	51	14	0	0.13
10	65	37	51	14	0	0.13
11	65	38	52	13	0	0.13
12	65	38	52	13	0	0.13
13	65	38	52	13	0	0.13
14	66	38	52	13	0	0.13
15	66	39	53	12	0	0.13
16	66	39	53	12	0	0.12
17	66	40	53	12	0	0.13
18	66	40	53	12	0	0.13
19	67	40	54	11	0	0.13
20	67	40	54	11	0	0.13
21	67	41	54	11	0	0.13
22	67	41	54	11	0	0.13
23	68	41	55	10	0	0.13
24	68	42	55	10	0	0.13
25	68	42	55	10	0	0.13
26	68	42	55	10	0	0.13
27	69	43	56	9	0	0.13
28	69	43	56	9	0	0.14
29	69	44	57	9	1	0.14
30	70	44	57	9	1	0.14
MTH	66.0	39.3	52.7	370	2	3.96
	65.6	39.9	52.8	1163	41	13.79

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	70	45	57	8	0	0.14
2	70	45	57	8	0	0.15
3	70	45	57	8	0	0.15
4	71	45	58	8	1	0.15
5	71	45	58	8	1	0.15
6	71	45	58	8	1	0.15
7	72	46	59	7	1	0.16
8	72	46	59	7	1	0.16
9	72	46	59	7	1	0.16
10	72	46	59	7	1	0.16
11	72	47	60	6	1	0.16
12	72	47	60	6	1	0.16
13	72	48	60	6	1	0.16
14	72	48	60	6	1	0.16
15	73	48	61	5	1	0.16
16	73	49	61	5	1	0.16
17	73	49	61	5	1	0.16
18	73	49	61	5	1	0.16
19	73	49	61	5	1	0.17
20	73	49	61	5	1	0.17
21	74	50	62	5	2	0.17
22	74	51	63	4	2	0.17
23	75	51	63	4	2	0.17
24	75	51	63	4	2	0.16
25	75	51	63	4	2	0.16
26	75	51	63	4	2	0.16
27	76	52	64	3	2	0.16
28	76	52	64	3	2	0.16
29	76	52	64	3	2	0.16
30	76	52	64	3	2	0.16
31	76	52	64	3	2	0.16
MTH	73.1	48.5	60.8	170	39	4.94

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BLACK MOUNTAIN 2 W NORTH CAROLINA Station Number: 310843

Latitude: 35 B 36 * 26 (Longitude: -082 B 20* 57 (Elevation (feet): 2290

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	53	64	3	2	0.16
2	77	54	65	3	3	0.16
3	77	54	65	3	3	0.16
4	78	55	66	2	3	0.15
5	78	55	66	2	3	0.15
6	78	55	66	2	3	0.15
7	78	55	66	2	3	0.15
8	78	55	66	2	3	0.15
9	78	55	66	2	3	0.15
10	78	55	66	2	3	0.15
11	79	55	67	2	4	0.15
12	79	56	68	1	4	0.15
13	79	56	68	1	4	0.15
14	79	56	68	1	4	0.14
15	79	56	68	1	4	0.14
16	80	56	68	1	4	0.14
17	80	56	68	1	4	0.14
18	80	56	68	1	4	0.14
19	80	56	68	1	4	0.14
20	80	57	69	1	5	0.14
21	80	58	69	1	5	0.14
22	80	58	69	1	5	0.14
23	80	58	69	1	5	0.14
24	81	58	70	0	5	0.13
25	81	58	70	0	5	0.13
26	81	59	70	0	5	0.13
27	81	59	70	0	5	0.13
28	82	59	71	0	6	0.13
29	82	59	71	0	6	0.13
30	82	59	71	0	6	0.13
MTH	79.4	56.4	67.9	37	123	4.29

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	60	71	0	6	0.13
2	82	60	71	*	6	0.13
3	82	60	71	*	6	0.13
4	83	60	71	*	7	0.13
5	83	60	72	*	7	0.13
6	83	60	72	*	7	0.13
7	83	61	72	*	7	0.13
8	83	61	72	*	7	0.13
9	83	61	72	0	7	0.13
10	83	61	72	0	7	0.13
11	83	61	72	0	7	0.12
12	83	61	72	0	7	0.12
13	83	61	72	0	7	0.12
14	83	61	72	0	7	0.12
15	83	61	72	0	7	0.12
16	83	61	72	0	7	0.12
17	83	61	72	0	7	0.12
18	83	61	72	0	7	0.12
19	84	61	73	0	8	0.12
20	84	61	73	0	8	0.12
21	84	61	73	0	8	0.12
22	84	61	73	0	8	0.12
23	84	61	73	0	8	0.12
24	83	61	72	0	7	0.12
25	83	61	72	0	7	0.12
26	83	61	72	0	7	0.12
27	83	61	72	0	7	0.12
28	83	61	72	0	7	0.12
29	83	61	72	0	7	0.12
30	83	61	72	0	7	0.12
31	83	61	72	0	7	0.12
MTH	83.1	60.8	72.0	1	219	3.82
SUMMER SEASON:	81.3	58.9	70.2	44	520	12.07

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	61	72	0	7	0.12
2	83	61	72	0	7	0.12
3	83	61	72	0	7	0.12
4	83	61	72	0	7	0.12
5	83	61	72	0	7	0.12
6	83	61	72	0	7	0.12
7	83	61	72	0	7	0.12
8	83	60	72	0	7	0.13
9	83	60	71	0	6	0.13
10	83	60	71	0	6	0.13
11	82	60	71	0	6	0.13
12	82	60	71	0	6	0.13
13	82	60	71	0	6	0.13
14	82	60	71	0	6	0.13
15	82	60	71	0	6	0.13
16	82	60	71	0	6	0.13
17	82	59	71	0	6	0.13
18	82	59	71	0	6	0.13
19	81	59	70	0	5	0.13
20	81	59	70	0	5	0.13
21	81	59	70	0	5	0.13
22	81	59	70	0	5	0.13
23	81	59	70	0	5	0.13
24	81	59	70	0	5	0.13
25	80	59	70	0	5	0.13
26	80	58	69	1	5	0.13
27	80	58	69	1	5	0.13
28	79	58	69	1	5	0.13
29	79	57	68	1	4	0.13
30	79	57	68	1	4	0.13
31	79	57	68	1	4	0.13
MTH	81.6	59.5	70.6	6	178	3.96

SEPTEMBER

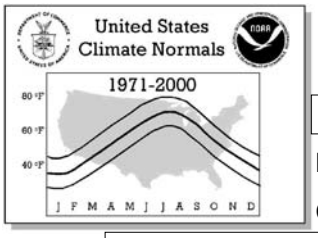
Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	57	68	1	4	0.13
2	79	57	68	1	4	0.13
3	79	57	68	1	4	0.13
4	79	57	68	1	4	0.13
5	79	57	68	1	4	0.13
6	78	57	67	1	3	0.14
7	78	56	67	1	3	0.13
8	78	56	67	1	3	0.13
9	78	56	67	1	3	0.13
10	78	55	66	2	3	0.13
11	78	55	66	2	3	0.13
12	77	55	66	2	3	0.13
13	77	55	66	2	3	0.13
14	76	54	65	2	2	0.13
15	76	54	65	2	2	0.13
16	76	54	65	2	2	0.13
17	76	53	65	2	2	0.13
18	76	52	64	3	2	0.13
19	75	52	64	3	2	0.13
20	75	52	64	3	2	0.13
21	75	51	63	4	2	0.13
22	75	51	63	4	2	0.13
23	74	51	63	4	2	0.13
24	74	51	63	4	2	0.13
25	74	50	62	4	1	0.13
26	73	49	61	5	1	0.12
27	73	49	61	5	1	0.12
28	73	49	61	5	1	0.12
29	72	48	60	6	1	0.12
30	72	48	60	6	1	0.12
MTH	76.1	53.3	64.7	81	72	3.86
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	48	60	6	1	0.12
2	72	47	59	7	1	0.11
3	72	47	59	7	1	0.11
4	71	46	58	8	1	0.11
5	71	46	58	8	1	0.11
6	71	46	58	8	1	0.11
7	70	45	58	8	1	0.11
8	70	44	57	8	0	0.11
9	69	43	56	9	0	0.11
10	69	43	56	9	0	0.11
11	69	43	56	9	0	0.11
12	69	42	55	10	0	0.11
13	69	41	55	10	0	0.11
14	68	41	55	10	0	0.11
15	68	40	54	11	0	0.11
16	68	40	54	11	0	0.11
17	67	40	54	11	0	0.11
18	67	39	53	12	0	0.11
19	67	39	53	12	0	0.11
20	67	39	53	12	0	0.11
21	66	39	53	12	0	0.11
22	66	38	52	13	0	0.11
23	66	38	52	13	0	0.11
24	65	38	52	13	0	0.11
25	65	37	51	14	0	0.12
26	65	37	51	14	0	0.12
27	64	37	51	14	0	0.12
28	64	36	50	15	0	0.12
29	64	36	50	15	0	0.12
30	64	36	50	15	0	0.12
31	63	36	50	15	0	0.13
MTH	67.7	40.9	54.3	339	7	3.50
AUTUMN SEASON:	67.4	42.2	54.8	1008	79	11.40
ANNUAL:	65.8	41.5	53.7	4752	640	48.44

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	36	49	16	0	0.13
2	63	36	49	16	0	0.13
3	63	36	49	16	0	0.13
4	63	36	49	16	0	0.13
5	61	35	48	17	0	0.13
6	61	35	48	17	0	0.13
7	61	34	48	17	0	0.14
8	60	34	47	18	0	0.14
9	60	34	47	18	0	0.14
10	60	34	47	18	0	0.14
11	60	33	47	18	0	0.14
12	59	33	46	19	0	0.14
13	59	33	46	19	0	0.14
14	59	33	46	19	0	0.14
15	59	33	46	19	0	0.14
16	58	32	45	20	0	0.14
17	58	32	45	20	0	0.14
18	58	32	45	20	0	0.14
19	57	31	44	21	0	0.14
20	57	31	44	21	0	0.14
21	57	31	44	21	0	0.14
22	56	31	44	21	0	0.14
23	56	30	43	22	0	0.13
24	56	30	43	22	0	0.13
25	55	30	43	22	0	0.13
26	55	30	43	22	0	0.13
27	55	29	42	23	0	0.13
28	54	29	42	23	0	0.13
29	54	29	42	23	0	0.12
30	54	29	41	24	0	0.12
MTH	58.4	32.4	45.4	588	0	4.04



CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BLACK MOUNTAIN 2 W NORTH CAROLINA Station Number: 310843

Latitude: 35° 36* 26(Longitude: -082° 20* 57(Elevation (feet): 2290

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.53	0.32	0.90	0.44	0.80	0.67	0.75	0.33	0.15	0.04	0.58	0.33	26.91
0.010	0.67	0.43	1.09	0.56	0.99	0.83	0.90	0.44	0.23	0.07	0.72	0.43	28.58
0.050	1.20	0.88	1.76	1.06	1.66	1.41	1.42	0.91	0.59	0.27	1.26	0.84	33.52
0.100	1.59	1.23	2.22	1.44	2.12	1.82	1.78	1.28	0.92	0.50	1.64	1.16	36.37
0.200	2.16	1.78	2.89	2.01	2.81	2.41	2.29	1.86	1.48	0.96	2.21	1.66	40.05
0.300	2.66	2.28	3.44	2.51	3.39	2.92	2.72	2.38	2.01	1.44	2.70	2.09	42.85
0.400	3.14	2.76	3.97	3.01	3.95	3.41	3.13	2.90	2.56	1.98	3.18	2.52	45.35
0.500	3.64	3.28	4.52	3.52	4.53	3.92	3.54	3.45	3.17	2.59	3.67	2.98	47.77
0.600	4.19	3.86	5.11	4.09	5.16	4.47	3.99	4.06	3.87	3.32	4.21	3.48	50.28
0.700	4.84	4.56	5.80	4.77	5.89	5.12	4.52	4.80	4.72	4.25	4.84	4.09	53.05
0.800	5.69	5.46	6.68	5.66	6.84	5.95	5.19	5.76	5.86	5.54	5.66	4.88	56.43
0.900	7.00	6.91	8.04	7.04	8.30	7.24	6.21	7.30	7.71	7.69	6.93	6.12	61.34
0.950	8.22	8.26	9.28	8.34	9.65	8.43	7.15	8.75	9.49	9.82	8.11	7.29	65.59
0.990	10.85	11.23	11.93	11.16	12.54	10.98	9.15	11.91	13.48	14.70	10.64	9.84	74.09
0.995	11.93	12.46	13.01	12.31	13.72	12.02	9.96	13.22	15.15	16.78	11.68	10.89	77.37

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BREVARD NORTH CAROLINA Station Number: 311055

Latitude: 35B 12* 56 (Longitude: -082B 42* 19 (Elevation (feet): 2212

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	29	41	24	0	0.20
2	53	29	41	24	0	0.20
3	53	29	41	24	0	0.20
4	53	29	41	24	0	0.20
5	52	29	40	25	0	0.20
6	52	29	40	25	0	0.20
7	52	29	40	25	0	0.20
8	52	27	40	25	0	0.20
9	51	27	39	26	0	0.20
10	51	27	39	26	0	0.20
11	51	27	39	26	0	0.20
12	50	27	39	26	0	0.19
13	50	26	38	27	0	0.19
14	50	26	38	27	0	0.19
15	50	26	38	27	0	0.19
16	50	26	38	27	0	0.19
17	49	26	38	27	0	0.19
18	49	25	37	28	0	0.19
19	49	25	37	28	0	0.19
20	49	25	37	28	0	0.19
21	49	25	37	28	0	0.19
22	48	25	37	28	0	0.19
23	48	25	37	28	0	0.19
24	48	25	37	28	0	0.19
25	48	24	36	29	0	0.19
26	48	24	36	29	0	0.19
27	48	24	36	29	0	0.19
28	48	24	36	29	0	0.19
29	48	24	36	29	0	0.19
30	47	24	36	29	0	0.19
31	47	24	36	29	0	0.20
MTH	49.9	26.2	38.1	834	0	6.01
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	24	36	29	0	0.19
2	47	24	36	29	0	0.19
3	47	24	36	29	0	0.19
4	47	24	36	29	0	0.20
5	47	24	36	29	0	0.20
6	47	24	36	29	0	0.20
7	47	24	35	30	0	0.20
8	47	24	35	30	0	0.20
9	47	24	35	30	0	0.19
10	47	24	35	30	0	0.19
11	47	24	35	30	0	0.19
12	47	24	35	30	0	0.19
13	47	23	35	30	0	0.19
14	47	23	35	30	0	0.19
15	47	23	35	30	0	0.19
16	47	23	35	30	0	0.19
17	47	23	35	30	0	0.19
18	47	23	35	30	0	0.19
19	47	23	35	30	0	0.19
20	47	23	35	30	0	0.19
21	47	23	35	30	0	0.19
22	47	23	35	30	0	0.19
23	47	23	35	30	0	0.19
24	47	24	36	29	0	0.19
25	47	24	36	29	0	0.19
26	48	24	36	29	0	0.19
27	48	24	36	29	0	0.19
28	48	24	36	29	0	0.19
29	48	24	36	29	0	0.19
30	48	24	36	29	0	0.19
31	48	24	36	29	0	0.18
MTH	47.2	23.7	35.5	916	0	5.93
	49.5	25.0	37.3	2495	0	17.17

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	24	36	29	0	0.18
2	49	24	36	29	0	0.18
3	49	24	36	29	0	0.18
4	49	24	36	29	0	0.18
5	50	24	37	28	0	0.18
6	50	24	37	28	0	0.18
7	50	24	37	28	0	0.18
8	50	24	37	28	0	0.18
9	50	24	37	28	0	0.18
10	50	24	37	28	0	0.18
11	51	25	38	27	0	0.18
12	51	25	38	27	0	0.18
13	51	25	38	27	0	0.18
14	51	25	38	27	0	0.18
15	51	25	38	27	0	0.18
16	52	25	39	26	0	0.19
17	52	25	39	26	0	0.19
18	52	26	39	26	0	0.19
19	52	26	39	26	0	0.19
20	52	26	39	26	0	0.19
21	53	26	40	25	0	0.19
22	53	26	40	25	0	0.19
23	53	27	40	25	0	0.19
24	53	27	40	25	0	0.20
25	54	27	41	24	0	0.20
26	54	27	41	24	0	0.20
27	55	27	41	24	0	0.20
28	55	27	41	24	0	0.21
MTH	51.5	25.3	38.4	745	0	5.23

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	29	42	23	0	0.21
2	55	29	42	23	0	0.21
3	56	29	42	23	0	0.21
4	56	30	43	22	0	0.21
5	56	30	43	22	0	0.21
6	57	30	43	22	0	0.21
7	57	30	43	22	0	0.22
8	57	30	44	21	0	0.22
9	58	30	44	21	0	0.22
10	58	30	44	21	0	0.22
11	58	31	44	21	0	0.22
12	58	31	45	20	0	0.22
13	59	31	45	20	0	0.22
14	59	31	45	20	0	0.22
15	59	31	45	20	*	0.22
16	59	32	46	19	*	0.22
17	60	32	46	19	*	0.22
18	60	32	46	19	*	0.22
19	60	33	47	19	*	0.21
20	61	33	47	18	*	0.21
21	61	33	47	18	*	0.21
22	61	33	47	18	*	0.21
23	61	33	47	18	*	0.21
24	62	34	48	17	0	0.20
25	62	34	48	17	0	0.20
26	62	34	48	17	0	0.20
27	62	34	48	17	0	0.20
28	63	35	49	16	0	0.19
29	63	35	49	16	0	0.19
30	63	35	49	16	0	0.19
31	63	35	49	16	0	0.18
MTH	59.4	31.9	45.7	601	1	6.50
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	36	50	15	0	0.18
2	64	36	50	15	*	0.18
3	64	36	50	15	*	0.17
4	64	37	50	15	*	0.17
5	65	37	51	15	*	0.17
6	65	37	51	14	*	0.16
7	65	37	51	14	*	0.16
8	65	37	51	14	*	0.16
9	66	37	51	14	*	0.16
10	66	38	52	13	0	0.15
11	66	38	52	13	0	0.15
12	66	38	52	13	0	0.15
13	66	38	52	13	0	0.15
14	67	39	53	12	0	0.15
15	67	39	53	12	0	0.15
16	67	39	53	12	0	0.15
17	68	39	54	11	0	0.15
18	68	40	54	11	0	0.15
19	68	40	54	11	0	0.15
20	68	40	54	11	0	0.15
21	69	41	55	10	0	0.15
22	69	41	55	10	0	0.15
23	69	41	55	10	0	0.15
24	69	41	55	10	0	0.15
25	69	42	56	9	0	0.15
26	70	42	56	9	0	0.15
27	70	42	56	9	0	0.15
28	70	42	56	9	0	0.16
29	70	42	56	9	0	0.16
30	71	43	57	9	1	0.16
MTH	67.2	39.2	53.2	357	2	4.69
	66.8	39.9	53.4	1113	44	17.11

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	71	44	57	8	0	0.17
2	71	44	57	8	0	0.17
3	72	45	58	8	1	0.17
4	72	45	58	8	1	0.17
5	72	45	59	7	1	0.18
6	72	46	59	7	1	0.18
7	72	46	59	7	1	0.18
8	72	46	59	7	1	0.18
9	73	47	60	6	1	0.18
10	73	47	60	6	1	0.19
11	73	47	60	6	1	0.19
12	73	47	60	6	1	0.19
13	73	48	61	5	1	0.19
14	74	48	61	5	1	0.19
15	74	48	61	5	1	0.19
16	74	48	61	5	1	0.20
17	74	49	62	4	1	0.20
18	74	49	62	4	1	0.20
19	75	49	62	4	1	0.20
20	75	50	63	4	2	0.20
21	75	50	63	4	2	0.20
22	75	50	63	4	2	0.20
23	75	51	63	4	2	0.20
24	75	51	63	4	2	0.20
25	76	51	64	3	2	0.20
26	76	52	64	3	2	0.20
27	76	52	64	3	2	0.20
28	76	52	64	3	2	0.20
29	76	52	64	3	2	0.20
30	77	53	65	2	2	0.20
31	77	53	65	2	2	0.20
MTH	74.0	48.6	61.3	155	41	5.92

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BREVARD NORTH CAROLINA Station Number: 311055

Latitude: 35 B 12 * 56 (Longitude: -082 B 42 * 19 (Elevation (feet): 2212

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	77	54	65	2	2	0.20
2	77	54	65	2	2	0.20
3	77	54	66	2	3	0.20
4	78	54	66	2	3	0.20
5	78	54	66	2	3	0.20
6	78	55	66	2	3	0.20
7	78	55	66	2	3	0.20
8	78	55	67	1	3	0.20
9	78	55	67	1	3	0.20
10	79	55	67	1	3	0.20
11	79	55	67	1	3	0.20
12	79	55	67	1	3	0.20
13	79	55	67	1	3	0.19
14	79	56	68	1	4	0.19
15	79	57	68	1	4	0.19
16	79	57	68	1	4	0.19
17	79	57	68	1	4	0.19
18	79	57	68	1	4	0.19
19	80	57	69	0	4	0.19
20	80	58	69	0	4	0.19
21	80	58	69	0	4	0.19
22	80	58	69	0	4	0.19
23	80	59	70	0	5	0.19
24	80	59	70	0	5	0.18
25	80	59	70	0	5	0.18
26	81	59	70	0	5	0.18
27	81	59	70	0	5	0.18
28	81	59	70	0	5	0.18
29	81	59	70	0	5	0.18
30	81	59	70	1	6	0.18
MTH	79.2	56.6	67.9	26	114	5.75

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	59	70	1	6	0.18
2	81	60	70	0	5	0.17
3	81	60	71	0	6	0.17
4	81	60	71	0	6	0.17
5	81	60	71	0	6	0.17
6	81	61	71	0	6	0.17
7	81	61	71	0	6	0.17
8	82	61	71	0	6	0.17
9	82	61	71	0	6	0.17
10	82	61	71	0	6	0.17
11	82	61	72	0	7	0.17
12	82	61	72	0	7	0.16
13	82	61	72	0	7	0.16
14	82	61	72	0	7	0.16
15	82	62	72	0	7	0.16
16	82	62	72	0	7	0.16
17	82	62	72	0	7	0.16
18	82	62	72	0	7	0.16
19	82	62	72	0	7	0.16
20	82	62	72	0	7	0.16
21	82	62	72	0	7	0.16
22	82	62	72	0	7	0.16
23	82	62	72	0	7	0.16
24	82	62	72	0	7	0.16
25	82	62	72	0	7	0.16
26	82	62	72	0	7	0.16
27	82	62	72	0	7	0.16
28	82	62	72	0	7	0.16
29	82	62	72	0	7	0.17
30	82	62	72	0	7	0.17
31	82	62	72	0	7	0.17
MTH	81.8	61.4	71.6	1	206	5.11
SUMMER SEASON:	80.3	59.4	69.9	30	482	16.26

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	62	72	0	7	0.17
2	82	62	72	0	7	0.17
3	81	61	71	0	6	0.17
4	81	61	71	0	6	0.17
5	81	61	71	0	6	0.17
6	81	61	71	0	6	0.17
7	81	61	71	0	6	0.17
8	81	61	71	0	6	0.17
9	81	61	71	0	6	0.17
10	81	61	71	0	6	0.17
11	81	61	71	0	6	0.17
12	81	61	71	0	6	0.17
13	81	61	71	0	6	0.17
14	80	60	70	0	5	0.17
15	80	60	70	0	5	0.17
16	80	60	70	0	5	0.17
17	80	60	70	0	5	0.17
18	80	60	70	0	5	0.17
19	80	60	70	0	5	0.18
20	80	60	70	0	5	0.18
21	80	60	70	0	5	0.18
22	79	60	70	0	5	0.18
23	79	60	70	0	5	0.18
24	79	59	69	0	4	0.18
25	79	59	69	0	4	0.18
26	79	59	69	0	4	0.18
27	79	59	69	0	4	0.18
28	79	59	69	0	4	0.18
29	78	58	68	1	4	0.18
30	78	58	68	1	4	0.18
31	78	58	68	1	4	0.18
MTH	80.1	60.1	70.1	3	162	5.40

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	58	68	0	3	0.18
2	78	58	68	0	3	0.18
3	78	58	68	0	3	0.18
4	78	58	68	0	3	0.18
5	78	58	68	0	3	0.18
6	77	58	67	1	3	0.18
7	77	58	67	1	3	0.18
8	77	58	67	1	3	0.18
9	77	56	66	1	2	0.18
10	76	56	66	1	2	0.17
11	76	56	66	1	2	0.17
12	76	56	66	1	2	0.17
13	76	55	66	1	2	0.17
14	76	54	65	2	2	0.17
15	76	54	65	2	2	0.17
16	75	54	65	2	2	0.17
17	75	54	65	2	2	0.17
18	75	54	65	2	2	0.17
19	75	53	64	2	1	0.17
20	74	52	63	3	1	0.17
21	74	52	63	3	1	0.17
22	74	52	63	3	1	0.17
23	74	51	63	3	1	0.17
24	73	51	62	4	1	0.16
25	73	51	62	4	1	0.16
26	73	50	62	4	1	0.16
27	73	49	61	5	1	0.16
28	72	49	61	5	1	0.16
29	72	48	60	6	1	0.16
30	72	48	60	6	1	0.16
MTH	75.3	54.0	64.7	66	56	5.12
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	48	60	6	1	0.16
2	71	48	59	7	1	0.16
3	71	47	59	7	1	0.16
4	71	46	58	8	1	0.16
5	71	45	58	8	1	0.15
6	70	44	57	9	1	0.15
7	70	44	57	9	1	0.15
8	70	44	57	9	1	0.15
9	69	44	57	9	1	0.15
10	69	43	56	9	0	0.15
11	69	42	56	9	0	0.15
12	69	41	55	10	0	0.15
13	68	41	55	10	0	0.15
14	68	41	55	10	0	0.15
15	68	40	54	11	0	0.15
16	68	40	54	11	0	0.15
17	67	40	54	11	0	0.15
18	67	39	53	12	0	0.15
19	67	39	53	12	0	0.15
20	66	39	53	12	0	0.16
21	66	38	52	13	0	0.16
22	66	38	52	13	0	0.16
23	66	38	52	13	0	0.16
24	65	37	51	14	0	0.16
25	65	37	51	14	0	0.16
26	65	37	51	14	0	0.16
27	64	36	50	15	0	0.16
28	64	36	50	15	0	0.17
29	64	36	50	15	0	0.17
30	63	36	50	15	0	0.17
31	63	36	49	16	0	0.17
MTH	67.5	40.7	54.1	346	9	4.85
AUTUMN SEASON:	67.0	42.4	54.8	997	65	15.66
ANNUAL:	65.9	41.7	53.9	4635	591	66.20

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	36	49	16	0	0.17
2	63	36	49	16	0	0.17
3	63	35	49	16	0	0.18
4	63	35	49	16	0	0.18
5	62	35	48	17	0	0.18
6	61	35	48	17	0	0.18
7	61	34	48	17	0	0.18
8	60	34	47	18	0	0.18
9	60	34	47	18	0	0.18
10	60	34	47	18	0	0.19
11	60	34	47	18	0	0.19
12	59	33	46	19	0	0.19
13	59	33	46	19	0	0.19
14	59	33	46	19	0	0.19
15	59	33	46	19	0	0.19
16	58	32	45	20	0	0.19
17	58	32	45	20	0	0.19
18	58	32	45	20	0	0.19
19	57	32	45	20	0	0.19
20	57	31	44	21	0	0.19
21	57	31	44	21	0	0.20
22	56	31	44	21	0	0.20
23	56	31	44	21	0	0.20
24	56	30	43	22	0	0.20
25	55	30	43	22	0	0.20
26	55	30	43	22	0	0.20
27	54	30	42	23	0	0.20
28	54	30	42	23	0	0.20
29	54	29	42	23	0	0.20
30	54	29	42	23	0	0.20
MTH	58.4	32.5	45.5	585	0	5.69

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BREVARD NORTH CAROLINA Station Number: 311055

Latitude: 35B 12* 56(Longitude: -082B 42* 19(Elevation (feet): 2212

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.71	0.43	1.35	0.41	0.89	0.76	0.97	0.63	0.22	0.08	1.23	0.37	36.43
0.010	0.91	0.57	1.61	0.55	1.11	0.96	1.17	0.81	0.32	0.13	1.46	0.52	38.73
0.050	1.68	1.19	2.51	1.11	1.90	1.72	1.87	1.50	0.82	0.47	2.25	1.17	45.54
0.100	2.24	1.68	3.11	1.55	2.46	2.26	2.35	2.01	1.26	0.82	2.77	1.72	49.48
0.200	3.09	2.44	3.97	2.23	3.29	3.08	3.04	2.79	2.01	1.47	3.52	2.60	54.57
0.300	3.83	3.13	4.69	2.85	4.00	3.79	3.62	3.46	2.71	2.15	4.14	3.41	58.44
0.400	4.56	3.82	5.37	3.45	4.68	4.47	4.17	4.13	3.44	2.88	4.72	4.23	61.90
0.500	5.31	4.55	6.06	4.10	5.39	5.19	4.73	4.82	4.23	3.71	5.32	5.11	65.25
0.600	6.15	5.36	6.81	4.82	6.16	5.97	5.34	5.59	5.14	4.69	5.96	6.11	68.72
0.700	7.14	6.34	7.67	5.68	7.07	6.90	6.05	6.50	6.25	5.92	6.70	7.31	72.57
0.800	8.42	7.63	8.77	6.80	8.24	8.09	6.96	7.68	7.74	7.60	7.64	8.91	77.25
0.900	10.42	9.67	10.46	8.59	10.06	9.96	8.36	9.53	10.14	10.40	9.08	11.47	84.07
0.950	12.30	11.60	12.00	10.27	11.73	11.69	9.64	11.26	12.45	13.14	10.40	13.90	89.98
0.990	16.34	15.81	15.27	13.94	15.33	15.43	12.37	15.00	17.59	19.37	13.18	19.26	101.80
0.995	18.00	17.56	16.59	15.46	16.80	16.97	13.47	16.53	19.74	22.01	14.30	21.50	106.35

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BRIDGEWATER HYDRO NORTH CAROLINA Station Number: 311081

Latitude: 35 B 44 * 35 (Longitude: -081 B 50* 14 (Elevation (feet): 1150

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.12
6						0.12
7						0.12
8						0.12
9						0.12
10						0.12
11						0.12
12						0.12
13						0.12
14						0.12
15						0.11
16						0.11
17						0.11
18						0.11
19						0.12
20						0.12
21						0.12
22						0.12
23						0.12
24						0.12
25						0.12
26						0.12
27						0.12
28						0.12
29						0.12
30						0.12
31						0.12
MTH						3.68
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.13
5						0.13
6						0.13
7						0.13
8						0.13
9						0.13
10						0.13
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.13
17						0.13
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.14
24						0.14
25						0.14
26						0.14
27						0.14
28						0.14
29						0.14
30						0.14
31						0.14
MTH						4.09
						11.78

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.14
7						0.14
8						0.14
9						0.14
10						0.14
11						0.14
12						0.14
13						0.14
14						0.14
15						0.14
16						0.14
17						0.14
18						0.14
19						0.14
20						0.15
21						0.15
22						0.15
23						0.15
24						0.15
25						0.15
26						0.15
27						0.15
28						0.15
MTH						4.01

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16
2						0.16
3						0.16
4						0.16
5						0.16
6						0.16
7						0.16
8						0.16
9						0.16
10						0.16
11						0.16
12						0.17
13						0.17
14						0.17
15						0.17
16						0.16
17						0.16
18						0.16
19						0.16
20						0.16
21						0.16
22						0.16
23						0.16
24						0.16
25						0.16
26						0.16
27						0.16
28						0.15
29						0.15
30						0.15
31						0.15
MTH						4.96
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.15
2						0.15
3						0.14
4						0.14
5						0.14
6						0.14
7						0.14
8						0.14
9						0.14
10						0.13
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.13
17						0.13
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.14
24						0.14
25						0.14
26						0.14
27						0.14
28						0.14
29						0.14
30						0.14
MTH						4.09
						13.91

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.15
3						0.15
4						0.15
5						0.15
6						0.15
7						0.15
8						0.15
9						0.15
10						0.16
11						0.16
12						0.16
13						0.16
14						0.16
15						0.16
16						0.16
17						0.16
18						0.16
19						0.16
20						0.16
21						0.16
22						0.16
23						0.16
24						0.16
25						0.16
26						0.16
27						0.16
28						0.16
29						0.16
30						0.16
31						0.16
MTH						4.86

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BRIDGEWATER HYDRO NORTH CAROLINA Station Number: 311081

Latitude: 35 B 44 * 35 (Longitude: -081 B 50* 14 (Elevation (feet): 1150

Climate Division: NC 01 Southern Mountains

JUNE							JULY							AUGUST						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16	1						0.15	1						0.14
2						0.16	2						0.15	2						0.14
3						0.15	3						0.15	3						0.14
4						0.15	4						0.15	4						0.14
5						0.15	5						0.15	5						0.14
6						0.15	6						0.16	6						0.14
7						0.15	7						0.16	7						0.14
8						0.15	8						0.16	8						0.14
9						0.15	9						0.16	9						0.14
10						0.15	10						0.16	10						0.13
11						0.15	11						0.16	11						0.13
12						0.15	12						0.16	12						0.13
13						0.15	13						0.16	13						0.13
14						0.15	14						0.16	14						0.13
15						0.15	15						0.16	15						0.13
16						0.15	16						0.15	16						0.13
17						0.15	17						0.15	17						0.13
18						0.15	18						0.15	18						0.13
19						0.15	19						0.15	19						0.13
20						0.15	20						0.15	20						0.13
21						0.15	21						0.15	21						0.13
22						0.15	22						0.15	22						0.13
23						0.15	23						0.15	23						0.13
24						0.15	24						0.15	24						0.13
25						0.15	25						0.15	25						0.13
26						0.15	26						0.15	26						0.13
27						0.15	27						0.15	27						0.14
28						0.15	28						0.15	28						0.14
29						0.15	29						0.15	29						0.14
30						0.15	30						0.14	30						0.14
							31						0.14	31						0.14
MTH						4.52	MTH						4.73	MTH						4.17
						SUMMER SEASON:							13.42							

SEPTEMBER							OCTOBER							NOVEMBER						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14	1						0.13	1						0.13
2						0.14	2						0.13	2						0.13
3						0.14	3						0.13	3						0.13
4						0.14	4						0.13	4						0.13
5						0.14	5						0.13	5						0.13
6						0.14	6						0.13	6						0.13
7						0.14	7						0.13	7						0.13
8						0.14	8						0.13	8						0.13
9						0.14	9						0.13	9						0.13
10						0.14	10						0.13	10						0.13
11						0.14	11						0.13	11						0.13
12						0.15	12						0.13	12						0.13
13						0.15	13						0.13	13						0.13
14						0.15	14						0.12	14						0.13
15						0.15	15						0.12	15						0.13
16						0.14	16						0.12	16						0.13
17						0.14	17						0.12	17						0.13
18						0.14	18						0.12	18						0.13
19						0.14	19						0.12	19						0.13
20						0.14	20						0.12	20						0.13
21						0.14	21						0.12	21						0.13
22						0.14	22						0.12	22						0.13
23						0.14	23						0.12	23						0.13
24						0.14	24						0.12	24						0.13
25						0.14	25						0.12	25						0.13
26						0.14	26						0.12	26						0.12
27						0.14	27						0.12	27						0.12
28						0.14	28						0.13	28						0.12
29						0.14	29						0.13	29						0.12
30						0.14	30						0.13	30						0.12
							31						0.13							
MTH						4.24	MTH						3.89	MTH						3.85
						AUTUMN SEASON:							11.98							
						ANNUAL:							51.09							

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BRIDGEWATER HYDRO NORTH CAROLINA Station Number: 311081

Latitude: 35° 44* 35(Longitude: -081° 50* 14(Elevation (feet): 1150

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.42	0.24	0.64	0.12	0.62	0.40	0.30	0.36	0.22	0.06	0.69	0.37	27.93
0.010	0.55	0.33	0.81	0.19	0.79	0.53	0.41	0.48	0.32	0.10	0.84	0.49	29.72
0.050	1.06	0.76	1.46	0.54	1.42	1.07	0.93	0.98	0.76	0.35	1.36	0.95	35.00
0.100	1.45	1.12	1.93	0.87	1.88	1.50	1.36	1.37	1.14	0.62	1.73	1.29	38.07
0.200	2.04	1.71	2.64	1.45	2.57	2.16	2.05	1.98	1.76	1.14	2.25	1.83	42.03
0.300	2.56	2.25	3.25	2.02	3.17	2.75	2.69	2.53	2.33	1.68	2.70	2.30	45.05
0.400	3.08	2.80	3.85	2.62	3.76	3.33	3.34	3.07	2.92	2.27	3.12	2.77	47.75
0.500	3.62	3.40	4.47	3.28	4.37	3.95	4.03	3.65	3.56	2.94	3.55	3.26	50.36
0.600	4.22	4.07	5.15	4.05	5.04	4.65	4.82	4.29	4.29	3.74	4.02	3.80	53.07
0.700	4.94	4.88	5.96	4.99	5.83	5.48	5.76	5.06	5.17	4.74	4.57	4.45	56.07
0.800	5.87	5.96	7.01	6.27	6.86	6.56	7.02	6.06	6.34	6.11	5.28	5.29	59.72
0.900	7.34	7.70	8.64	8.36	8.46	8.28	9.03	7.66	8.23	8.40	6.36	6.62	65.04
0.950	8.72	9.35	10.17	10.37	9.95	9.90	10.93	9.16	10.03	10.65	7.36	7.87	69.66
0.990	11.71	12.99	13.45	14.91	13.17	13.43	15.15	12.44	14.03	15.78	9.49	10.58	78.90
0.995	12.95	14.51	14.79	16.82	14.49	14.89	16.90	13.80	15.70	17.97	10.35	11.70	82.47

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BUCK FOREST NORTH CAROLINA Station Number: 311174

Latitude: 35 B 11 * 00 (Longitude: -082 B 37* 00 (Elevation (feet): 2515

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.20
2						0.20
3						0.20
4						0.20
5						0.20
6						0.19
7						0.19
8						0.19
9						0.19
10						0.19
11						0.19
12						0.19
13						0.19
14						0.19
15						0.19
16						0.19
17						0.19
18						0.19
19						0.19
20						0.19
21						0.19
22						0.19
23						0.19
24						0.19
25						0.19
26						0.19
27						0.19
28						0.19
29						0.19
30						0.19
31						0.20
MTH						5.95
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.20
2						0.20
3						0.20
4						0.20
5						0.20
6						0.20
7						0.20
8						0.20
9						0.21
10						0.21
11						0.21
12						0.21
13						0.21
14						0.21
15						0.21
16						0.21
17						0.21
18						0.21
19						0.21
20						0.21
21						0.21
22						0.21
23						0.21
24						0.21
25						0.21
26						0.21
27						0.20
28						0.20
29						0.20
30						0.20
31						0.20
MTH						6.38
						18.09

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.20
2						0.20
3						0.20
4						0.20
5						0.20
6						0.20
7						0.20
8						0.20
9						0.20
10						0.20
11						0.20
12						0.20
13						0.20
14						0.20
15						0.20
16						0.20
17						0.20
18						0.20
19						0.21
20						0.21
21						0.21
22						0.21
23						0.21
24						0.22
25						0.22
26						0.22
27						0.22
28						0.23
MTH						5.76

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.23
2						0.23
3						0.24
4						0.24
5						0.24
6						0.24
7						0.25
8						0.25
9						0.25
10						0.25
11						0.25
12						0.25
13						0.25
14						0.25
15						0.25
16						0.25
17						0.25
18						0.25
19						0.25
20						0.24
21						0.24
22						0.24
23						0.24
24						0.24
25						0.23
26						0.23
27						0.23
28						0.22
29						0.22
30						0.22
31						0.21
MTH						7.43
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.21
2						0.20
3						0.20
4						0.20
5						0.19
6						0.19
7						0.19
8						0.18
9						0.18
10						0.18
11						0.18
12						0.17
13						0.17
14						0.17
15						0.17
16						0.17
17						0.17
18						0.17
19						0.17
20						0.17
21						0.17
22						0.17
23						0.17
24						0.17
25						0.17
26						0.18
27						0.18
28						0.18
29						0.18
30						0.19
MTH						5.39
						19.21

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.19
2						0.19
3						0.20
4						0.20
5						0.20
6						0.20
7						0.21
8						0.21
9						0.21
10						0.21
11						0.21
12						0.21
13						0.21
14						0.21
15						0.21
16						0.21
17						0.21
18						0.21
19						0.21
20						0.21
21						0.21
22						0.21
23						0.21
24						0.21
25						0.21
26						0.21
27						0.21
28						0.20
29						0.20
30						0.20
31						0.20
MTH						6.39

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BUCK FOREST NORTH CAROLINA Station Number: 311174

Latitude: 35 B 11 * 00 (Longitude: -082 B 37 * 00 (Elevation (feet): 2515

Climate Division: NC 01 Southern Mountains

JUNE							JULY							AUGUST						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.19	1						0.17	1						0.17
2						0.19	2						0.17	2						0.17
3						0.19	3						0.17	3						0.17
4						0.19	4						0.17	4						0.17
5						0.19	5						0.17	5						0.17
6						0.18	6						0.17	6						0.17
7						0.18	7						0.17	7						0.17
8						0.18	8						0.17	8						0.17
9						0.18	9						0.17	9						0.17
10						0.18	10						0.17	10						0.17
11						0.17	11						0.17	11						0.17
12						0.17	12						0.17	12						0.17
13						0.17	13						0.17	13						0.17
14						0.17	14						0.17	14						0.17
15						0.17	15						0.17	15						0.17
16						0.17	16						0.17	16						0.17
17						0.17	17						0.17	17						0.17
18						0.17	18						0.17	18						0.17
19						0.17	19						0.18	19						0.17
20						0.17	20						0.18	20						0.17
21						0.17	21						0.18	21						0.17
22						0.17	22						0.18	22						0.17
23						0.16	23						0.17	23						0.18
24						0.16	24						0.17	24						0.18
25						0.16	25						0.17	25						0.18
26						0.16	26						0.17	26						0.18
27						0.17	27						0.17	27						0.18
28						0.17	28						0.17	28						0.18
29						0.17	29						0.17	29						0.18
30						0.17	30						0.17	30						0.18
							31						0.17	31						0.18
MTH						5.21	MTH						5.31	MTH						5.36
						SUMMER SEASON:							15.88							

SEPTEMBER							OCTOBER							NOVEMBER						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.18	1						0.17	1						0.19
2						0.18	2						0.17	2						0.19
3						0.18	3						0.17	3						0.20
4						0.18	4						0.17	4						0.20
5						0.19	5						0.17	5						0.20
6						0.19	6						0.17	6						0.20
7						0.19	7						0.17	7						0.21
8						0.19	8						0.16	8						0.21
9						0.19	9						0.16	9						0.21
10						0.19	10						0.16	10						0.21
11						0.19	11						0.16	11						0.21
12						0.19	12						0.16	12						0.21
13						0.19	13						0.16	13						0.21
14						0.19	14						0.16	14						0.21
15						0.19	15						0.16	15						0.21
16						0.19	16						0.16	16						0.21
17						0.19	17						0.17	17						0.22
18						0.19	18						0.17	18						0.22
19						0.19	19						0.17	19						0.22
20						0.18	20						0.17	20						0.22
21						0.18	21						0.17	21						0.21
22						0.18	22						0.17	22						0.21
23						0.18	23						0.17	23						0.21
24						0.18	24						0.17	24						0.21
25						0.18	25						0.18	25						0.21
26						0.18	26						0.18	26						0.21
27						0.18	27						0.18	27						0.21
28						0.18	28						0.18	28						0.21
29						0.17	29						0.18	29						0.21
30						0.17	30						0.19	30						0.21
							31						0.19							
MTH						5.53	MTH						5.27	MTH						6.26
						AUTUMN SEASON:							17.06							
						ANNUAL:							70.24							

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: BUCK FOREST NORTH CAROLINA Station Number: 311174

Latitude: 35° 11* 00(Longitude: -082° 37* 00(Elevation (feet): 2515

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.27	0.51	1.11	0.55	0.99	0.85	0.98	0.36	0.08	0.09	1.23	0.51	39.97
0.010	1.53	0.68	1.38	0.72	1.22	1.04	1.18	0.50	0.13	0.15	1.47	0.68	42.35
0.050	2.41	1.38	2.38	1.39	2.08	1.75	1.91	1.10	0.49	0.51	2.34	1.39	49.33
0.100	3.00	1.92	3.08	1.90	2.69	2.24	2.41	1.59	0.87	0.89	2.92	1.94	53.36
0.200	3.85	2.76	4.13	2.68	3.58	2.96	3.13	2.38	1.61	1.60	3.76	2.81	58.53
0.300	4.56	3.51	5.02	3.37	4.34	3.58	3.74	3.09	2.38	2.34	4.46	3.59	62.46
0.400	5.24	4.26	5.88	4.05	5.08	4.17	4.32	3.82	3.22	3.13	5.13	4.37	65.96
0.500	5.93	5.04	6.77	4.77	5.83	4.77	4.91	4.59	4.17	4.03	5.81	5.19	69.35
0.600	6.67	5.93	7.74	5.56	6.66	5.44	5.55	5.47	5.31	5.10	6.55	6.11	72.85
0.700	7.54	6.98	8.89	6.51	7.64	6.21	6.30	6.52	6.73	6.42	7.40	7.21	76.72
0.800	8.64	8.36	10.36	7.74	8.88	7.21	7.26	7.91	8.70	8.25	8.49	8.65	81.43
0.900	10.34	10.54	12.65	9.68	10.83	8.76	8.74	10.13	11.97	11.27	10.17	10.94	88.26
0.950	11.89	12.59	14.76	11.49	12.62	10.18	10.09	12.24	15.19	14.24	11.71	13.09	94.17
0.990	15.18	17.08	19.31	15.44	16.46	13.23	12.98	16.88	22.53	20.98	14.97	17.80	105.96
0.995	16.51	18.93	21.16	17.07	18.02	14.47	14.15	18.80	25.65	23.85	16.30	19.75	110.50

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

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The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CANTON 1 SW NORTH CAROLINA Station Number: 311441

Latitude: 35 B 31 * 00 (Longitude: -082 B 51 * 00 (Elevation (feet): 2662

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	29	41	24	0	0.10
2	52	29	40	25	0	0.10
3	52	29	40	25	0	0.10
4	52	29	40	25	0	0.10
5	52	29	40	25	0	0.10
6	51	28	39	26	0	0.10
7	51	28	39	26	0	0.10
8	51	28	39	26	0	0.10
9	51	27	39	26	0	0.10
10	51	27	39	26	0	0.10
11	50	26	38	27	0	0.10
12	50	26	38	27	0	0.09
13	49	26	38	27	0	0.09
14	49	26	38	27	0	0.09
15	49	25	37	28	0	0.09
16	49	25	37	28	0	0.09
17	49	25	37	28	0	0.09
18	48	25	37	28	0	0.09
19	48	25	37	28	0	0.09
20	48	25	37	28	0	0.09
21	47	25	36	29	0	0.09
22	47	25	36	29	0	0.09
23	47	25	36	29	0	0.09
24	47	25	36	29	0	0.09
25	47	24	36	29	0	0.09
26	47	24	36	29	0	0.10
27	47	24	36	29	0	0.10
28	46	24	35	30	0	0.10
29	46	24	35	30	0	0.10
30	46	24	35	30	0	0.10
31	46	24	35	30	0	0.10
MTH	49.0	26.0	37.5	853	0	2.96

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	23	35	30	0	0.10
2	46	23	35	30	0	0.10
3	46	23	35	30	0	0.10
4	46	23	35	30	0	0.10
5	46	23	35	30	0	0.10
6	46	23	35	30	0	0.10
7	46	23	34	31	0	0.10
8	46	23	34	31	0	0.10
9	46	23	34	31	0	0.10
10	46	23	34	31	0	0.11
11	46	23	34	31	0	0.11
12	46	23	34	31	0	0.11
13	46	23	34	31	0	0.11
14	46	23	34	31	0	0.11
15	46	23	34	31	0	0.11
16	46	23	34	31	0	0.11
17	45	23	34	31	0	0.11
18	45	23	34	31	0	0.11
19	45	23	34	31	0	0.11
20	45	23	34	31	0	0.11
21	45	23	34	31	0	0.11
22	45	23	34	31	0	0.11
23	45	23	34	31	0	0.11
24	45	23	34	31	0	0.11
25	45	23	34	31	0	0.12
26	46	23	35	30	0	0.12
27	46	23	35	30	0	0.12
28	46	23	35	30	0	0.12
29	46	23	35	30	0	0.12
30	47	23	35	30	0	0.12
31	47	23	35	30	0	0.12
MTH	45.8	23.0	34.4	949	0	3.39
WINTER SEASON:	48.1	24.6	36.4	2580	0	9.95

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	23	35	30	0	0.12
2	47	23	35	30	0	0.12
3	47	23	35	30	0	0.12
4	47	24	35	30	0	0.12
5	47	24	35	30	0	0.12
6	48	24	36	29	0	0.12
7	48	24	36	29	0	0.12
8	48	24	36	29	0	0.12
9	48	24	36	29	0	0.12
10	48	24	36	29	0	0.12
11	49	24	36	29	0	0.12
12	49	24	37	28	0	0.13
13	49	24	37	28	0	0.13
14	49	24	37	28	0	0.13
15	50	24	37	28	0	0.13
16	50	24	37	28	0	0.13
17	50	25	38	27	0	0.13
18	50	25	38	27	0	0.13
19	50	25	38	27	0	0.13
20	51	25	38	27	0	0.13
21	51	25	38	27	0	0.13
22	51	26	39	26	0	0.14
23	52	26	39	26	0	0.14
24	52	26	39	26	0	0.14
25	52	26	39	26	0	0.14
26	52	27	40	25	0	0.14
27	53	27	40	25	0	0.14
28	53	27	40	25	0	0.14
MTH	49.6	24.7	37.2	778	0	3.60

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	28	40	25	0	0.14
2	54	28	41	24	0	0.14
3	54	28	41	24	0	0.15
4	54	29	41	24	0	0.15
5	55	29	42	23	0	0.15
6	55	29	42	23	0	0.15
7	55	29	42	23	0	0.15
8	55	29	42	23	0	0.15
9	56	30	43	22	0	0.15
10	56	30	43	22	0	0.15
11	56	30	43	22	0	0.15
12	56	31	44	21	*	0.15
13	57	31	44	21	*	0.15
14	57	31	44	21	*	0.15
15	57	31	44	21	*	0.15
16	57	32	45	21	*	0.15
17	58	32	45	20	*	0.15
18	58	32	45	20	*	0.15
19	58	32	45	20	*	0.15
20	58	32	45	20	*	0.15
21	59	33	46	19	0	0.15
22	59	33	46	19	0	0.14
23	59	33	46	19	0	0.14
24	60	33	47	18	0	0.14
25	60	33	47	18	0	0.14
26	60	34	47	18	0	0.14
27	60	34	47	18	0	0.14
28	60	34	47	18	0	0.14
29	61	34	48	17	0	0.13
30	62	34	48	17	0	0.13
31	62	34	48	17	0	0.13
MTH	57.5	31.4	44.5	638	1	4.50

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	35	48	17	0	0.13
2	62	35	49	16	0	0.13
3	63	35	49	16	0	0.13
4	63	35	49	16	0	0.12
5	63	35	49	16	0	0.12
6	64	36	50	15	0	0.12
7	64	36	50	15	0	0.12
8	64	36	50	15	0	0.12
9	64	36	50	15	0	0.12
10	65	37	51	14	0	0.12
11	65	37	51	14	0	0.12
12	65	37	51	14	0	0.12
13	65	37	51	14	0	0.12
14	66	38	52	13	0	0.11
15	66	38	52	13	0	0.11
16	66	38	52	13	0	0.11
17	66	38	52	13	0	0.11
18	67	39	53	12	0	0.11
19	67	39	53	12	0	0.11
20	67	39	53	12	0	0.11
21	67	40	54	11	0	0.12
22	68	40	54	11	0	0.12
23	68	40	54	11	0	0.12
24	68	40	54	11	0	0.12
25	68	41	55	10	0	0.12
26	68	41	55	10	0	0.12
27	69	41	55	10	0	0.12
28	69	41	55	10	0	0.12
29	69	42	56	9	0	0.12
30	69	43	56	9	0	0.13
MTH	65.9	38.2	52.1	387	0	3.57
SPRING SEASON:	65.3	39.1	52.3	1203	32	12.15

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	69	44	56	9	0	0.13
2	70	44	57	8	0	0.13
3	70	44	57	8	0	0.13
4	70	44	57	8	0	0.13
5	70	44	57	8	0	0.13
6	70	45	57	8	0	0.13
7	70	45	57	8	0	0.13
8	71	45	58	8	1	0.14
9	72	46	59	7	1	0.14
10	72	46	59	7	1	0.14
11	72	46	59	7	1	0.14
12	72	46	59	7	1	0.14
13	72	47	60	6	1	0.14
14	72	47	60	6	1	0.14
15	72	48	60	6	1	0.14
16	72	48	60	6	1	0.14
17	73	48	61	5	1	0.14
18	73	49	61	5	1	0.14
19	73	49	61	5	1	0.13
20	73	49	61	5	1	0.13
21	74	49	62	4	1	0.13
22	74	50	62	4	1	0.13
23	74	50	62	4	1	0.13
24	74	50	62	4	1	0.13
25	75	50	63	4	2	0.13
26	75	51	63	4	2	0.13
27	75	51	63	4	2	0.12
28	75	51	63	4	2	0.12
29	76	51	64	3	2	0.12
30	76	52	64	3	2	0.12
31	76	52	64	3	2	0.11
MTH	72.7	47.8	60.3	178	31	4.08

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CANTON 1 SW NORTH CAROLINA Station Number: 311441

Latitude: 35 B 31 * 00 (Longitude: -082 B 51 * 00 (Elevation (feet): 2662

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	53	64	3	2	0.11
2	76	53	64	3	2	0.11
3	77	53	65	2	2	0.11
4	77	54	65	2	2	0.11
5	77	54	65	2	2	0.10
6	77	54	66	2	3	0.10
7	77	54	66	2	3	0.10
8	78	54	66	2	3	0.10
9	78	54	66	2	3	0.10
10	78	54	66	2	3	0.10
11	78	54	66	2	3	0.10
12	78	55	67	1	3	0.10
13	79	55	67	1	3	0.09
14	79	55	67	1	3	0.09
15	79	55	67	1	3	0.09
16	79	55	67	1	3	0.09
17	79	56	68	1	4	0.09
18	79	56	68	1	4	0.09
19	80	56	68	1	4	0.10
20	80	56	68	1	4	0.10
21	80	56	68	1	4	0.10
22	80	56	68	1	4	0.10
23	80	56	68	1	4	0.10
24	80	56	68	1	4	0.10
25	81	57	69	1	5	0.10
26	81	57	69	1	5	0.10
27	81	57	69	1	5	0.11
28	81	57	69	1	5	0.11
29	81	58	70	0	5	0.11
30	81	58	70	0	5	0.11
MTH	78.9	55.3	67.1	41	105	3.02

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	59	70	0	5	0.11
2	82	59	70	*	5	0.12
3	82	59	70	*	6	0.12
4	82	59	70	*	6	0.12
5	82	59	70	*	6	0.12
6	82	59	71	*	6	0.13
7	82	60	71	*	6	0.13
8	82	60	71	0	6	0.13
9	82	60	71	0	6	0.13
10	82	60	71	0	6	0.13
11	82	60	71	0	6	0.13
12	82	60	71	0	6	0.14
13	82	60	71	0	6	0.14
14	82	60	71	0	6	0.14
15	82	60	71	0	6	0.14
16	82	60	71	0	6	0.14
17	82	60	71	0	6	0.14
18	82	61	72	0	7	0.14
19	82	61	72	0	7	0.14
20	82	61	72	0	7	0.14
21	83	61	72	0	7	0.14
22	82	61	72	0	7	0.14
23	82	61	72	0	7	0.14
24	82	61	72	0	7	0.14
25	82	61	72	0	7	0.14
26	82	60	71	0	6	0.14
27	82	60	71	0	6	0.14
28	82	60	71	0	6	0.14
29	82	60	71	0	6	0.14
30	82	60	71	0	6	0.14
31	82	60	71	0	6	0.14
MTH	82.0	60.1	71.1	3	192	4.17
SUMMER SEASON:	80.5	58.1	69.4	46	449	11.04

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	60	71	0	6	0.14
2	82	60	71	0	6	0.13
3	82	60	71	0	6	0.13
4	82	60	71	0	6	0.13
5	82	60	71	0	6	0.13
6	82	60	71	0	6	0.13
7	81	60	71	0	6	0.13
8	81	60	71	0	6	0.13
9	81	60	71	0	6	0.13
10	81	60	70	0	5	0.13
11	81	60	70	0	5	0.13
12	81	60	70	0	5	0.13
13	81	60	70	0	5	0.12
14	81	59	70	0	5	0.12
15	81	59	70	0	5	0.12
16	81	59	70	0	5	0.12
17	81	59	70	0	5	0.12
18	80	59	70	0	5	0.12
19	80	59	70	0	5	0.12
20	80	59	70	0	5	0.12
21	80	59	70	0	5	0.12
22	80	58	69	0	4	0.12
23	80	58	69	0	4	0.12
24	80	58	69	0	4	0.12
25	79	58	69	*	4	0.12
26	79	58	69	*	4	0.12
27	79	58	69	*	4	0.12
28	79	57	68	*	4	0.12
29	79	57	68	*	4	0.12
30	79	57	68	*	3	0.12
31	79	57	68	0	3	0.12
MTH	80.5	59.0	69.8	2	152	3.85

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	57	68	0	3	0.12
2	78	57	68	0	3	0.12
3	78	57	68	0	3	0.12
4	78	57	67	1	3	0.12
5	78	57	67	1	3	0.12
6	77	57	67	1	3	0.11
7	77	57	67	1	3	0.11
8	77	56	66	1	2	0.11
9	77	56	66	1	2	0.11
10	77	56	66	1	2	0.11
11	76	55	66	1	2	0.11
12	76	55	66	1	2	0.11
13	76	54	65	2	2	0.11
14	76	54	65	2	2	0.11
15	76	54	65	2	2	0.11
16	75	54	65	2	2	0.11
17	75	54	65	2	2	0.11
18	75	53	64	2	1	0.11
19	74	52	63	3	1	0.10
20	74	52	63	3	1	0.10
21	74	52	63	3	1	0.10
22	73	51	62	4	1	0.10
23	73	51	62	4	1	0.10
24	73	50	62	4	1	0.10
25	73	49	61	5	1	0.10
26	73	49	61	5	1	0.10
27	72	49	61	5	1	0.09
28	72	48	60	6	1	0.09
29	72	48	60	6	1	0.09
30	71	47	59	7	1	0.09
MTH	75.2	53.3	64.3	76	54	3.19
AUTUMN SEASON:	66.1	42.1	54.2	1048	61	8.83
ANNUAL:	65.0	41.0	53.1	4877	542	41.97

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	71	47	59	7	1	0.09
2	71	47	59	8	2	0.08
3	70	47	58	8	1	0.08
4	70	45	58	8	1	0.08
5	70	45	58	8	1	0.08
6	69	45	57	8	0	0.08
7	69	44	56	9	0	0.08
8	69	43	56	9	0	0.08
9	68	43	56	9	0	0.08
10	68	42	55	10	0	0.08
11	68	42	55	10	0	0.08
12	67	42	55	10	0	0.08
13	67	41	54	11	0	0.08
14	67	41	54	11	0	0.08
15	66	41	54	11	0	0.08
16	66	40	53	12	0	0.08
17	66	40	53	12	0	0.08
18	65	39	52	13	0	0.08
19	65	39	52	13	0	0.08
20	65	39	52	13	0	0.08
21	65	39	52	13	0	0.08
22	64	38	51	14	0	0.08
23	64	38	51	14	0	0.08
24	64	38	51	14	0	0.08
25	63	37	50	15	0	0.08
26	63	37	50	15	0	0.08
27	63	37	50	15	0	0.08
28	62	36	49	16	0	0.08
29	62	36	49	16	0	0.09
30	62	36	49	16	0	0.09
31	62	36	49	16	0	0.09
MTH	66.2	40.7	53.5	364	6	2.52

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	36	49	17	1	0.09
2	61	36	48	17	0	0.09
3	61	36	48	17	0	0.09
4	61	36	48	17	0	0.10
5	61	34	47	18	0	0.10
6	60	34	47	18	0	0.10
7	60	34	47	18	0	0.10
8	59	34	47	18	0	0.10
9	59	33	46	19	0	0.10
10	59	33	46	19	0	0.10
11	58	33	46	19	0	0.10
12	58	33	46	19	0	0.11
13	57	33	45	20	0	0.11
14	57	33	45	20	0	0.11
15	57	33	45	20	0	0.11
16	57	32	45	20	0	0.11
17	56	32	44	21	0	0.11
18	56	32	44	21	0	0.11
19	56	32	44	21	0	0.11
20	56	31	44	21	0	0.11
21	55	31	43	22	0	0.11
22	55	31	43	22	0	0.11
23	55	31	43	22	0	0.11
24	55	30	43	22	0	0.11
25	54	30	42	23	0	0.11
26	54	30	42	23	0	0.11
27	54	30	42	23	0	0.10
28	53	30	42	23	0	0.10
29	53	29	41	24	0	0.10
30	53	29	41	24	0	0.10
MTH	57.1	32.4	44.8	608	1	3.12

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CANTON 1 SW NORTH CAROLINA Station Number: 311441

Latitude: 35° 31* 00(Longitude: -082° 51* 00(Elevation (feet): 2662

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.74	0.42	1.01	0.48	1.02	0.54	1.15	0.71	0.21	0.09	0.73	0.48	26.80
0.010	0.88	0.54	1.19	0.60	1.19	0.66	1.33	0.86	0.29	0.14	0.86	0.59	28.04
0.050	1.35	1.00	1.81	1.07	1.75	1.07	1.90	1.38	0.65	0.37	1.29	0.99	31.64
0.100	1.66	1.34	2.23	1.41	2.12	1.35	2.27	1.75	0.94	0.58	1.58	1.27	33.69
0.200	2.11	1.86	2.81	1.92	2.63	1.77	2.78	2.27	1.41	0.94	1.98	1.68	36.28
0.300	2.47	2.31	3.29	2.36	3.06	2.11	3.19	2.71	1.84	1.29	2.31	2.03	38.23
0.400	2.82	2.75	3.75	2.78	3.45	2.45	3.58	3.13	2.27	1.65	2.62	2.36	39.96
0.500	3.17	3.21	4.21	3.22	3.85	2.79	3.96	3.56	2.73	2.05	2.93	2.71	41.61
0.600	3.55	3.72	4.71	3.71	4.28	3.16	4.38	4.03	3.25	2.51	3.27	3.08	43.31
0.700	3.99	4.33	5.29	4.28	4.77	3.59	4.85	4.57	3.88	3.07	3.66	3.53	45.19
0.800	4.55	5.12	6.02	5.02	5.40	4.14	5.45	5.27	4.71	3.83	4.15	4.09	47.44
0.900	5.41	6.35	7.13	6.18	6.35	5.00	6.35	6.34	6.04	5.06	4.90	4.97	50.69
0.950	6.19	7.50	8.15	7.25	7.21	5.78	7.17	7.33	7.30	6.24	5.59	5.78	53.49
0.990	7.83	10.00	10.29	9.56	9.01	7.45	8.87	9.42	10.07	8.89	7.02	7.52	58.99
0.995	8.49	11.02	11.16	10.51	9.73	8.13	9.55	10.27	11.22	10.01	7.60	8.22	61.10

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CATALOOCHEE NORTH CAROLINA Station Number: 311564

Latitude: 35 B 37 * 00 (Longitude: -083 B 06* 00 (Elevation (feet): 2620

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	27	40	25	0	0.13
2	52	27	40	25	0	0.13
3	52	27	39	26	0	0.13
4	52	27	39	26	0	0.13
5	51	27	39	26	0	0.13
6	51	27	39	26	0	0.13
7	50	26	38	27	0	0.13
8	50	26	38	27	0	0.13
9	50	26	38	27	0	0.13
10	50	25	38	27	0	0.13
11	49	25	37	28	0	0.14
12	49	25	37	28	0	0.14
13	49	25	37	28	0	0.14
14	49	24	37	28	0	0.14
15	48	24	36	29	0	0.14
16	48	24	36	29	0	0.14
17	48	24	36	29	0	0.14
18	48	24	36	29	0	0.14
19	48	24	36	29	0	0.14
20	47	23	35	30	0	0.14
21	47	23	35	30	0	0.14
22	47	23	35	30	0	0.14
23	47	23	35	30	0	0.14
24	47	23	35	30	0	0.14
25	47	23	35	30	0	0.14
26	46	23	35	30	0	0.14
27	46	22	34	31	0	0.14
28	46	22	34	31	0	0.14
29	46	22	34	31	0	0.15
30	46	22	34	31	0	0.15
31	46	22	34	31	0	0.15
MTH	48.6	24.4	36.5	884	0	4.27
WINTER SEASON:			48.0	23.2	35.6	2646	0	13.68

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	22	34	31	0	0.15
2	46	22	34	31	0	0.15
3	46	22	34	31	0	0.15
4	46	22	34	31	0	0.15
5	45	22	34	31	0	0.15
6	45	22	34	31	0	0.15
7	45	22	34	31	0	0.15
8	45	22	34	31	0	0.15
9	45	22	34	31	0	0.15
10	45	22	33	32	0	0.15
11	45	22	33	32	0	0.15
12	45	22	33	32	0	0.15
13	45	21	33	32	0	0.16
14	45	21	33	32	0	0.16
15	45	21	33	32	0	0.16
16	45	21	33	32	0	0.16
17	45	21	33	32	0	0.16
18	45	21	33	32	0	0.16
19	46	21	34	31	0	0.16
20	46	21	34	31	0	0.16
21	46	21	34	31	0	0.16
22	46	21	34	31	0	0.16
23	46	21	34	31	0	0.16
24	46	22	34	31	0	0.16
25	46	22	34	31	0	0.16
26	46	22	34	31	0	0.16
27	46	22	34	31	0	0.16
28	46	22	34	31	0	0.16
29	46	22	34	31	0	0.16
30	46	22	34	31	0	0.16
31	46	22	34	31	0	0.16
MTH	45.6	21.7	33.7	970	0	4.84

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	22	34	31	0	0.16
2	48	22	35	30	0	0.16
3	48	22	35	30	0	0.16
4	48	22	35	30	0	0.16
5	48	22	35	30	0	0.16
6	48	22	35	30	0	0.16
7	48	23	35	30	0	0.16
8	48	23	35	30	0	0.16
9	48	23	36	29	0	0.16
10	49	23	36	29	0	0.16
11	49	23	36	29	0	0.16
12	49	23	36	29	0	0.16
13	49	23	36	29	0	0.16
14	49	23	36	29	0	0.16
15	50	23	37	28	0	0.16
16	50	24	37	28	0	0.16
17	50	24	37	28	0	0.16
18	50	24	37	28	0	0.16
19	50	24	37	28	0	0.16
20	51	24	38	27	0	0.17
21	51	25	38	27	0	0.17
22	51	25	38	27	0	0.17
23	51	25	38	27	0	0.17
24	52	25	39	26	0	0.17
25	52	25	39	26	0	0.17
26	53	25	39	26	0	0.17
27	53	25	39	26	0	0.17
28	53	26	40	25	0	0.17
MTH	49.8	23.6	36.7	792	0	4.57

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	27	40	25	0	0.18
2	54	27	40	25	0	0.18
3	54	27	40	25	0	0.18
4	54	27	41	24	0	0.18
5	55	28	41	24	0	0.18
6	55	28	41	24	0	0.18
7	55	28	41	24	0	0.18
8	55	28	42	23	0	0.18
9	56	28	42	23	0	0.18
10	56	28	42	23	0	0.18
11	56	29	43	22	0	0.19
12	56	29	43	22	0	0.19
13	57	29	43	22	0	0.18
14	57	29	43	22	0	0.18
15	57	30	44	21	0	0.18
16	58	30	44	21	0	0.18
17	58	30	44	21	0	0.18
18	58	30	44	21	0	0.18
19	58	31	45	20	0	0.18
20	59	31	45	20	0	0.18
21	59	31	45	20	0	0.18
22	59	31	45	20	0	0.18
23	60	32	46	19	0	0.18
24	60	32	46	19	0	0.18
25	60	32	46	19	0	0.17
26	60	32	46	19	0	0.17
27	61	33	47	18	0	0.17
28	61	33	47	18	0	0.17
29	61	33	47	18	0	0.17
30	61	33	47	18	0	0.16
31	62	33	48	17	0	0.16
MTH	57.6	30.0	43.8	657	0	5.51
SPRING SEASON:			65.4	37.5	51.5	1267	21	14.66

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	34	48	17	0	0.16
2	62	35	48	17	0	0.16
3	62	35	48	17	0	0.15
4	63	35	49	16	0	0.15
5	64	35	49	16	0	0.15
6	64	35	49	16	0	0.15
7	64	35	49	16	0	0.15
8	64	35	49	16	0	0.14
9	64	35	50	15	0	0.14
10	65	35	50	15	0	0.14
11	65	35	50	15	0	0.14
12	65	35	50	15	0	0.14
13	65	36	51	14	0	0.14
14	66	36	51	14	0	0.14
15	66	36	51	14	0	0.14
16	66	36	51	14	0	0.14
17	66	37	52	13	0	0.14
18	67	37	52	13	0	0.14
19	67	37	52	13	0	0.14
20	67	38	53	12	0	0.14
21	67	38	53	12	0	0.14
22	68	38	53	12	0	0.14
23	68	38	53	12	0	0.14
24	68	39	54	11	0	0.14
25	68	39	54	11	0	0.14
26	68	40	54	11	0	0.14
27	68	40	54	11	0	0.14
28	69	40	55	10	0	0.14
29	69	41	55	10	0	0.14
30	69	41	55	10	0	0.15
MTH	65.9	36.9	51.4	408	0	4.30

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	69	42	55	10	0	0.15
2	70	42	56	9	0	0.15
3	70	42	56	9	0	0.15
4	70	43	56	9	0	0.15
5	70	43	56	9	0	0.15
6	71	43	57	8	0	0.15
7	71	43	57	8	0	0.15
8	71	43	57	8	0	0.16
9	72	43	57	8	0	0.16
10	72	43	57	8	0	0.16
11	72	44	58	8	1	0.16
12	72	45	59	7	1	0.16
13	72	45	59	7	1	0.16
14	72	45	59	7	1	0.16
15	73	45	59	7	1	0.16
16	73	45	59	7	1	0.16
17	73	46	60	6	1	0.16
18	73	46	60	6	1	0.16
19	73	47	60	6	1	0.16
20	73	47	60	6	1	0.16
21	73	47	60	6	1	0.16
22	74	47	61	5	1	0.16
23	74	48	61	5	1	0.16
24	74	48	61	5	1	0.16
25	74	48	61	5	1	0.16
26	75	49	62	4	1	0.16
27	75	49	62	4	1	0.16
28	75	49	62	4	1	0.15
29	75	49	62	4	1	0.15
30	75	49	62	4	1	0.15
31	76	50	63	3	1	0.15
MTH	72.7	45.7	59.2	202	21	4.85

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CATALOOCHEE NORTH CAROLINA Station Number: 311564

Latitude: 35 B 37 * 00 (Longitude: -083 B 06* 00 (Elevation (feet): 2620

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	51	63	3	1	0.15
2	76	51	63	3	1	0.15
3	76	51	63	3	1	0.15
4	76	51	63	3	1	0.15
5	77	51	64	3	2	0.15
6	77	51	64	3	2	0.14
7	77	51	64	3	2	0.14
8	78	52	65	2	2	0.14
9	78	52	65	2	2	0.14
10	78	52	65	2	2	0.14
11	78	52	65	2	2	0.14
12	78	52	65	2	2	0.14
13	78	52	65	2	2	0.14
14	78	52	65	2	2	0.14
15	78	53	66	1	2	0.14
16	78	53	66	1	2	0.14
17	79	53	66	1	2	0.14
18	79	53	66	1	2	0.14
19	79	54	67	1	3	0.14
20	79	54	67	1	3	0.14
21	79	54	67	1	3	0.14
22	79	54	67	1	3	0.14
23	79	55	67	1	3	0.14
24	79	55	67	1	3	0.14
25	79	55	67	1	3	0.14
26	79	55	67	1	3	0.14
27	79	55	67	1	3	0.14
28	79	56	68	1	4	0.14
29	80	56	68	1	4	0.14
30	80	56	68	1	4	0.14
MTH	78.2	53.1	65.7	51	71	4.25
					SUMMER SEASON:	

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	56	68	1	4	0.14
2	80	56	68	1	4	0.14
3	80	56	68	1	4	0.14
4	81	56	68	0	3	0.14
5	81	57	69	0	4	0.14
6	81	57	69	0	4	0.14
7	81	57	69	0	4	0.14
8	81	57	69	0	4	0.15
9	81	57	69	0	4	0.15
10	81	57	69	0	4	0.15
11	81	57	69	0	4	0.15
12	81	58	69	0	4	0.15
13	81	58	69	0	4	0.15
14	81	58	70	0	5	0.15
15	81	58	70	0	5	0.15
16	81	58	70	0	5	0.15
17	82	58	70	0	5	0.15
18	82	58	70	0	5	0.15
19	82	58	70	0	5	0.15
20	82	58	70	0	5	0.15
21	82	58	70	0	5	0.15
22	82	58	70	0	5	0.15
23	82	58	70	0	5	0.15
24	82	58	70	0	5	0.15
25	82	58	70	0	5	0.15
26	82	58	70	0	5	0.15
27	82	58	70	0	5	0.15
28	81	58	70	0	5	0.15
29	81	58	70	0	5	0.15
30	81	58	70	0	5	0.15
31	81	58	69	0	4	0.15
MTH	81.3	57.5	69.4	3	140	4.58
	79.8	55.7	67.8	63	320	13.35

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	58	70	0	5	0.15
2	81	58	70	0	5	0.15
3	81	58	69	0	4	0.15
4	81	58	69	0	4	0.15
5	81	58	69	0	4	0.15
6	81	58	69	0	4	0.15
7	81	57	69	0	4	0.15
8	81	57	69	0	4	0.15
9	81	57	69	0	4	0.15
10	81	57	69	0	4	0.15
11	81	57	69	0	4	0.15
12	81	57	69	0	4	0.15
13	80	57	69	0	4	0.15
14	80	57	69	0	4	0.15
15	80	57	69	0	4	0.15
16	80	57	69	0	4	0.15
17	80	57	69	0	4	0.15
18	80	56	68	0	3	0.15
19	80	56	68	0	3	0.14
20	80	56	68	0	3	0.14
21	80	56	68	0	3	0.14
22	79	56	68	0	3	0.14
23	79	55	67	1	3	0.14
24	79	55	67	1	3	0.14
25	79	55	67	1	3	0.14
26	79	55	67	1	3	0.14
27	79	55	67	1	3	0.14
28	79	55	67	1	3	0.14
29	78	54	66	1	2	0.14
30	78	54	66	1	2	0.14
31	78	54	66	1	2	0.14
MTH	80.0	56.4	68.2	9	109	4.52

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	54	66	1	2	0.14
2	78	54	66	1	2	0.14
3	78	54	66	1	2	0.14
4	78	54	66	1	2	0.14
5	78	54	66	1	2	0.14
6	78	54	66	1	2	0.13
7	78	54	66	1	2	0.13
8	78	53	65	1	1	0.13
9	76	52	64	2	1	0.13
10	76	52	64	2	1	0.13
11	76	52	64	2	1	0.13
12	76	52	64	2	1	0.13
13	76	52	64	2	1	0.13
14	76	51	64	2	1	0.13
15	75	51	63	3	1	0.13
16	75	51	63	3	1	0.12
17	75	50	63	3	1	0.12
18	75	50	63	3	1	0.12
19	75	49	62	4	1	0.12
20	74	49	62	4	1	0.12
21	74	49	62	4	1	0.12
22	74	48	61	5	1	0.12
23	74	48	61	5	1	0.11
24	73	48	61	5	1	0.11
25	73	48	61	5	1	0.11
26	73	47	60	5	0	0.11
27	72	46	59	6	0	0.11
28	72	46	59	6	0	0.11
29	72	45	59	6	0	0.10
30	72	44	58	7	0	0.10
MTH	75.3	50.4	62.9	94	32	3.70
					AUTUMN SEASON:	
					ANNUAL:	

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	43	57	8	0	0.10
2	71	43	57	9	*	0.10
3	71	43	57	9	*	0.10
4	71	43	57	9	*	0.09
5	70	43	57	9	*	0.09
6	70	43	56	9	*	0.09
7	70	43	56	9	0	0.09
8	69	42	55	10	0	0.09
9	69	41	55	10	0	0.09
10	69	40	54	11	0	0.09
11	69	39	54	11	0	0.09
12	68	39	54	11	0	0.09
13	68	38	53	12	0	0.09
14	68	38	53	12	0	0.08
15	67	38	53	12	0	0.08
16	67	37	52	13	0	0.08
17	67	37	52	13	0	0.08
18	67	37	52	13	0	0.09
19	66	36	51	14	0	0.09
20	66	36	51	14	0	0.09
21	66	36	51	14	0	0.09
22	65	36	51	14	0	0.09
23	65	35	50	15	0	0.09
24	65	35	50	15	0	0.09
25	64	35	50	15	0	0.09
26	64	34	49	16	0	0.09
27	64	34	49	16	0	0.09
28	63	34	49	16	0	0.09
29	63	34	49	16	0	0.10
30	63	34	49	16	0	0.10
31	62	34	48	17	0	0.10
MTH	67.1	38.1	52.6	388	4	2.81
	66.6	39.8	53.3	1103	36	10.19
	65.0	39.0	52.1	5079	377	51.88

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	34	48	17	0	0.10
2	62	34	48	17	0	0.11
3	62	34	48	17	0	0.11
4	61	34	47	18	0	0.11
5	61	34	47	18	0	0.11
6	61	33	47	18	0	0.11
7	61	33	47	18	0	0.11
8	60	32	46	19	0	0.12
9	60	32	46	19	0	0.12
10	59	32	46	19	0	0.12
11	59	32	46	19	0	0.12
12	58	32	45	20	0	0.12
13	58	32	45	20	0	0.12
14	58	31	45	20	0	0.12
15	57	31	44	21	0	0.13
16	57	31	44	21	0	0.13
17	57	31	44	21	0	0.13
18	57	31	44	21	0	0.13
19	56	30	43	22	0	0.13
20	56	30	43	22	0	0.13
21	56	30	43	22	0	0.13
22	56	30	43	22	0	0.13
23	55	29	42	23	0	0.13
24	55	29	42	23	0	0.13
25	55	29	42	23	0	0.13
26	54	28	41	24	0	0.13
27	54	28	41	24	0	0.13
28	54	28	41	24	0	0.13
29	53	28	41	24	0	0.13
30	53	27	40	25	0	0.13
MTH	57.6	31.0	44.3	621	0	3.68

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CATALOOCHEE NORTH CAROLINA Station Number: 311564

Latitude: 35B 37* 00(Longitude: -083B 06* 00(Elevation (feet): 2620

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.79	0.64	1.05	0.98	1.58	0.69	1.19	0.00	0.26	0.15	1.26	0.94	33.90
0.010	0.97	0.80	1.26	1.16	1.78	0.84	1.38	0.00	0.35	0.21	1.41	1.12	35.38
0.050	1.63	1.41	2.02	1.75	2.43	1.42	2.01	1.07	0.77	0.51	1.90	1.71	39.68
0.100	2.09	1.84	2.54	2.15	2.84	1.82	2.42	1.71	1.11	0.76	2.20	2.10	42.10
0.200	2.76	2.49	3.28	2.71	3.39	2.41	2.99	2.46	1.65	1.17	2.61	2.66	45.18
0.300	3.32	3.04	3.90	3.16	3.83	2.91	3.45	3.05	2.14	1.55	2.94	3.12	47.48
0.400	3.87	3.58	4.49	3.60	4.24	3.39	3.89	3.60	2.64	1.94	3.24	3.56	49.52
0.500	4.43	4.14	5.10	4.04	4.65	3.89	4.33	4.17	3.17	2.36	3.54	4.00	51.47
0.600	5.05	4.75	5.76	4.51	5.08	4.43	4.80	4.79	3.77	2.84	3.85	4.48	53.47
0.700	5.76	5.47	6.52	5.06	5.57	5.07	5.34	5.51	4.49	3.42	4.21	5.03	55.67
0.800	6.68	6.40	7.50	5.75	6.19	5.88	6.02	6.43	5.45	4.20	4.66	5.73	58.32
0.900	8.11	7.85	9.00	6.81	7.11	7.14	7.06	7.86	6.97	5.44	5.33	6.80	62.13
0.950	9.43	9.19	10.38	7.77	7.94	8.31	8.00	9.17	8.41	6.63	5.92	7.77	65.40
0.990	12.24	12.08	13.31	9.79	9.64	10.80	9.96	11.99	11.58	9.27	7.15	9.83	71.83
0.995	13.38	13.26	14.49	10.61	10.32	11.81	10.75	13.13	12.89	10.37	7.64	10.66	74.28

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

United States Climate Normals 1971-2000

Station Name: CELO 2 S NORTH CAROLINA Station Number: 311624

Latitude: 35° 49* 45(Longitude: -082° 10* 31(Elevation (feet): 2680

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	27	41	24	0	0.15
2	54	27	40	25	0	0.15
3	54	27	40	25	0	0.14
4	54	27	40	25	0	0.14
5	53	26	39	26	0	0.14
6	53	26	39	26	0	0.14
7	52	25	39	26	0	0.13
8	52	25	39	26	0	0.13
9	51	25	38	27	0	0.13
10	51	25	38	27	0	0.13
11	51	25	38	27	0	0.13
12	51	24	38	27	0	0.13
13	50	24	37	28	0	0.13
14	50	24	37	28	0	0.13
15	50	24	37	28	0	0.13
16	50	24	37	28	0	0.13
17	50	24	37	28	0	0.13
18	49	23	36	29	0	0.13
19	49	23	36	29	0	0.13
20	49	23	36	29	0	0.13
21	49	23	36	29	0	0.13
22	49	23	36	29	0	0.13
23	48	23	36	29	0	0.13
24	48	22	35	30	0	0.13
25	48	22	35	30	0	0.13
26	48	22	35	30	0	0.14
27	48	22	35	30	0	0.14
28	48	22	35	30	0	0.14
29	47	22	35	30	0	0.14
30	47	22	35	30	0	0.15
31	47	22	35	30	0	0.15
MTH	50.2	24.0	37.1	865	0	4.19
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	22	34	31	0	0.15
2	47	22	34	31	0	0.16
3	47	22	34	31	0	0.16
4	47	22	34	31	0	0.16
5	46	22	34	31	0	0.17
6	46	22	34	31	0	0.17
7	46	22	34	31	0	0.17
8	46	22	34	31	0	0.17
9	46	22	34	31	0	0.17
10	46	22	34	31	0	0.18
11	46	22	34	31	0	0.18
12	45	22	33	32	0	0.18
13	45	22	33	32	0	0.18
14	45	22	33	32	0	0.18
15	46	22	34	31	0	0.18
16	46	22	34	31	0	0.19
17	46	22	34	31	0	0.19
18	46	22	34	31	0	0.19
19	46	22	34	31	0	0.19
20	46	22	34	31	0	0.19
21	46	22	34	31	0	0.19
22	46	21	34	31	0	0.19
23	46	21	34	31	0	0.19
24	46	21	34	31	0	0.19
25	46	21	34	31	0	0.19
26	46	21	34	31	0	0.19
27	46	21	34	31	0	0.19
28	46	21	34	31	0	0.19
29	46	21	34	31	0	0.19
30	46	21	34	31	0	0.18
31	47	21	34	31	0	0.18
MTH	46.1	21.7	33.9	964	0	5.58
	48.5	22.9	35.8	2633	0	14.84

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	21	34	31	0	0.18
2	47	22	34	31	0	0.18
3	47	22	34	31	0	0.18
4	47	22	35	30	0	0.18
5	48	22	35	30	0	0.18
6	48	22	35	30	0	0.18
7	48	22	35	30	0	0.18
8	48	22	35	30	0	0.18
9	48	22	35	30	0	0.18
10	48	22	35	30	0	0.17
11	48	22	35	30	0	0.17
12	49	22	36	29	0	0.17
13	49	23	36	29	0	0.18
14	49	23	36	29	0	0.18
15	49	23	36	29	0	0.18
16	49	23	36	29	0	0.18
17	50	23	37	28	0	0.18
18	50	23	37	28	0	0.18
19	50	24	37	28	0	0.18
20	50	24	37	28	0	0.18
21	50	24	37	28	0	0.18
22	51	24	38	27	0	0.18
23	51	25	38	27	0	0.19
24	51	25	38	27	0	0.19
25	51	25	38	27	0	0.19
26	52	25	39	26	0	0.19
27	52	26	39	26	0	0.19
28	52	26	39	26	0	0.19
MTH	49.3	23.2	36.3	804	0	5.07

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	26	40	25	0	0.20
2	54	27	40	25	0	0.20
3	54	27	40	25	0	0.20
4	54	27	41	24	0	0.20
5	54	28	41	24	0	0.21
6	54	28	41	24	0	0.21
7	55	28	41	24	0	0.21
8	55	29	42	23	0	0.21
9	55	29	42	23	0	0.21
10	55	29	42	23	0	0.21
11	56	29	43	22	0	0.21
12	56	30	43	22	0	0.21
13	56	30	43	22	0	0.21
14	56	30	43	22	0	0.21
15	57	30	44	21	0	0.21
16	57	31	44	21	0	0.21
17	57	31	44	21	0	0.21
18	57	31	44	21	0	0.21
19	58	31	45	20	0	0.21
20	58	32	45	20	0	0.21
21	58	32	45	20	0	0.21
22	58	32	45	20	0	0.20
23	59	32	46	19	0	0.20
24	59	33	46	19	0	0.20
25	59	33	46	19	0	0.20
26	59	33	46	19	0	0.20
27	60	33	47	18	0	0.19
28	61	33	47	18	0	0.19
29	61	33	47	18	0	0.19
30	61	33	47	18	0	0.18
31	62	34	48	17	0	0.18
MTH	57.1	30.5	43.8	657	0	6.30
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	35	48	17	0	0.18
2	62	35	48	17	0	0.17
3	62	35	48	17	0	0.17
4	63	35	49	16	0	0.17
5	64	35	49	16	0	0.16
6	64	35	49	16	0	0.16
7	64	35	49	16	0	0.16
8	64	35	50	15	0	0.16
9	64	35	50	15	0	0.15
10	64	36	50	15	0	0.15
11	64	36	50	15	0	0.15
12	64	36	50	15	0	0.15
13	65	36	51	14	0	0.15
14	66	36	51	14	0	0.15
15	66	36	51	14	0	0.15
16	66	36	51	14	0	0.15
17	66	37	52	13	0	0.15
18	67	37	52	13	0	0.14
19	67	37	52	13	0	0.14
20	67	37	52	13	0	0.14
21	67	38	53	12	0	0.14
22	68	38	53	12	0	0.15
23	68	38	53	12	0	0.15
24	68	39	54	11	0	0.15
25	68	39	54	11	0	0.15
26	68	40	54	11	0	0.15
27	68	40	54	11	0	0.15
28	69	40	55	10	0	0.15
29	69	41	55	10	0	0.15
30	69	41	55	10	0	0.16
MTH	65.8	37.0	51.4	408	0	4.60
	65.2	37.7	51.5	1267	23	16.22

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	70	41	55	10	0	0.16
2	70	41	55	10	0	0.16
3	71	42	56	9	0	0.16
4	71	42	56	9	0	0.16
5	71	42	56	9	0	0.17
6	71	43	57	8	0	0.17
7	71	43	57	8	0	0.17
8	71	43	57	8	0	0.17
9	71	44	58	8	1	0.17
10	72	44	58	8	1	0.17
11	72	44	58	8	1	0.17
12	72	45	59	7	1	0.17
13	72	45	59	7	1	0.17
14	72	45	59	7	1	0.17
15	73	45	59	7	1	0.18
16	73	45	59	7	1	0.18
17	73	46	60	6	1	0.18
18	73	46	60	6	1	0.18
19	73	47	60	6	1	0.18
20	73	47	60	6	1	0.18
21	73	47	60	6	1	0.18
22	74	47	61	5	1	0.18
23	74	48	61	5	1	0.18
24	74	48	61	5	1	0.17
25	74	48	61	5	1	0.17
26	75	48	62	4	1	0.17
27	75	49	62	4	1	0.17
28	75	49	62	4	1	0.17
29	75	49	62	4	1	0.17
30	76	49	63	3	1	0.17
31	76	50	63	3	1	0.17
MTH	72.8	45.6	59.2	202	23	5.32

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CELO 2 S NORTH CAROLINA Station Number: 311624

Latitude: 35 B 49 * 45 (Longitude: -082 B 10* 31 (Elevation (feet): 2680

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	51	64	3	2	0.17
2	77	51	64	3	2	0.17
3	77	52	64	3	2	0.16
4	77	52	64	3	2	0.16
5	77	52	64	3	2	0.16
6	77	52	64	3	2	0.16
7	77	52	64	3	2	0.16
8	77	52	64	3	2	0.16
9	77	52	65	2	2	0.16
10	78	52	65	2	2	0.16
11	78	52	65	2	2	0.15
12	78	52	65	2	2	0.15
13	78	52	65	2	2	0.15
14	78	52	65	2	2	0.15
15	78	53	66	2	3	0.15
16	79	53	66	2	3	0.15
17	79	53	66	2	3	0.15
18	79	53	66	2	3	0.15
19	79	54	67	1	3	0.15
20	79	54	67	1	3	0.15
21	79	54	67	1	3	0.15
22	80	54	67	1	3	0.15
23	80	54	67	1	3	0.14
24	80	54	67	1	3	0.14
25	80	55	68	1	4	0.14
26	80	55	68	1	4	0.14
27	80	56	68	1	4	0.14
28	80	56	68	1	4	0.14
29	80	56	68	1	4	0.14
30	80	56	68	1	4	0.14
MTH	78.5	53.2	65.9	56	82	4.54

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	56	68	1	4	0.14
2	80	57	68	1	4	0.14
3	80	57	68	1	4	0.14
4	81	57	69	1	5	0.14
5	81	57	69	1	5	0.14
6	82	57	69	1	5	0.14
7	82	57	70	0	5	0.14
8	82	58	70	0	5	0.14
9	82	58	70	0	5	0.14
10	82	58	70	0	5	0.14
11	82	58	70	0	5	0.14
12	82	58	70	0	5	0.14
13	82	58	70	0	5	0.14
14	82	58	70	0	5	0.14
15	82	58	70	0	5	0.14
16	82	58	70	0	5	0.14
17	82	58	70	0	5	0.14
18	82	58	70	0	5	0.14
19	83	58	71	0	6	0.14
20	83	58	71	0	6	0.14
21	83	58	71	0	6	0.14
22	83	58	71	0	6	0.14
23	83	59	71	0	6	0.15
24	83	58	71	0	6	0.15
25	83	58	71	0	6	0.15
26	82	58	70	0	5	0.15
27	82	58	70	0	5	0.15
28	82	58	70	0	5	0.15
29	82	58	70	0	5	0.15
30	82	58	70	0	5	0.15
31	82	58	70	0	5	0.15
MTH	82.0	57.8	69.9	6	159	4.43
SUMMER SEASON:	80.5	55.8	68.2	75	371	13.99

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	58	70	0	5	0.15
2	82	58	70	0	5	0.15
3	82	58	70	0	5	0.16
4	82	58	70	0	5	0.16
5	82	58	70	0	5	0.16
6	82	58	70	0	5	0.16
7	82	58	70	0	5	0.16
8	82	57	70	0	5	0.16
9	82	57	70	0	5	0.16
10	82	57	70	0	5	0.16
11	82	57	70	0	5	0.16
12	82	57	70	0	5	0.16
13	82	57	70	0	5	0.16
14	82	57	69	0	4	0.16
15	82	57	69	0	4	0.16
16	82	57	69	0	4	0.16
17	82	57	69	0	4	0.16
18	82	56	69	0	4	0.16
19	81	56	68	1	4	0.17
20	81	56	68	1	4	0.17
21	80	56	68	1	4	0.17
22	80	56	68	1	4	0.17
23	80	56	68	1	4	0.17
24	79	56	68	1	4	0.17
25	79	55	67	1	3	0.17
26	79	55	67	1	3	0.17
27	79	55	67	1	3	0.16
28	79	55	67	1	3	0.16
29	79	55	67	1	3	0.16
30	79	55	67	1	3	0.16
31	79	54	67	1	3	0.16
MTH	81.0	56.5	68.8	13	130	5.02

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	54	67	1	3	0.16
2	79	54	67	1	3	0.16
3	79	54	66	1	2	0.16
4	79	54	66	1	2	0.16
5	79	54	66	1	2	0.16
6	78	54	66	1	2	0.16
7	78	54	66	1	2	0.16
8	78	52	65	2	2	0.16
9	78	52	65	2	2	0.16
10	78	52	65	2	2	0.16
11	77	52	65	2	2	0.16
12	77	51	64	3	2	0.16
13	77	51	64	3	2	0.16
14	77	51	64	3	2	0.15
15	76	50	63	3	1	0.15
16	76	50	63	3	1	0.15
17	76	50	63	3	1	0.15
18	76	50	63	3	1	0.15
19	75	49	62	4	1	0.15
20	75	49	62	4	1	0.15
21	75	48	62	4	1	0.15
22	75	48	62	4	1	0.15
23	75	47	61	5	1	0.14
24	75	47	61	5	1	0.14
25	74	46	60	6	1	0.14
26	74	46	60	6	1	0.14
27	74	46	60	6	1	0.14
28	73	45	59	7	1	0.14
29	73	45	59	7	1	0.14
30	73	44	59	7	1	0.14
MTH	76.3	50.0	63.2	101	46	4.55

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	44	58	8	1	0.13
2	73	44	58	8	1	0.13
3	72	43	58	9	2	0.13
4	72	43	57	9	1	0.13
5	72	43	57	9	1	0.13
6	72	43	57	9	1	0.13
7	71	42	56	9	0	0.13
8	70	41	56	10	*	0.13
9	70	40	55	10	*	0.13
10	70	39	55	10	*	0.13
11	70	38	54	11	*	0.13
12	70	38	54	11	*	0.13
13	69	38	54	11	0	0.13
14	69	37	53	12	0	0.13
15	69	37	53	12	0	0.13
16	68	37	53	12	0	0.13
17	68	36	52	13	0	0.13
18	68	36	52	13	0	0.13
19	68	36	52	13	0	0.13
20	67	36	52	13	0	0.13
21	67	35	51	14	0	0.13
22	67	35	51	14	0	0.14
23	66	35	51	14	0	0.14
24	66	34	50	15	0	0.14
25	66	34	50	15	0	0.14
26	65	34	50	15	0	0.14
27	65	34	50	15	0	0.15
28	64	34	49	16	0	0.15
29	64	34	49	16	0	0.15
30	64	34	49	16	0	0.15
31	64	33	49	16	0	0.15
MTH	68.4	37.7	53.1	378	8	4.18
AUTUMN SEASON:	67.9	39.3	53.7	1085	54	13.78
ANNUAL:	65.5	38.9	52.3	5060	448	58.83

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	33	48	17	0	0.16
2	64	33	48	17	0	0.16
3	63	33	48	17	0	0.16
4	63	33	48	17	0	0.16
5	62	33	48	17	0	0.17
6	62	33	47	18	0	0.17
7	62	32	47	18	0	0.17
8	62	32	47	18	0	0.17
9	61	32	47	18	0	0.17
10	61	31	46	19	0	0.17
11	61	31	46	19	0	0.17
12	60	31	46	19	0	0.18
13	60	31	46	19	0	0.18
14	59	31	45	20	0	0.18
15	59	31	45	20	0	0.18
16	59	30	45	20	0	0.18
17	58	30	44	21	0	0.18
18	58	30	44	21	0	0.17
19	58	30	44	21	0	0.17
20	58	30	44	21	0	0.17
21	57	29	43	22	0	0.17
22	57	29	43	22	0	0.17
23	57	29	43	22	0	0.17
24	57	29	43	22	0	0.17
25	56	28	42	23	0	0.16
26	56	28	42	23	0	0.16
27	56	28	42	23	0	0.16
28	55	27	41	24	0	0.16
29	55	27	41	24	0	0.16
30	55	27	41	24	0	0.15
MTH	59.2	30.4	44.8	606	0	5.05

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CELO 2 S NORTH CAROLINA Station Number: 311624

Latitude: 35B 49* 45(Longitude: -082B 10* 31(Elevation (feet): 2680

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.68	0.55	1.08	0.67	0.90	0.64	1.04	0.28	0.17	0.00	0.50	0.60	32.74
0.010	0.87	0.71	1.32	0.84	1.10	0.80	1.22	0.39	0.25	0.00	0.66	0.75	34.77
0.050	1.60	1.35	2.17	1.45	1.82	1.40	1.84	0.92	0.67	0.30	1.28	1.31	40.75
0.100	2.13	1.83	2.77	1.89	2.32	1.83	2.24	1.37	1.05	0.73	1.76	1.71	44.22
0.200	2.93	2.56	3.64	2.54	3.06	2.48	2.81	2.10	1.71	1.40	2.49	2.30	48.68
0.300	3.62	3.20	4.37	3.09	3.68	3.03	3.27	2.79	2.34	2.02	3.14	2.81	52.08
0.400	4.30	3.84	5.07	3.63	4.28	3.56	3.71	3.48	3.00	2.66	3.78	3.30	55.10
0.500	5.01	4.50	5.79	4.18	4.89	4.12	4.16	4.23	3.71	3.36	4.46	3.80	58.04
0.600	5.79	5.24	6.58	4.79	5.56	4.73	4.64	5.09	4.54	4.17	5.21	4.36	61.07
0.700	6.71	6.11	7.50	5.50	6.34	5.44	5.19	6.12	5.56	5.17	6.10	5.02	64.44
0.800	7.91	7.25	8.68	6.42	7.34	6.37	5.89	7.49	6.93	6.51	7.27	5.87	68.53
0.900	9.78	9.04	10.50	7.85	8.89	7.81	6.96	9.70	9.15	8.69	9.11	7.18	74.48
0.950	11.53	10.71	12.17	9.17	10.31	9.14	7.93	11.81	11.29	10.80	10.83	8.40	79.63
0.990	15.30	14.35	15.75	12.02	13.36	12.02	9.97	16.47	16.08	15.54	14.59	11.03	89.93
0.995	16.84	15.84	17.20	13.18	14.60	13.19	10.79	18.41	18.09	17.53	16.14	12.10	93.90

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: COWEETA EXP STATION NORTH CAROLINA Station Number: 312102

Latitude: 35B 04* 00(Longitude: -083B 26* 00(Elevation (feet): 2249

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	30	43	22	0	0.22
2	55	30	42	23	0	0.21
3	55	30	42	23	0	0.21
4	55	30	42	23	0	0.21
5	55	30	42	23	0	0.21
6	55	28	41	24	0	0.21
7	55	28	41	24	0	0.21
8	54	28	41	24	0	0.21
9	53	28	41	24	0	0.21
10	53	27	40	25	0	0.21
11	53	27	40	25	0	0.21
12	53	27	40	25	0	0.20
13	52	27	40	25	0	0.20
14	52	27	40	25	0	0.20
15	52	26	39	26	0	0.20
16	52	26	39	26	0	0.20
17	51	26	39	26	0	0.20
18	51	26	39	26	0	0.20
19	51	26	39	26	0	0.21
20	50	26	38	27	0	0.21
21	50	26	38	27	0	0.21
22	50	26	38	27	0	0.21
23	50	26	38	27	0	0.21
24	50	26	38	27	0	0.21
25	50	26	38	27	0	0.21
26	50	25	38	27	0	0.21
27	49	25	37	28	0	0.21
28	49	25	37	28	0	0.22
29	49	25	37	28	0	0.22
30	49	25	37	28	0	0.22
31	49	25	37	28	0	0.22
MTH	51.9	26.9	39.4	794	0	6.49
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	25	37	28	0	0.22
2	49	25	37	28	0	0.22
3	49	25	37	28	0	0.23
4	49	25	37	28	0	0.23
5	49	25	37	28	0	0.23
6	49	25	37	28	0	0.23
7	49	25	37	28	0	0.23
8	49	25	37	28	0	0.23
9	49	25	37	28	0	0.24
10	48	25	37	28	0	0.24
11	48	24	36	29	0	0.24
12	48	24	36	29	0	0.24
13	48	24	36	29	0	0.24
14	49	24	36	29	0	0.24
15	49	24	36	29	0	0.24
16	49	24	36	29	0	0.24
17	49	24	36	29	0	0.24
18	49	24	37	28	0	0.25
19	49	24	37	28	0	0.25
20	49	24	37	28	0	0.25
21	49	24	37	28	0	0.25
22	49	24	37	28	0	0.25
23	49	24	37	28	0	0.25
24	49	24	37	28	0	0.25
25	49	25	37	28	0	0.25
26	49	25	37	28	0	0.25
27	49	25	37	28	0	0.25
28	49	25	37	28	0	0.25
29	49	25	37	28	0	0.25
30	49	25	37	28	0	0.25
31	49	25	37	28	0	0.24
MTH	48.9	24.6	36.8	875	0	7.47
	51.2	26.0	38.7	2375	0	20.91

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	25	37	28	0	0.25
2	51	25	38	27	0	0.25
3	51	25	38	27	0	0.24
4	52	25	38	27	0	0.24
5	52	25	38	27	0	0.24
6	52	25	38	27	0	0.24
7	52	25	38	27	0	0.24
8	52	25	38	27	0	0.24
9	52	26	39	26	0	0.24
10	52	26	39	26	0	0.24
11	52	26	39	26	0	0.24
12	52	26	39	26	0	0.24
13	52	26	39	26	0	0.25
14	52	26	39	26	0	0.25
15	53	26	40	25	0	0.25
16	53	27	40	25	0	0.25
17	53	27	40	25	0	0.25
18	53	27	40	25	0	0.25
19	54	27	41	24	0	0.25
20	54	27	41	24	0	0.25
21	54	28	41	24	0	0.25
22	54	28	41	24	0	0.25
23	54	28	41	24	0	0.25
24	55	28	42	23	0	0.26
25	55	29	42	23	0	0.26
26	55	29	42	23	0	0.26
27	56	29	43	22	0	0.26
28	56	29	43	22	0	0.26
MTH	53.0	26.6	39.8	706	0	6.95

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	30	43	22	0	0.26
2	57	30	43	22	0	0.26
3	57	30	44	21	0	0.27
4	58	31	44	21	0	0.27
5	58	31	44	21	0	0.27
6	58	31	44	21	0	0.27
7	58	32	45	20	0	0.27
8	58	32	45	20	0	0.27
9	58	32	45	20	0	0.27
10	58	32	45	20	0	0.27
11	59	33	46	19	0	0.27
12	59	33	46	19	0	0.27
13	59	33	46	19	0	0.27
14	60	33	47	18	0	0.27
15	60	34	47	18	0	0.27
16	60	34	47	18	0	0.27
17	60	34	47	18	0	0.27
18	61	34	48	17	0	0.26
19	61	35	48	17	0	0.26
20	61	35	48	17	0	0.26
21	61	35	48	17	0	0.26
22	62	35	49	16	0	0.26
23	62	35	49	16	0	0.25
24	62	36	49	16	0	0.25
25	62	36	49	16	0	0.25
26	63	36	50	15	0	0.24
27	63	36	50	15	0	0.24
28	64	36	50	15	0	0.24
29	64	36	50	15	0	0.23
30	64	36	50	15	0	0.23
31	64	37	51	14	0	0.23
MTH	60.3	33.7	47.0	558	0	8.03
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	37	51	14	0	0.22
2	65	38	51	14	0	0.22
3	65	38	51	14	0	0.21
4	65	38	52	13	0	0.21
5	66	38	52	13	0	0.21
6	66	38	52	13	0	0.20
7	66	38	52	13	0	0.20
8	67	39	53	12	0	0.20
9	67	39	53	12	0	0.19
10	67	39	53	12	0	0.19
11	67	39	53	12	0	0.19
12	68	40	54	11	0	0.19
13	68	40	54	11	0	0.18
14	68	40	54	11	0	0.18
15	68	40	54	11	0	0.18
16	68	41	55	10	0	0.18
17	69	41	55	10	0	0.18
18	69	41	55	10	0	0.18
19	69	41	55	10	0	0.18
20	69	41	55	10	0	0.18
21	70	42	56	9	0	0.18
22	70	42	56	9	0	0.18
23	70	42	56	9	0	0.18
24	70	42	56	9	0	0.18
25	71	43	57	8	0	0.18
26	71	43	57	8	0	0.18
27	71	43	57	8	0	0.18
28	71	43	57	8	0	0.18
29	71	44	58	8	1	0.18
30	72	44	58	8	1	0.18
MTH	68.3	40.5	54.4	320	2	5.67
	67.8	40.9	54.4	1025	49	19.90

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	45	59	8	2	0.19
2	73	45	59	7	1	0.19
3	73	46	59	7	1	0.19
4	73	46	59	7	1	0.19
5	73	46	59	7	1	0.19
6	73	46	59	7	1	0.20
7	73	46	60	6	1	0.20
8	73	47	60	6	1	0.20
9	73	47	60	6	1	0.20
10	73	47	60	6	1	0.20
11	74	47	61	5	1	0.20
12	74	48	61	5	1	0.20
13	74	48	61	5	1	0.20
14	74	48	61	5	1	0.20
15	74	48	61	5	1	0.20
16	74	48	61	5	1	0.20
17	74	49	62	5	2	0.20
18	75	49	62	5	2	0.20
19	75	50	63	4	2	0.21
20	76	50	63	4	2	0.21
21	76	50	63	4	2	0.21
22	76	50	63	4	2	0.21
23	76	50	63	4	2	0.21
24	76	51	64	3	2	0.20
25	77	51	64	3	2	0.20
26	77	51	64	3	2	0.20
27	77	51	64	3	2	0.20
28	77	52	65	2	2	0.20
29	77	52	65	2	2	0.20
30	78	52	65	2	2	0.20
31	78	52	65	2	2	0.20
MTH	74.8	48.7	61.8	147	47	6.20

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: COWEETA EXP STATION NORTH CAROLINA Station Number: 312102

Latitude: 35B 04* 00 (Longitude: -083B 26* 00 (Elevation (feet): 2249

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	53	65	2	2	0.20
2	79	54	66	2	3	0.20
3	79	54	66	2	3	0.20
4	79	54	66	2	3	0.20
5	79	54	66	2	3	0.20
6	79	54	67	1	3	0.19
7	79	54	67	1	3	0.19
8	80	54	67	1	3	0.19
9	80	54	67	1	3	0.19
10	80	54	67	1	3	0.19
11	80	55	67	1	3	0.19
12	80	55	67	1	3	0.19
13	80	55	68	1	4	0.19
14	81	55	68	1	4	0.18
15	81	55	68	1	4	0.18
16	81	56	69	0	4	0.18
17	81	56	69	0	4	0.18
18	81	56	69	0	4	0.18
19	81	56	69	0	4	0.18
20	82	56	69	0	4	0.18
21	82	56	69	0	4	0.17
22	82	56	69	0	4	0.17
23	82	57	70	0	5	0.17
24	82	57	70	0	5	0.17
25	82	57	70	0	5	0.17
26	82	58	70	0	5	0.17
27	82	58	70	0	5	0.16
28	82	58	70	0	5	0.16
29	82	58	70	0	5	0.16
30	82	58	70	0	5	0.16
MTH	80.7	55.6	68.2	20	115	5.44

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	58	71	0	6	0.16
2	83	58	71	0	6	0.16
3	83	59	71	0	6	0.15
4	83	59	71	0	6	0.15
5	84	59	71	0	6	0.15
6	84	59	71	0	6	0.15
7	84	59	71	0	6	0.15
8	84	59	72	0	7	0.15
9	84	59	72	0	7	0.15
10	84	59	72	0	7	0.14
11	84	60	72	0	7	0.14
12	84	60	72	0	7	0.14
13	84	60	72	0	7	0.14
14	84	60	72	0	7	0.14
15	84	60	72	0	7	0.14
16	84	60	72	0	7	0.14
17	84	60	72	0	7	0.14
18	84	60	72	0	7	0.14
19	84	60	72	0	7	0.14
20	84	60	72	0	7	0.14
21	84	60	72	0	7	0.14
22	84	60	72	0	7	0.14
23	84	60	72	0	7	0.14
24	84	60	72	0	7	0.14
25	84	60	72	0	7	0.14
26	84	60	72	0	7	0.14
27	84	60	72	0	7	0.14
28	84	60	72	0	7	0.14
29	84	60	72	0	7	0.14
30	84	60	72	0	7	0.14
31	84	60	72	0	7	0.14
MTH	83.9	59.6	71.8	0	210	4.45
SUMMER SEASON:	82.4	58.0	70.2	21	504	14.77

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	60	72	0	7	0.14
2	84	60	72	0	7	0.14
3	84	60	72	0	7	0.14
4	84	60	72	0	7	0.14
5	84	60	72	0	7	0.15
6	84	60	72	0	7	0.15
7	83	60	72	0	7	0.15
8	83	60	72	0	7	0.15
9	83	60	71	0	6	0.15
10	83	59	71	0	6	0.15
11	83	59	71	0	6	0.15
12	83	59	71	0	6	0.15
13	83	59	71	0	6	0.15
14	83	59	71	0	6	0.15
15	83	59	71	0	6	0.16
16	83	59	71	0	6	0.16
17	83	59	71	0	6	0.16
18	82	59	71	0	6	0.16
19	82	59	71	0	6	0.16
20	82	58	70	0	5	0.16
21	82	58	70	0	5	0.16
22	82	58	70	0	5	0.16
23	82	58	70	0	5	0.17
24	82	58	70	*	5	0.17
25	81	58	70	*	5	0.17
26	81	58	70	*	5	0.17
27	81	58	70	*	5	0.17
28	81	57	69	*	5	0.17
29	81	57	69	*	4	0.17
30	81	57	69	*	4	0.17
31	81	57	69	0	4	0.18
MTH	82.5	58.8	70.7	1	179	4.88

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	57	69	0	4	0.18
2	80	57	69	0	4	0.18
3	80	57	69	0	4	0.18
4	80	57	69	0	4	0.18
5	80	57	68	0	3	0.18
6	80	57	68	0	3	0.18
7	79	57	68	0	3	0.18
8	79	57	68	0	3	0.18
9	79	55	67	1	3	0.18
10	79	55	67	1	3	0.18
11	79	55	67	1	3	0.19
12	78	55	67	1	3	0.18
13	78	54	66	1	2	0.18
14	78	54	66	1	2	0.18
15	78	54	66	1	2	0.18
16	78	54	66	1	2	0.18
17	77	53	65	2	2	0.18
18	77	53	65	2	2	0.18
19	77	53	65	2	2	0.18
20	76	52	64	3	2	0.18
21	76	52	64	3	2	0.18
22	76	52	64	3	2	0.18
23	76	51	64	3	2	0.17
24	76	50	63	3	1	0.17
25	75	50	63	3	1	0.17
26	75	49	62	4	1	0.17
27	75	49	62	4	1	0.17
28	75	49	62	4	1	0.16
29	74	48	61	5	1	0.16
30	74	48	61	5	1	0.16
MTH	77.5	53.4	65.5	54	69	5.30
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	48	61	6	2	0.15
2	74	47	60	6	1	0.15
3	74	46	60	6	1	0.15
4	74	45	59	7	1	0.15
5	74	45	59	7	1	0.14
6	74	45	59	7	1	0.14
7	72	44	58	8	1	0.14
8	72	44	58	8	1	0.14
9	71	44	58	8	1	0.14
10	71	43	57	8	0	0.14
11	71	43	57	8	*	0.14
12	70	43	57	9	*	0.14
13	70	42	56	9	*	0.14
14	70	42	56	9	*	0.14
15	69	41	55	10	*	0.14
16	69	41	55	10	*	0.14
17	69	41	55	10	0	0.14
18	68	40	54	11	0	0.14
19	68	40	54	11	0	0.14
20	68	40	54	11	0	0.14
21	68	39	54	11	0	0.14
22	67	39	53	12	0	0.15
23	67	39	53	12	0	0.15
24	67	38	53	12	0	0.15
25	66	38	52	13	0	0.15
26	66	38	52	13	0	0.16
27	66	38	52	13	0	0.16
28	66	37	52	13	0	0.16
29	65	37	51	14	0	0.17
30	65	37	51	14	0	0.17
31	65	37	51	14	0	0.18
MTH	69.4	41.3	55.4	310	11	4.58
AUTUMN SEASON:	69.0	42.7	55.9	910	80	16.31
ANNUAL:	67.6	41.9	54.8	4331	633	71.89

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	36	51	14	0	0.18
2	65	36	50	15	0	0.19
3	65	36	50	15	0	0.19
4	65	36	50	15	0	0.19
5	65	36	50	15	0	0.20
6	63	35	49	16	0	0.20
7	63	35	49	16	0	0.20
8	63	35	49	16	0	0.21
9	62	35	49	16	0	0.21
10	62	34	48	17	0	0.21
11	62	34	48	17	0	0.21
12	61	34	48	17	0	0.22
13	60	34	47	18	0	0.22
14	60	34	47	18	0	0.22
15	60	34	47	18	0	0.22
16	60	33	47	18	0	0.22
17	59	33	46	19	0	0.22
18	59	33	46	19	0	0.22
19	59	33	46	19	0	0.23
20	59	32	46	19	0	0.23
21	58	32	45	20	0	0.23
22	58	32	45	20	0	0.23
23	58	32	45	20	0	0.23
24	58	31	45	20	0	0.23
25	57	31	44	21	0	0.22
26	57	31	44	21	0	0.22
27	57	31	44	21	0	0.22
28	56	30	43	22	0	0.22
29	56	30	43	22	0	0.22
30	56	30	43	22	0	0.22
MTH	60.3	33.3	46.8	546	0	6.43

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: COWEETA EXP STATION NORTH CAROLINA Station Number: 312102

Latitude: 35° 04* 00(Longitude: -083° 26* 00(Elevation (feet): 2249

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.74	0.91	1.44	0.75	0.90	0.68	0.31	0.54	0.25	0.00	1.80	0.92	40.49
0.010	2.05	1.16	1.75	0.94	1.12	0.86	0.43	0.69	0.36	0.00	2.06	1.15	42.94
0.050	3.08	2.07	2.84	1.69	1.94	1.57	0.93	1.31	0.89	0.38	2.95	2.02	50.16
0.100	3.76	2.73	3.60	2.23	2.53	2.09	1.34	1.77	1.35	0.88	3.51	2.63	54.34
0.200	4.73	3.72	4.70	3.03	3.41	2.86	1.99	2.48	2.13	1.62	4.30	3.55	59.70
0.300	5.52	4.57	5.62	3.73	4.16	3.54	2.59	3.10	2.85	2.29	4.93	4.33	63.78
0.400	6.26	5.40	6.50	4.41	4.88	4.20	3.18	3.71	3.60	2.98	5.52	5.10	67.42
0.500	7.01	6.27	7.40	5.11	5.63	4.88	3.82	4.34	4.41	3.74	6.11	5.88	70.94
0.600	7.83	7.22	8.39	5.89	6.45	5.64	4.54	5.05	5.34	4.60	6.75	6.75	74.58
0.700	8.76	8.34	9.53	6.80	7.42	6.54	5.40	5.89	6.46	5.65	7.48	7.77	78.61
0.800	9.95	9.79	11.00	7.99	8.66	7.69	6.54	6.99	7.97	7.06	8.39	9.08	83.51
0.900	11.76	12.06	13.27	9.84	10.60	9.51	8.36	8.70	10.41	9.35	9.77	11.13	90.62
0.950	13.41	14.16	15.35	11.55	12.40	11.20	10.09	10.30	12.73	11.55	11.02	13.02	96.79
0.990	16.87	18.70	19.78	15.25	16.26	14.84	13.88	13.78	17.91	16.47	13.61	17.09	109.08
0.995	18.27	20.56	21.58	16.77	17.83	16.34	15.45	15.21	20.08	18.53	14.65	18.76	113.83

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CULLOWHEE NORTH CAROLINA Station Number: 312200

Latitude: 35 B 19 * 32 (Longitude: -083 B 11 * 28 (Elevation (feet): 2192

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	31	42	23	0	0.14
2	54	31	42	23	0	0.14
3	54	31	42	23	0	0.14
4	54	29	41	24	0	0.14
5	54	29	41	24	0	0.14
6	54	29	41	24	0	0.14
7	52	29	41	24	0	0.14
8	52	28	40	25	0	0.14
9	52	28	40	25	0	0.14
10	51	28	40	25	0	0.14
11	51	28	40	25	0	0.14
12	50	28	39	26	0	0.14
13	50	28	39	26	0	0.14
14	50	28	39	26	0	0.14
15	50	27	39	26	0	0.13
16	50	27	39	26	0	0.14
17	49	27	38	27	0	0.14
18	49	27	38	27	0	0.14
19	49	27	38	27	0	0.14
20	49	27	38	27	0	0.14
21	49	26	38	27	0	0.14
22	49	26	38	27	0	0.14
23	48	26	37	28	0	0.14
24	48	26	37	28	0	0.14
25	48	26	37	28	0	0.14
26	48	26	37	28	0	0.14
27	48	26	37	28	0	0.14
28	48	26	37	28	0	0.14
29	48	26	37	28	0	0.14
30	48	25	37	28	0	0.14
31	48	25	37	28	0	0.14
MTH	50.3	27.5	38.9	809	0	4.33
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	25	36	29	0	0.15
2	48	25	36	29	0	0.15
3	48	25	36	29	0	0.15
4	47	25	36	29	0	0.15
5	47	25	36	29	0	0.15
6	47	25	36	29	0	0.15
7	47	25	36	29	0	0.16
8	47	25	36	29	0	0.16
9	47	25	36	29	0	0.16
10	47	25	36	29	0	0.16
11	47	25	36	29	0	0.16
12	47	25	36	29	0	0.16
13	47	25	36	29	0	0.16
14	47	24	36	29	0	0.16
15	47	24	36	29	0	0.16
16	47	24	36	29	0	0.16
17	47	25	36	29	0	0.16
18	47	25	36	29	0	0.16
19	47	25	36	29	0	0.16
20	47	25	36	29	0	0.16
21	47	25	36	29	0	0.16
22	47	25	36	29	0	0.16
23	47	25	36	29	0	0.16
24	47	25	36	29	0	0.16
25	47	25	36	29	0	0.16
26	48	25	37	28	0	0.16
27	48	25	37	28	0	0.17
28	48	25	37	28	0	0.17
29	48	25	37	28	0	0.16
30	49	25	37	28	0	0.16
31	49	25	37	28	0	0.16
MTH	47.4	24.9	36.2	893	0	4.92
	49.9	26.6	38.3	2410	0	13.94

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	26	37	28	0	0.16
2	49	26	37	28	0	0.16
3	50	26	38	27	0	0.16
4	50	26	38	27	0	0.16
5	50	26	38	27	0	0.16
6	50	26	38	27	0	0.16
7	50	26	38	27	0	0.16
8	50	26	38	27	0	0.16
9	51	26	38	27	0	0.16
10	51	27	39	26	0	0.16
11	51	27	39	26	0	0.17
12	51	27	39	26	0	0.17
13	51	27	39	26	0	0.17
14	51	27	39	26	0	0.17
15	52	27	40	25	0	0.17
16	52	27	40	25	0	0.17
17	52	28	40	25	0	0.17
18	52	28	40	25	0	0.17
19	53	28	41	24	0	0.17
20	53	28	41	24	0	0.17
21	54	28	41	24	0	0.17
22	54	28	41	24	0	0.17
23	54	28	41	24	0	0.17
24	54	29	42	23	0	0.17
25	55	29	42	23	0	0.17
26	55	29	42	23	0	0.18
27	55	30	43	22	0	0.18
28	56	30	43	22	0	0.18
MTH	52.0	27.4	39.7	708	0	4.69

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	30	43	22	0	0.18
2	57	30	43	22	0	0.18
3	57	31	44	21	0	0.18
4	57	31	44	21	0	0.18
5	57	31	44	21	0	0.18
6	57	31	44	21	0	0.18
7	58	32	45	20	0	0.18
8	58	32	45	20	0	0.18
9	58	32	45	20	0	0.19
10	59	32	46	19	0	0.18
11	59	33	46	19	0	0.18
12	59	33	46	19	0	0.18
13	59	33	46	19	0	0.18
14	60	33	47	18	0	0.18
15	60	34	47	18	0	0.18
16	60	34	47	18	0	0.18
17	60	34	47	18	0	0.18
18	61	34	48	17	0	0.18
19	61	34	48	17	0	0.18
20	61	35	48	17	0	0.18
21	61	35	48	17	0	0.18
22	62	35	49	16	0	0.17
23	62	35	49	16	0	0.17
24	62	36	49	16	0	0.17
25	62	36	49	16	0	0.17
26	62	36	49	16	0	0.17
27	63	36	50	15	0	0.16
28	64	36	50	15	0	0.16
29	64	36	50	15	0	0.16
30	64	36	50	15	0	0.16
31	64	37	51	14	0	0.15
MTH	60.2	33.7	47.0	558	0	5.43
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	38	51	14	0	0.15
2	65	38	51	14	0	0.15
3	65	38	51	14	0	0.14
4	65	38	52	13	0	0.14
5	66	39	52	13	0	0.14
6	66	39	52	13	0	0.14
7	66	39	52	13	0	0.13
8	66	39	53	12	0	0.13
9	67	39	53	12	0	0.13
10	67	39	53	12	0	0.13
11	67	39	53	12	0	0.13
12	67	40	54	11	0	0.13
13	68	40	54	11	0	0.12
14	68	40	54	11	0	0.12
15	68	40	54	11	*	0.12
16	68	41	55	10	*	0.12
17	69	41	55	10	*	0.12
18	69	41	55	10	*	0.12
19	69	42	56	10	*	0.12
20	70	42	56	9	*	0.12
21	70	42	56	9	*	0.12
22	70	42	56	9	*	0.13
23	70	43	57	8	*	0.13
24	70	43	57	8	0	0.13
25	71	43	57	8	0	0.13
26	71	43	57	8	0	0.13
27	71	44	58	7	0	0.13
28	71	45	58	7	0	0.13
29	71	46	59	7	1	0.14
30	72	46	59	7	1	0.14
MTH	68.3	41.0	54.7	313	3	3.91
	68.0	41.8	54.9	991	63	14.20

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	47	59	7	1	0.14
2	73	47	60	7	2	0.14
3	73	47	60	6	1	0.15
4	73	47	60	6	1	0.15
5	73	48	60	6	1	0.15
6	74	48	61	5	1	0.15
7	74	48	61	5	1	0.15
8	74	48	61	5	1	0.15
9	74	48	61	5	1	0.16
10	75	48	61	5	1	0.16
11	75	48	61	5	1	0.16
12	75	49	62	5	2	0.16
13	75	50	63	4	2	0.16
14	75	50	63	4	2	0.16
15	75	51	63	4	2	0.16
16	75	51	63	4	2	0.16
17	75	51	63	4	2	0.16
18	76	51	64	3	2	0.16
19	76	52	64	3	2	0.16
20	76	52	64	3	2	0.16
21	76	52	64	3	2	0.16
22	76	52	64	3	2	0.16
23	76	52	64	3	2	0.16
24	77	53	65	3	3	0.16
25	77	54	66	2	3	0.16
26	78	54	66	2	3	0.16
27	78	54	66	2	3	0.16
28	78	54	66	2	3	0.16
29	78	54	66	2	3	0.16
30	78	55	67	1	3	0.16
31	79	55	67	1	3	0.16
MTH	75.5	50.7	63.1	120	60	4.86

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CULLOWHEE NORTH CAROLINA Station Number: 312200

Latitude: 35B 19* 32 (Longitude: -083B 11* 28 (Elevation (feet): 2192

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	56	67	1	3	0.16
2	79	56	67	1	3	0.16
3	79	56	67	1	3	0.15
4	79	56	67	1	3	0.15
5	80	56	68	1	4	0.15
6	80	56	68	1	4	0.15
7	80	56	68	1	4	0.15
8	80	56	68	1	4	0.15
9	81	56	68	1	4	0.15
10	81	57	69	0	4	0.15
11	81	57	69	0	4	0.15
12	81	57	69	0	4	0.15
13	81	58	70	0	5	0.14
14	81	58	70	0	5	0.14
15	81	58	70	0	5	0.14
16	81	58	70	0	5	0.14
17	81	58	70	0	5	0.14
18	82	58	70	0	5	0.14
19	82	58	70	0	5	0.14
20	82	58	70	0	5	0.14
21	82	59	71	0	6	0.14
22	82	59	71	0	6	0.14
23	82	60	71	0	6	0.14
24	82	60	71	0	6	0.14
25	82	60	71	0	6	0.14
26	82	60	71	0	6	0.14
27	83	60	72	0	7	0.14
28	83	60	72	0	7	0.14
29	83	61	72	0	7	0.14
30	83	61	72	0	7	0.14
MTH	81.2	58.0	69.6	9	148	4.34

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	61	72	0	7	0.14
2	83	61	72	0	7	0.14
3	83	61	72	0	7	0.14
4	83	62	72	0	7	0.14
5	84	62	73	0	8	0.14
6	84	62	73	0	8	0.14
7	84	62	73	0	8	0.14
8	84	62	73	0	8	0.14
9	84	62	73	0	8	0.14
10	84	62	73	0	8	0.14
11	84	62	73	0	8	0.14
12	84	62	73	0	8	0.14
13	84	62	73	0	8	0.14
14	85	62	73	0	8	0.14
15	85	63	74	0	9	0.14
16	85	63	74	0	9	0.14
17	85	63	74	0	9	0.14
18	85	63	74	0	9	0.14
19	85	63	74	0	9	0.14
20	85	63	74	0	9	0.14
21	85	63	74	0	9	0.14
22	85	63	74	0	9	0.14
23	85	63	74	0	9	0.14
24	85	63	74	0	9	0.14
25	85	63	74	0	9	0.13
26	84	63	74	0	9	0.13
27	84	63	74	0	9	0.13
28	84	63	74	0	9	0.13
29	84	63	74	0	9	0.13
30	84	63	74	0	9	0.13
31	84	63	74	0	9	0.13
MTH	84.3	62.5	73.4	0	261	4.27
SUMMER SEASON:	82.7	60.6	71.8	9	633	12.52

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	63	74	0	9	0.13
2	84	63	74	0	9	0.13
3	84	63	73	0	8	0.13
4	84	63	73	0	8	0.13
5	84	63	73	0	8	0.13
6	84	63	73	0	8	0.13
7	84	63	73	0	8	0.13
8	84	63	73	0	8	0.13
9	84	62	73	0	8	0.13
10	84	62	73	0	8	0.13
11	83	62	73	0	8	0.13
12	83	62	73	0	8	0.13
13	83	62	73	0	8	0.13
14	83	62	73	0	8	0.13
15	83	61	72	0	7	0.13
16	83	61	72	0	7	0.13
17	83	61	72	0	7	0.13
18	83	61	72	0	7	0.13
19	83	61	72	0	7	0.12
20	82	61	72	0	7	0.12
21	82	61	72	0	7	0.12
22	82	61	72	0	7	0.12
23	82	61	72	0	7	0.12
24	82	60	71	0	6	0.12
25	82	60	71	0	6	0.12
26	82	60	71	0	6	0.12
27	82	60	71	0	6	0.12
28	81	60	71	0	6	0.12
29	81	60	71	0	6	0.12
30	81	60	71	0	6	0.12
31	81	60	70	0	5	0.13
MTH	82.8	61.5	72.2	0	224	3.91

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	60	70	0	5	0.12
2	81	60	70	0	5	0.13
3	81	60	70	0	5	0.13
4	81	60	70	0	5	0.13
5	81	60	70	0	5	0.13
6	79	59	69	0	4	0.13
7	79	59	69	0	4	0.12
8	79	59	69	0	4	0.12
9	79	58	69	0	4	0.12
10	79	58	69	0	4	0.12
11	79	58	69	0	4	0.12
12	79	58	69	0	4	0.12
13	78	57	68	0	3	0.12
14	78	56	67	1	3	0.12
15	78	56	67	1	3	0.12
16	78	56	67	1	3	0.12
17	78	56	67	1	3	0.12
18	77	55	66	2	3	0.12
19	77	55	66	2	3	0.12
20	77	55	66	2	3	0.12
21	76	54	65	2	2	0.12
22	76	54	65	2	2	0.12
23	76	53	65	2	2	0.11
24	75	53	64	3	2	0.11
25	75	53	64	3	2	0.11
26	75	52	64	3	2	0.11
27	75	51	63	4	2	0.11
28	75	51	63	4	2	0.11
29	74	50	62	4	1	0.11
30	74	50	62	4	1	0.11
MTH	77.7	55.9	66.8	41	95	3.57
AUTUMN SEASON:	68.6	44.4	56.5	880	107	11.05
ANNUAL:	67.3	43.3	55.4	4290	803	51.71

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	50	62	4	1	0.10
2	73	50	61	5	1	0.10
3	73	48	61	5	1	0.10
4	73	47	60	6	1	0.10
5	73	47	60	6	1	0.10
6	73	47	60	6	1	0.10
7	73	46	59	7	1	0.10
8	73	46	59	7	1	0.10
9	71	45	58	8	1	0.10
10	71	45	58	8	1	0.10
11	71	45	58	8	1	0.10
12	70	45	58	8	1	0.10
13	70	44	57	8	0	0.10
14	70	43	57	8	0	0.10
15	69	43	56	9	0	0.10
16	69	43	56	9	0	0.10
17	68	42	55	10	0	0.10
18	68	42	55	10	0	0.10
19	68	41	55	10	0	0.10
20	67	41	54	11	0	0.10
21	67	41	54	11	0	0.10
22	67	40	54	11	0	0.10
23	66	40	53	12	0	0.10
24	66	40	53	12	0	0.11
25	66	40	53	12	0	0.11
26	66	39	53	12	0	0.11
27	65	39	52	13	0	0.11
28	65	39	52	13	0	0.11
29	65	38	52	13	0	0.11
30	64	38	51	14	0	0.12
31	64	38	51	14	0	0.12
MTH	69.0	43.0	56.0	290	12	3.20

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	38	51	14	0	0.12
2	63	38	50	15	0	0.13
3	63	38	50	15	0	0.13
4	63	38	50	15	0	0.13
5	63	38	50	15	0	0.13
6	62	36	49	16	0	0.13
7	62	36	49	16	0	0.14
8	62	36	49	16	0	0.14
9	61	36	49	16	0	0.14
10	61	35	48	17	0	0.14
11	61	35	48	17	0	0.14
12	60	35	48	17	0	0.14
13	60	34	47	18	0	0.14
14	60	34	47	18	0	0.14
15	59	34	47	18	0	0.15
16	59	34	47	18	0	0.15
17	58	34	46	19	0	0.15
18	58	34	46	19	0	0.15
19	58	33	46	19	0	0.15
20	57	33	45	20	0	0.15
21	57	33	45	20	0	0.15
22	57	33	45	20	0	0.15
23	57	33	45	20	0	0.15
24	56	32	44	21	0	0.15
25	56	32	44	21	0	0.15
26	56	32	44	21	0	0.15
27	55	31	43	22	0	0.15
28	55	31	43	22	0	0.15
29	55	31	43	22	0	0.15
30	54	31	43	22	0	0.14
MTH	59.1	34.3	46.7	549	0	4.28

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: CULLOWHEE NORTH CAROLINA Station Number: 312200

Latitude: 35° 19* 32(Longitude: -083° 11* 28(Elevation (feet): 2192

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.78	0.76	1.00	0.46	0.98	0.45	0.51	0.29	0.25	0.07	1.19	0.71	31.83
0.010	0.97	0.94	1.21	0.58	1.17	0.59	0.65	0.39	0.34	0.12	1.37	0.87	33.44
0.050	1.63	1.57	1.96	1.09	1.84	1.13	1.20	0.84	0.75	0.37	1.95	1.46	38.12
0.100	2.10	2.02	2.47	1.46	2.30	1.54	1.61	1.20	1.07	0.62	2.33	1.87	40.80
0.200	2.78	2.67	3.21	2.02	2.95	2.17	2.22	1.77	1.60	1.07	2.85	2.47	44.20
0.300	3.36	3.22	3.83	2.51	3.49	2.73	2.76	2.29	2.07	1.51	3.28	2.98	46.77
0.400	3.92	3.75	4.42	2.99	4.00	3.27	3.28	2.81	2.56	1.99	3.67	3.47	49.04
0.500	4.50	4.30	5.02	3.49	4.52	3.85	3.82	3.37	3.07	2.52	4.07	3.97	51.23
0.600	5.13	4.90	5.68	4.05	5.09	4.49	4.43	4.00	3.65	3.14	4.49	4.52	53.48
0.700	5.87	5.59	6.45	4.70	5.75	5.24	5.14	4.75	4.34	3.91	4.98	5.16	55.97
0.800	6.82	6.49	7.42	5.56	6.58	6.23	6.07	5.74	5.26	4.96	5.59	5.98	58.97
0.900	8.29	7.88	8.93	6.90	7.87	7.78	7.52	7.32	6.73	6.69	6.51	7.26	63.31
0.950	9.65	9.16	10.31	8.14	9.05	9.24	8.87	8.81	8.12	8.37	7.35	8.43	67.04
0.990	12.56	11.91	13.26	10.85	11.54	12.40	11.80	12.09	11.18	12.16	9.09	10.95	74.43
0.995	13.75	13.02	14.45	11.96	12.55	13.70	13.00	13.46	12.45	13.77	9.78	11.97	77.27

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ENKA NORTH CAROLINA Station Number: 312837

Latitude: 35 B 32 * 20 (Longitude: -082 B 39* 05 (Elevation (feet): 2050

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.10
2						0.09
3						0.09
4						0.09
5						0.09
6						0.09
7						0.09
8						0.09
9						0.09
10						0.09
11						0.08
12						0.08
13						0.08
14						0.08
15						0.08
16						0.08
17						0.08
18						0.08
19						0.08
20						0.08
21						0.08
22						0.08
23						0.08
24						0.08
25						0.08
26						0.08
27						0.08
28						0.09
29						0.09
30						0.09
31						0.09
MTH						2.63
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.09
2						0.09
3						0.09
4						0.09
5						0.09
6						0.10
7						0.10
8						0.10
9						0.10
10						0.10
11						0.10
12						0.10
13						0.10
14						0.10
15						0.10
16						0.10
17						0.11
18						0.11
19						0.11
20						0.11
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.11
28						0.11
29						0.11
30						0.12
31						0.12
MTH						3.22
						9.40

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.12
6						0.12
7						0.12
8						0.12
9						0.12
10						0.12
11						0.12
12						0.12
13						0.12
14						0.13
15						0.13
16						0.13
17						0.13
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.13
24						0.13
25						0.14
26						0.14
27						0.14
28						0.14
MTH						3.55

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.14
7						0.15
8						0.15
9						0.15
10						0.15
11						0.15
12						0.15
13						0.15
14						0.15
15						0.14
16						0.14
17						0.14
18						0.14
19						0.14
20						0.14
21						0.14
22						0.14
23						0.14
24						0.14
25						0.14
26						0.13
27						0.13
28						0.13
29						0.13
30						0.13
31						0.12
MTH						4.35
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.11
6						0.11
7						0.11
8						0.11
9						0.11
10						0.11
11						0.11
12						0.11
13						0.11
14						0.11
15						0.10
16						0.10
17						0.10
18						0.10
19						0.10
20						0.10
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.11
28						0.11
29						0.11
30						0.12
MTH						3.29
						11.57

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.12
6						0.12
7						0.13
8						0.13
9						0.13
10						0.13
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.13
17						0.13
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.13
24						0.13
25						0.13
26						0.13
27						0.13
28						0.12
29						0.12
30						0.12
31						0.12
MTH						3.93

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ENKA NORTH CAROLINA Station Number: 312837

Latitude: 35 B 32 * 20 (Longitude: -082 B 39 * 05 (Elevation (feet): 2050

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.11
4						0.11
5						0.11
6						0.11
7						0.11
8						0.11
9						0.11
10						0.11
11						0.10
12						0.10
13						0.10
14						0.10
15						0.10
16						0.10
17						0.10
18						0.10
19						0.10
20						0.10
21						0.10
22						0.10
23						0.10
24						0.10
25						0.10
26						0.10
27						0.10
28						0.10
29						0.10
30						0.10
MTH						3.12
					SUMMER SEASON:	

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.10
2						0.10
3						0.10
4						0.10
5						0.10
6						0.10
7						0.10
8						0.10
9						0.10
10						0.10
11						0.10
12						0.10
13						0.10
14						0.10
15						0.10
16						0.10
17						0.10
18						0.10
19						0.10
20						0.10
21						0.10
22						0.10
23						0.10
24						0.11
25						0.11
26						0.11
27						0.11
28						0.11
29						0.11
30						0.11
31						0.11
MTH						3.18
						9.84

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.11
2						0.11
3						0.11
4						0.11
5						0.11
6						0.11
7						0.11
8						0.11
9						0.11
10						0.11
11						0.11
12						0.11
13						0.11
14						0.11
15						0.11
16						0.11
17						0.11
18						0.11
19						0.12
20						0.12
21						0.12
22						0.12
23						0.12
24						0.12
25						0.12
26						0.12
27						0.12
28						0.12
29						0.12
30						0.12
31						0.12
MTH						3.54

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.13
5						0.13
6						0.13
7						0.13
8						0.13
9						0.13
10						0.13
11						0.13
12						0.12
13						0.12
14						0.12
15						0.12
16						0.12
17						0.12
18						0.12
19						0.12
20						0.12
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.10
28						0.10
29						0.10
30						0.10
MTH						3.54
					AUTUMN SEASON:	
					ANNUAL:	

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.09
2						0.09
3						0.09
4						0.09
5						0.08
6						0.08
7						0.08
8						0.08
9						0.08
10						0.08
11						0.08
12						0.07
13						0.07
14						0.07
15						0.07
16						0.07
17						0.07
18						0.07
19						0.07
20						0.07
21						0.07
22						0.07
23						0.08
24						0.08
25						0.08
26						0.08
27						0.08
28						0.08
29						0.08
30						0.09
31						0.09
MTH						2.43
						9.02
						39.83

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.09
2						0.09
3						0.09
4						0.09
5						0.10
6						0.10
7						0.10
8						0.10
9						0.10
10						0.10
11						0.10
12						0.10
13						0.10
14						0.11
15						0.11
16						0.11
17						0.11
18						0.11
19						0.11
20						0.11
21						0.11
22						0.11
23						0.10
24						0.10
25						0.10
26						0.10
27						0.10
28						0.10
29						0.10
30						0.10
MTH						3.05

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ENKA NORTH CAROLINA Station Number: 312837

Latitude: 35B 32* 20(Longitude: -082B 39* 05(Elevation (feet): 2050

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.36	0.48	0.51	0.37	0.61	0.32	0.49	0.12	0.00	0.00	0.62	0.15	20.88
0.010	0.47	0.60	0.66	0.48	0.75	0.41	0.61	0.19	0.00	0.00	0.74	0.22	22.32
0.050	0.88	1.07	1.22	0.90	1.28	0.80	1.03	0.51	0.36	0.10	1.17	0.50	26.60
0.100	1.18	1.41	1.63	1.21	1.65	1.10	1.33	0.80	0.78	0.31	1.45	0.73	29.10
0.200	1.65	1.91	2.25	1.68	2.20	1.55	1.78	1.31	1.37	0.67	1.85	1.12	32.34
0.300	2.05	2.35	2.80	2.10	2.67	1.95	2.16	1.80	1.88	1.02	2.19	1.48	34.82
0.400	2.45	2.77	3.33	2.51	3.12	2.34	2.52	2.31	2.41	1.41	2.51	1.84	37.04
0.500	2.87	3.21	3.89	2.93	3.59	2.76	2.90	2.88	2.97	1.84	2.84	2.23	39.19
0.600	3.34	3.69	4.51	3.40	4.10	3.22	3.32	3.53	3.60	2.35	3.19	2.67	41.43
0.700	3.88	4.26	5.23	3.96	4.69	3.77	3.80	4.33	4.37	2.99	3.60	3.21	43.92
0.800	4.60	4.99	6.18	4.69	5.46	4.49	4.42	5.40	5.38	3.87	4.12	3.92	46.96
0.900	5.72	6.13	7.67	5.83	6.66	5.62	5.39	7.15	7.02	5.32	4.92	5.06	51.39
0.950	6.77	7.20	9.05	6.90	7.76	6.67	6.29	8.84	8.58	6.75	5.65	6.14	55.25
0.990	9.03	9.48	12.05	9.21	10.13	8.98	8.21	12.62	12.04	10.00	7.20	8.55	62.99
0.995	9.97	10.42	13.28	10.16	11.09	9.92	8.99	14.21	13.49	11.38	7.83	9.55	65.99

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FLETCHER 2 NE NORTH CAROLINA Station Number: 313101

Latitude: 35 B 27 * 00 (Longitude: -082 B 29 * 00 (Elevation (feet): 2190

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	31	44	21	0	0.11
2	56	31	44	21	0	0.11
3	56	31	43	22	0	0.11
4	54	31	42	23	0	0.11
5	54	30	42	23	0	0.10
6	54	30	42	23	0	0.10
7	54	30	42	23	0	0.10
8	54	29	42	23	0	0.10
9	54	29	41	24	0	0.10
10	54	29	41	24	0	0.10
11	54	29	41	24	0	0.10
12	53	29	41	24	0	0.10
13	52	28	40	25	0	0.10
14	52	28	40	25	0	0.09
15	52	28	40	25	0	0.09
16	52	28	40	25	0	0.09
17	52	28	40	25	0	0.09
18	51	28	40	25	0	0.09
19	51	27	39	26	0	0.09
20	51	27	39	26	0	0.10
21	51	27	39	26	0	0.10
22	51	27	39	26	0	0.10
23	50	27	39	26	0	0.10
24	50	27	39	26	0	0.10
25	49	27	38	27	0	0.10
26	49	27	38	27	0	0.10
27	49	27	38	27	0	0.10
28	49	27	38	27	0	0.10
29	49	27	38	27	0	0.10
30	49	26	38	27	0	0.11
31	49	26	38	27	0	0.11
MTH	52.0	28.3	40.2	770	0	3.10

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	26	38	27	0	0.11
2	49	26	38	27	0	0.11
3	49	26	38	27	0	0.11
4	49	26	37	28	0	0.11
5	49	26	37	28	0	0.12
6	49	26	37	28	0	0.12
7	49	26	37	28	0	0.12
8	49	26	37	28	0	0.12
9	49	26	37	28	0	0.12
10	49	26	37	28	0	0.12
11	49	26	37	28	0	0.12
12	48	26	37	28	0	0.12
13	48	26	37	28	0	0.13
14	48	26	37	28	0	0.13
15	48	26	37	28	0	0.13
16	48	25	37	28	0	0.13
17	48	25	37	28	0	0.13
18	48	25	37	28	0	0.13
19	48	26	37	28	0	0.13
20	48	26	37	28	0	0.13
21	48	26	37	28	0	0.13
22	48	26	37	28	0	0.13
23	48	26	37	28	0	0.13
24	48	26	37	28	0	0.13
25	48	26	37	28	0	0.13
26	49	26	38	27	0	0.13
27	49	26	38	27	0	0.13
28	49	26	38	27	0	0.13
29	50	26	38	27	0	0.13
30	50	26	38	27	0	0.13
31	50	26	38	27	0	0.13
MTH	48.7	25.9	37.3	859	0	3.87

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	27	38	27	0	0.13
2	50	27	38	27	0	0.13
3	50	27	39	26	0	0.13
4	50	27	39	26	0	0.13
5	51	27	39	26	0	0.12
6	52	27	39	26	0	0.12
7	52	27	39	26	0	0.12
8	52	27	39	26	0	0.12
9	52	27	39	26	0	0.12
10	52	27	39	26	0	0.12
11	52	27	40	25	0	0.12
12	52	28	40	25	0	0.13
13	52	28	40	25	0	0.13
14	52	28	40	25	0	0.13
15	52	28	40	25	0	0.13
16	52	28	40	25	0	0.13
17	53	28	41	24	0	0.13
18	53	28	41	24	0	0.13
19	54	28	41	24	0	0.13
20	54	28	41	24	0	0.13
21	54	28	41	24	0	0.13
22	54	29	42	23	0	0.13
23	54	29	42	23	0	0.13
24	55	29	42	23	0	0.14
25	55	29	42	23	0	0.14
26	55	30	43	22	0	0.14
27	55	30	43	22	0	0.14
28	56	30	43	22	0	0.14
MTH	52.7	28.0	40.4	690	0	3.62

WINTER SEASON: 51.1 27.4 39.3 2319 0 10.59

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	31	43	22	0	0.14
2	57	32	44	21	0	0.15
3	57	32	44	21	0	0.15
4	57	32	44	21	0	0.15
5	57	32	44	21	0	0.15
6	57	32	45	20	0	0.15
7	57	33	45	20	0	0.15
8	58	33	45	20	0	0.15
9	58	33	45	20	0	0.15
10	58	33	46	19	0	0.15
11	58	33	46	19	0	0.15
12	59	33	46	19	0	0.15
13	59	33	46	19	0	0.16
14	59	34	47	18	0	0.16
15	60	34	47	18	0	0.15
16	60	34	47	18	0	0.15
17	60	35	48	17	0	0.15
18	60	35	48	17	0	0.15
19	61	35	48	17	0	0.15
20	61	35	48	17	0	0.15
21	61	36	49	16	0	0.15
22	62	36	49	16	0	0.15
23	62	36	49	16	0	0.15
24	62	36	49	16	0	0.15
25	62	36	49	16	0	0.15
26	63	36	50	15	0	0.14
27	63	37	50	15	0	0.14
28	63	37	50	15	0	0.14
29	63	37	50	15	0	0.14
30	64	37	51	14	0	0.14
31	65	37	51	14	0	0.13
MTH	60.0	34.4	47.2	552	0	4.59

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	38	51	14	0	0.13
2	65	38	51	14	0	0.13
3	66	38	52	13	0	0.13
4	66	38	52	13	0	0.12
5	66	39	52	13	0	0.12
6	66	39	52	13	0	0.12
7	67	39	53	12	0	0.12
8	67	39	53	12	0	0.12
9	67	39	53	12	0	0.12
10	68	39	53	12	0	0.12
11	68	39	54	11	0	0.11
12	68	39	54	11	0	0.11
13	69	39	54	11	0	0.11
14	69	39	54	11	0	0.11
15	69	39	54	11	0	0.11
16	69	40	55	10	0	0.11
17	70	40	55	10	0	0.11
18	70	40	55	10	0	0.11
19	70	40	55	10	0	0.11
20	70	41	56	9	0	0.11
21	70	41	56	9	0	0.11
22	71	41	56	9	0	0.11
23	71	41	56	9	0	0.11
24	71	42	57	8	0	0.11
25	71	42	57	8	0	0.11
26	72	42	57	8	0	0.11
27	72	42	57	8	0	0.12
28	72	42	57	8	0	0.12
29	72	43	58	8	1	0.12
30	72	44	58	8	1	0.12
MTH	69.0	40.1	54.6	315	2	3.47

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	45	58	8	1	0.12
2	73	45	59	7	1	0.12
3	73	45	59	7	1	0.12
4	73	45	59	7	1	0.13
5	73	45	59	7	1	0.13
6	73	45	59	7	1	0.13
7	73	46	59	6	0	0.13
8	74	46	60	6	1	0.13
9	74	46	60	6	1	0.13
10	74	46	60	6	1	0.13
11	74	47	61	5	1	0.14
12	74	47	61	5	1	0.14
13	75	47	61	5	1	0.14
14	75	47	61	5	1	0.14
15	75	48	62	5	2	0.14
16	75	48	62	5	2	0.14
17	75	49	62	5	2	0.14
18	75	49	62	5	2	0.14
19	76	49	63	4	2	0.14
20	76	50	63	4	2	0.14
21	76	50	63	4	2	0.14
22	76	50	63	4	2	0.14
23	76	50	63	4	2	0.14
24	77	51	64	3	2	0.14
25	77	51	64	3	2	0.14
26	77	51	64	3	2	0.14
27	77	52	65	3	3	0.14
28	78	52	65	3	3	0.14
29	78	52	65	3	3	0.14
30	78	52	65	3	3	0.14
31	78	53	66	2	3	0.14
MTH	75.2	48.4	61.8	150	52	4.21

SPRING SEASON: 68.0 40.9 54.5 1017 54 12.27

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FLETCHER 2 NE NORTH CAROLINA Station Number: 313101

Latitude: 35 B 27 * 00 (Longitude: -082 B 29* 00 (Elevation (feet): 2190

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	53	66	2	3	0.14
2	79	53	66	2	3	0.14
3	79	53	66	2	3	0.14
4	79	53	66	2	3	0.14
5	79	54	66	2	3	0.14
6	79	54	66	2	3	0.14
7	80	55	67	2	4	0.14
8	80	55	68	1	4	0.14
9	80	55	68	1	4	0.14
10	80	56	68	1	4	0.14
11	80	56	68	1	4	0.14
12	80	56	68	1	4	0.13
13	81	56	68	1	4	0.13
14	81	56	69	0	4	0.13
15	81	57	69	0	4	0.13
16	81	57	69	0	4	0.13
17	81	58	70	0	5	0.13
18	81	58	70	0	5	0.13
19	82	58	70	0	5	0.13
20	82	58	70	0	5	0.13
21	82	58	70	0	5	0.13
22	82	58	70	0	5	0.13
23	82	58	70	0	5	0.13
24	82	58	70	0	5	0.13
25	82	59	71	0	6	0.12
26	83	59	71	0	6	0.12
27	83	59	71	0	6	0.12
28	83	59	71	0	6	0.12
29	83	59	71	0	6	0.12
30	83	59	71	0	6	0.12
MTH	81.0	56.6	68.8	20	134	3.95

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	60	71	0	6	0.12
2	83	60	71	0	6	0.12
3	83	60	71	0	6	0.12
4	83	60	71	0	6	0.12
5	84	60	72	0	7	0.12
6	84	60	72	0	7	0.12
7	84	60	72	0	7	0.11
8	84	60	72	0	7	0.11
9	84	60	72	0	7	0.11
10	84	60	72	0	7	0.11
11	84	60	72	0	7	0.11
12	84	60	72	0	7	0.11
13	84	60	72	0	7	0.11
14	84	60	72	0	7	0.11
15	84	60	72	0	7	0.11
16	84	60	72	0	7	0.11
17	84	60	72	0	7	0.11
18	84	61	72	0	7	0.11
19	84	61	73	0	8	0.11
20	84	61	73	0	8	0.11
21	84	61	73	0	8	0.12
22	84	61	73	0	8	0.12
23	85	61	73	0	8	0.12
24	85	61	73	0	8	0.12
25	85	61	73	0	8	0.12
26	85	61	73	0	8	0.12
27	85	61	73	0	8	0.12
28	85	61	73	0	8	0.12
29	84	61	73	0	8	0.12
30	84	61	73	0	8	0.12
31	84	61	73	0	8	0.13
MTH	84.1	60.5	72.3	0	226	3.59
SUMMER SEASON:	82.7	58.9	70.8	20	559	11.75

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	61	73	0	8	0.12
2	84	61	72	0	7	0.13
3	84	61	72	0	7	0.13
4	84	61	72	0	7	0.13
5	84	61	72	0	7	0.13
6	84	60	72	0	7	0.13
7	84	60	72	0	7	0.13
8	84	60	72	0	7	0.13
9	84	60	72	0	7	0.13
10	84	60	72	0	7	0.13
11	84	60	72	0	7	0.14
12	84	60	72	0	7	0.14
13	84	60	72	0	7	0.14
14	84	60	72	0	7	0.14
15	84	60	72	0	7	0.14
16	83	60	72	0	7	0.14
17	83	60	72	0	7	0.14
18	83	59	71	0	6	0.14
19	83	59	71	0	6	0.14
20	83	59	71	0	6	0.14
21	83	59	71	0	6	0.14
22	83	59	71	0	6	0.14
23	83	59	71	0	6	0.14
24	82	59	71	0	6	0.14
25	82	59	71	0	6	0.14
26	82	59	71	0	6	0.14
27	82	58	70	0	5	0.14
28	82	58	70	0	5	0.14
29	82	58	70	0	5	0.14
30	82	58	70	0	5	0.13
31	81	58	70	0	5	0.13
MTH	83.2	59.6	71.4	0	199	4.21

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	58	70	0	5	0.13
2	81	58	70	0	5	0.13
3	81	57	69	0	4	0.13
4	81	57	69	0	4	0.13
5	81	57	69	0	4	0.13
6	81	56	68	1	4	0.13
7	81	56	68	1	4	0.13
8	81	56	68	1	4	0.13
9	79	55	67	1	3	0.13
10	79	55	67	1	3	0.13
11	79	55	67	1	3	0.13
12	79	55	67	1	3	0.12
13	79	55	67	1	3	0.12
14	78	54	66	2	3	0.12
15	78	54	66	2	3	0.12
16	78	54	66	2	3	0.12
17	77	54	66	2	3	0.12
18	77	53	65	2	2	0.12
19	77	53	65	2	2	0.12
20	77	52	65	2	2	0.12
21	77	51	64	3	2	0.12
22	76	51	64	3	2	0.12
23	76	51	64	3	2	0.11
24	76	50	63	4	2	0.11
25	76	50	63	4	2	0.11
26	75	50	63	4	2	0.11
27	75	49	62	4	1	0.11
28	75	49	62	4	1	0.11
29	74	48	61	5	1	0.11
30	74	48	61	5	1	0.11
MTH	78.0	53.4	65.7	61	83	3.63

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	48	61	5	1	0.11
2	73	48	60	6	1	0.11
3	73	48	60	6	1	0.10
4	73	48	60	6	1	0.10
5	73	46	59	7	1	0.10
6	72	46	59	7	1	0.10
7	72	45	59	7	1	0.10
8	72	44	58	8	1	0.10
9	71	44	58	8	1	0.10
10	71	43	57	9	1	0.10
11	71	43	57	9	1	0.10
12	71	43	57	9	1	0.10
13	70	42	56	9	0	0.10
14	70	42	56	9	0	0.10
15	70	42	56	9	0	0.10
16	69	41	55	10	0	0.10
17	69	41	55	10	0	0.10
18	69	41	55	10	0	0.10
19	68	41	55	10	0	0.10
20	68	40	54	11	0	0.10
21	68	40	54	11	0	0.11
22	68	40	54	11	0	0.11
23	67	39	53	12	0	0.11
24	67	39	53	12	0	0.11
25	67	39	53	12	0	0.11
26	66	39	53	12	0	0.11
27	66	38	52	13	0	0.11
28	66	38	52	13	0	0.11
29	66	38	52	13	0	0.11
30	65	38	52	13	0	0.12
31	65	37	51	14	0	0.12
MTH	69.4	42.0	55.7	301	12	3.25
AUTUMN SEASON:	69.2	43.2	56.3	893	97	10.63
ANNUAL:	67.8	42.6	55.2	4249	710	45.24

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	37	51	14	0	0.12
2	65	37	51	14	0	0.12
3	65	37	51	14	*	0.12
4	64	37	51	15	*	0.12
5	63	37	50	15	*	0.12
6	63	37	50	15	*	0.13
7	62	37	50	16	*	0.13
8	62	37	49	16	*	0.13
9	62	37	49	16	*	0.13
10	62	37	49	16	*	0.13
11	61	36	48	17	*	0.13
12	61	35	48	17	0	0.13
13	61	35	48	17	0	0.13
14	61	35	48	17	0	0.13
15	60	34	47	18	0	0.13
16	60	34	47	18	0	0.13
17	60	34	47	18	0	0.13
18	60	34	47	18	0	0.13
19	59	33	46	19	0	0.13
20	59	33	46	19	0	0.13
21	59	33	46	19	0	0.13
22	58	33	46	19	0	0.13
23	58	32	45	20	0	0.12
24	58	32	45	20	0	0.12
25	57	32	45	20	0	0.12
26	57	32	45	20	0	0.12
27	57	31	44	21	0	0.12
28	57	31	44	21	0	0.12
29	56	31	44	21	0	0.11
30	56	31	44	21	0	0.11
MTH	60.3	34.4	47.4	531	2	3.75

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FLETCHER 2 NE NORTH CAROLINA Station Number: 313101

Latitude: 35° 27* 00(Longitude: -082° 29* 00(Elevation (feet): 2190

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.67	0.29	0.68	0.33	0.77	0.50	0.74	0.43	0.15	0.09	0.83	0.35	26.98
0.010	0.81	0.39	0.85	0.44	0.93	0.64	0.88	0.56	0.23	0.14	0.98	0.45	28.44
0.050	1.34	0.82	1.46	0.86	1.50	1.15	1.38	1.09	0.58	0.42	1.50	0.85	32.70
0.100	1.71	1.15	1.90	1.19	1.90	1.53	1.71	1.48	0.89	0.68	1.85	1.14	35.15
0.200	2.24	1.69	2.54	1.69	2.47	2.09	2.19	2.10	1.42	1.14	2.34	1.59	38.27
0.300	2.69	2.16	3.09	2.14	2.95	2.58	2.58	2.63	1.92	1.59	2.74	1.98	40.63
0.400	3.12	2.64	3.63	2.59	3.41	3.06	2.96	3.16	2.43	2.07	3.12	2.36	42.73
0.500	3.56	3.15	4.18	3.05	3.88	3.56	3.34	3.72	3.00	2.60	3.51	2.76	44.75
0.600	4.05	3.72	4.78	3.57	4.40	4.10	3.76	4.34	3.65	3.21	3.93	3.21	46.84
0.700	4.61	4.40	5.49	4.19	4.99	4.75	4.24	5.08	4.44	3.97	4.41	3.73	49.14
0.800	5.33	5.29	6.40	5.00	5.76	5.59	4.85	6.04	5.49	5.00	5.02	4.42	51.93
0.900	6.45	6.71	7.82	6.28	6.94	6.90	5.79	7.56	7.21	6.68	5.96	5.49	55.97
0.950	7.47	8.05	9.13	7.48	8.02	8.11	6.65	8.98	8.86	8.31	6.82	6.50	59.45
0.990	9.67	10.99	11.95	10.10	10.32	10.74	8.46	12.07	12.53	11.98	8.62	8.68	66.37
0.995	10.56	12.21	13.10	11.18	11.25	11.82	9.20	13.34	14.07	13.53	9.35	9.57	69.03

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FLETCHER 3 W NORTH CAROLINA Station Number: 313106

Latitude: 35B 25* 35 (Longitude: -082B 33* 26 (Elevation (feet): 2070

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	28	41	24	0	0.13
2	54	27	40	25	0	0.13
3	54	27	40	25	0	0.13
4	53	27	40	25	0	0.13
5	51	27	39	26	0	0.13
6	51	27	39	26	0	0.12
7	51	27	39	26	0	0.12
8	51	26	39	26	0	0.12
9	50	26	38	27	0	0.12
10	50	26	38	27	0	0.12
11	50	26	38	27	0	0.12
12	50	26	38	27	0	0.12
13	50	25	38	27	0	0.12
14	49	25	37	28	0	0.12
15	49	25	37	28	0	0.12
16	49	25	37	28	0	0.12
17	49	25	37	28	0	0.12
18	49	25	37	28	0	0.12
19	48	25	37	28	0	0.12
20	48	24	36	29	0	0.12
21	48	24	36	29	0	0.12
22	48	24	36	29	0	0.12
23	48	24	36	29	0	0.12
24	48	24	36	29	0	0.12
25	47	24	36	29	0	0.13
26	47	23	35	30	0	0.13
27	47	23	35	30	0	0.13
28	47	23	35	30	0	0.13
29	47	23	35	30	0	0.13
30	47	23	35	30	0	0.13
31	46	23	35	30	0	0.13
MTH	49.4	25.1	37.3	860	0	3.84
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	23	35	30	0	0.13
2	46	23	35	30	0	0.14
3	46	23	35	30	0	0.14
4	46	23	35	30	0	0.14
5	46	23	35	30	0	0.14
6	46	23	34	31	0	0.14
7	46	23	34	31	0	0.14
8	46	23	34	31	0	0.14
9	46	23	34	31	0	0.14
10	46	23	34	31	0	0.15
11	46	23	34	31	0	0.15
12	46	23	34	31	0	0.15
13	46	23	34	31	0	0.15
14	46	23	34	31	0	0.15
15	46	23	34	31	0	0.15
16	46	23	34	31	0	0.15
17	45	23	34	31	0	0.15
18	45	23	34	31	0	0.15
19	45	23	34	31	0	0.15
20	45	23	34	31	0	0.15
21	45	23	34	31	0	0.15
22	46	23	35	30	0	0.15
23	46	23	35	30	0	0.15
24	46	23	35	30	0	0.15
25	46	23	35	30	0	0.15
26	46	23	35	30	0	0.15
27	46	23	35	30	0	0.15
28	47	23	35	30	0	0.15
29	47	23	35	30	0	0.15
30	47	23	35	30	0	0.15
31	47	23	35	30	0	0.15
MTH	46.0	23.0	34.5	946	0	4.55
	48.5	24.4	36.5	2570	0	12.48

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	24	35	30	0	0.15
2	47	24	35	30	0	0.15
3	48	24	36	29	0	0.14
4	48	24	36	29	0	0.14
5	48	24	36	29	0	0.14
6	48	24	36	29	0	0.14
7	49	24	36	29	0	0.14
8	49	24	36	29	0	0.14
9	49	24	37	28	0	0.14
10	49	25	37	28	0	0.14
11	49	25	37	28	0	0.14
12	49	25	37	28	0	0.14
13	49	25	37	28	0	0.14
14	49	25	37	28	0	0.14
15	50	25	38	27	0	0.14
16	50	25	38	27	0	0.14
17	51	25	38	27	0	0.15
18	51	25	38	27	0	0.15
19	51	25	38	27	0	0.15
20	51	26	39	26	0	0.15
21	52	26	39	26	0	0.15
22	52	26	39	26	0	0.15
23	52	26	39	26	0	0.15
24	52	27	40	25	0	0.15
25	53	27	40	25	0	0.15
26	53	27	40	25	0	0.16
27	53	28	41	24	0	0.16
28	53	28	41	24	0	0.16
MTH	50.1	25.3	37.7	764	0	4.09

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	29	41	24	0	0.16
2	54	29	41	24	0	0.16
3	54	30	42	23	0	0.17
4	55	30	42	23	0	0.17
5	55	30	42	23	0	0.17
6	55	30	43	22	0	0.17
7	55	30	43	22	0	0.17
8	56	31	43	22	0	0.17
9	56	31	43	22	0	0.17
10	56	31	44	21	0	0.17
11	56	31	44	21	0	0.17
12	57	31	44	21	0	0.17
13	57	31	44	21	0	0.17
14	57	32	45	20	0	0.17
15	58	32	45	20	0	0.17
16	58	32	45	20	0	0.17
17	58	32	45	20	0	0.17
18	58	33	46	19	0	0.17
19	59	33	46	19	0	0.17
20	59	33	46	19	0	0.17
21	59	33	46	19	0	0.17
22	60	34	47	18	0	0.17
23	60	34	47	18	0	0.17
24	60	34	47	18	0	0.16
25	60	34	47	18	0	0.16
26	61	35	48	17	0	0.16
27	61	35	48	17	0	0.16
28	61	35	48	17	0	0.15
29	61	35	48	17	0	0.15
30	62	35	49	16	0	0.15
31	62	35	49	16	0	0.15
MTH	57.9	32.3	45.1	617	0	5.13
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	36	49	16	0	0.14
2	63	36	49	16	0	0.14
3	63	36	50	15	0	0.14
4	63	37	50	15	0	0.13
5	64	37	50	15	0	0.13
6	64	37	50	15	0	0.13
7	64	37	51	14	0	0.13
8	65	37	51	14	0	0.13
9	65	37	51	14	0	0.12
10	65	37	51	14	0	0.12
11	65	38	52	13	0	0.12
12	66	38	52	13	0	0.12
13	66	38	52	13	0	0.12
14	66	38	52	13	0	0.12
15	67	39	53	12	0	0.12
16	67	39	53	12	0	0.12
17	67	39	53	12	0	0.12
18	67	39	53	12	0	0.12
19	68	40	54	11	0	0.12
20	68	40	54	11	0	0.12
21	68	40	54	11	0	0.12
22	68	40	54	11	0	0.12
23	69	41	55	10	0	0.12
24	69	41	55	10	0	0.12
25	69	41	55	10	0	0.12
26	69	42	56	9	0	0.12
27	70	42	56	9	0	0.13
28	70	42	56	9	0	0.13
29	70	42	56	9	0	0.13
30	70	43	57	9	1	0.13
MTH	66.6	39.0	52.8	367	1	3.75
	66.1	39.8	53.0	1147	44	13.67

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	71	44	57	8	0	0.13
2	71	45	58	8	1	0.13
3	71	45	58	8	1	0.14
4	71	45	58	8	1	0.14
5	71	45	58	8	1	0.14
6	71	46	58	8	1	0.14
7	72	46	59	7	1	0.14
8	72	46	59	7	1	0.15
9	72	46	59	7	1	0.15
10	73	46	60	6	1	0.15
11	73	47	60	6	1	0.15
12	73	47	60	6	1	0.15
13	73	47	60	6	1	0.15
14	73	48	61	5	1	0.15
15	74	48	61	5	1	0.16
16	74	48	61	5	1	0.16
17	74	48	61	5	1	0.16
18	74	48	61	5	1	0.16
19	75	49	62	5	2	0.16
20	75	49	62	5	2	0.16
21	75	50	63	4	2	0.16
22	75	50	63	4	2	0.16
23	75	50	63	4	2	0.16
24	76	50	63	4	2	0.16
25	76	51	64	3	2	0.16
26	76	51	64	3	2	0.17
27	76	51	64	3	2	0.17
28	77	51	64	3	2	0.17
29	77	51	64	3	2	0.17
30	77	52	65	2	2	0.17
31	77	53	65	2	2	0.17
MTH	73.9	48.2	61.1	163	43	4.79

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FLETCHER 3 W NORTH CAROLINA Station Number: 313106

Latitude: 35 B 25 * 35 (Longitude: -082 B 33 * 26 (Elevation (feet): 2070

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	53	65	2	2	0.17
2	78	53	65	2	2	0.17
3	78	53	66	2	3	0.17
4	78	53	66	2	3	0.17
5	78	54	66	2	3	0.17
6	78	54	66	2	3	0.17
7	79	54	67	1	3	0.17
8	79	54	67	1	3	0.17
9	79	55	67	1	3	0.16
10	79	55	67	1	3	0.16
11	79	55	67	1	3	0.16
12	79	55	67	1	3	0.16
13	80	56	68	1	4	0.16
14	80	56	68	1	4	0.16
15	80	56	68	1	4	0.16
16	80	56	68	1	4	0.16
17	81	56	69	0	4	0.16
18	81	57	69	0	4	0.16
19	81	57	69	0	4	0.16
20	81	57	69	0	4	0.16
21	82	57	70	0	5	0.16
22	82	57	70	0	5	0.16
23	82	58	70	0	5	0.16
24	82	58	70	0	5	0.15
25	82	58	70	0	5	0.15
26	82	58	70	0	5	0.15
27	82	58	70	0	5	0.15
28	82	59	71	0	6	0.15
29	83	59	71	0	6	0.15
30	83	59	71	0	6	0.15
MTH	80.3	56.0	68.2	22	119	4.81

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	59	71	0	6	0.14
2	83	60	71	0	6	0.14
3	83	60	71	0	6	0.14
4	83	60	71	0	6	0.14
5	83	60	72	0	7	0.14
6	84	60	72	0	7	0.14
7	84	60	72	0	7	0.14
8	84	60	72	0	7	0.14
9	84	60	72	0	7	0.14
10	84	60	72	0	7	0.14
11	84	60	72	0	7	0.14
12	84	60	72	0	7	0.14
13	84	60	72	0	7	0.14
14	84	60	72	0	7	0.13
15	84	60	72	0	7	0.13
16	84	60	72	0	7	0.14
17	84	60	72	0	7	0.14
18	84	61	73	0	8	0.14
19	84	61	73	0	8	0.14
20	85	61	73	0	8	0.14
21	85	61	73	0	8	0.14
22	85	61	73	0	8	0.14
23	85	61	73	0	8	0.14
24	84	61	73	*	8	0.14
25	84	61	73	*	8	0.14
26	84	61	73	*	8	0.14
27	84	60	72	*	8	0.14
28	84	60	72	*	8	0.14
29	84	60	72	*	7	0.15
30	84	60	72	*	7	0.15
31	84	60	72	0	7	0.15
MTH	84.0	60.3	72.2	2	224	4.35
SUMMER SEASON:	82.3	58.4	70.4	26	526	14.14

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	60	72	0	7	0.15
2	84	60	72	0	7	0.15
3	84	60	72	0	7	0.15
4	84	60	72	0	7	0.16
5	84	60	72	0	7	0.16
6	84	60	72	0	7	0.16
7	84	60	72	0	7	0.16
8	83	60	72	0	7	0.16
9	83	60	72	0	7	0.16
10	83	60	72	0	7	0.16
11	83	60	71	0	6	0.16
12	83	60	71	0	6	0.16
13	83	60	71	0	6	0.16
14	83	60	71	0	6	0.16
15	83	59	71	0	6	0.16
16	83	59	71	0	6	0.17
17	83	59	71	0	6	0.17
18	82	59	71	0	6	0.17
19	82	59	71	0	6	0.17
20	82	59	71	0	6	0.17
21	82	59	71	0	6	0.16
22	82	58	70	0	5	0.16
23	82	58	70	0	5	0.16
24	82	58	70	*	5	0.16
25	81	58	70	*	5	0.16
26	81	58	70	*	5	0.16
27	81	57	69	*	5	0.16
28	81	57	69	*	5	0.16
29	81	57	69	*	4	0.16
30	81	57	69	*	4	0.16
31	80	57	69	0	4	0.16
MTH	82.5	59.0	70.8	2	183	4.98

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	57	69	0	4	0.15
2	80	57	69	0	4	0.15
3	80	57	69	0	4	0.15
4	80	57	68	0	3	0.15
5	80	56	68	0	3	0.15
6	80	56	68	0	3	0.15
7	79	55	67	1	3	0.15
8	79	55	67	1	3	0.14
9	79	55	67	1	3	0.14
10	79	55	67	1	3	0.14
11	78	55	67	1	3	0.14
12	78	54	66	1	2	0.14
13	78	54	66	1	2	0.14
14	77	53	65	2	2	0.14
15	77	53	65	2	2	0.14
16	77	53	65	2	2	0.13
17	77	52	65	2	2	0.13
18	76	52	64	3	2	0.13
19	76	52	64	3	2	0.13
20	76	51	63	3	1	0.13
21	76	50	63	3	1	0.13
22	76	50	63	3	1	0.13
23	75	49	62	4	1	0.13
24	75	49	62	4	1	0.12
25	75	49	62	4	1	0.12
26	74	48	61	5	1	0.12
27	74	48	61	5	1	0.12
28	74	47	60	6	1	0.12
29	74	46	60	6	1	0.12
30	73	46	60	6	1	0.12
MTH	77.1	52.4	64.8	70	63	4.05
AUTUMN SEASON:	67.7	41.0	54.4	1036	70	11.60
ANNUAL:	66.2	40.9	53.6	4779	640	51.89

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	46	59	7	1	0.11
2	73	44	58	7	0	0.11
3	73	44	58	8	1	0.11
4	72	44	58	8	1	0.11
5	71	44	57	9	1	0.11
6	71	44	57	9	1	0.11
7	71	44	57	9	1	0.11
8	71	42	57	9	1	0.11
9	70	41	56	9	0	0.11
10	70	40	55	10	0	0.11
11	70	40	55	10	0	0.11
12	69	40	55	10	0	0.11
13	69	39	54	11	0	0.11
14	69	39	54	11	0	0.11
15	68	39	54	11	0	0.11
16	68	38	53	12	0	0.11
17	68	38	53	12	0	0.11
18	67	38	53	12	0	0.11
19	67	37	52	13	0	0.11
20	67	37	52	13	0	0.11
21	66	37	52	13	0	0.11
22	66	36	51	14	0	0.11
23	66	36	51	14	0	0.11
24	65	36	51	14	0	0.11
25	65	35	50	15	0	0.11
26	65	35	50	15	0	0.12
27	64	35	50	15	0	0.12
28	64	35	50	15	0	0.12
29	63	35	49	16	0	0.12
30	63	35	49	16	0	0.12
31	63	35	49	16	0	0.12
MTH	68.0	39.0	53.5	363	7	3.47

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	35	49	16	0	0.13
2	62	35	48	17	0	0.13
3	62	35	48	17	0	0.13
4	62	35	48	17	0	0.13
5	62	35	48	17	0	0.13
6	62	33	47	18	0	0.13
7	61	33	47	18	0	0.13
8	61	33	47	18	0	0.13
9	60	33	47	18	0	0.14
10	60	32	46	19	0	0.14
11	60	32	46	19	0	0.14
12	59	32	46	19	0	0.14
13	59	32	46	19	0	0.14
14	58	32	45	20	0	0.14
15	58	32	45	20	0	0.14
16	58	32	45	20	0	0.14
17	58	31	45	20	0	0.14
18	57	31	44	21	0	0.14
19	57	31	44	21	0	0.14
20	57	31	44	21	0	0.14
21	56	31	44	21	0	0.14
22	56	30	43	22	0	0.14
23	56	30	43	22	0	0.14
24	55	30	43	22	0	0.14
25	55	29	42	23	0	0.14
26	55	29	42	23	0	0.14
27	54	29	42	23	0	0.13
28	54	28	41	24	0	0.13
29	54	28	41	24	0	0.13
30	54	28	41	24	0	0.13
MTH	58.2	31.6	44.9	603	0	4.08

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Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FLETCHER 3 W NORTH CAROLINA Station Number: 313106

Latitude: 35B 25* 35(Longitude: -082B 33* 26(Elevation (feet): 2070

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.54	0.34	0.70	0.24	0.78	0.36	0.49	0.24	0.21	0.00	0.73	0.39	29.66
0.010	0.70	0.46	0.88	0.33	0.96	0.49	0.63	0.34	0.30	0.00	0.89	0.51	31.40
0.050	1.28	0.95	1.56	0.75	1.60	1.05	1.19	0.85	0.72	0.32	1.44	0.99	36.54
0.100	1.71	1.33	2.05	1.09	2.06	1.49	1.60	1.28	1.08	0.72	1.83	1.36	39.50
0.200	2.37	1.93	2.77	1.64	2.72	2.20	2.23	2.01	1.67	1.30	2.39	1.91	43.30
0.300	2.94	2.46	3.40	2.14	3.28	2.83	2.78	2.69	2.22	1.80	2.85	2.40	46.19
0.400	3.49	3.00	4.01	2.65	3.83	3.47	3.31	3.39	2.79	2.32	3.30	2.89	48.76
0.500	4.08	3.57	4.64	3.20	4.38	4.16	3.88	4.15	3.40	2.88	3.76	3.40	51.25
0.600	4.72	4.20	5.34	3.81	4.99	4.92	4.50	5.02	4.10	3.51	4.27	3.96	53.82
0.700	5.48	4.96	6.15	4.56	5.71	5.84	5.24	6.08	4.94	4.29	4.85	4.64	56.66
0.800	6.46	5.96	7.21	5.54	6.62	7.05	6.20	7.49	6.07	5.31	5.60	5.51	60.11
0.900	8.01	7.54	8.86	7.12	8.04	8.99	7.71	9.77	7.88	6.98	6.75	6.90	65.12
0.950	9.45	9.03	10.39	8.62	9.35	10.81	9.12	11.95	9.61	8.57	7.81	8.19	69.46
0.990	12.57	12.29	13.68	11.92	12.14	14.82	12.18	16.80	13.45	12.11	10.07	11.01	78.09
0.995	13.85	13.64	15.03	13.29	13.28	16.48	13.44	18.83	15.05	13.59	10.98	12.16	81.42

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FOREST CITY 6 SW NORTH CAROLINA Station Number: 313150

Latitude: 35° 15* 56(Longitude: -081° 55* 55(Elevation (feet): 990

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	31	44	21	0	0.12
2	57	31	44	21	0	0.12
3	56	31	43	22	0	0.12
4	56	31	43	22	0	0.12
5	55	30	43	22	0	0.12
6	55	29	42	23	0	0.11
7	55	29	42	23	0	0.11
8	54	29	42	23	0	0.11
9	54	29	42	23	0	0.11
10	53	29	41	24	0	0.11
11	53	29	41	24	0	0.11
12	53	29	41	24	0	0.11
13	53	28	41	24	0	0.12
14	52	28	40	25	0	0.12
15	52	28	40	25	0	0.12
16	52	28	40	25	0	0.12
17	52	28	40	25	0	0.12
18	52	27	40	25	0	0.12
19	52	27	40	25	0	0.12
20	51	27	39	26	0	0.12
21	51	27	39	26	0	0.12
22	51	27	39	26	0	0.12
23	51	27	39	26	0	0.13
24	51	27	39	26	0	0.13
25	51	27	39	26	0	0.13
26	50	27	39	26	0	0.13
27	50	26	38	27	0	0.13
28	50	26	38	27	0	0.14
29	50	26	38	27	0	0.14
30	50	26	38	27	0	0.14
31	50	26	38	27	0	0.14
MTH	52.6	28.1	40.4	763	0	3.78

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	26	38	27	0	0.15
2	50	26	38	27	0	0.15
3	50	26	38	27	0	0.15
4	50	26	38	27	0	0.15
5	49	26	38	27	0	0.15
6	49	26	38	27	0	0.16
7	49	26	38	27	0	0.16
8	49	26	38	27	0	0.16
9	49	26	37	28	0	0.16
10	49	26	37	28	0	0.16
11	49	26	37	28	0	0.16
12	49	26	37	28	0	0.16
13	49	25	37	28	0	0.17
14	49	25	37	28	0	0.17
15	49	25	37	28	0	0.17
16	49	25	37	28	0	0.17
17	49	26	38	27	0	0.17
18	49	26	38	27	0	0.17
19	49	26	38	27	0	0.17
20	50	26	38	27	0	0.17
21	50	26	38	27	0	0.17
22	50	26	38	27	0	0.17
23	50	26	38	27	0	0.17
24	50	26	38	27	0	0.16
25	50	26	38	27	0	0.16
26	50	26	38	27	0	0.16
27	50	26	38	27	0	0.16
28	50	26	38	27	0	0.16
29	50	26	38	27	0	0.16
30	50	26	38	27	0	0.16
31	51	26	39	26	0	0.15
MTH	49.6	25.9	37.8	844	0	5.01

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	52	26	39	26	0	0.15
2	52	26	39	26	0	0.15
3	52	26	39	26	0	0.15
4	52	26	39	26	0	0.15
5	52	26	39	26	0	0.15
6	52	27	39	26	0	0.15
7	52	27	39	26	0	0.15
8	53	27	40	25	0	0.14
9	53	27	40	25	0	0.14
10	54	27	40	25	0	0.14
11	54	27	40	25	0	0.14
12	54	27	40	25	0	0.14
13	54	27	41	24	0	0.14
14	54	27	41	24	0	0.14
15	54	28	41	24	0	0.14
16	54	28	41	24	0	0.14
17	54	28	41	24	0	0.14
18	55	28	42	23	0	0.15
19	55	28	42	23	0	0.15
20	55	29	42	23	0	0.15
21	55	29	42	23	0	0.15
22	55	29	42	23	0	0.15
23	56	29	43	22	0	0.15
24	56	29	43	22	0	0.16
25	57	29	43	22	0	0.16
26	57	29	43	22	0	0.16
27	57	30	44	21	0	0.16
28	57	31	44	21	0	0.17
MTH	54.2	27.8	41.0	672	0	4.16

WINTER SEASON: 52.1 27.2 39.7 2279 0 12.95

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	32	44	21	0	0.17
2	57	32	44	21	0	0.17
3	59	32	45	20	0	0.17
4	59	32	45	20	0	0.17
5	59	32	45	20	0	0.18
6	59	32	46	19	0	0.18
7	59	32	46	19	0	0.18
8	60	33	46	19	0	0.18
9	60	33	46	19	0	0.18
10	60	33	47	18	0	0.18
11	60	33	47	18	0	0.18
12	61	33	47	18	0	0.19
13	61	33	47	18	0	0.19
14	61	34	48	17	0	0.19
15	61	35	48	17	0	0.19
16	61	35	48	17	0	0.18
17	62	35	49	16	0	0.18
18	62	35	49	16	0	0.18
19	63	35	49	16	0	0.18
20	63	35	49	16	0	0.18
21	63	36	50	15	0	0.18
22	64	36	50	15	0	0.18
23	64	36	50	15	0	0.18
24	64	37	51	14	0	0.17
25	65	37	51	14	0	0.17
26	65	37	51	14	0	0.17
27	65	37	51	14	0	0.17
28	66	38	52	13	0	0.16
29	66	38	52	13	0	0.16
30	66	38	52	13	0	0.16
31	66	38	52	13	0	0.15
MTH	61.9	34.7	48.3	518	0	5.45

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	67	40	54	12	1	0.15
2	67	40	54	12	1	0.14
3	67	40	54	12	1	0.14
4	69	40	54	11	0	0.14
5	69	40	54	11	0	0.13
6	69	40	54	11	0	0.13
7	69	40	54	11	0	0.13
8	70	40	55	10	0	0.13
9	70	41	55	10	0	0.12
10	70	41	55	10	0	0.12
11	70	41	55	10	0	0.12
12	71	41	56	9	0	0.12
13	71	41	56	9	0	0.12
14	71	41	56	9	0	0.12
15	71	42	57	8	0	0.12
16	71	42	57	8	0	0.11
17	72	42	57	8	0	0.11
18	72	42	57	8	0	0.11
19	72	43	58	7	0	0.11
20	72	44	58	7	0	0.11
21	72	44	58	7	0	0.11
22	72	44	58	7	0	0.12
23	72	44	58	7	0	0.12
24	72	45	59	7	1	0.12
25	73	45	59	7	1	0.12
26	74	45	60	6	1	0.12
27	74	46	60	6	1	0.12
28	74	46	60	6	1	0.12
29	74	46	60	6	1	0.13
30	75	46	61	5	1	0.13
MTH	71.1	42.4	56.8	257	10	3.69

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	75	47	61	5	1	0.13
2	75	48	61	5	1	0.13
3	75	48	61	5	1	0.14
4	75	48	61	5	1	0.14
5	77	48	62	5	2	0.14
6	77	48	62	5	2	0.14
7	77	49	63	4	2	0.14
8	77	49	63	4	2	0.15
9	77	49	63	4	2	0.15
10	77	49	63	4	2	0.15
11	77	50	64	3	2	0.15
12	78	50	64	3	2	0.15
13	78	50	64	3	2	0.15
14	78	51	65	3	3	0.15
15	78	51	65	3	3	0.15
16	78	52	65	3	3	0.15
17	78	52	65	3	3	0.15
18	78	52	65	3	3	0.16
19	79	52	66	2	3	0.16
20	79	53	66	2	3	0.16
21	80	53	67	2	4	0.16
22	80	53	67	2	4	0.16
23	80	54	67	2	4	0.16
24	80	54	67	2	4	0.16
25	80	54	67	2	4	0.15
26	80	54	67	2	4	0.15
27	80	55	68	2	5	0.15
28	81	55	68	2	5	0.15
29	81	56	69	1	5	0.15
30	82	56	69	1	5	0.15
31	82	56	69	1	5	0.15
MTH	78.4	51.5	65.0	93	92	4.63

SPRING SEASON: 70.4 42.8 56.7 868 102 13.77

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FOREST CITY 6 SW NORTH CAROLINA Station Number: 313150

Latitude: 35° 15* 56(Longitude: -081° 55* 55(Elevation (feet): 990

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	57	69	1	5	0.15
2	82	58	70	1	6	0.15
3	83	58	70	1	6	0.15
4	83	58	70	1	6	0.14
5	83	58	70	1	6	0.14
6	83	58	70	1	6	0.14
7	83	58	70	1	6	0.14
8	84	59	71	1	7	0.14
9	84	59	72	0	7	0.14
10	84	59	72	0	7	0.14
11	85	59	72	0	7	0.14
12	85	59	72	0	7	0.14
13	85	59	72	0	7	0.14
14	85	60	73	0	8	0.13
15	85	60	73	0	8	0.13
16	86	60	73	0	8	0.13
17	86	60	73	0	8	0.13
18	86	60	73	0	8	0.13
19	86	61	74	0	9	0.13
20	86	61	74	0	9	0.13
21	86	61	74	0	9	0.13
22	87	61	74	0	9	0.13
23	87	61	74	0	9	0.13
24	87	61	74	0	9	0.13
25	87	61	74	0	9	0.13
26	87	62	75	0	10	0.13
27	87	62	75	0	10	0.13
28	88	62	75	0	10	0.13
29	88	62	75	0	10	0.13
30	88	62	75	0	10	0.13
MTH	85.3	59.9	72.6	8	236	4.06

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	88	63	75	0	10	0.13
2	88	63	75	0	10	0.13
3	89	63	76	0	11	0.13
4	89	63	76	0	11	0.13
5	89	63	76	0	11	0.13
6	89	64	76	0	11	0.13
7	89	64	76	0	11	0.13
8	89	64	76	0	11	0.13
9	89	64	76	0	11	0.13
10	89	64	76	0	11	0.13
11	89	64	76	0	11	0.13
12	89	64	77	0	12	0.13
13	89	64	77	0	12	0.13
14	89	64	77	0	12	0.13
15	89	64	77	0	12	0.13
16	89	64	77	0	12	0.13
17	90	64	77	0	12	0.13
18	90	64	77	0	12	0.13
19	90	64	77	0	12	0.13
20	90	64	77	0	12	0.13
21	89	65	77	0	12	0.13
22	89	65	77	0	12	0.13
23	89	65	77	0	12	0.13
24	89	65	77	0	12	0.13
25	89	65	77	0	12	0.13
26	89	65	77	0	12	0.13
27	89	65	77	0	12	0.13
28	89	64	77	0	12	0.13
29	89	64	77	0	12	0.13
30	89	64	77	0	12	0.14
31	89	64	77	0	12	0.14
MTH	89.1	64.1	76.6	0	359	4.05
SUMMER SEASON:	87.2	62.3	74.8	8	907	12.40

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	89	64	77	0	12	0.13
2	89	64	77	0	12	0.13
3	89	64	77	0	12	0.13
4	89	64	77	0	12	0.13
5	89	64	76	0	11	0.14
6	89	64	76	0	11	0.14
7	89	64	76	0	11	0.14
8	89	64	76	0	11	0.14
9	88	64	76	0	11	0.14
10	88	64	76	0	11	0.14
11	88	64	76	0	11	0.14
12	88	64	76	0	11	0.14
13	88	63	76	0	11	0.14
14	87	63	75	0	10	0.14
15	87	63	75	0	10	0.14
16	87	63	75	0	10	0.14
17	87	63	75	0	10	0.14
18	87	63	75	0	10	0.14
19	87	63	75	0	10	0.14
20	87	63	75	0	10	0.14
21	86	63	75	0	10	0.14
22	86	62	74	0	9	0.14
23	86	62	74	0	9	0.14
24	86	62	74	0	9	0.14
25	86	62	74	0	9	0.14
26	86	62	74	0	9	0.14
27	85	61	73	0	8	0.14
28	85	61	73	0	8	0.14
29	85	61	73	0	8	0.14
30	85	61	73	0	8	0.14
31	85	61	73	0	8	0.13
MTH	87.2	62.9	75.1	0	312	4.29

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	61	73	0	8	0.14
2	84	61	72	0	7	0.14
3	84	61	72	0	7	0.14
4	84	61	72	0	7	0.14
5	84	61	72	0	7	0.14
6	84	59	71	0	6	0.14
7	84	59	71	0	6	0.13
8	83	59	71	0	6	0.13
9	83	59	71	0	6	0.13
10	82	59	71	0	6	0.13
11	82	58	70	0	5	0.13
12	82	58	70	0	5	0.13
13	82	58	70	0	5	0.13
14	82	58	70	0	5	0.13
15	81	58	70	0	5	0.13
16	81	57	69	0	4	0.13
17	81	56	69	0	4	0.13
18	80	56	68	1	4	0.13
19	80	56	68	1	4	0.13
20	80	55	68	1	4	0.13
21	80	55	68	1	4	0.14
22	79	55	67	1	3	0.14
23	79	54	67	1	3	0.14
24	79	53	66	2	3	0.14
25	79	53	66	2	3	0.14
26	78	53	66	3	4	0.14
27	78	52	65	3	3	0.14
28	78	52	65	3	3	0.14
29	77	51	64	3	2	0.14
30	77	51	64	3	2	0.14
MTH	81.1	56.6	68.9	25	141	4.06

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	77	50	63	3	1	0.14
2	76	50	63	4	2	0.14
3	76	49	62	4	1	0.14
4	76	49	62	5	2	0.14
5	75	48	62	5	2	0.14
6	75	48	62	5	2	0.14
7	75	48	62	5	2	0.14
8	74	47	61	5	1	0.14
9	74	46	60	6	1	0.14
10	74	46	60	6	1	0.14
11	73	46	60	6	1	0.14
12	73	45	59	7	1	0.14
13	73	45	59	7	1	0.14
14	72	45	59	7	1	0.15
15	72	44	58	8	1	0.15
16	72	44	58	8	1	0.15
17	71	43	57	9	1	0.15
18	71	43	57	9	1	0.15
19	71	43	57	9	1	0.15
20	70	43	57	9	1	0.15
21	70	43	57	9	1	0.15
22	70	42	56	9	0	0.14
23	69	41	55	10	0	0.14
24	69	41	55	10	0	0.14
25	69	41	55	10	0	0.14
26	68	41	55	10	0	0.14
27	68	40	54	11	0	0.14
28	68	40	54	11	0	0.14
29	68	40	54	11	0	0.14
30	67	39	53	12	0	0.14
31	67	39	53	12	0	0.14
MTH	71.7	44.2	58.0	242	26	4.42
AUTUMN SEASON:	71.5	45.4	58.5	756	167	12.42
ANNUAL:	70.3	44.4	57.4	3911	1176	51.54

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	67	39	53	12	0	0.14
2	66	39	53	12	0	0.14
3	66	39	52	13	0	0.14
4	66	39	52	13	0	0.14
5	65	39	52	13	0	0.14
6	65	38	52	13	0	0.14
7	65	37	51	14	0	0.14
8	64	37	51	14	0	0.14
9	64	37	51	14	0	0.14
10	63	37	50	15	0	0.14
11	63	37	50	15	0	0.14
12	63	37	50	15	0	0.13
13	62	36	49	16	0	0.13
14	62	36	49	16	0	0.13
15	62	36	49	16	0	0.13
16	62	35	49	16	0	0.13
17	61	35	48	17	0	0.13
18	61	35	48	17	0	0.13
19	61	35	48	17	0	0.13
20	60	34	47	18	0	0.13
21	60	34	47	18	0	0.13
22	60	34	47	18	0	0.13
23	59	33	46	19	0	0.13
24	59	33	46	19	0	0.12
25	59	33	46	19	0	0.12
26	58	33	46	19	0	0.12
27	58	32	45	20	0	0.12
28	58	32	45	20	0	0.12
29	57	32	45	20	0	0.12
30	57	31	44	21	0	0.12
MTH	61.8	35.5	48.7	489	0	3.94

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FOREST CITY 6 SW NORTH CAROLINA Station Number: 313150

Latitude: 35° 15* 56(Longitude: -081° 55* 55(Elevation (feet): 990

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.56	0.35	1.02	0.32	1.02	0.22	0.89	0.29	0.05	0.00	0.67	0.53	30.81
0.010	0.72	0.47	1.23	0.42	1.21	0.31	1.06	0.41	0.08	0.00	0.82	0.67	32.47
0.050	1.36	0.96	1.97	0.87	1.85	0.73	1.62	0.89	0.33	0.44	1.36	1.17	37.31
0.100	1.84	1.35	2.49	1.21	2.27	1.09	1.99	1.28	0.60	0.95	1.73	1.53	40.08
0.200	2.56	1.95	3.22	1.75	2.88	1.69	2.52	1.91	1.13	1.69	2.27	2.06	43.63
0.300	3.19	2.50	3.84	2.23	3.38	2.24	2.96	2.49	1.69	2.33	2.73	2.52	46.31
0.400	3.81	3.04	4.43	2.71	3.85	2.81	3.37	3.06	2.31	2.98	3.17	2.97	48.69
0.500	4.46	3.62	5.04	3.22	4.33	3.42	3.79	3.68	3.02	3.69	3.62	3.43	50.98
0.600	5.19	4.27	5.69	3.80	4.85	4.11	4.25	4.38	3.87	4.49	4.11	3.93	53.35
0.700	6.04	5.04	6.46	4.48	5.45	4.95	4.77	5.22	4.94	5.45	4.69	4.53	55.96
0.800	7.15	6.06	7.43	5.37	6.21	6.07	5.44	6.33	6.41	6.74	5.43	5.30	59.13
0.900	8.90	7.67	8.94	6.79	7.37	7.87	6.46	8.10	8.89	8.82	6.57	6.50	63.70
0.950	10.53	9.19	10.31	8.12	8.43	9.59	7.38	9.77	11.34	10.80	7.62	7.61	67.65
0.990	14.06	12.51	13.25	11.04	10.67	13.39	9.34	13.47	16.93	15.20	9.86	10.00	75.49
0.995	15.51	13.89	14.44	12.25	11.58	14.98	10.13	15.00	19.32	17.04	10.77	10.98	78.50

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FRANKLIN 3 W NORTH CAROLINA Station Number: 313228

Latitude: 35 B 10 * 30 (Longitude: -083 B 25* 29 (Elevation (feet): 2170

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	29	42	23	0	0.15
2	54	29	41	24	0	0.15
3	54	29	41	24	0	0.15
4	53	29	41	24	0	0.15
5	53	28	40	25	0	0.15
6	53	28	40	25	0	0.15
7	52	27	40	25	0	0.15
8	52	27	40	25	0	0.15
9	51	27	39	26	0	0.14
10	51	27	39	26	0	0.14
11	51	27	39	26	0	0.14
12	51	27	39	26	0	0.14
13	51	26	39	26	0	0.14
14	50	26	38	27	0	0.14
15	50	26	38	27	0	0.14
16	50	26	38	27	0	0.14
17	50	26	38	27	0	0.14
18	50	26	38	27	0	0.14
19	49	26	38	27	0	0.14
20	49	25	37	28	0	0.15
21	49	25	37	28	0	0.15
22	49	25	37	28	0	0.15
23	49	25	37	28	0	0.15
24	49	25	37	28	0	0.15
25	48	25	37	28	0	0.15
26	48	25	37	28	0	0.15
27	48	24	36	29	0	0.15
28	48	24	36	29	0	0.15
29	48	24	36	29	0	0.16
30	48	24	36	29	0	0.16
31	48	24	36	29	0	0.16
MTH	50.4	26.2	38.3	828	0	4.57
WINTER SEASON:						

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	24	36	29	0	0.16
2	48	24	36	29	0	0.16
3	48	24	36	29	0	0.16
4	48	24	36	29	0	0.16
5	48	24	36	29	0	0.17
6	48	24	36	29	0	0.17
7	47	24	36	29	0	0.17
8	47	24	36	29	0	0.17
9	47	24	36	29	0	0.17
10	47	24	36	29	0	0.17
11	47	24	36	29	0	0.17
12	47	24	35	30	0	0.17
13	47	24	35	30	0	0.17
14	47	24	35	30	0	0.18
15	47	24	36	29	0	0.18
16	47	24	36	29	0	0.18
17	47	24	36	29	0	0.18
18	48	24	36	29	0	0.18
19	48	24	36	29	0	0.18
20	48	24	36	29	0	0.18
21	48	24	36	29	0	0.18
22	48	24	36	29	0	0.18
23	48	24	36	29	0	0.18
24	48	24	36	29	0	0.18
25	48	24	36	29	0	0.18
26	48	24	36	29	0	0.18
27	48	24	36	29	0	0.18
28	48	24	36	29	0	0.18
29	48	24	36	29	0	0.18
30	48	24	36	29	0	0.17
31	48	24	36	29	0	0.17
MTH	47.7	24.0	35.9	902	0	5.39
	50.2	25.2	37.8	2456	0	14.85

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	24	37	28	0	0.18
2	50	24	37	28	0	0.17
3	50	24	37	28	0	0.17
4	50	24	37	28	0	0.17
5	50	24	37	28	0	0.17
6	50	25	37	28	0	0.17
7	50	25	38	27	0	0.17
8	51	25	38	27	0	0.17
9	51	25	38	27	0	0.17
10	51	25	38	27	0	0.17
11	51	25	38	27	0	0.17
12	52	25	38	27	0	0.17
13	52	25	38	27	0	0.17
14	52	25	39	26	0	0.17
15	53	25	39	26	0	0.17
16	53	25	39	26	0	0.17
17	53	25	39	26	0	0.17
18	53	26	40	25	0	0.17
19	53	26	40	25	0	0.18
20	54	26	40	25	0	0.18
21	54	26	40	25	0	0.18
22	54	27	41	24	0	0.18
23	55	27	41	24	0	0.18
24	55	27	41	24	0	0.18
25	55	27	41	24	0	0.18
26	55	28	42	23	0	0.18
27	56	28	42	23	0	0.19
28	56	28	42	23	0	0.19
MTH	52.5	25.6	39.1	726	0	4.89

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	29	42	23	0	0.19
2	57	30	43	22	0	0.19
3	57	30	43	22	0	0.19
4	57	30	43	22	0	0.19
5	57	30	44	21	0	0.19
6	58	30	44	21	0	0.19
7	58	30	44	21	0	0.19
8	58	31	44	21	0	0.19
9	58	31	45	20	0	0.19
10	59	31	45	20	0	0.20
11	59	31	45	20	0	0.20
12	59	31	45	20	0	0.20
13	59	32	46	19	0	0.19
14	60	32	46	19	0	0.19
15	60	32	46	19	0	0.19
16	60	33	47	18	0	0.19
17	61	33	47	18	0	0.19
18	61	33	47	18	0	0.19
19	61	33	47	18	0	0.19
20	61	33	47	18	0	0.19
21	62	34	48	17	0	0.19
22	62	34	48	17	0	0.18
23	62	34	48	17	0	0.18
24	62	34	48	17	0	0.18
25	63	35	49	16	0	0.18
26	63	35	49	16	0	0.18
27	63	35	49	16	0	0.17
28	63	35	49	16	0	0.17
29	64	35	50	15	0	0.17
30	64	35	50	15	0	0.17
31	64	35	50	15	0	0.16
MTH	60.3	32.5	46.4	577	0	5.76
SPRING SEASON:						

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	36	50	15	0	0.16
2	65	36	50	15	0	0.15
3	65	36	51	14	0	0.15
4	66	36	51	14	0	0.15
5	66	37	51	14	0	0.15
6	66	37	51	14	0	0.14
7	66	37	51	14	0	0.14
8	67	37	52	13	0	0.14
9	67	37	52	13	0	0.14
10	67	37	52	13	0	0.14
11	67	37	52	13	0	0.13
12	68	38	53	12	0	0.13
13	68	38	53	12	0	0.13
14	68	38	53	12	0	0.13
15	68	38	53	12	0	0.13
16	69	39	54	11	0	0.13
17	69	39	54	11	0	0.13
18	69	39	54	11	0	0.13
19	69	40	55	10	0	0.13
20	70	40	55	10	0	0.13
21	70	40	55	10	0	0.13
22	70	40	55	10	0	0.13
23	70	41	56	9	0	0.13
24	71	41	56	9	0	0.13
25	71	41	56	9	0	0.13
26	71	42	57	8	0	0.13
27	71	42	57	8	0	0.13
28	72	42	57	8	0	0.14
29	72	42	57	8	0	0.14
30	72	43	58	8	1	0.14
MTH	68.5	38.9	53.7	340	1	4.09
	68.1	40.1	54.1	1057	56	14.75

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	45	58	8	1	0.14
2	73	45	59	8	2	0.14
3	73	45	59	7	1	0.15
4	73	46	59	7	1	0.15
5	73	46	59	7	1	0.15
6	74	46	60	6	1	0.15
7	74	46	60	6	1	0.15
8	74	46	60	6	1	0.15
9	74	46	60	6	1	0.16
10	75	47	61	5	1	0.16
11	75	47	61	5	1	0.16
12	75	47	61	5	1	0.16
13	75	48	61	5	1	0.16
14	75	49	62	5	2	0.16
15	75	49	62	5	2	0.16
16	75	50	63	4	2	0.16
17	76	50	63	4	2	0.16
18	76	50	63	4	2	0.16
19	76	50	63	4	2	0.16
20	76	50	63	4	2	0.16
21	77	51	64	3	2	0.16
22	77	51	64	3	2	0.17
23	77	51	64	3	2	0.17
24	77	51	64	3	2	0.17
25	77	51	64	3	2	0.17
26	77	51	64	3	2	0.16
27	78	52	65	3	3	0.16
28	78	53	66	2	3	0.16
29	78	53	66	2	3	0.16
30	78	53	66	2	3	0.16
31	79	53	66	2	3	0.16
MTH	75.6	49.0	62.3	140	55	4.90

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FRANKLIN 3 W NORTH CAROLINA Station Number: 313228

Latitude: 35B 10* 30 (Longitude: -083B 25* 29 (Elevation (feet): 2170

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	79	54	66	2	3	0.16
2	79	54	66	1	2	0.16
3	79	54	66	1	2	0.16
4	79	54	67	1	3	0.16
5	80	55	67	1	3	0.16
6	80	55	68	1	4	0.16
7	80	55	68	1	4	0.16
8	80	55	68	1	4	0.16
9	80	56	68	1	4	0.15
10	80	56	68	1	4	0.15
11	80	56	68	1	4	0.15
12	81	56	69	0	4	0.15
13	81	57	69	0	4	0.15
14	81	57	69	0	4	0.15
15	82	57	70	0	5	0.15
16	82	57	70	0	5	0.15
17	82	57	70	0	5	0.15
18	82	58	70	0	5	0.15
19	82	58	70	0	5	0.15
20	82	58	70	0	5	0.15
21	82	58	70	0	5	0.15
22	82	58	70	0	5	0.14
23	83	59	71	0	6	0.14
24	83	59	71	0	6	0.14
25	83	59	71	0	6	0.14
26	83	59	71	0	6	0.14
27	83	59	71	0	6	0.14
28	83	59	71	0	6	0.14
29	83	60	72	0	7	0.14
30	83	60	72	0	7	0.14
MTH	81.3	57.0	69.2	12	139	4.49

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	60	72	0	7	0.14
2	84	60	72	0	7	0.14
3	84	60	72	0	7	0.14
4	84	60	72	0	7	0.13
5	84	61	72	0	7	0.13
6	84	61	72	0	7	0.13
7	84	61	73	0	8	0.13
8	84	61	73	0	8	0.13
9	84	61	73	0	8	0.13
10	84	62	73	0	8	0.13
11	84	62	73	0	8	0.13
12	84	62	73	0	8	0.13
13	84	62	73	0	8	0.13
14	84	62	73	0	8	0.13
15	84	62	73	0	8	0.13
16	84	62	73	0	8	0.13
17	84	62	73	*	8	0.13
18	85	62	73	*	8	0.13
19	85	62	73	*	8	0.13
20	85	62	73	*	9	0.13
21	85	62	73	*	9	0.13
22	85	62	74	*	9	0.13
23	85	62	74	*	9	0.13
24	85	62	74	*	9	0.13
25	85	62	74	0	9	0.13
26	85	62	74	0	9	0.13
27	85	63	74	0	9	0.13
28	85	63	74	0	9	0.13
29	85	62	74	0	9	0.14
30	85	62	73	0	8	0.14
31	85	62	73	0	8	0.14
MTH	84.5	61.7	73.1	2	252	4.09

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	62	73	0	8	0.14
2	85	62	73	0	8	0.14
3	84	62	73	0	8	0.14
4	84	62	73	0	8	0.14
5	84	62	73	0	8	0.14
6	84	62	73	0	8	0.14
7	84	62	73	0	8	0.14
8	84	62	73	0	8	0.14
9	84	62	73	0	8	0.14
10	84	62	73	0	8	0.14
11	84	62	73	0	8	0.14
12	84	62	73	0	8	0.14
13	84	62	73	0	8	0.14
14	84	62	73	0	8	0.14
15	83	61	72	0	7	0.14
16	83	61	72	0	7	0.15
17	83	61	72	0	7	0.15
18	83	61	72	0	7	0.15
19	83	61	72	0	7	0.15
20	83	61	72	0	7	0.15
21	83	61	72	0	7	0.15
22	83	61	72	0	7	0.15
23	82	61	72	0	7	0.15
24	82	60	71	0	6	0.15
25	82	60	71	0	6	0.15
26	82	60	71	0	6	0.15
27	82	60	71	0	6	0.15
28	82	60	71	0	6	0.15
29	82	60	71	0	6	0.15
30	81	60	71	0	6	0.14
31	81	59	70	0	5	0.14
MTH	83.2	61.2	72.2	0	222	4.48

SUMMER SEASON:	83.0	59.9	71.5	14	613	13.06

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	59	70	0	5	0.15
2	81	59	70	0	5	0.14
3	81	59	70	0	5	0.14
4	81	59	70	0	5	0.14
5	81	59	70	0	5	0.14
6	80	59	69	0	4	0.14
7	80	58	69	0	4	0.14
8	80	58	69	0	4	0.14
9	80	58	69	0	4	0.14
10	79	57	68	1	4	0.14
11	79	57	68	1	4	0.14
12	78	56	67	1	3	0.14
13	78	56	67	1	3	0.14
14	78	56	67	1	3	0.14
15	78	56	67	1	3	0.13
16	78	55	67	1	3	0.13
17	77	55	66	2	3	0.13
18	77	55	66	2	3	0.13
19	77	54	66	2	3	0.13
20	77	53	65	2	2	0.13
21	77	53	65	2	2	0.13
22	76	53	65	2	2	0.12
23	76	52	64	3	2	0.12
24	76	52	64	3	2	0.12
25	76	52	64	3	2	0.12
26	75	51	63	4	2	0.12
27	75	50	63	4	2	0.12
28	75	50	63	4	2	0.12
29	75	49	62	4	1	0.11
30	74	49	62	4	1	0.11
MTH	77.9	55.0	66.5	48	93	3.94

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	48	61	5	1	0.11
2	74	48	61	5	1	0.11
3	74	47	60	6	1	0.11
4	74	47	60	6	1	0.10
5	74	46	60	6	1	0.10
6	72	46	59	7	1	0.10
7	72	45	59	7	1	0.10
8	72	44	58	8	1	0.10
9	72	44	58	8	1	0.10
10	71	44	58	8	1	0.10
11	71	43	57	9	1	0.10
12	71	43	57	9	1	0.10
13	70	42	56	9	0	0.10
14	70	42	56	9	0	0.10
15	70	41	56	9	0	0.10
16	69	41	55	10	0	0.10
17	69	41	55	10	0	0.10
18	69	40	55	10	0	0.10
19	68	40	54	11	0	0.10
20	68	40	54	11	0	0.10
21	68	39	54	11	0	0.10
22	67	39	53	12	0	0.11
23	67	39	53	12	0	0.11
24	67	38	53	12	0	0.11
25	66	38	52	13	0	0.11
26	66	38	52	13	0	0.11
27	66	37	52	13	0	0.12
28	65	37	51	14	0	0.12
29	65	37	51	14	0	0.12
30	65	36	51	14	0	0.12
31	64	36	50	15	0	0.13
MTH	69.4	41.5	55.5	306	12	3.29

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	36	50	15	0	0.13
2	64	36	50	15	0	0.13
3	64	36	50	15	*	0.14
4	64	36	50	16	*	0.14
5	63	36	49	16	*	0.14
6	63	36	49	16	*	0.14
7	62	35	49	17	*	0.15
8	62	34	48	17	*	0.15
9	62	34	48	17	*	0.15
10	61	34	48	17	*	0.15
11	61	33	47	18	*	0.15
12	61	33	47	18	0	0.15
13	60	33	47	18	0	0.16
14	60	32	46	19	0	0.16
15	60	32	46	19	0	0.16
16	59	32	46	19	0	0.16
17	59	32	46	19	0	0.16
18	58	32	45	20	0	0.16
19	58	32	45	20	0	0.16
20	58	32	45	20	0	0.16
21	57	31	44	21	0	0.16
22	57	31	44	21	0	0.16
23	57	31	44	21	0	0.16
24	57	31	44	21	0	0.16
25	56	30	43	22	0	0.16
26	56	30	43	22	0	0.16
27	56	30	43	22	0	0.16
28	55	29	42	23	0	0.16
29	55	29	42	23	0	0.15
30	55	29	42	23	0	0.15
MTH	59.5	32.6	46.1	570	2	4.58

AUTUMN SEASON:	68.9	43.0	56.0	924	107	11.81
ANNUAL:	67.6	42.1	54.8	4451	776	54.47

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: FRANKLIN 3 W NORTH CAROLINA Station Number: 313228

Latitude: 35° 10* 30(Longitude: -083° 25* 29(Elevation (feet): 2170

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.11	0.58	1.07	0.61	0.99	0.79	0.62	0.55	0.25	0.06	1.32	0.73	33.28
0.010	1.32	0.74	1.29	0.76	1.18	0.96	0.77	0.70	0.35	0.11	1.51	0.90	34.99
0.050	2.07	1.37	2.08	1.31	1.86	1.57	1.32	1.28	0.78	0.35	2.13	1.52	39.97
0.100	2.57	1.83	2.62	1.69	2.31	2.00	1.71	1.70	1.14	0.59	2.53	1.95	42.81
0.200	3.28	2.54	3.41	2.27	2.97	2.61	2.28	2.34	1.72	1.04	3.09	2.58	46.43
0.300	3.88	3.15	4.06	2.76	3.51	3.13	2.77	2.90	2.25	1.50	3.53	3.12	49.17
0.400	4.44	3.75	4.69	3.23	4.03	3.63	3.24	3.45	2.79	2.00	3.95	3.64	51.59
0.500	5.02	4.38	5.33	3.72	4.55	4.14	3.73	4.02	3.36	2.55	4.36	4.18	53.93
0.600	5.64	5.07	6.03	4.25	5.13	4.69	4.26	4.65	4.01	3.21	4.81	4.76	56.34
0.700	6.36	5.89	6.84	4.88	5.79	5.34	4.89	5.39	4.79	4.02	5.31	5.44	58.99
0.800	7.27	6.95	7.87	5.69	6.63	6.17	5.70	6.36	5.83	5.13	5.95	6.32	62.20
0.900	8.68	8.62	9.47	6.95	7.93	7.45	6.95	7.87	7.49	6.97	6.91	7.69	66.83
0.950	9.97	10.18	10.93	8.12	9.11	8.63	8.11	9.27	9.07	8.77	7.78	8.94	70.83
0.990	12.69	13.55	14.05	10.62	11.62	11.13	10.60	12.32	12.55	12.84	9.59	11.64	78.73
0.995	13.79	14.93	15.31	11.64	12.64	12.15	11.61	13.56	14.00	14.57	10.31	12.73	81.77

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HENDERSONVILLE 1 NE NORTH CAROLINA Station Number: 313976

Latitude: 35 B 20 * 00 (Longitude: -082 B 27* 00 (Elevation (feet): 2160

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	31	42	23	0	0.15
2	53	31	42	23	0	0.14
3	53	31	42	23	0	0.14
4	52	30	41	24	0	0.14
5	52	30	41	24	0	0.14
6	52	30	41	24	0	0.14
7	51	29	40	25	0	0.14
8	51	29	40	25	0	0.14
9	51	29	40	25	0	0.13
10	51	29	40	25	0	0.13
11	51	28	40	25	0	0.13
12	50	28	39	26	0	0.13
13	50	28	39	26	0	0.13
14	50	28	39	26	0	0.13
15	50	28	39	26	0	0.13
16	49	28	39	26	0	0.13
17	49	27	38	27	0	0.13
18	49	27	38	27	0	0.13
19	49	27	38	27	0	0.13
20	49	27	38	27	0	0.13
21	48	27	38	27	0	0.14
22	48	26	37	28	0	0.14
23	48	26	37	28	0	0.14
24	48	26	37	28	0	0.14
25	48	26	37	28	0	0.14
26	48	26	37	28	0	0.14
27	48	26	37	28	0	0.14
28	47	26	37	28	0	0.14
29	47	26	37	28	0	0.15
30	47	26	37	28	0	0.15
31	47	25	36	29	0	0.15
MTH	49.7	27.8	38.8	812	0	4.26
WINTER SEASON:				49.0	26.6	37.9	2445	0	14.04

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	26	36	29	0	0.15
2	47	26	36	29	0	0.16
3	47	26	36	29	0	0.16
4	47	26	36	29	0	0.16
5	47	26	36	29	0	0.16
6	47	25	36	29	0	0.16
7	47	25	36	29	0	0.17
8	46	25	36	29	0	0.17
9	46	25	36	29	0	0.17
10	46	25	36	29	0	0.17
11	46	25	36	29	0	0.17
12	46	25	36	29	0	0.17
13	46	25	36	29	0	0.17
14	46	25	36	29	0	0.17
15	46	25	36	29	0	0.17
16	46	25	36	29	0	0.17
17	46	25	36	29	0	0.17
18	46	25	36	29	0	0.17
19	47	25	36	29	0	0.17
20	47	25	36	29	0	0.17
21	47	25	36	29	0	0.17
22	47	25	36	29	0	0.17
23	47	25	36	29	0	0.17
24	47	25	36	29	0	0.17
25	47	25	36	29	0	0.17
26	47	25	36	29	0	0.17
27	47	25	36	29	0	0.17
28	47	25	36	29	0	0.17
29	47	25	36	29	0	0.17
30	47	25	36	29	0	0.17
31	47	25	36	29	0	0.17
MTH	46.7	25.2	36.0	899	0	5.20

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	25	37	28	0	0.16
2	48	25	37	28	0	0.16
3	49	25	37	28	0	0.16
4	49	25	37	28	0	0.16
5	49	25	37	28	0	0.16
6	49	26	37	28	0	0.16
7	49	26	37	28	0	0.16
8	49	26	37	28	0	0.16
9	49	26	38	27	0	0.16
10	50	26	38	27	0	0.16
11	50	26	38	27	0	0.16
12	50	26	38	27	0	0.16
13	50	26	38	27	0	0.16
14	50	26	38	27	0	0.16
15	51	27	39	26	0	0.16
16	51	27	39	26	0	0.16
17	51	27	39	26	0	0.16
18	51	27	39	26	0	0.16
19	51	27	39	26	0	0.16
20	52	28	40	25	0	0.16
21	52	28	40	25	0	0.16
22	52	28	40	25	0	0.17
23	52	28	40	25	0	0.17
24	53	29	41	24	0	0.17
25	53	29	41	24	0	0.17
26	53	29	41	24	0	0.18
27	54	29	42	23	0	0.18
28	54	30	42	23	0	0.18
MTH	50.7	26.9	38.8	734	0	4.58

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	30	42	23	0	0.18
2	54	31	42	23	0	0.19
3	56	31	43	22	0	0.19
4	56	31	43	22	0	0.19
5	56	31	43	22	0	0.19
6	56	31	44	21	0	0.19
7	56	32	44	21	0	0.20
8	56	32	44	21	0	0.20
9	56	32	44	21	0	0.20
10	57	33	45	20	0	0.20
11	57	33	45	20	0	0.20
12	57	33	45	20	0	0.20
13	57	33	45	20	0	0.20
14	58	34	46	19	0	0.20
15	58	34	46	19	0	0.20
16	58	34	46	19	0	0.20
17	59	34	47	18	0	0.20
18	59	35	47	18	0	0.20
19	59	35	47	18	0	0.20
20	59	35	47	18	0	0.20
21	60	35	48	17	0	0.19
22	60	35	48	17	0	0.19
23	60	36	48	17	0	0.19
24	60	36	48	17	0	0.19
25	61	36	49	16	0	0.19
26	61	36	49	16	0	0.18
27	62	36	49	16	0	0.18
28	62	36	49	16	0	0.18
29	62	36	49	16	0	0.18
30	63	37	50	15	0	0.17
31	63	37	50	15	0	0.17
MTH	58.5	33.9	46.2	583	0	5.94
SPRING SEASON:				66.6	42.0	54.3	1042	59	14.98

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	38	50	15	0	0.17
2	63	38	50	15	0	0.16
3	64	38	51	14	0	0.16
4	64	38	51	14	0	0.16
5	65	38	51	14	0	0.15
6	65	38	51	14	0	0.15
7	65	38	52	13	0	0.15
8	65	39	52	13	0	0.14
9	65	39	52	13	0	0.14
10	65	39	52	13	0	0.14
11	66	39	53	12	0	0.14
12	66	40	53	12	0	0.14
13	66	40	53	12	0	0.13
14	67	40	54	11	0	0.13
15	67	40	54	11	0	0.13
16	67	41	54	11	0	0.13
17	67	41	54	11	0	0.13
18	68	41	55	10	0	0.13
19	68	42	55	10	0	0.13
20	68	42	55	10	0	0.13
21	68	42	55	10	0	0.13
22	69	43	56	9	0	0.13
23	69	43	56	9	0	0.13
24	69	43	56	9	0	0.13
25	69	44	57	8	0	0.13
26	70	44	57	8	0	0.13
27	70	44	57	8	0	0.13
28	70	44	57	8	0	0.13
29	70	45	58	8	1	0.14
30	71	45	58	8	1	0.14
MTH	67.0	40.9	54.0	333	2	4.16

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	47	59	7	1	0.14
2	72	47	59	7	1	0.14
3	72	47	59	7	1	0.14
4	72	47	59	7	1	0.14
5	72	48	60	6	1	0.15
6	72	48	60	6	1	0.15
7	73	48	60	6	1	0.15
8	73	49	61	5	1	0.15
9	73	49	61	5	1	0.15
10	73	49	61	5	1	0.15
11	73	50	62	4	1	0.15
12	73	50	62	4	1	0.16
13	74	50	62	4	1	0.16
14	74	51	63	4	2	0.16
15	74	51	63	4	2	0.16
16	74	52	63	4	2	0.16
17	74	52	63	4	2	0.16
18	74	52	63	4	2	0.16
19	75	52	64	3	2	0.16
20	75	53	64	3	2	0.16
21	75	53	64	3	2	0.16
22	75	53	64	3	2	0.16
23	75	53	64	3	2	0.16
24	76	54	65	3	3	0.16
25	76	54	65	3	3	0.17
26	76	55	66	2	3	0.17
27	77	55	66	2	3	0.17
28	77	55	66	2	3	0.17
29	77	55	66	2	3	0.17
30	77	55	66	2	3	0.17
31	77	55	66	2	3	0.17
MTH	74.3	51.3	62.8	126	57	4.88

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HENDERSONVILLE 1 NE NORTH CAROLINA Station Number: 313976

Latitude: 35 B 20 * 00 (Longitude: -082 B 27 * 00 (Elevation (feet): 2160

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	77	55	66	2	3	0.17
2	78	55	66	2	3	0.17
3	78	57	67	2	4	0.17
4	78	57	68	1	4	0.17
5	79	57	68	1	4	0.16
6	79	57	68	1	4	0.16
7	79	58	68	1	4	0.16
8	79	58	68	1	4	0.16
9	79	58	68	1	4	0.16
10	80	58	69	1	5	0.16
11	80	58	69	1	5	0.16
12	80	58	69	1	5	0.16
13	80	58	69	1	5	0.16
14	80	59	70	0	5	0.16
15	81	59	70	0	5	0.16
16	81	59	70	0	5	0.16
17	81	60	71	0	6	0.16
18	81	60	71	0	6	0.16
19	81	60	71	0	6	0.16
20	82	60	71	0	6	0.16
21	82	60	71	0	6	0.16
22	82	60	71	0	6	0.16
23	82	60	71	0	6	0.15
24	82	61	72	0	7	0.15
25	82	61	72	0	7	0.15
26	82	61	72	0	7	0.15
27	83	61	72	0	7	0.15
28	83	61	72	0	7	0.15
29	83	61	72	0	7	0.15
30	83	62	73	0	8	0.15
MTH	80.6	59.0	69.8	16	161	4.76

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	62	73	0	8	0.15
2	84	63	73	0	8	0.15
3	84	63	73	0	8	0.15
4	84	63	73	0	8	0.14
5	84	63	73	0	8	0.14
6	84	63	74	0	9	0.14
7	84	63	74	0	9	0.14
8	84	63	74	0	9	0.14
9	84	64	74	0	9	0.14
10	84	64	74	0	9	0.14
11	84	64	74	0	9	0.14
12	84	64	74	0	9	0.14
13	84	64	74	0	9	0.14
14	84	64	74	0	9	0.14
15	84	64	74	0	9	0.14
16	84	64	74	0	9	0.14
17	84	64	74	0	9	0.14
18	85	64	74	0	9	0.14
19	85	64	74	0	9	0.14
20	85	64	75	0	10	0.15
21	85	64	75	0	10	0.15
22	85	64	75	0	10	0.15
23	85	64	75	0	10	0.15
24	85	64	75	0	10	0.15
25	85	64	75	0	10	0.15
26	84	64	74	0	9	0.15
27	84	64	74	0	9	0.15
28	84	64	74	0	9	0.16
29	84	64	74	0	9	0.16
30	84	64	74	0	9	0.16
31	84	64	74	0	9	0.16
MTH	84.3	63.7	74.0	0	280	4.53
SUMMER SEASON:	82.4	61.6	72.1	16	671	14.70

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	64	74	0	9	0.16
2	84	64	74	0	9	0.16
3	84	64	74	0	9	0.17
4	84	64	74	0	9	0.17
5	84	64	74	0	9	0.17
6	84	63	74	0	9	0.17
7	84	63	74	0	9	0.17
8	84	63	73	0	8	0.17
9	84	63	73	0	8	0.18
10	83	63	73	0	8	0.18
11	83	63	73	0	8	0.18
12	83	63	73	0	8	0.18
13	83	63	73	0	8	0.18
14	83	63	73	0	8	0.18
15	83	62	73	0	8	0.18
16	83	62	73	0	8	0.18
17	82	62	72	0	7	0.18
18	82	62	72	0	7	0.18
19	82	62	72	0	7	0.18
20	82	62	72	0	7	0.18
21	82	62	72	0	7	0.18
22	82	61	72	0	7	0.18
23	82	61	72	0	7	0.18
24	81	61	71	0	6	0.18
25	81	61	71	0	6	0.17
26	81	61	71	0	6	0.17
27	81	61	71	0	6	0.17
28	81	61	71	0	6	0.17
29	80	61	71	0	6	0.17
30	80	60	70	0	5	0.17
31	80	60	70	0	5	0.17
MTH	82.5	62.2	72.4	0	230	5.41

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	60	70	0	5	0.16
2	80	60	70	0	5	0.16
3	80	59	69	0	4	0.16
4	80	59	69	0	4	0.16
5	80	59	69	0	4	0.16
6	79	59	69	0	4	0.16
7	79	59	69	0	4	0.15
8	79	59	69	0	4	0.15
9	79	58	68	0	3	0.15
10	78	58	68	0	3	0.15
11	78	58	68	0	3	0.15
12	78	58	68	0	3	0.15
13	77	57	67	1	3	0.15
14	77	57	67	1	3	0.14
15	77	56	67	1	3	0.14
16	77	56	67	1	3	0.14
17	77	55	66	1	2	0.14
18	76	55	66	1	2	0.14
19	76	55	66	1	2	0.14
20	76	54	65	2	2	0.14
21	76	54	65	2	2	0.13
22	75	54	65	2	2	0.13
23	75	53	64	3	2	0.13
24	75	53	64	3	2	0.13
25	74	53	64	3	2	0.13
26	74	52	63	3	1	0.13
27	74	51	63	3	1	0.13
28	74	50	62	4	1	0.13
29	73	50	62	4	1	0.13
30	73	49	61	5	1	0.13
MTH	76.9	55.7	66.3	41	81	4.29
AUTUMN SEASON:	67.7	44.4	56.1	902	93	12.90
ANNUAL:	66.4	43.7	55.1	4405	823	56.62

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	49	61	5	1	0.13
2	72	49	60	5	0	0.13
3	72	49	60	6	1	0.13
4	72	47	59	6	0	0.12
5	71	47	59	7	1	0.12
6	71	47	59	7	1	0.12
7	71	47	59	7	1	0.12
8	70	47	58	8	1	0.12
9	70	47	58	8	1	0.12
10	69	46	57	9	1	0.12
11	69	46	57	9	1	0.12
12	69	44	57	9	1	0.12
13	69	44	57	9	1	0.12
14	69	44	57	9	1	0.12
15	68	43	56	9	0	0.12
16	68	42	55	10	0	0.13
17	67	42	55	10	0	0.13
18	67	42	55	10	0	0.13
19	67	41	54	11	0	0.13
20	67	41	54	11	0	0.13
21	66	41	54	11	0	0.13
22	66	40	53	12	0	0.13
23	66	40	53	12	0	0.13
24	65	40	53	12	0	0.13
25	65	39	52	13	0	0.13
26	65	39	52	13	0	0.14
27	64	39	52	13	0	0.14
28	64	39	52	13	0	0.14
29	64	38	51	14	0	0.14
30	63	38	51	14	0	0.14
31	63	38	51	14	0	0.14
MTH	67.8	43.1	55.5	306	12	3.97

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	38	50	15	0	0.14
2	63	38	50	15	0	0.15
3	63	38	50	15	0	0.15
4	62	38	50	15	0	0.15
5	61	37	49	16	0	0.15
6	61	37	49	16	0	0.15
7	61	37	49	16	0	0.15
8	61	36	49	16	0	0.15
9	60	36	48	17	0	0.16
10	60	36	48	17	0	0.16
11	60	36	48	17	0	0.16
12	60	35	48	17	0	0.16
13	59	35	47	18	0	0.16
14	59	35	47	18	0	0.16
15	59	35	47	18	0	0.16
16	58	34	46	19	0	0.16
17	58	34	46	19	0	0.16
18	58	34	46	19	0	0.16
19	57	34	46	19	0	0.16
20	57	33	45	20	0	0.16
21	57	33	45	20	0	0.16
22	56	33	45	20	0	0.16
23	56	32	44	21	0	0.16
24	56	32	44	21	0	0.15
25	55	32	44	21	0	0.15
26	55	32	44	21	0	0.15
27	55	31	43	22	0	0.15
28	54	31	43	22	0	0.15
29	54	31	43	22	0	0.15
30	53	31	42	23	0	0.15
MTH	58.4	34.5	46.5	555	0	4.64

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HENDERSONVILLE 1 NE NORTH CAROLINA Station Number: 313976

Latitude: 35° 20* 00(Longitude: -082° 27* 00(Elevation (feet): 2160

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.56	0.43	0.82	0.22	0.57	0.58	0.65	0.49	0.25	0.07	0.91	0.48	32.74
0.010	0.73	0.57	1.03	0.31	0.73	0.74	0.81	0.65	0.35	0.12	1.09	0.62	34.62
0.050	1.39	1.13	1.82	0.74	1.36	1.36	1.41	1.30	0.81	0.40	1.73	1.16	40.15
0.100	1.88	1.56	2.38	1.11	1.82	1.81	1.84	1.81	1.19	0.70	2.17	1.56	43.34
0.200	2.63	2.22	3.23	1.71	2.52	2.49	2.48	2.60	1.82	1.24	2.79	2.18	47.42
0.300	3.29	2.82	3.95	2.28	3.13	3.09	3.03	3.30	2.40	1.79	3.31	2.71	50.52
0.400	3.94	3.41	4.65	2.86	3.73	3.67	3.56	4.00	3.00	2.39	3.80	3.24	53.28
0.500	4.62	4.03	5.38	3.49	4.36	4.27	4.11	4.74	3.63	3.06	4.31	3.80	55.94
0.600	5.38	4.72	6.18	4.20	5.05	4.94	4.72	5.56	4.36	3.85	4.85	4.41	58.70
0.700	6.28	5.54	7.12	5.07	5.87	5.73	5.43	6.55	5.23	4.84	5.49	5.14	61.74
0.800	7.45	6.62	8.34	6.22	6.94	6.76	6.34	7.84	6.39	6.19	6.30	6.08	65.43
0.900	9.28	8.33	10.23	8.08	8.61	8.36	7.77	9.88	8.26	8.43	7.55	7.57	70.79
0.950	11.00	9.93	11.99	9.85	10.16	9.86	9.09	11.81	10.04	10.62	8.69	8.95	75.42
0.990	14.72	13.43	15.77	13.78	13.54	13.09	11.93	16.00	13.97	15.58	11.11	11.96	84.63
0.995	16.25	14.87	17.32	15.43	14.92	14.42	13.09	17.74	15.61	17.69	12.09	13.20	88.18

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HICKORY RGNL AP NORTH CAROLINA Station Number: 314020

Latitude: 35 B 44 * 28 (Longitude: -081 B 23* 23 (Elevation (feet): 1143

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	35	45	20	0	0.12
2	55	35	45	20	0	0.12
3	55	34	45	20	0	0.12
4	54	34	44	21	0	0.12
5	54	34	44	21	0	0.12
6	54	34	44	21	0	0.11
7	54	33	44	21	0	0.11
8	53	33	43	22	0	0.11
9	53	33	43	22	0	0.11
10	53	33	43	22	0	0.11
11	53	32	43	22	0	0.11
12	52	32	42	23	0	0.11
13	52	32	42	23	0	0.11
14	52	32	42	23	0	0.11
15	52	32	42	23	0	0.11
16	52	32	42	23	0	0.11
17	51	32	41	24	0	0.11
18	51	32	41	24	0	0.11
19	51	31	41	24	0	0.12
20	51	31	41	24	0	0.12
21	51	31	41	24	0	0.12
22	50	30	40	25	0	0.12
23	50	30	40	25	0	0.12
24	50	30	40	25	0	0.12
25	50	30	40	25	0	0.12
26	50	30	40	25	0	0.12
27	50	30	40	25	0	0.12
28	49	30	40	25	0	0.12
29	49	30	40	25	0	0.12
30	49	29	39	26	0	0.12
31	49	29	39	26	0	0.12
MTH	51.8	31.8	41.8	719	0	3.59
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	29	39	26	0	0.12
2	49	29	39	26	0	0.13
3	49	29	39	26	0	0.13
4	49	29	39	26	0	0.13
5	49	29	39	26	0	0.13
6	49	29	39	26	0	0.13
7	49	29	39	26	0	0.13
8	49	29	39	26	0	0.13
9	49	29	39	26	0	0.13
10	48	29	39	26	0	0.13
11	48	29	39	26	0	0.14
12	48	29	39	26	0	0.14
13	48	29	39	26	0	0.14
14	48	29	38	27	0	0.14
15	48	29	39	26	0	0.14
16	48	29	39	26	0	0.14
17	48	29	39	26	0	0.14
18	49	29	39	26	0	0.14
19	49	29	39	26	0	0.14
20	49	29	39	26	0	0.14
21	49	29	39	26	0	0.14
22	49	29	39	26	0	0.14
23	49	29	39	26	0	0.14
24	49	29	39	26	0	0.14
25	49	29	39	26	0	0.14
26	49	29	39	26	0	0.14
27	49	30	39	26	0	0.14
28	49	30	39	26	0	0.14
29	49	30	39	26	0	0.14
30	49	30	39	26	0	0.14
31	50	30	40	25	0	0.14
MTH	48.8	29.2	39.0	806	0	4.23
	51.2	30.8	41.0	2161	0	11.69

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	30	40	25	0	0.14
2	50	30	40	25	0	0.14
3	50	30	40	25	0	0.14
4	51	30	40	25	0	0.13
5	51	30	40	25	0	0.13
6	51	30	41	24	0	0.13
7	51	30	41	24	0	0.13
8	51	30	41	24	0	0.13
9	52	30	41	24	0	0.13
10	52	30	41	24	0	0.13
11	52	30	41	24	0	0.13
12	52	31	42	23	0	0.13
13	53	31	42	23	0	0.13
14	53	31	42	23	0	0.14
15	53	31	42	23	0	0.14
16	53	31	42	23	0	0.14
17	53	32	43	22	0	0.14
18	54	32	43	22	0	0.14
19	54	32	43	22	0	0.14
20	54	32	43	22	0	0.14
21	54	33	44	21	0	0.14
22	55	33	44	21	0	0.14
23	55	33	44	21	0	0.14
24	55	33	44	21	0	0.15
25	56	34	45	20	0	0.15
26	56	34	45	20	0	0.15
27	56	34	45	20	0	0.15
28	56	34	45	20	0	0.15
MTH	53.0	31.5	42.3	636	0	3.87

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	35	46	19	0	0.15
2	57	35	46	19	0	0.16
3	58	35	46	19	0	0.16
4	58	36	47	18	0	0.16
5	58	36	47	18	0	0.16
6	58	37	47	18	0	0.16
7	58	37	47	18	0	0.16
8	59	37	48	17	0	0.16
9	59	37	48	17	0	0.16
10	59	37	48	17	0	0.16
11	60	38	49	16	0	0.16
12	60	38	49	16	0	0.17
13	60	38	49	16	0	0.17
14	60	38	49	16	0	0.17
15	61	39	50	15	*	0.17
16	61	39	50	15	*	0.16
17	61	39	50	15	*	0.16
18	62	39	51	15	*	0.16
19	62	40	51	15	*	0.16
20	62	40	51	14	*	0.16
21	62	40	51	14	*	0.16
22	63	40	52	13	*	0.16
23	63	41	52	13	0	0.16
24	63	41	52	13	0	0.16
25	64	41	53	12	0	0.16
26	64	41	53	12	0	0.15
27	65	41	53	12	0	0.15
28	65	41	53	12	0	0.15
29	65	42	54	11	0	0.15
30	66	42	54	11	0	0.15
31	66	42	54	11	0	0.14
MTH	61.2	38.8	50.0	467	2	4.92
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	67	42	54	11	0	0.14
2	67	43	55	10	0	0.14
3	67	43	55	10	0	0.13
4	67	43	55	10	0	0.13
5	67	44	56	9	0	0.13
6	68	44	56	9	0	0.13
7	68	44	56	9	0	0.13
8	68	44	56	9	0	0.13
9	69	45	57	8	0	0.12
10	69	45	57	8	0	0.12
11	69	45	57	8	0	0.12
12	69	45	57	8	0	0.12
13	70	46	58	7	0	0.12
14	70	46	58	7	0	0.12
15	70	46	58	7	0	0.12
16	70	46	58	7	0	0.12
17	71	47	59	7	1	0.12
18	71	47	59	7	1	0.12
19	71	47	59	7	1	0.12
20	71	48	60	6	1	0.12
21	72	48	60	6	1	0.12
22	72	48	60	6	1	0.12
23	72	48	60	6	1	0.12
24	73	48	61	5	1	0.12
25	73	49	61	5	1	0.12
26	73	49	61	5	1	0.12
27	73	49	61	5	1	0.12
28	73	50	62	4	1	0.12
29	74	50	62	4	1	0.12
30	74	50	62	4	1	0.12
MTH	70.3	46.3	58.3	214	14	3.70
	69.6	46.7	58.2	750	124	13.08

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	50	62	4	1	0.13
2	75	50	63	4	2	0.13
3	75	52	63	4	2	0.13
4	75	52	63	4	2	0.13
5	75	52	63	4	2	0.13
6	75	52	64	3	2	0.13
7	75	52	64	3	2	0.13
8	76	53	64	3	2	0.14
9	76	53	64	3	2	0.14
10	76	53	64	3	2	0.14
11	76	53	65	3	3	0.14
12	76	54	65	3	3	0.14
13	76	55	66	2	3	0.14
14	77	55	66	2	3	0.14
15	77	55	66	2	3	0.14
16	77	55	66	2	3	0.14
17	77	56	67	2	4	0.15
18	78	56	67	2	4	0.15
19	78	56	67	2	4	0.15
20	78	56	67	2	4	0.15
21	78	56	67	2	4	0.15
22	79	57	68	1	4	0.15
23	79	57	68	1	4	0.15
24	79	58	69	1	5	0.15
25	79	58	69	1	5	0.15
26	80	58	69	1	5	0.15
27	80	58	69	1	5	0.15
28	80	58	69	1	5	0.16
29	80	59	70	1	6	0.16
30	81	59	70	1	6	0.16
31	81	59	70	1	6	0.16
MTH	77.4	55.1	66.3	69	108	4.46

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HICKORY RGNL AP NORTH CAROLINA Station Number: 314020

Latitude: 35 B 44 * 28 (Longitude: -081 B 23* 23 (Elevation (feet): 1143

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	59	70	1	6	0.16
2	82	59	70	1	6	0.16
3	82	60	71	1	7	0.16
4	83	60	71	1	7	0.16
5	83	60	71	1	7	0.16
6	83	60	71	1	7	0.16
7	83	62	72	1	8	0.16
8	83	63	73	0	8	0.16
9	83	63	73	0	8	0.16
10	83	63	73	0	8	0.16
11	83	63	73	0	8	0.16
12	83	63	73	0	8	0.16
13	84	63	74	0	9	0.16
14	84	63	74	0	9	0.16
15	84	64	74	0	9	0.16
16	84	64	74	0	9	0.16
17	84	64	74	0	9	0.16
18	85	64	75	0	10	0.16
19	85	64	75	0	10	0.16
20	85	65	75	0	10	0.16
21	85	65	75	0	10	0.16
22	85	65	75	0	10	0.16
23	85	65	75	0	10	0.16
24	86	65	76	0	11	0.16
25	86	65	76	0	11	0.15
26	86	66	76	0	11	0.15
27	86	66	76	0	11	0.15
28	86	66	76	0	11	0.15
29	86	66	76	0	11	0.15
30	86	66	76	0	11	0.15
MTH	84.2	63.4	73.8	7	270	4.74

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	87	66	77	0	12	0.15
2	87	67	77	0	12	0.15
3	87	67	77	0	12	0.15
4	87	67	77	0	12	0.15
5	87	67	77	0	12	0.14
6	87	67	77	0	12	0.14
7	87	67	77	0	12	0.14
8	88	67	77	0	12	0.14
9	88	67	77	0	12	0.14
10	88	67	78	0	13	0.14
11	88	67	78	0	13	0.14
12	88	68	78	0	13	0.14
13	88	68	78	0	13	0.14
14	88	68	78	0	13	0.14
15	88	68	78	0	13	0.13
16	88	68	78	0	13	0.13
17	88	68	78	0	13	0.13
18	88	68	78	0	13	0.13
19	88	68	78	0	13	0.13
20	88	68	78	0	13	0.13
21	88	68	78	0	13	0.13
22	88	68	78	0	13	0.13
23	88	68	78	0	13	0.13
24	88	68	78	0	13	0.13
25	88	68	78	0	13	0.13
26	88	68	78	0	13	0.13
27	88	68	78	0	13	0.13
28	88	68	78	0	13	0.12
29	88	68	78	0	13	0.12
30	88	68	78	0	13	0.12
31	88	68	78	0	13	0.12
MTH	87.8	67.6	77.7	0	394	4.17
SUMMER SEASON:	86.0	65.8	75.9	7	1013	12.76

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	88	68	78	0	13	0.12
2	88	68	78	0	13	0.12
3	88	68	78	0	13	0.12
4	88	68	78	0	13	0.12
5	87	68	78	0	13	0.12
6	87	68	78	0	13	0.12
7	87	68	77	0	12	0.12
8	87	68	77	0	12	0.12
9	87	68	77	0	12	0.12
10	87	67	77	0	12	0.12
11	87	67	77	0	12	0.12
12	87	67	77	0	12	0.12
13	87	67	77	0	12	0.12
14	87	67	77	0	12	0.12
15	86	67	77	0	12	0.12
16	86	66	76	0	11	0.12
17	86	66	76	0	11	0.12
18	86	66	76	0	11	0.12
19	86	66	76	0	11	0.12
20	86	66	76	0	11	0.12
21	86	66	76	0	11	0.13
22	85	66	76	0	11	0.13
23	85	65	75	0	10	0.13
24	85	65	75	0	10	0.13
25	85	65	75	0	10	0.13
26	85	65	75	0	10	0.13
27	84	65	75	0	10	0.13
28	84	64	74	0	9	0.13
29	84	64	74	0	9	0.13
30	84	64	74	0	9	0.14
31	84	64	74	0	9	0.14
MTH	86.1	66.4	76.3	0	349	3.85

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	64	74	0	9	0.14
2	83	64	73	0	8	0.14
3	83	64	73	0	8	0.14
4	83	64	73	0	8	0.14
5	83	64	73	0	8	0.14
6	82	63	72	0	7	0.14
7	82	63	72	0	7	0.14
8	82	63	72	0	7	0.14
9	82	63	72	0	7	0.14
10	81	62	71	0	6	0.14
11	81	61	71	0	6	0.15
12	81	61	71	0	6	0.15
13	81	61	71	0	6	0.15
14	80	61	71	0	6	0.15
15	80	60	70	0	5	0.15
16	80	60	70	0	5	0.15
17	79	60	70	0	5	0.15
18	79	59	69	1	5	0.14
19	79	59	69	1	5	0.14
20	79	59	69	1	5	0.14
21	78	58	68	1	4	0.14
22	78	58	68	1	4	0.14
23	78	57	68	1	4	0.14
24	78	57	68	1	4	0.14
25	78	57	68	1	4	0.14
26	77	56	67	1	3	0.14
27	77	55	66	2	3	0.14
28	76	55	66	2	3	0.13
29	76	55	66	2	3	0.13
30	76	54	65	3	3	0.13
MTH	79.8	59.9	69.9	18	164	4.24
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	75	54	65	3	3	0.13
2	75	54	65	3	3	0.13
3	75	54	64	3	2	0.13
4	74	53	63	4	2	0.12
5	74	53	63	4	2	0.12
6	74	53	63	4	2	0.12
7	73	52	62	5	2	0.12
8	73	52	62	5	2	0.12
9	73	51	62	5	2	0.12
10	73	50	62	5	2	0.12
11	72	49	61	5	1	0.12
12	72	49	60	6	1	0.11
13	72	49	60	6	1	0.11
14	71	48	60	6	1	0.11
15	71	47	59	7	1	0.11
16	71	47	59	7	1	0.11
17	70	47	59	7	1	0.11
18	70	46	58	8	1	0.11
19	70	46	58	8	1	0.11
20	69	46	58	8	1	0.11
21	69	45	57	9	1	0.11
22	69	45	57	9	1	0.11
23	68	45	57	9	1	0.11
24	68	44	56	9	0	0.11
25	68	44	56	9	0	0.11
26	67	44	56	9	0	0.11
27	67	43	55	10	0	0.11
28	67	43	55	10	0	0.11
29	66	43	55	10	0	0.11
30	66	43	55	10	0	0.12
31	65	43	54	11	0	0.12
MTH	70.6	47.8	59.2	214	35	3.57
AUTUMN SEASON:	70.3	48.9	59.7	690	203	11.45
ANNUAL:	69.3	48.1	58.7	3608	1340	48.98

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	43	54	12	1	0.12
2	65	42	54	12	1	0.12
3	65	42	54	12	1	0.12
4	65	42	54	12	1	0.12
5	64	42	53	12	0	0.12
6	64	42	53	12	0	0.12
7	63	42	52	13	0	0.12
8	63	42	52	13	0	0.12
9	63	42	52	13	0	0.12
10	62	41	51	14	0	0.12
11	62	41	51	14	0	0.12
12	62	41	51	14	0	0.12
13	61	40	51	14	0	0.12
14	61	39	50	15	0	0.12
15	61	39	50	15	0	0.13
16	60	39	50	15	0	0.13
17	60	38	49	16	0	0.13
18	60	38	49	16	0	0.13
19	59	38	49	16	0	0.12
20	59	37	48	17	0	0.12
21	59	37	48	17	0	0.12
22	59	37	48	17	0	0.12
23	58	37	48	17	0	0.12
24	58	36	47	18	0	0.12
25	58	36	47	18	0	0.12
26	57	36	47	18	0	0.12
27	56	36	46	19	0	0.12
28	56	36	46	19	0	0.12
29	56	36	46	19	0	0.12
30	56	35	46	19	0	0.12
MTH	60.6	39.1	49.9	458	4	3.64

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HICKORY RGNL AP NORTH CAROLINA Station Number: 314020

Latitude: 35B 44* 28(Longitude: -081B 23* 23(Elevation (feet): 1143

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.54	0.45	0.86	0.19	0.75	0.43	0.28	0.41	0.09	0.00	0.59	0.37	29.90
0.010	0.69	0.58	1.05	0.27	0.92	0.57	0.39	0.53	0.15	0.00	0.73	0.48	31.43
0.050	1.24	1.08	1.72	0.65	1.52	1.14	0.86	1.02	0.48	0.24	1.22	0.93	35.91
0.100	1.64	1.44	2.19	0.98	1.94	1.58	1.24	1.38	0.80	0.60	1.56	1.27	38.47
0.200	2.25	2.00	2.86	1.52	2.56	2.28	1.85	1.94	1.39	1.16	2.07	1.79	41.73
0.300	2.77	2.48	3.43	2.02	3.08	2.89	2.41	2.43	1.98	1.69	2.49	2.25	44.20
0.400	3.28	2.96	3.97	2.54	3.58	3.51	2.97	2.91	2.62	2.24	2.91	2.70	46.38
0.500	3.81	3.45	4.53	3.10	4.09	4.15	3.57	3.42	3.32	2.84	3.33	3.18	48.48
0.600	4.40	4.00	5.14	3.74	4.65	4.88	4.25	3.98	4.15	3.54	3.79	3.71	50.65
0.700	5.09	4.65	5.85	4.52	5.31	5.74	5.07	4.64	5.17	4.40	4.34	4.34	53.04
0.800	5.98	5.50	6.76	5.55	6.15	6.87	6.15	5.51	6.57	5.57	5.03	5.16	55.92
0.900	7.38	6.82	8.17	7.21	7.45	8.67	7.88	6.88	8.87	7.47	6.11	6.45	60.10
0.950	8.68	8.06	9.46	8.80	8.65	10.35	9.51	8.16	11.11	9.31	7.10	7.67	63.69
0.990	11.48	10.73	12.22	12.32	11.20	14.03	13.11	10.94	16.18	13.44	9.23	10.30	70.81
0.995	12.63	11.83	13.34	13.80	12.24	15.55	14.61	12.08	18.32	15.19	10.10	11.39	73.55

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HIGHLANDS NORTH CAROLINA Station Number: 314055

Latitude: 35B 03* 11(Longitude: -083B 11* 18(Elevation (feet): 3840

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	29	38	27	0	0.27
2	47	29	38	27	0	0.27
3	47	29	38	27	0	0.27
4	46	29	37	28	0	0.26
5	46	29	37	28	0	0.26
6	46	28	37	28	0	0.26
7	46	28	37	28	0	0.26
8	45	27	36	29	0	0.25
9	45	27	36	29	0	0.25
10	45	27	36	29	0	0.25
11	45	27	36	29	0	0.25
12	44	27	36	29	0	0.25
13	44	26	35	30	0	0.25
14	44	26	35	30	0	0.25
15	44	26	35	30	0	0.24
16	44	26	35	30	0	0.24
17	44	26	35	30	0	0.24
18	43	26	35	30	0	0.24
19	43	25	34	31	0	0.24
20	43	25	34	31	0	0.24
21	43	25	34	31	0	0.24
22	43	25	34	31	0	0.24
23	43	25	34	31	0	0.24
24	43	25	34	31	0	0.24
25	42	25	34	31	0	0.24
26	42	24	33	32	0	0.25
27	42	24	33	32	0	0.25
28	42	24	33	32	0	0.25
29	42	24	33	32	0	0.25
30	42	24	33	32	0	0.25
31	42	24	33	32	0	0.25
MTH	44.0	26.2	35.1	927	0	7.74

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	42	24	33	32	0	0.25
2	42	24	33	32	0	0.25
3	42	24	33	32	0	0.26
4	42	24	33	32	0	0.26
5	42	24	33	32	0	0.26
6	42	24	33	32	0	0.26
7	42	24	33	32	0	0.26
8	42	24	33	32	0	0.26
9	42	24	33	32	0	0.26
10	41	24	32	33	0	0.26
11	41	24	32	33	0	0.26
12	41	23	32	33	0	0.26
13	41	23	32	33	0	0.26
14	41	23	32	33	0	0.27
15	41	23	32	33	0	0.27
16	41	23	32	33	0	0.27
17	41	23	32	33	0	0.27
18	42	23	32	33	0	0.26
19	42	23	33	32	0	0.26
20	42	23	33	32	0	0.26
21	42	23	33	32	0	0.26
22	42	23	33	32	0	0.26
23	42	23	33	32	0	0.26
24	42	23	33	32	0	0.26
25	42	23	33	32	0	0.26
26	42	23	33	32	0	0.26
27	42	23	33	32	0	0.26
28	43	23	33	32	0	0.26
29	43	23	33	32	0	0.26
30	43	23	33	32	0	0.25
31	43	23	33	32	0	0.25
MTH	41.9	23.4	32.7	1001	0	8.06
WINTER SEASON:	44.0	24.9	34.5	2751	0	22.85

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	43	23	33	32	0	0.25
2	43	24	33	32	0	0.25
3	44	24	34	31	0	0.25
4	44	24	34	31	0	0.25
5	44	24	34	31	0	0.25
6	44	24	34	31	0	0.24
7	44	24	34	31	0	0.24
8	45	24	34	31	0	0.24
9	45	24	34	31	0	0.24
10	45	24	35	30	0	0.24
11	45	24	35	30	0	0.24
12	45	24	35	30	0	0.24
13	45	25	35	30	0	0.24
14	45	25	35	30	0	0.25
15	45	25	35	30	0	0.25
16	46	25	36	29	0	0.25
17	46	25	36	29	0	0.25
18	47	25	36	29	0	0.25
19	47	25	36	29	0	0.25
20	47	26	37	28	0	0.25
21	47	26	37	28	0	0.26
22	48	26	37	28	0	0.26
23	48	26	37	28	0	0.26
24	48	27	38	27	0	0.26
25	49	27	38	27	0	0.27
26	49	27	38	27	0	0.27
27	49	27	38	27	0	0.27
28	50	28	39	26	0	0.28
MTH	46.0	25.1	35.6	823	0	7.05

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	29	39	26	0	0.28
2	50	29	39	26	0	0.28
3	51	29	40	25	0	0.29
4	51	29	40	25	0	0.29
5	51	29	40	25	0	0.29
6	52	29	40	25	0	0.30
7	52	30	41	24	0	0.30
8	52	30	41	24	0	0.30
9	52	30	41	24	0	0.30
10	52	30	41	24	0	0.30
11	53	31	42	23	0	0.30
12	53	31	42	23	0	0.30
13	53	31	42	23	0	0.30
14	54	31	43	22	0	0.30
15	54	31	43	22	0	0.30
16	54	32	43	22	0	0.30
17	54	32	43	22	0	0.30
18	55	32	44	21	0	0.30
19	55	32	44	21	0	0.30
20	56	32	44	21	0	0.30
21	56	32	44	21	0	0.29
22	56	32	44	21	0	0.29
23	56	33	45	20	0	0.29
24	57	33	45	20	0	0.29
25	57	33	45	20	0	0.28
26	57	33	45	20	0	0.28
27	57	34	46	19	0	0.27
28	58	34	46	19	0	0.27
29	58	34	46	19	0	0.27
30	58	34	46	19	0	0.26
31	58	34	46	19	0	0.26
MTH	54.3	31.5	42.9	685	0	8.98
SPRING SEASON:	62.0	38.3	50.2	1375	15	23.35

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	59	35	47	18	0	0.25
2	59	35	47	18	*	0.24
3	59	36	47	18	*	0.24
4	59	36	48	18	*	0.24
5	59	36	48	18	*	0.23
6	61	36	48	17	*	0.23
7	61	36	48	17	*	0.22
8	61	36	48	17	*	0.22
9	61	36	48	17	0	0.22
10	61	36	49	16	0	0.21
11	62	36	49	16	0	0.21
12	62	36	49	16	0	0.21
13	62	36	49	16	0	0.21
14	62	36	49	16	0	0.21
15	62	37	50	15	0	0.21
16	63	37	50	15	0	0.20
17	63	37	50	15	0	0.20
18	63	37	50	15	0	0.20
19	63	38	51	14	0	0.20
20	64	38	51	14	0	0.20
21	64	38	51	14	0	0.20
22	64	38	51	14	0	0.21
23	64	39	52	13	0	0.21
24	64	40	52	13	0	0.21
25	64	40	52	13	0	0.21
26	64	40	52	13	0	0.21
27	65	40	53	12	0	0.21
28	65	41	53	12	0	0.22
29	65	41	53	12	0	0.22
30	66	41	54	11	0	0.22
MTH	62.4	37.5	50.0	453	2	6.47

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	43	54	11	0	0.23
2	66	43	54	11	0	0.23
3	66	43	54	11	0	0.23
4	67	43	55	10	0	0.24
5	67	43	55	10	0	0.24
6	67	43	55	10	0	0.24
7	67	44	55	10	0	0.25
8	68	44	56	9	0	0.25
9	68	44	56	9	0	0.25
10	69	44	56	9	0	0.25
11	69	45	57	8	0	0.25
12	69	45	57	8	0	0.26
13	69	45	57	8	0	0.26
14	69	45	57	8	0	0.26
15	69	46	58	7	0	0.26
16	70	46	58	7	0	0.26
17	70	46	58	7	0	0.26
18	70	46	58	7	0	0.26
19	70	47	59	7	1	0.26
20	70	47	59	7	1	0.26
21	71	47	59	7	1	0.27
22	71	48	60	6	1	0.27
23	71	48	60	6	1	0.27
24	71	48	60	6	1	0.27
25	71	48	60	6	1	0.26
26	72	48	60	6	1	0.26
27	72	48	60	6	1	0.26
28	72	49	61	5	1	0.26
29	72	49	61	5	1	0.26
30	72	50	61	5	1	0.26
31	72	50	61	5	1	0.26
MTH	69.5	46.0	57.8	237	13	7.90

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

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Station Name: HIGHLANDS NORTH CAROLINA Station Number: 314055

Latitude: 35 B 03 * 11 (Longitude: -083 B 11* 18 (Elevation (feet): 3840

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	50	61	5	1	0.26
2	73	50	62	4	1	0.26
3	73	51	62	4	1	0.25
4	73	51	62	4	1	0.25
5	73	51	62	4	1	0.25
6	74	51	62	4	1	0.25
7	74	51	63	3	1	0.25
8	74	52	63	3	1	0.25
9	74	52	63	3	1	0.24
10	74	52	63	3	1	0.24
11	74	52	63	3	1	0.24
12	74	52	63	3	1	0.24
13	74	52	63	3	1	0.24
14	75	53	64	3	2	0.24
15	75	53	64	3	2	0.24
16	75	53	64	3	2	0.24
17	76	53	65	2	2	0.23
18	76	53	65	2	2	0.23
19	76	54	65	2	2	0.23
20	76	54	65	2	2	0.23
21	76	54	65	2	2	0.23
22	76	54	65	2	2	0.23
23	76	54	65	2	2	0.23
24	76	54	65	2	2	0.23
25	77	55	66	1	2	0.23
26	77	55	66	1	2	0.23
27	77	55	66	1	2	0.22
28	77	55	66	1	2	0.22
29	77	55	66	1	2	0.22
30	77	55	66	1	2	0.22
MTH	75.1	52.9	64.0	77	47	7.12

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	77	56	67	1	3	0.22
2	78	56	67	1	3	0.22
3	78	56	67	1	3	0.22
4	78	56	67	1	3	0.22
5	78	56	67	1	3	0.22
6	78	56	67	1	3	0.22
7	78	56	67	1	3	0.22
8	78	56	67	1	3	0.22
9	78	57	67	1	3	0.22
10	78	57	67	1	3	0.22
11	78	57	67	1	3	0.21
12	78	57	67	1	3	0.21
13	78	57	67	1	3	0.21
14	78	57	67	1	3	0.21
15	78	57	68	1	4	0.21
16	78	57	68	1	4	0.21
17	78	57	68	1	4	0.21
18	78	57	68	1	4	0.21
19	78	58	68	1	4	0.21
20	78	58	68	1	4	0.21
21	78	58	68	1	4	0.21
22	78	58	68	1	4	0.21
23	78	58	68	1	4	0.21
24	78	58	68	1	4	0.21
25	78	58	68	1	4	0.21
26	78	58	68	1	4	0.21
27	78	58	68	0	3	0.21
28	78	58	68	0	3	0.21
29	78	58	68	0	3	0.21
30	78	58	68	0	3	0.21
31	78	58	68	0	3	0.21
MTH	78.0	57.2	67.6	26	105	6.61
SUMMER SEASON:	76.4	55.5	66.0	139	230	20.32

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	58	68	0	3	0.21
2	78	58	68	0	3	0.21
3	78	58	68	0	3	0.21
4	78	58	68	1	4	0.21
5	77	57	67	1	3	0.21
6	77	57	67	1	3	0.21
7	77	57	67	1	3	0.21
8	77	57	67	1	3	0.21
9	77	57	67	1	3	0.21
10	77	57	67	1	3	0.21
11	77	57	67	1	3	0.21
12	77	57	67	1	3	0.21
13	77	57	67	1	3	0.21
14	77	57	67	1	3	0.21
15	77	57	67	1	3	0.21
16	76	57	67	1	3	0.21
17	76	56	66	1	2	0.21
18	76	56	66	1	2	0.21
19	76	56	66	1	2	0.21
20	76	56	66	1	2	0.21
21	76	56	66	1	2	0.21
22	76	56	66	1	2	0.21
23	75	56	66	1	2	0.21
24	75	55	65	2	2	0.22
25	75	55	65	2	2	0.22
26	75	55	65	2	2	0.22
27	75	55	65	2	2	0.22
28	75	55	65	2	2	0.22
29	75	55	65	2	2	0.22
30	74	55	65	2	2	0.22
31	74	54	64	2	1	0.22
MTH	76.3	56.4	66.4	36	78	6.59

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	54	64	2	1	0.23
2	74	54	64	2	1	0.23
3	74	54	64	2	1	0.23
4	74	54	64	2	1	0.23
5	73	54	64	2	1	0.23
6	73	54	63	3	1	0.23
7	73	54	63	3	1	0.23
8	73	53	63	3	1	0.23
9	73	53	63	3	1	0.23
10	72	53	63	3	1	0.24
11	72	52	62	4	1	0.23
12	72	52	62	4	1	0.23
13	72	52	62	4	1	0.23
14	71	52	62	4	1	0.23
15	71	51	61	4	0	0.23
16	71	51	61	4	0	0.23
17	71	51	61	4	0	0.23
18	70	50	60	5	0	0.23
19	70	50	60	5	0	0.23
20	70	50	60	5	0	0.23
21	69	49	59	6	0	0.23
22	69	49	59	6	0	0.22
23	69	49	59	6	0	0.22
24	69	48	58	7	0	0.22
25	69	47	58	7	0	0.22
26	68	47	58	7	0	0.21
27	68	46	57	8	0	0.21
28	68	46	57	8	0	0.21
29	67	46	57	8	0	0.21
30	67	45	56	9	0	0.20
MTH	70.9	50.7	60.8	140	14	6.76
AUTUMN SEASON:	61.5	40.7	51.2	1273	15	21.05
ANNUAL:	61.0	39.8	50.5	5538	260	87.57

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	67	45	56	9	0	0.20
2	66	44	55	10	0	0.20
3	66	44	55	10	0	0.19
4	66	44	55	10	*	0.19
5	65	43	54	11	*	0.19
6	65	43	54	11	*	0.19
7	65	43	54	11	*	0.19
8	64	43	54	12	*	0.18
9	64	42	53	12	*	0.18
10	64	42	53	12	*	0.18
11	63	41	52	13	*	0.18
12	63	41	52	13	*	0.18
13	63	40	52	13	0	0.18
14	62	40	51	14	0	0.18
15	62	40	51	14	0	0.18
16	62	39	51	14	0	0.18
17	61	39	50	15	0	0.19
18	61	39	50	15	0	0.19
19	61	38	50	15	0	0.19
20	60	38	49	16	0	0.19
21	60	38	49	16	0	0.19
22	60	38	49	16	0	0.20
23	59	37	48	17	0	0.20
24	59	37	48	17	0	0.20
25	59	37	48	17	0	0.21
26	58	36	47	18	0	0.21
27	58	36	47	18	0	0.21
28	58	36	47	18	0	0.22
29	58	36	47	18	0	0.22
30	57	35	46	19	0	0.23
31	57	35	46	19	0	0.23
MTH	61.7	39.7	50.7	443	1	6.05

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	35	46	19	0	0.24
2	57	35	46	19	0	0.24
3	56	35	45	20	0	0.25
4	56	35	45	20	0	0.25
5	56	35	45	20	0	0.26
6	55	34	44	21	0	0.26
7	55	33	44	21	0	0.26
8	54	33	44	21	0	0.27
9	54	33	44	21	0	0.27
10	53	33	43	22	0	0.27
11	53	33	43	22	0	0.28
12	53	33	43	22	0	0.28
13	53	32	43	22	0	0.28
14	52	32	42	23	0	0.28
15	52	32	42	23	0	0.28
16	52	32	42	23	0	0.29
17	51	32	42	23	0	0.29
18	51	31	41	24	0	0.29
19	51	31	41	24	0	0.29
20	51	31	41	24	0	0.29
21	50	31	41	24	0	0.29
22	50	30	40	25	0	0.29
23	50	30	40	25	0	0.29
24	49	30	40	25	0	0.28
25	49	30	40	25	0	0.28
26	49	29	39	26	0	0.28
27	48	29	39	26	0	0.28
28	48	29	39	26	0	0.28
29	47	29	38	27	0	0.28
30	47	29	38	27	0	0.27
MTH	52.0	31.9	42.0	690	0	8.24

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Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.25	0.98	1.56	0.42	1.34	1.35	0.65	0.50	0.54	0.15	1.98	0.79	51.43
0.010	1.55	1.23	1.91	0.59	1.63	1.62	0.85	0.68	0.73	0.24	2.32	1.03	54.30
0.050	2.63	2.16	3.13	1.31	2.71	2.60	1.67	1.45	1.53	0.72	3.46	2.00	62.70
0.100	3.39	2.83	3.98	1.89	3.45	3.27	2.29	2.05	2.16	1.19	4.21	2.73	67.53
0.200	4.52	3.83	5.21	2.84	4.54	4.23	3.25	3.02	3.15	2.04	5.26	3.85	73.70
0.300	5.48	4.69	6.25	3.71	5.46	5.04	4.10	3.89	4.04	2.89	6.12	4.84	78.39
0.400	6.40	5.52	7.24	4.59	6.35	5.80	4.94	4.77	4.93	3.78	6.93	5.82	82.54
0.500	7.35	6.38	8.26	5.53	7.26	6.59	5.83	5.70	5.88	4.78	7.75	6.85	86.56
0.600	8.40	7.33	9.37	6.60	8.25	7.44	6.82	6.75	6.94	5.94	8.64	7.99	90.70
0.700	9.62	8.45	10.67	7.88	9.40	8.44	7.99	8.00	8.21	7.39	9.65	9.35	95.28
0.800	11.19	9.89	12.33	9.57	10.89	9.70	9.52	9.65	9.88	9.34	10.94	11.12	100.83
0.900	13.63	12.13	14.90	12.28	13.18	11.65	11.94	12.28	12.53	12.56	12.90	13.92	108.88
0.950	15.88	14.21	17.26	14.85	15.30	13.44	14.21	14.77	15.03	15.69	14.68	16.53	115.83
0.990	20.71	18.69	22.29	20.52	19.81	17.24	19.15	20.22	20.52	22.75	18.42	22.22	129.63
0.995	22.67	20.53	24.34	22.87	21.64	18.79	21.18	22.48	22.79	25.73	19.93	24.57	134.94

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HOT SPRINGS NORTH CAROLINA Station Number: 314260

Latitude: 35 B 53 * 43 (Longitude: -082 B 49 * 52 (Elevation (feet): 1396

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	33	44	21	0	0.10
2	55	33	44	21	0	0.10
3	54	33	43	22	0	0.10
4	54	33	43	22	0	0.10
5	54	33	43	22	0	0.10
6	54	31	42	23	0	0.10
7	53	31	42	23	0	0.10
8	53	31	42	23	0	0.10
9	52	31	42	23	0	0.10
10	52	30	41	24	0	0.10
11	52	30	41	24	0	0.10
12	51	30	41	24	0	0.10
13	51	30	41	24	0	0.10
14	50	30	40	25	0	0.10
15	50	30	40	25	0	0.10
16	50	30	40	25	0	0.10
17	50	29	40	25	0	0.10
18	49	29	39	26	0	0.10
19	49	29	39	26	0	0.10
20	49	29	39	26	0	0.10
21	49	29	39	26	0	0.10
22	49	29	39	26	0	0.10
23	49	29	39	26	0	0.10
24	48	28	38	27	0	0.10
25	48	28	38	27	0	0.10
26	48	28	38	27	0	0.10
27	48	28	38	27	0	0.10
28	48	28	38	27	0	0.10
29	47	28	38	27	0	0.11
30	47	28	38	27	0	0.11
31	46	28	37	28	0	0.11
MTH	50.5	29.9	40.2	769	0	3.13

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	28	37	28	0	0.11
2	46	28	37	28	0	0.11
3	46	28	37	28	0	0.11
4	46	28	37	28	0	0.11
5	46	28	37	28	0	0.11
6	46	28	37	28	0	0.11
7	46	27	37	28	0	0.11
8	46	27	37	28	0	0.11
9	46	27	37	28	0	0.11
10	46	27	37	28	0	0.12
11	46	27	37	28	0	0.12
12	46	27	36	29	0	0.12
13	46	27	36	29	0	0.12
14	46	27	36	29	0	0.12
15	46	27	36	29	0	0.12
16	46	27	36	29	0	0.12
17	46	27	37	28	0	0.12
18	46	27	37	28	0	0.12
19	46	27	37	28	0	0.12
20	47	27	37	28	0	0.12
21	47	27	37	28	0	0.12
22	47	27	37	28	0	0.12
23	47	27	37	28	0	0.12
24	47	27	37	28	0	0.12
25	47	27	37	28	0	0.12
26	47	27	37	28	0	0.12
27	47	27	37	28	0	0.12
28	47	27	37	28	0	0.12
29	47	27	37	28	0	0.12
30	48	28	38	27	0	0.12
31	48	28	38	27	0	0.12
MTH	46.5	27.3	36.9	871	0	3.63

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	28	38	27	0	0.12
2	49	28	38	27	0	0.12
3	49	28	38	27	0	0.12
4	49	28	38	27	0	0.12
5	49	28	39	26	0	0.12
6	49	28	39	26	0	0.12
7	49	28	39	26	0	0.12
8	50	28	39	26	0	0.12
9	50	28	39	26	0	0.12
10	50	28	39	26	0	0.12
11	50	29	40	25	0	0.12
12	51	29	40	25	0	0.12
13	51	29	40	25	0	0.12
14	51	29	40	25	0	0.12
15	51	29	40	25	0	0.12
16	52	30	41	24	0	0.12
17	52	30	41	24	0	0.12
18	52	30	41	24	0	0.12
19	52	30	41	24	0	0.12
20	53	30	42	23	0	0.12
21	53	30	42	23	0	0.12
22	53	31	42	23	0	0.12
23	53	31	42	23	0	0.12
24	54	31	43	22	0	0.12
25	54	31	43	22	0	0.12
26	54	32	43	22	0	0.12
27	54	32	43	22	0	0.12
28	55	32	44	21	0	0.13
MTH	51.4	29.5	40.5	686	0	3.37

WINTER SEASON: 49.4 28.9 39.2 2326 0 10.13

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	33	44	21	0	0.12
2	56	33	44	21	0	0.12
3	56	33	44	21	0	0.12
4	57	33	45	20	0	0.12
5	57	34	45	20	0	0.13
6	57	34	45	20	0	0.13
7	57	34	46	19	0	0.13
8	57	34	46	19	0	0.13
9	58	34	46	19	0	0.13
10	58	34	46	19	0	0.13
11	58	35	47	18	0	0.13
12	59	35	47	18	0	0.13
13	59	35	47	18	0	0.13
14	59	36	48	17	0	0.13
15	60	36	48	17	0	0.13
16	60	36	48	17	0	0.13
17	60	36	48	17	0	0.13
18	61	37	49	16	0	0.13
19	61	37	49	16	0	0.13
20	61	37	49	16	0	0.13
21	61	37	49	16	0	0.13
22	62	38	50	15	0	0.13
23	62	38	50	15	0	0.13
24	62	38	50	15	0	0.13
25	62	38	50	15	0	0.13
26	63	38	51	14	0	0.13
27	63	39	51	14	0	0.13
28	63	39	51	14	0	0.13
29	63	39	51	14	0	0.12
30	64	39	52	13	0	0.12
31	64	39	52	13	0	0.12
MTH	59.9	36.1	48.0	527	0	3.96

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	40	52	13	0	0.13
2	65	40	52	13	0	0.13
3	65	40	53	12	0	0.12
4	66	41	53	12	0	0.12
5	66	41	53	12	0	0.12
6	66	41	53	12	0	0.12
7	67	41	54	11	0	0.12
8	67	41	54	11	0	0.12
9	67	41	54	11	0	0.12
10	67	42	55	10	0	0.12
11	68	42	55	10	0	0.12
12	68	42	55	10	0	0.12
13	68	42	55	10	0	0.12
14	68	43	56	9	0	0.12
15	69	43	56	9	0	0.12
16	69	43	56	9	0	0.13
17	69	43	56	9	0	0.13
18	70	44	57	8	0	0.13
19	70	44	57	8	0	0.13
20	70	44	57	8	0	0.13
21	70	44	57	8	0	0.13
22	71	45	58	8	1	0.13
23	71	45	58	8	1	0.13
24	71	45	58	8	1	0.13
25	71	46	59	7	1	0.13
26	72	46	59	7	1	0.13
27	72	46	59	7	1	0.13
28	72	46	59	7	1	0.14
29	72	47	60	6	1	0.14
30	72	47	60	6	1	0.14
MTH	68.8	43.2	56.0	279	9	3.80

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	48	60	6	1	0.14
2	73	49	61	5	1	0.14
3	73	50	61	5	1	0.14
4	73	50	61	5	1	0.14
5	74	50	62	5	2	0.14
6	74	50	62	5	2	0.14
7	74	50	62	5	2	0.14
8	74	50	62	5	2	0.15
9	74	50	62	5	2	0.15
10	75	51	63	4	2	0.15
11	75	51	63	4	2	0.15
12	75	51	63	4	2	0.15
13	75	51	63	4	2	0.15
14	75	51	63	4	2	0.15
15	76	52	64	4	3	0.15
16	76	53	65	3	3	0.15
17	76	53	65	3	3	0.15
18	77	53	65	3	3	0.15
19	77	53	65	3	3	0.15
20	77	53	65	3	3	0.15
21	77	54	66	2	3	0.15
22	78	54	66	2	3	0.15
23	78	55	67	2	4	0.14
24	78	55	67	2	4	0.14
25	78	55	67	2	4	0.14
26	79	55	67	2	4	0.14
27	79	55	67	2	4	0.14
28	79	55	67	2	4	0.14
29	79	56	68	1	4	0.14
30	80	56	68	1	4	0.14
31	80	57	69	1	5	0.13
MTH	76.2	52.5	64.4	104	85	4.48

SPRING SEASON: 68.3 43.9 56.1 910 94 12.24

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HOT SPRINGS NORTH CAROLINA Station Number: 314260

Latitude: 35B 53* 43 (Longitude: -082B 49* 52 (Elevation (feet): 1396

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	58	69	1	5	0.13
2	81	58	69	1	5	0.13
3	81	58	69	1	5	0.13
4	81	58	69	1	5	0.13
5	81	58	69	1	5	0.13
6	81	58	70	1	6	0.13
7	82	59	70	1	6	0.13
8	82	59	70	1	6	0.13
9	82	59	71	0	6	0.13
10	82	59	71	0	6	0.13
11	82	59	71	0	6	0.12
12	83	59	71	0	6	0.12
13	83	59	71	0	6	0.12
14	83	60	72	0	7	0.12
15	83	60	72	0	7	0.12
16	83	60	72	0	7	0.12
17	84	60	72	0	7	0.13
18	84	60	72	0	7	0.13
19	84	60	72	0	7	0.13
20	84	61	73	0	8	0.13
21	84	61	73	0	8	0.13
22	84	62	73	0	8	0.13
23	84	62	73	0	8	0.13
24	84	62	73	0	8	0.13
25	84	62	73	0	8	0.13
26	85	62	74	0	9	0.13
27	85	63	74	0	9	0.14
28	85	63	74	0	9	0.14
29	85	63	74	0	9	0.14
30	85	63	74	0	9	0.14
MTH	83.1	60.2	71.7	8	208	3.88

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	64	75	0	10	0.14
2	86	64	75	0	10	0.15
3	86	64	75	0	10	0.15
4	86	64	75	0	10	0.15
5	86	64	75	0	10	0.15
6	86	64	75	0	10	0.15
7	86	64	75	0	10	0.15
8	86	65	76	0	11	0.15
9	86	65	76	0	11	0.15
10	87	65	76	0	11	0.15
11	87	65	76	0	11	0.16
12	87	65	76	0	11	0.16
13	87	65	76	0	11	0.16
14	87	65	76	0	11	0.16
15	87	65	76	0	11	0.16
16	87	65	76	0	11	0.16
17	87	65	76	0	11	0.16
18	87	65	76	0	11	0.15
19	87	65	76	0	11	0.15
20	87	65	76	0	11	0.15
21	87	65	76	0	11	0.15
22	87	65	76	0	11	0.15
23	87	65	76	0	11	0.15
24	87	65	76	0	11	0.15
25	87	65	76	0	11	0.15
26	87	65	76	0	11	0.14
27	87	65	76	0	11	0.14
28	87	65	76	0	11	0.14
29	87	65	76	0	11	0.14
30	87	65	76	0	11	0.13
31	87	65	76	0	11	0.13
MTH	86.7	64.8	75.8	0	334	4.63
SUMMER SEASON:	85.2	62.9	74.1	8	846	11.87

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	87	65	76	0	11	0.13
2	87	65	76	0	11	0.13
3	87	65	76	0	11	0.12
4	87	65	76	0	11	0.12
5	87	65	76	0	11	0.12
6	87	65	76	0	11	0.12
7	87	65	76	0	11	0.12
8	87	65	76	0	11	0.11
9	87	65	76	0	11	0.11
10	87	65	76	0	11	0.11
11	87	65	76	0	11	0.11
12	87	63	75	0	10	0.11
13	87	64	75	0	10	0.11
14	86	64	75	0	10	0.10
15	86	64	75	0	10	0.10
16	86	64	75	0	10	0.10
17	86	64	75	0	10	0.10
18	86	64	75	0	10	0.10
19	86	63	75	0	10	0.10
20	85	63	74	0	9	0.10
21	85	63	74	0	9	0.10
22	85	63	74	0	9	0.10
23	85	63	74	0	9	0.10
24	85	63	74	0	9	0.10
25	85	63	74	0	9	0.10
26	85	63	74	0	9	0.10
27	84	62	73	0	8	0.10
28	84	62	73	0	8	0.11
29	84	62	73	0	8	0.11
30	84	62	73	0	8	0.11
31	84	62	73	0	8	0.11
MTH	85.9	63.7	74.8	0	304	3.36

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	62	73	0	8	0.11
2	83	62	72	0	7	0.11
3	83	61	72	0	7	0.11
4	83	61	72	0	7	0.11
5	83	61	72	0	7	0.11
6	83	61	72	0	7	0.12
7	83	60	71	0	6	0.12
8	83	60	71	0	6	0.12
9	83	60	71	0	6	0.12
10	83	60	71	0	6	0.12
11	83	59	71	0	6	0.12
12	83	58	70	0	5	0.12
13	82	58	70	0	5	0.12
14	81	58	70	0	5	0.12
15	81	58	70	0	5	0.12
16	81	58	70	0	5	0.11
17	81	58	70	0	5	0.11
18	80	57	69	0	4	0.11
19	80	56	68	1	4	0.11
20	80	56	68	1	4	0.11
21	79	56	68	1	4	0.11
22	79	56	68	1	4	0.11
23	79	56	68	1	4	0.11
24	79	55	67	1	3	0.10
25	78	54	66	2	3	0.10
26	78	54	66	2	3	0.10
27	77	53	65	3	3	0.10
28	77	53	65	3	3	0.09
29	77	52	65	3	3	0.09
30	77	51	64	4	3	0.09
MTH	80.8	57.5	69.2	23	148	3.30
AUTUMN SEASON:	70.7	46.3	58.6	761	178	8.35
ANNUAL:	68.4	45.5	57.0	4005	1118	42.59

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	51	63	4	2	0.09
2	76	50	63	4	2	0.08
3	76	50	63	4	2	0.08
4	76	49	62	5	2	0.08
5	76	49	62	5	2	0.08
6	74	49	62	5	2	0.08
7	74	48	61	6	2	0.07
8	74	48	61	6	2	0.07
9	73	47	60	6	1	0.07
10	73	47	60	6	1	0.07
11	73	47	60	6	1	0.07
12	72	46	59	7	1	0.07
13	72	46	59	7	1	0.07
14	72	45	59	7	1	0.06
15	71	45	58	8	1	0.06
16	71	45	58	8	1	0.06
17	70	44	57	9	1	0.06
18	70	44	57	9	1	0.06
19	70	44	57	9	1	0.06
20	69	44	57	9	1	0.06
21	69	43	56	9	0	0.06
22	69	43	56	9	0	0.06
23	68	42	55	10	0	0.06
24	68	42	55	10	0	0.07
25	68	42	55	10	0	0.07
26	68	41	55	10	0	0.07
27	67	41	54	11	0	0.07
28	67	41	54	11	0	0.07
29	66	41	54	11	0	0.07
30	66	40	53	12	0	0.07
31	66	40	53	12	0	0.08
MTH	71.0	45.0	58.0	245	28	2.15

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	40	53	13	1	0.08
2	66	40	53	13	1	0.08
3	65	40	52	13	0	0.08
4	65	40	52	13	0	0.09
5	64	39	52	13	0	0.09
6	63	39	51	14	0	0.09
7	63	39	51	14	0	0.09
8	63	38	51	14	0	0.09
9	63	38	51	14	0	0.09
10	62	38	50	15	0	0.10
11	62	38	50	15	0	0.10
12	62	37	50	15	0	0.10
13	61	37	49	16	0	0.10
14	61	37	49	16	0	0.10
15	61	37	49	16	0	0.10
16	60	37	49	16	0	0.10
17	60	36	48	17	0	0.10
18	60	36	48	17	0	0.10
19	59	36	48	17	0	0.10
20	59	35	47	18	0	0.10
21	59	35	47	18	0	0.10
22	58	35	47	18	0	0.10
23	58	34	46	19	0	0.10
24	58	34	46	19	0	0.11
25	57	34	46	19	0	0.11
26	56	34	45	20	0	0.10
27	56	34	45	20	0	0.10
28	56	34	45	20	0	0.10
29	56	33	45	20	0	0.10
30	55	33	44	21	0	0.10
MTH	60.5	36.6	48.6	493	2	2.90

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HOT SPRINGS NORTH CAROLINA Station Number: 314260

Latitude: 35° 53* 43(Longitude: -082° 49* 52(Elevation (feet): 1396

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.84	0.75	0.71	0.68	1.45	0.99	1.37	0.71	0.33	0.00	0.81	0.46	28.85
0.010	0.99	0.89	0.86	0.82	1.64	1.15	1.57	0.85	0.43	0.00	0.93	0.57	30.00
0.050	1.49	1.35	1.41	1.34	2.24	1.69	2.20	1.31	0.84	0.36	1.32	0.99	33.31
0.100	1.82	1.66	1.78	1.70	2.62	2.04	2.60	1.62	1.15	0.65	1.58	1.29	35.17
0.200	2.29	2.10	2.32	2.22	3.13	2.52	3.15	2.07	1.63	1.02	1.93	1.73	37.52
0.300	2.68	2.46	2.78	2.66	3.54	2.92	3.60	2.43	2.05	1.31	2.22	2.11	39.28
0.400	3.04	2.80	3.21	3.08	3.92	3.29	4.01	2.78	2.47	1.60	2.48	2.47	40.82
0.500	3.41	3.15	3.66	3.50	4.29	3.66	4.42	3.13	2.91	1.90	2.75	2.85	42.30
0.600	3.80	3.52	4.14	3.97	4.69	4.07	4.86	3.51	3.40	2.24	3.04	3.26	43.82
0.700	4.26	3.96	4.71	4.52	5.15	4.53	5.36	3.96	3.99	2.63	3.37	3.75	45.48
0.800	4.84	4.51	5.43	5.21	5.72	5.11	5.99	4.52	4.75	3.15	3.78	4.37	47.47
0.900	5.72	5.35	6.55	6.28	6.57	5.99	6.94	5.38	5.96	3.96	4.40	5.35	50.34
0.950	6.53	6.11	7.57	7.27	7.33	6.79	7.80	6.17	7.09	4.72	4.96	6.25	52.78
0.990	8.22	7.73	9.76	9.37	8.92	8.47	9.57	7.83	9.55	6.37	6.14	8.18	57.59
0.995	8.90	8.38	10.64	10.23	9.55	9.14	10.28	8.50	10.56	7.05	6.61	8.97	59.41

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HOT SPRINGS 2 NORTH CAROLINA Station Number: 314265

Latitude: 35 B 54 * 00 (Longitude: -082 B 50 * 00 (Elevation (feet): 1480

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	34	45	20	0	0.11
2	55	34	44	21	0	0.11
3	55	34	44	21	0	0.11
4	55	33	44	21	0	0.11
5	55	33	44	21	0	0.10
6	54	32	43	22	0	0.10
7	53	32	43	22	0	0.10
8	53	32	43	22	0	0.10
9	52	32	42	23	0	0.10
10	52	32	42	23	0	0.10
11	52	32	42	23	0	0.10
12	52	31	42	23	0	0.10
13	51	31	41	24	0	0.10
14	51	31	41	24	0	0.10
15	51	31	41	24	0	0.10
16	51	31	41	24	0	0.10
17	51	31	41	24	0	0.10
18	50	30	40	25	0	0.10
19	50	30	40	25	0	0.10
20	50	30	40	25	0	0.10
21	50	30	40	25	0	0.10
22	50	30	40	25	0	0.10
23	49	30	40	25	0	0.10
24	49	29	39	26	0	0.10
25	49	29	39	26	0	0.10
26	49	29	39	26	0	0.10
27	49	29	39	26	0	0.10
28	48	29	39	26	0	0.10
29	48	29	39	26	0	0.10
30	48	29	39	26	0	0.10
31	48	28	38	27	0	0.11
MTH	51.2	30.9	41.1	741	0	3.15

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	28	38	27	0	0.10
2	48	28	38	27	0	0.10
3	48	28	38	27	0	0.10
4	48	28	38	27	0	0.11
5	48	28	38	27	0	0.11
6	48	28	38	27	0	0.11
7	47	28	38	27	0	0.11
8	47	28	38	27	0	0.11
9	47	28	38	27	0	0.11
10	47	28	38	27	0	0.11
11	47	28	38	27	0	0.11
12	47	28	38	27	0	0.11
13	47	28	37	28	0	0.11
14	47	28	37	28	0	0.11
15	47	28	37	28	0	0.11
16	47	28	37	28	0	0.11
17	47	28	38	27	0	0.11
18	47	28	38	27	0	0.11
19	47	28	38	27	0	0.11
20	47	28	38	27	0	0.11
21	48	28	38	27	0	0.11
22	48	28	38	27	0	0.11
23	48	28	38	27	0	0.11
24	48	28	38	27	0	0.11
25	48	28	38	27	0	0.11
26	48	28	38	27	0	0.11
27	48	29	38	27	0	0.11
28	48	29	38	27	0	0.11
29	48	29	38	27	0	0.11
30	48	29	38	27	0	0.11
31	49	29	39	26	0	0.11
MTH	47.6	28.2	37.9	840	0	3.38

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	29	39	26	0	0.11
2	49	29	39	26	0	0.11
3	49	29	39	26	0	0.11
4	49	30	39	26	0	0.11
5	49	30	39	26	0	0.11
6	50	30	40	25	0	0.11
7	50	30	40	25	0	0.11
8	50	30	40	25	0	0.11
9	50	30	40	25	0	0.11
10	51	30	40	25	0	0.11
11	51	30	40	25	0	0.11
12	51	30	41	24	0	0.11
13	51	30	41	24	0	0.11
14	52	30	41	24	0	0.11
15	52	30	41	24	0	0.12
16	52	30	41	24	0	0.12
17	52	31	42	23	0	0.12
18	52	31	42	23	0	0.12
19	53	31	42	23	0	0.12
20	53	31	42	23	0	0.12
21	53	32	43	22	0	0.12
22	54	32	43	22	0	0.12
23	54	32	43	22	0	0.13
24	54	32	43	22	0	0.13
25	54	33	44	21	0	0.13
26	55	33	44	21	0	0.13
27	55	33	44	21	0	0.13
28	55	33	44	21	0	0.13
MTH	51.8	30.8	41.3	664	0	3.28

WINTER SEASON: 50.2 29.9 40.1 2245 0 9.81

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	34	45	20	0	0.13
2	56	34	45	20	0	0.14
3	56	35	45	20	0	0.14
4	56	35	45	20	0	0.14
5	57	35	46	19	0	0.14
6	57	35	46	19	0	0.14
7	57	35	46	19	0	0.14
8	58	35	46	19	0	0.14
9	58	36	47	18	0	0.14
10	58	36	47	18	0	0.15
11	58	36	47	18	*	0.15
12	59	36	48	17	*	0.15
13	59	37	48	17	*	0.15
14	60	37	49	17	*	0.15
15	60	37	49	17	*	0.15
16	60	37	49	16	*	0.15
17	60	38	49	16	*	0.15
18	60	38	49	16	*	0.15
19	60	38	49	16	0	0.15
20	61	38	50	15	0	0.15
21	62	38	50	15	0	0.15
22	62	38	50	15	0	0.15
23	62	38	50	15	0	0.14
24	63	39	51	14	0	0.14
25	63	39	51	14	0	0.14
26	63	39	51	14	0	0.14
27	64	39	52	13	0	0.14
28	64	40	52	13	0	0.14
29	64	40	52	13	0	0.14
30	64	40	52	13	0	0.13
31	65	40	53	12	0	0.13
MTH	60.1	37.2	48.7	508	2	4.44

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	41	53	12	0	0.13
2	66	41	53	12	0	0.13
3	67	41	54	12	*	0.13
4	67	41	54	11	*	0.13
5	67	42	54	11	*	0.13
6	67	42	54	11	*	0.12
7	68	42	55	11	*	0.12
8	68	42	55	10	*	0.12
9	68	42	55	10	*	0.12
10	68	42	55	10	*	0.12
11	68	42	55	10	*	0.12
12	69	42	56	9	0	0.12
13	69	43	56	9	0	0.12
14	69	43	56	9	0	0.12
15	69	43	56	9	0	0.12
16	70	43	57	8	0	0.11
17	71	43	57	8	0	0.11
18	71	43	57	8	0	0.11
19	71	43	57	8	0	0.11
20	71	44	58	8	1	0.11
21	72	44	58	8	1	0.11
22	72	45	59	7	1	0.11
23	72	45	59	7	1	0.11
24	72	45	59	7	1	0.11
25	73	45	59	7	1	0.12
26	73	45	59	7	1	0.12
27	73	46	60	6	1	0.12
28	73	47	60	6	1	0.12
29	73	47	60	6	1	0.12
30	73	47	60	6	1	0.12
MTH	69.9	43.4	56.7	263	13	3.56

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	48	61	5	1	0.12
2	74	49	61	5	1	0.12
3	74	49	61	5	1	0.12
4	74	49	61	5	1	0.12
5	74	49	61	5	1	0.12
6	76	49	62	5	2	0.12
7	76	49	62	5	2	0.12
8	76	50	63	4	2	0.12
9	76	50	63	4	2	0.12
10	76	50	63	4	2	0.12
11	76	50	63	4	2	0.13
12	76	51	64	3	2	0.13
13	77	51	64	3	2	0.13
14	77	51	64	3	2	0.13
15	77	51	64	3	2	0.13
16	77	52	65	3	3	0.13
17	77	52	65	3	3	0.13
18	78	52	65	3	3	0.13
19	78	52	65	3	3	0.13
20	78	53	66	2	3	0.13
21	78	54	66	2	3	0.13
22	78	54	66	2	3	0.13
23	78	54	66	2	3	0.13
24	79	54	67	2	4	0.13
25	79	55	67	2	4	0.13
26	79	55	67	2	4	0.13
27	79	55	67	2	4	0.13
28	80	55	68	1	4	0.13
29	80	56	68	1	4	0.13
30	80	56	68	1	4	0.13
31	81	56	69	1	5	0.13
MTH	77.2	52.0	64.6	95	82	3.93

SPRING SEASON: 69.0 44.2 56.6 866 97 11.93

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HOT SPRINGS 2 NORTH CAROLINA Station Number: 314265

Latitude: 35B 54* 00 (Longitude: -082B 50* 00 (Elevation (feet): 1480

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	57	69	1	5	0.13
2	81	57	69	1	5	0.13
3	81	57	69	1	5	0.13
4	81	58	69	1	5	0.13
5	81	58	69	1	5	0.12
6	83	58	70	1	6	0.12
7	83	58	70	1	6	0.12
8	83	58	71	0	6	0.12
9	83	58	71	0	6	0.12
10	83	59	71	0	6	0.12
11	84	59	71	0	6	0.13
12	84	59	72	0	7	0.13
13	84	59	72	0	7	0.13
14	84	60	72	0	7	0.13
15	84	60	72	0	7	0.13
16	84	60	72	0	7	0.13
17	84	60	72	0	7	0.13
18	85	60	73	0	8	0.13
19	85	61	73	0	8	0.13
20	85	61	73	0	8	0.13
21	85	61	73	0	8	0.13
22	85	61	73	0	8	0.13
23	85	61	73	0	8	0.13
24	85	61	73	0	8	0.13
25	86	62	74	0	9	0.14
26	86	62	74	0	9	0.14
27	86	62	74	0	9	0.14
28	86	62	74	0	9	0.14
29	86	62	74	0	9	0.14
30	86	62	74	0	9	0.14
MTH	84.0	59.8	71.9	7	213	3.90

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	63	75	0	10	0.14
2	87	64	75	0	10	0.15
3	87	64	75	0	10	0.15
4	87	64	75	0	10	0.15
5	87	64	75	0	10	0.15
6	87	64	75	0	10	0.15
7	87	64	75	0	10	0.15
8	87	64	76	0	11	0.15
9	87	64	76	0	11	0.15
10	87	64	76	0	11	0.15
11	87	64	76	0	11	0.16
12	88	64	76	0	11	0.16
13	88	64	76	0	11	0.16
14	88	64	76	0	11	0.16
15	88	64	76	0	11	0.16
16	88	64	76	0	11	0.16
17	88	64	76	0	11	0.16
18	88	64	76	0	11	0.16
19	88	64	76	0	11	0.16
20	88	64	76	0	11	0.16
21	88	64	76	0	11	0.16
22	88	64	76	0	11	0.16
23	88	64	76	0	11	0.16
24	88	64	76	0	11	0.16
25	88	64	76	0	11	0.16
26	88	64	76	0	11	0.16
27	88	65	77	0	12	0.15
28	88	65	77	0	12	0.15
29	88	65	77	0	12	0.15
30	88	64	76	0	11	0.15
31	88	64	76	0	11	0.15
MTH	87.6	64.1	75.9	0	337	4.80
SUMMER SEASON:	86.2	62.4	74.3	7	866	12.94

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	88	64	76	0	11	0.15
2	88	64	76	0	11	0.15
3	88	64	76	0	11	0.15
4	88	64	76	0	11	0.15
5	88	64	76	0	11	0.15
6	88	64	76	0	11	0.14
7	88	64	76	0	11	0.14
8	88	64	76	0	11	0.14
9	88	64	76	0	11	0.14
10	88	64	76	0	11	0.14
11	88	64	76	0	11	0.14
12	88	64	76	0	11	0.14
13	88	64	76	0	11	0.14
14	88	64	76	0	11	0.14
15	87	64	76	0	11	0.14
16	87	64	76	0	11	0.14
17	87	64	75	0	10	0.13
18	87	64	75	0	10	0.13
19	87	63	75	0	10	0.13
20	87	63	75	0	10	0.13
21	87	63	75	0	10	0.13
22	87	63	75	0	10	0.13
23	87	63	75	0	10	0.13
24	86	62	74	0	9	0.13
25	86	62	74	0	9	0.13
26	86	62	74	0	9	0.13
27	86	62	74	0	9	0.13
28	86	62	74	0	9	0.13
29	85	62	74	0	9	0.13
30	85	61	73	0	8	0.13
31	85	61	73	0	8	0.13
MTH	87.1	63.3	75.2	0	316	4.24

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	61	73	0	8	0.13
2	85	61	73	0	8	0.13
3	84	61	73	0	8	0.13
4	84	61	72	0	7	0.13
5	84	61	72	0	7	0.13
6	84	61	72	0	7	0.12
7	84	61	72	0	7	0.12
8	83	60	71	0	6	0.12
9	83	60	71	0	6	0.12
10	83	59	71	0	6	0.12
11	83	59	71	0	6	0.12
12	82	59	71	0	6	0.12
13	82	59	71	0	6	0.12
14	82	58	70	0	5	0.12
15	82	58	70	0	5	0.12
16	81	57	69	1	5	0.12
17	81	57	69	1	5	0.12
18	81	57	69	1	5	0.11
19	80	57	69	1	5	0.11
20	80	56	68	1	4	0.11
21	80	56	68	1	4	0.11
22	79	56	68	1	4	0.11
23	79	55	67	2	4	0.11
24	79	55	67	2	4	0.11
25	79	55	67	2	4	0.10
26	78	54	66	2	3	0.10
27	78	54	66	2	3	0.10
28	77	53	65	3	3	0.10
29	77	53	65	3	3	0.10
30	77	53	65	3	3	0.09
MTH	81.2	57.6	69.4	26	157	3.45
AUTUMN SEASON:	71.1	47.2	59.2	731	200	9.09
ANNUAL:	69.1	45.9	57.5	3849	1163	43.77

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	53	64	4	3	0.09
2	76	53	64	4	3	0.09
3	75	52	63	4	2	0.09
4	75	52	63	4	2	0.09
5	75	52	63	4	2	0.08
6	75	50	62	5	2	0.08
7	75	50	62	5	2	0.08
8	75	49	62	5	2	0.08
9	74	48	61	6	2	0.08
10	73	48	61	6	2	0.08
11	73	47	60	6	1	0.08
12	73	47	60	6	1	0.08
13	72	47	60	6	1	0.08
14	72	46	59	7	1	0.08
15	72	46	59	7	1	0.08
16	71	46	59	7	1	0.08
17	71	45	58	8	1	0.08
18	71	45	58	8	1	0.08
19	70	45	58	8	1	0.08
20	70	44	57	9	1	0.08
21	70	44	57	9	1	0.08
22	69	44	57	9	1	0.08
23	69	43	56	10	1	0.08
24	68	43	56	10	1	0.08
25	68	43	56	10	1	0.08
26	68	42	55	10	0	0.08
27	68	42	55	10	0	0.08
28	67	42	55	10	0	0.08
29	66	42	54	11	0	0.08
30	66	42	54	11	0	0.09
31	66	42	54	11	0	0.09
MTH	71.3	46.3	58.8	230	37	2.54

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	41	54	12	1	0.09
2	66	41	53	13	1	0.09
3	66	41	53	13	1	0.09
4	66	40	53	13	1	0.09
5	65	40	52	13	0	0.10
6	64	40	52	13	*	0.10
7	64	40	52	13	*	0.10
8	64	40	52	13	*	0.10
9	63	40	52	14	*	0.10
10	63	39	51	14	*	0.10
11	63	39	51	14	*	0.10
12	62	39	51	15	*	0.10
13	62	38	50	15	*	0.10
14	62	38	50	15	*	0.10
15	61	37	49	16	*	0.10
16	61	37	49	16	*	0.11
17	60	37	49	16	0	0.11
18	60	37	49	16	0	0.11
19	59	37	48	17	0	0.11
20	59	37	48	17	0	0.11
21	59	36	48	17	0	0.11
22	58	36	47	18	0	0.11
23	58	36	47	18	0	0.11
24	58	36	47	18	0	0.11
25	57	35	46	19	0	0.11
26	57	35	46	19	0	0.11
27	57	35	46	19	0	0.11
28	57	35	46	19	0	0.11
29	56	34	45	20	0	0.11
30	56	34	45	20	0	0.10
MTH	61.0	37.7	49.4	475	6	3.10

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: HOT SPRINGS 2 NORTH CAROLINA Station Number: 314265

Latitude: 35° 54* 00(Longitude: -082° 50* 00(Elevation (feet): 1480

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.00	0.64	1.19	0.69	1.20	1.06	1.59	1.19	0.56	0.20	1.00	0.62	31.32
0.010	1.14	0.77	1.37	0.83	1.36	1.22	1.79	1.37	0.69	0.27	1.13	0.74	32.39
0.050	1.60	1.22	1.98	1.32	1.90	1.76	2.43	1.95	1.15	0.56	1.54	1.18	35.43
0.100	1.90	1.53	2.38	1.65	2.23	2.11	2.83	2.32	1.48	0.80	1.80	1.47	37.13
0.200	2.30	1.97	2.93	2.13	2.70	2.58	3.37	2.83	1.96	1.17	2.16	1.89	39.26
0.300	2.62	2.34	3.37	2.53	3.07	2.97	3.81	3.25	2.37	1.50	2.45	2.25	40.85
0.400	2.92	2.69	3.79	2.91	3.41	3.33	4.21	3.64	2.76	1.84	2.71	2.58	42.23
0.500	3.23	3.04	4.21	3.30	3.76	3.70	4.61	4.03	3.16	2.20	2.97	2.93	43.56
0.600	3.55	3.43	4.66	3.72	4.13	4.09	5.03	4.44	3.60	2.60	3.25	3.30	44.91
0.700	3.92	3.88	5.17	4.21	4.54	4.53	5.52	4.92	4.12	3.09	3.57	3.73	46.39
0.800	4.38	4.46	5.82	4.84	5.07	5.10	6.12	5.51	4.78	3.72	3.96	4.28	48.16
0.900	5.07	5.34	6.81	5.80	5.86	5.95	7.02	6.42	5.80	4.74	4.56	5.12	50.69
0.950	5.70	6.15	7.69	6.68	6.57	6.72	7.83	7.23	6.75	5.69	5.09	5.90	52.85
0.990	7.00	7.86	9.55	8.54	8.04	8.32	9.50	8.93	8.77	7.79	6.19	7.54	57.05
0.995	7.51	8.56	10.29	9.30	8.63	8.97	10.16	9.61	9.59	8.66	6.63	8.21	58.65

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: LAKE LURE 2 NORTH CAROLINA Station Number: 314764

Latitude: 35 B 26 * 00 (Longitude: -082 B 14 * 01 (Elevation (feet): 1040

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.13
6						0.13
7						0.13
8						0.13
9						0.13
10						0.13
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.12
17						0.12
18						0.12
19						0.12
20						0.12
21						0.13
22						0.13
23						0.13
24						0.13
25						0.13
26						0.13
27						0.13
28						0.13
29						0.13
30						0.13
31						0.14
MTH						4.03
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.15
7						0.15
8						0.15
9						0.15
10						0.15
11						0.15
12						0.15
13						0.15
14						0.16
15						0.16
16						0.16
17						0.16
18						0.16
19						0.16
20						0.16
21						0.16
22						0.16
23						0.16
24						0.16
25						0.16
26						0.16
27						0.16
28						0.16
29						0.16
30						0.16
31						0.16
MTH						4.78
						13.53

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16
2						0.16
3						0.16
4						0.16
5						0.16
6						0.16
7						0.16
8						0.16
9						0.17
10						0.17
11						0.17
12						0.17
13						0.17
14						0.17
15						0.17
16						0.17
17						0.17
18						0.17
19						0.17
20						0.17
21						0.17
22						0.17
23						0.17
24						0.17
25						0.18
26						0.18
27						0.18
28						0.18
MTH						4.72

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.18
2						0.18
3						0.18
4						0.18
5						0.18
6						0.18
7						0.18
8						0.18
9						0.18
10						0.19
11						0.18
12						0.18
13						0.18
14						0.18
15						0.18
16						0.18
17						0.18
18						0.18
19						0.18
20						0.18
21						0.18
22						0.18
23						0.18
24						0.17
25						0.17
26						0.17
27						0.17
28						0.17
29						0.17
30						0.16
31						0.16
MTH						5.49
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16
2						0.16
3						0.15
4						0.15
5						0.15
6						0.15
7						0.15
8						0.14
9						0.14
10						0.14
11						0.14
12						0.14
13						0.14
14						0.14
15						0.14
16						0.14
17						0.14
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.13
24						0.13
25						0.13
26						0.14
27						0.14
28						0.14
29						0.14
30						0.14
MTH						4.21
						14.39

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.14
7						0.14
8						0.15
9						0.15
10						0.15
11						0.15
12						0.15
13						0.15
14						0.15
15						0.15
16						0.15
17						0.15
18						0.15
19						0.15
20						0.15
21						0.16
22						0.16
23						0.16
24						0.16
25						0.16
26						0.16
27						0.16
28						0.16
29						0.16
30						0.16
31						0.16
MTH						4.69

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: LAKE LURE 2 NORTH CAROLINA Station Number: 314764

Latitude: 35 B 26 * 00 (Longitude: -082 B 14 * 01 (Elevation (feet): 1040

Climate Division: NC 01 Southern Mountains

JUNE							JULY							AUGUST						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16	1						0.15	1						0.18
2						0.16	2						0.15	2						0.18
3						0.16	3						0.15	3						0.18
4						0.16	4						0.15	4						0.18
5						0.16	5						0.15	5						0.19
6						0.16	6						0.15	6						0.19
7						0.16	7						0.15	7						0.19
8						0.17	8						0.15	8						0.19
9						0.17	9						0.15	9						0.19
10						0.17	10						0.15	10						0.19
11						0.17	11						0.15	11						0.20
12						0.17	12						0.15	12						0.20
13						0.16	13						0.15	13						0.20
14						0.16	14						0.15	14						0.20
15						0.16	15						0.15	15						0.20
16						0.16	16						0.15	16						0.20
17						0.16	17						0.15	17						0.20
18						0.16	18						0.15	18						0.20
19						0.16	19						0.15	19						0.20
20						0.16	20						0.15	20						0.20
21						0.16	21						0.16	21						0.20
22						0.16	22						0.16	22						0.20
23						0.16	23						0.16	23						0.20
24						0.16	24						0.16	24						0.19
25						0.16	25						0.16	25						0.19
26						0.16	26						0.16	26						0.19
27						0.16	27						0.17	27						0.19
28						0.16	28						0.17	28						0.19
29						0.16	29						0.17	29						0.19
30						0.15	30						0.17	30						0.18
							31						0.18	31						0.18
MTH						4.84	MTH						4.82	MTH						5.96
						SUMMER SEASON:							15.62							

SEPTEMBER							OCTOBER							NOVEMBER						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.18	1						0.14	1						0.16
2						0.18	2						0.14	2						0.16
3						0.18	3						0.14	3						0.16
4						0.17	4						0.14	4						0.16
5						0.17	5						0.14	5						0.16
6						0.17	6						0.14	6						0.16
7						0.17	7						0.15	7						0.16
8						0.17	8						0.15	8						0.16
9						0.16	9						0.15	9						0.17
10						0.16	10						0.15	10						0.17
11						0.16	11						0.15	11						0.17
12						0.16	12						0.15	12						0.17
13						0.16	13						0.15	13						0.16
14						0.16	14						0.15	14						0.16
15						0.15	15						0.15	15						0.16
16						0.15	16						0.15	16						0.16
17						0.15	17						0.15	17						0.16
18						0.15	18						0.15	18						0.16
19						0.15	19						0.15	19						0.16
20						0.15	20						0.15	20						0.16
21						0.15	21						0.15	21						0.16
22						0.15	22						0.15	22						0.16
23						0.15	23						0.15	23						0.16
24						0.15	24						0.15	24						0.16
25						0.15	25						0.15	25						0.15
26						0.15	26						0.15	26						0.15
27						0.15	27						0.16	27						0.15
28						0.15	28						0.16	28						0.15
29						0.14	29						0.16	29						0.15
30						0.14	30						0.16	30						0.14
							31						0.16							
MTH						4.73	MTH						4.64	MTH						4.77
						AUTUMN SEASON:							14.14							
						ANNUAL:							57.68							

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: LAKE LURE 2 NORTH CAROLINA Station Number: 314764

Latitude: 35° 26* 00(Longitude: -082° 14* 01(Elevation (feet): 1040

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.69	0.57	0.80	0.53	0.80	0.65	0.83	0.47	0.18	0.09	0.88	0.47	36.27
0.010	0.86	0.73	1.00	0.68	0.98	0.82	1.01	0.63	0.27	0.15	1.07	0.60	38.02
0.050	1.49	1.33	1.74	1.23	1.62	1.45	1.67	1.33	0.71	0.48	1.72	1.11	43.09
0.100	1.95	1.78	2.26	1.63	2.06	1.91	2.13	1.88	1.11	0.83	2.17	1.50	45.97
0.200	2.62	2.46	3.03	2.23	2.71	2.60	2.79	2.75	1.80	1.47	2.82	2.08	49.64
0.300	3.20	3.05	3.69	2.75	3.25	3.20	3.35	3.54	2.45	2.11	3.36	2.59	52.40
0.400	3.76	3.63	4.33	3.26	3.77	3.77	3.88	4.33	3.13	2.81	3.88	3.08	54.84
0.500	4.34	4.23	4.99	3.79	4.31	4.37	4.44	5.17	3.88	3.59	4.41	3.60	57.19
0.600	4.98	4.89	5.72	4.37	4.90	5.03	5.04	6.11	4.73	4.51	4.99	4.18	59.60
0.700	5.72	5.68	6.57	5.06	5.58	5.81	5.74	7.24	5.78	5.66	5.66	4.86	62.26
0.800	6.69	6.70	7.67	5.96	6.46	6.82	6.63	8.72	7.19	7.22	6.52	5.74	65.47
0.900	8.19	8.30	9.38	7.35	7.82	8.39	8.02	11.08	9.48	9.82	7.84	7.13	70.10
0.950	9.57	9.79	10.96	8.65	9.07	9.85	9.30	13.31	11.68	12.35	9.05	8.43	74.08
0.990	12.56	13.01	14.35	11.45	11.74	12.99	12.03	18.20	16.60	18.09	11.64	11.23	81.93
0.995	13.78	14.34	15.74	12.60	12.83	14.28	13.14	20.23	18.67	20.53	12.68	12.39	84.95

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: LAKE TOXAWAY 2 SW NORTH CAROLINA Station Number: 314788

Latitude: 35 B 06 * 31 (Longitude: -082 B 57* 39 (Elevation (feet): 3080

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.27
2						0.26
3						0.26
4						0.26
5						0.25
6						0.25
7						0.24
8						0.24
9						0.24
10						0.24
11						0.23
12						0.23
13						0.23
14						0.23
15						0.23
16						0.23
17						0.23
18						0.23
19						0.23
20						0.22
21						0.23
22						0.23
23						0.23
24						0.23
25						0.23
26						0.23
27						0.23
28						0.23
29						0.24
30						0.24
31						0.24
MTH						7.36
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.24
2						0.25
3						0.25
4						0.25
5						0.25
6						0.26
7						0.26
8						0.26
9						0.26
10						0.26
11						0.27
12						0.27
13						0.27
14						0.27
15						0.27
16						0.27
17						0.27
18						0.27
19						0.27
20						0.27
21						0.27
22						0.27
23						0.27
24						0.27
25						0.27
26						0.27
27						0.26
28						0.26
29						0.26
30						0.26
31						0.26
MTH						8.16
						22.68

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.25
2						0.25
3						0.25
4						0.25
5						0.25
6						0.25
7						0.25
8						0.25
9						0.25
10						0.25
11						0.25
12						0.25
13						0.25
14						0.25
15						0.25
16						0.25
17						0.25
18						0.25
19						0.25
20						0.26
21						0.26
22						0.26
23						0.26
24						0.27
25						0.27
26						0.27
27						0.28
28						0.28
MTH						7.16

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.29
2						0.29
3						0.29
4						0.30
5						0.30
6						0.30
7						0.30
8						0.31
9						0.31
10						0.31
11						0.31
12						0.31
13						0.31
14						0.31
15						0.31
16						0.31
17						0.31
18						0.31
19						0.31
20						0.31
21						0.30
22						0.30
23						0.30
24						0.30
25						0.29
26						0.29
27						0.29
28						0.28
29						0.28
30						0.27
31						0.27
MTH						9.27
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.26
2						0.26
3						0.25
4						0.25
5						0.24
6						0.24
7						0.24
8						0.23
9						0.23
10						0.23
11						0.23
12						0.22
13						0.22
14						0.22
15						0.22
16						0.22
17						0.22
18						0.22
19						0.22
20						0.22
21						0.22
22						0.23
23						0.23
24						0.23
25						0.23
26						0.23
27						0.24
28						0.24
29						0.25
30						0.25
MTH						6.99
						24.80

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.25
2						0.26
3						0.26
4						0.26
5						0.27
6						0.27
7						0.27
8						0.28
9						0.28
10						0.28
11						0.28
12						0.28
13						0.29
14						0.29
15						0.29
16						0.29
17						0.29
18						0.29
19						0.29
20						0.28
21						0.28
22						0.28
23						0.28
24						0.28
25						0.28
26						0.27
27						0.27
28						0.27
29						0.26
30						0.26
31						0.26
MTH						8.54

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: LAKE TOXAWAY 2 SW NORTH CAROLINA Station Number: 314788

Latitude: 35 B 06 * 31 (Longitude: -082 B 57* 39 (Elevation (feet): 3080

Climate Division: NC 01 Southern Mountains

JUNE							JULY							AUGUST						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.25	1						0.23	1						0.26
2						0.25	2						0.23	2						0.25
3						0.24	3						0.24	3						0.25
4						0.24	4						0.24	4						0.25
5						0.24	5						0.24	5						0.25
6						0.23	6						0.24	6						0.25
7						0.23	7						0.24	7						0.25
8						0.23	8						0.25	8						0.25
9						0.23	9						0.25	9						0.25
10						0.22	10						0.25	10						0.25
11						0.22	11						0.25	11						0.25
12						0.22	12						0.25	12						0.25
13						0.22	13						0.25	13						0.25
14						0.22	14						0.25	14						0.25
15						0.22	15						0.26	15						0.25
16						0.22	16						0.26	16						0.25
17						0.21	17						0.26	17						0.25
18						0.21	18						0.26	18						0.25
19						0.21	19						0.26	19						0.25
20						0.21	20						0.26	20						0.25
21						0.21	21						0.26	21						0.25
22						0.22	22						0.26	22						0.25
23						0.22	23						0.26	23						0.25
24						0.22	24						0.26	24						0.25
25						0.22	25						0.26	25						0.24
26						0.22	26						0.26	26						0.24
27						0.22	27						0.26	27						0.25
28						0.22	28						0.26	28						0.25
29						0.23	29						0.26	29						0.25
30						0.23	30						0.26	30						0.25
							31						0.26	31						0.25
MTH						6.73	MTH						7.83	MTH						7.74
					SUMMER SEASON:								22.30							

SEPTEMBER							OCTOBER							NOVEMBER						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.25	1						0.20	1						0.25
2						0.25	2						0.20	2						0.26
3						0.25	3						0.20	3						0.26
4						0.25	4						0.19	4						0.27
5						0.25	5						0.19	5						0.27
6						0.25	6						0.19	6						0.28
7						0.25	7						0.19	7						0.28
8						0.25	8						0.19	8						0.29
9						0.24	9						0.19	9						0.29
10						0.24	10						0.19	10						0.29
11						0.24	11						0.19	11						0.30
12						0.24	12						0.19	12						0.30
13						0.24	13						0.19	13						0.30
14						0.24	14						0.19	14						0.30
15						0.24	15						0.19	15						0.30
16						0.24	16						0.19	16						0.30
17						0.24	17						0.19	17						0.30
18						0.23	18						0.19	18						0.30
19						0.23	19						0.20	19						0.30
20						0.23	20						0.20	20						0.30
21						0.23	21						0.20	21						0.30
22						0.23	22						0.20	22						0.30
23						0.22	23						0.21	23						0.30
24						0.22	24						0.21	24						0.29
25						0.22	25						0.22	25						0.29
26						0.22	26						0.22	26						0.29
27						0.21	27						0.22	27						0.29
28						0.21	28						0.23	28						0.28
29						0.21	29						0.24	29						0.28
30						0.20	30						0.24	30						0.27
							31						0.25							
MTH						7.02	MTH						6.29	MTH						8.63
					AUTUMN SEASON:								21.94							
					ANNUAL:								91.72							

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: LAKE TOXAWAY 2 SW NORTH CAROLINA Station Number: 314788

Latitude: 35° 06* 31(Longitude: -082° 57* 39(Elevation (feet): 3080

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.05	0.80	1.18	0.68	1.15	0.93	0.80	0.60	0.25	0.10	1.46	0.65	50.46
0.010	1.33	1.04	1.50	0.90	1.45	1.16	1.05	0.81	0.38	0.17	1.79	0.87	53.65
0.050	2.40	1.95	2.71	1.76	2.58	2.05	2.03	1.71	1.02	0.58	2.96	1.76	63.09
0.100	3.18	2.62	3.59	2.42	3.39	2.69	2.76	2.42	1.60	1.03	3.78	2.44	68.56
0.200	4.34	3.66	4.91	3.44	4.60	3.65	3.90	3.56	2.61	1.88	4.97	3.52	75.61
0.300	5.35	4.56	6.06	4.34	5.65	4.47	4.90	4.58	3.58	2.75	5.97	4.48	80.99
0.400	6.33	5.45	7.17	5.23	6.66	5.26	5.89	5.61	4.60	3.70	6.94	5.43	85.79
0.500	7.35	6.38	8.34	6.17	7.71	6.09	6.93	6.70	5.72	4.78	7.93	6.44	90.44
0.600	8.48	7.41	9.62	7.21	8.87	7.00	8.09	7.93	7.00	6.06	9.01	7.57	95.25
0.700	9.80	8.63	11.13	8.45	10.24	8.07	9.46	9.40	8.58	7.67	10.27	8.92	100.59
0.800	11.52	10.22	13.09	10.08	12.00	9.45	11.24	11.34	10.70	9.87	11.89	10.68	107.08
0.900	14.21	12.71	16.15	12.64	14.76	11.61	14.07	14.42	14.15	13.54	14.40	13.48	116.53
0.950	16.70	15.04	19.00	15.05	17.31	13.60	16.71	17.33	17.48	17.13	16.70	16.10	124.74
0.990	22.09	20.08	25.15	20.28	22.81	17.90	22.45	23.72	24.94	25.33	21.63	21.84	141.13
0.995	24.29	22.16	27.67	22.44	25.07	19.67	24.81	26.37	28.07	28.81	23.63	24.22	147.45

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MARION 2 NW NORTH CAROLINA Station Number: 315340

Latitude: 35° 39* 47(Longitude: -082° 01* 45(Elevation (feet): 1466

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	31	43	22	0	0.14
2	55	31	43	22	0	0.14
3	54	31	42	23	0	0.14
4	54	30	42	23	0	0.13
5	54	30	42	23	0	0.13
6	54	29	41	24	0	0.13
7	53	29	41	24	0	0.13
8	52	29	41	24	0	0.13
9	52	29	41	24	0	0.13
10	51	29	40	25	0	0.13
11	51	29	40	25	0	0.13
12	51	29	40	25	0	0.13
13	50	29	40	25	0	0.13
14	50	28	39	26	0	0.13
15	50	28	39	26	0	0.13
16	50	28	39	26	0	0.12
17	50	27	39	26	0	0.12
18	49	27	38	27	0	0.12
19	49	27	38	27	0	0.12
20	49	27	38	27	0	0.12
21	49	27	38	27	0	0.12
22	49	27	38	27	0	0.12
23	49	27	38	27	0	0.12
24	48	27	38	27	0	0.12
25	48	26	37	28	0	0.12
26	48	26	37	28	0	0.12
27	48	26	37	28	0	0.12
28	48	26	37	28	0	0.12
29	48	26	37	28	0	0.13
30	48	26	37	28	0	0.13
31	48	26	37	28	0	0.13
MTH	50.5	28.0	39.3	798	0	3.93
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	26	37	28	0	0.13
2	48	26	37	28	0	0.13
3	48	26	37	28	0	0.13
4	48	26	37	28	0	0.13
5	48	25	36	29	0	0.13
6	47	25	36	29	0	0.13
7	47	25	36	29	0	0.13
8	47	25	36	29	0	0.13
9	47	25	36	29	0	0.13
10	47	25	36	29	0	0.13
11	47	25	36	29	0	0.13
12	47	25	36	29	0	0.13
13	47	25	36	29	0	0.13
14	47	25	36	29	0	0.13
15	47	25	36	29	0	0.13
16	47	25	36	29	0	0.13
17	47	25	36	29	0	0.14
18	48	25	37	28	0	0.14
19	48	25	37	28	0	0.14
20	48	25	37	28	0	0.14
21	48	25	37	28	0	0.14
22	48	26	37	28	0	0.14
23	48	26	37	28	0	0.14
24	48	26	37	28	0	0.14
25	48	26	37	28	0	0.14
26	48	26	37	28	0	0.14
27	48	26	37	28	0	0.14
28	48	26	37	28	0	0.14
29	48	26	37	28	0	0.14
30	48	26	37	28	0	0.14
31	49	26	38	27	0	0.14
MTH	47.7	25.5	36.6	880	0	4.18
	50.1	27.2	38.7	2372	0	12.47

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	26	38	27	0	0.14
2	50	26	38	27	0	0.14
3	50	26	38	27	0	0.14
4	50	26	38	27	0	0.15
5	50	27	38	27	0	0.15
6	50	27	38	27	0	0.15
7	50	27	39	26	0	0.15
8	51	27	39	26	0	0.15
9	51	27	39	26	0	0.15
10	51	27	39	26	0	0.15
11	51	27	39	26	0	0.15
12	51	27	39	26	0	0.15
13	52	28	40	25	0	0.15
14	52	28	40	25	0	0.15
15	52	28	40	25	0	0.15
16	52	28	40	25	0	0.16
17	53	28	41	24	0	0.16
18	53	29	41	24	0	0.16
19	53	29	41	24	0	0.16
20	53	29	41	24	0	0.16
21	54	29	42	23	0	0.16
22	54	30	42	23	0	0.16
23	54	30	42	23	0	0.17
24	54	30	42	23	0	0.17
25	55	30	43	22	0	0.17
26	55	31	43	22	0	0.17
27	55	31	43	22	0	0.17
28	55	31	43	22	0	0.17
MTH	52.2	28.2	40.2	694	0	4.36

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	32	44	21	0	0.18
2	57	32	44	21	*	0.18
3	57	32	45	21	*	0.18
4	57	33	45	20	*	0.18
5	58	33	45	20	*	0.18
6	58	33	45	20	*	0.18
7	58	34	46	19	*	0.18
8	59	34	46	19	0	0.18
9	59	34	46	19	0	0.18
10	59	34	47	18	0	0.19
11	59	34	47	18	0	0.19
12	60	34	47	18	0	0.19
13	60	35	47	18	0	0.19
14	60	35	48	17	0	0.19
15	61	35	48	17	0	0.19
16	61	35	48	17	0	0.19
17	61	36	49	16	0	0.19
18	62	36	49	16	0	0.18
19	62	36	49	16	0	0.18
20	62	36	49	16	*	0.18
21	62	37	50	15	*	0.18
22	63	37	50	15	*	0.18
23	63	37	50	15	*	0.18
24	63	38	51	15	*	0.18
25	64	38	51	14	*	0.18
26	64	38	51	14	*	0.17
27	64	38	51	14	*	0.17
28	64	39	52	13	*	0.17
29	65	39	52	13	0	0.17
30	65	39	52	13	0	0.17
31	65	39	52	13	0	0.16
MTH	60.9	35.6	48.3	521	2	5.59
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	41	53	12	0	0.16
2	66	41	53	12	*	0.16
3	66	41	53	12	*	0.16
4	66	42	54	12	*	0.16
5	67	42	54	11	*	0.15
6	67	42	54	11	*	0.15
7	67	42	54	11	*	0.15
8	67	42	55	10	*	0.15
9	68	42	55	10	0	0.15
10	68	43	55	10	0	0.15
11	68	43	55	10	0	0.14
12	68	43	56	9	0	0.14
13	69	43	56	9	0	0.14
14	69	43	56	9	0	0.14
15	69	43	56	9	0	0.14
16	69	44	57	8	0	0.14
17	70	44	57	8	0	0.14
18	70	44	57	8	0	0.14
19	70	45	58	7	0	0.14
20	70	45	58	7	0	0.14
21	71	45	58	7	0	0.14
22	71	45	58	7	0	0.14
23	71	46	59	7	1	0.15
24	72	46	59	7	1	0.15
25	72	46	59	7	1	0.15
26	72	47	60	6	1	0.15
27	72	47	60	6	1	0.15
28	73	47	60	6	1	0.15
29	73	47	60	6	1	0.15
30	73	48	61	5	1	0.16
MTH	69.3	44.0	56.7	259	9	4.43
	69.0	44.1	56.6	863	90	15.36

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	49	61	5	1	0.16
2	74	49	61	5	1	0.16
3	74	49	61	5	1	0.16
4	74	50	62	4	1	0.16
5	74	50	62	4	1	0.16
6	74	50	62	4	1	0.17
7	74	51	62	4	1	0.17
8	75	51	63	4	2	0.17
9	76	51	63	4	2	0.17
10	76	51	63	4	2	0.17
11	76	51	64	3	2	0.17
12	76	52	64	3	2	0.17
13	76	52	64	3	2	0.17
14	76	52	64	3	2	0.17
15	77	53	65	2	2	0.18
16	77	53	65	2	2	0.18
17	77	53	65	2	2	0.18
18	77	54	66	2	3	0.18
19	78	54	66	2	3	0.18
20	78	54	66	2	3	0.18
21	78	54	66	2	3	0.18
22	78	54	66	2	3	0.18
23	78	54	66	2	3	0.18
24	79	55	67	2	4	0.18
25	79	55	67	2	4	0.18
26	79	56	68	1	4	0.18
27	79	56	68	1	4	0.17
28	80	56	68	1	4	0.17
29	80	56	68	1	4	0.17
30	80	57	69	1	5	0.17
31	80	57	69	1	5	0.17
MTH	76.9	52.9	64.9	83	79	5.34

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MARION 2 NW NORTH CAROLINA Station Number: 315340

Latitude: 35 B 39 * 47 (Longitude: -082 B 01 * 45 (Elevation (feet): 1466

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	58	69	1	5	0.17
2	80	58	69	1	5	0.17
3	80	59	69	1	5	0.17
4	81	59	70	1	6	0.17
5	81	59	70	1	6	0.17
6	82	59	70	1	6	0.16
7	82	59	70	1	6	0.16
8	82	59	70	1	6	0.16
9	82	59	70	1	6	0.16
10	82	59	70	1	6	0.16
11	82	60	71	1	7	0.16
12	83	60	72	0	7	0.16
13	83	61	72	0	7	0.16
14	83	61	72	0	7	0.16
15	83	61	72	0	7	0.16
16	83	62	73	0	8	0.15
17	83	62	73	0	8	0.15
18	84	62	73	0	8	0.15
19	84	62	73	0	8	0.15
20	84	62	73	0	8	0.15
21	84	62	73	0	8	0.15
22	84	63	74	0	9	0.15
23	84	63	74	0	9	0.15
24	85	63	74	0	9	0.15
25	85	63	74	0	9	0.15
26	85	63	74	0	9	0.15
27	85	63	74	0	9	0.15
28	85	63	74	0	9	0.15
29	85	64	75	0	10	0.14
30	86	64	75	0	10	0.14
MTH	83.1	61.1	72.1	11	223	4.68

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	65	75	0	10	0.14
2	86	65	75	0	10	0.14
3	86	65	75	0	10	0.14
4	86	65	75	0	10	0.14
5	86	65	75	0	10	0.14
6	86	65	76	0	11	0.14
7	86	65	76	0	11	0.14
8	86	65	76	0	11	0.14
9	86	65	76	0	11	0.14
10	87	65	76	0	11	0.14
11	87	65	76	0	11	0.14
12	87	65	76	0	11	0.14
13	87	65	76	0	11	0.14
14	87	65	76	0	11	0.14
15	87	65	76	0	11	0.14
16	87	65	76	0	11	0.14
17	87	65	76	0	11	0.14
18	87	66	76	0	11	0.14
19	87	66	77	0	12	0.14
20	87	66	77	0	12	0.14
21	87	66	77	0	12	0.14
22	87	66	77	0	12	0.14
23	87	66	77	0	12	0.13
24	87	66	77	0	12	0.13
25	87	66	77	0	12	0.13
26	87	66	77	0	12	0.13
27	87	66	76	0	11	0.13
28	87	66	76	0	11	0.13
29	87	66	76	0	11	0.13
30	87	66	76	0	11	0.13
31	87	66	76	0	11	0.13
MTH	86.7	65.5	76.1	0	344	4.25

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	87	66	76	0	11	0.13
2	87	66	76	0	11	0.13
3	87	66	76	0	11	0.13
4	87	65	76	0	11	0.13
5	87	65	76	*	11	0.14
6	87	65	76	*	11	0.14
7	86	65	76	*	11	0.14
8	85	65	75	*	11	0.14
9	85	65	75	*	11	0.14
10	85	65	75	*	10	0.14
11	85	65	75	*	10	0.14
12	85	65	75	*	10	0.14
13	85	65	75	0	10	0.14
14	85	65	75	0	10	0.14
15	85	65	75	0	10	0.14
16	85	64	75	0	10	0.14
17	85	64	75	0	10	0.14
18	84	64	74	0	9	0.14
19	84	64	74	0	9	0.14
20	84	64	74	0	9	0.14
21	84	64	74	0	9	0.14
22	84	64	74	0	9	0.14
23	84	64	74	0	9	0.14
24	83	63	73	0	8	0.14
25	83	63	73	0	8	0.14
26	83	63	73	0	8	0.14
27	83	63	73	0	8	0.14
28	83	63	73	0	8	0.14
29	83	63	73	0	8	0.15
30	82	62	72	0	7	0.15
31	82	62	72	0	7	0.15
MTH	84.7	64.3	74.5	2	295	4.33

SUMMER SEASON: 84.8 63.6 74.2 13 862 13.26

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	62	72	0	7	0.15
2	82	62	72	0	7	0.15
3	82	62	72	0	7	0.15
4	81	62	71	0	6	0.15
5	81	62	71	0	6	0.15
6	81	62	71	0	6	0.15
7	81	62	71	0	6	0.15
8	81	61	71	0	6	0.15
9	81	60	70	0	5	0.15
10	81	60	70	0	5	0.15
11	80	60	70	0	5	0.15
12	80	60	70	0	5	0.15
13	80	60	70	0	5	0.15
14	79	60	70	0	5	0.15
15	79	59	69	0	4	0.15
16	79	59	69	0	4	0.15
17	78	58	68	1	4	0.15
18	78	58	68	1	4	0.15
19	78	57	68	1	4	0.15
20	77	57	67	1	3	0.15
21	77	57	67	1	3	0.15
22	77	56	67	1	3	0.15
23	77	55	66	2	3	0.15
24	76	55	66	2	3	0.15
25	76	55	66	2	3	0.14
26	76	55	66	2	3	0.14
27	76	54	65	2	2	0.14
28	75	53	64	3	2	0.14
29	75	53	64	3	2	0.14
30	74	52	63	4	2	0.14
MTH	78.7	58.3	68.5	26	130	4.44

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	52	63	4	2	0.14
2	74	52	63	4	2	0.14
3	74	52	63	4	2	0.14
4	74	51	63	4	2	0.14
5	74	49	61	5	1	0.14
6	74	49	61	5	1	0.13
7	72	49	61	5	1	0.13
8	72	48	60	6	1	0.13
9	72	48	60	6	1	0.13
10	71	47	59	7	1	0.13
11	71	47	59	7	1	0.13
12	71	47	59	7	1	0.13
13	70	46	58	8	1	0.13
14	70	46	58	8	1	0.13
15	69	45	57	8	0	0.13
16	69	45	57	8	0	0.13
17	69	45	57	8	0	0.13
18	68	44	56	9	0	0.13
19	68	44	56	9	0	0.13
20	68	44	56	9	0	0.13
21	67	43	55	10	0	0.13
22	67	43	55	10	0	0.13
23	67	43	55	10	0	0.13
24	67	42	55	10	0	0.13
25	66	42	54	11	0	0.13
26	66	42	54	11	0	0.13
27	66	41	54	11	0	0.14
28	65	41	53	12	0	0.14
29	65	41	53	12	0	0.14
30	65	41	53	12	0	0.14
31	65	40	53	12	0	0.14
MTH	69.4	45.5	57.5	252	18	4.13

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	40	52	13	0	0.14
2	64	40	52	13	0	0.14
3	64	40	52	13	0	0.14
4	63	40	51	14	0	0.14
5	63	40	51	14	0	0.14
6	63	39	51	14	0	0.14
7	63	39	51	14	0	0.14
8	62	38	50	15	0	0.15
9	62	38	50	15	0	0.15
10	62	38	50	15	0	0.15
11	61	38	50	15	0	0.15
12	61	37	49	16	0	0.15
13	61	37	49	16	0	0.15
14	61	37	49	16	0	0.15
15	60	36	48	17	0	0.15
16	60	36	48	17	0	0.15
17	60	36	48	17	0	0.15
18	59	35	47	18	0	0.15
19	59	35	47	18	0	0.15
20	58	35	47	18	0	0.15
21	58	34	46	19	0	0.15
22	58	34	46	19	0	0.15
23	57	34	46	19	0	0.14
24	57	33	45	20	0	0.14
25	57	33	45	20	0	0.14
26	56	33	45	20	0	0.14
27	56	32	44	21	0	0.14
28	56	32	44	21	0	0.14
29	55	32	44	21	0	0.14
30	55	31	43	22	0	0.14
MTH	59.9	36.1	48.0	510	0	4.35

AUTUMN SEASON: 69.3 46.6 58.0 788 148 12.92

ANNUAL: 68.3 45.4 56.9 4036 1100 54.01

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MARION 2 NW NORTH CAROLINA Station Number: 315340

Latitude: 35° 39* 47(Longitude: -082° 01* 45(Elevation (feet): 1466

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.37	0.44	0.67	0.21	1.04	0.38	0.46	0.43	0.15	0.00	0.62	0.21	27.96
0.010	0.49	0.57	0.86	0.31	1.24	0.52	0.60	0.57	0.23	0.00	0.77	0.30	29.93
0.050	0.99	1.11	1.58	0.75	1.98	1.07	1.14	1.11	0.64	0.32	1.35	0.71	35.79
0.100	1.38	1.52	2.11	1.14	2.48	1.51	1.54	1.52	1.00	0.77	1.76	1.06	39.22
0.200	1.99	2.16	2.91	1.78	3.20	2.19	2.15	2.14	1.64	1.43	2.37	1.63	43.66
0.300	2.54	2.71	3.61	2.39	3.80	2.81	2.69	2.70	2.26	2.04	2.90	2.17	47.07
0.400	3.08	3.27	4.29	3.01	4.37	3.42	3.22	3.25	2.90	2.67	3.41	2.71	50.13
0.500	3.65	3.85	5.01	3.69	4.95	4.07	3.78	3.83	3.61	3.35	3.94	3.30	53.10
0.600	4.30	4.49	5.80	4.46	5.59	4.81	4.39	4.47	4.42	4.14	4.52	3.98	56.18
0.700	5.06	5.26	6.73	5.40	6.32	5.68	5.12	5.24	5.42	5.10	5.20	4.79	59.61
0.800	6.07	6.27	7.94	6.66	7.26	6.83	6.08	6.23	6.76	6.39	6.09	5.87	63.80
0.900	7.66	7.85	9.84	8.69	8.70	8.65	7.57	7.81	8.95	8.49	7.46	7.61	69.92
0.950	9.16	9.33	11.60	10.63	10.03	10.38	8.97	9.28	11.07	10.51	8.73	9.27	75.26
0.990	12.43	12.56	15.43	14.94	12.83	14.14	12.01	12.49	15.80	15.02	11.46	12.96	85.96
0.995	13.78	13.89	16.99	16.74	13.97	15.70	13.26	13.81	17.79	16.92	12.58	14.49	90.11

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MARSHALL NORTH CAROLINA Station Number: 315356

Latitude: 35 B 48 * 08 (Longitude: -082 B 40* 02 (Elevation (feet): 2000

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	27	40	25	0	0.09
2	53	27	40	25	0	0.09
3	53	27	40	25	0	0.09
4	52	27	39	26	0	0.09
5	52	27	39	26	0	0.09
6	52	26	39	26	0	0.09
7	52	25	38	27	0	0.09
8	52	25	38	27	0	0.09
9	51	25	38	27	0	0.09
10	50	25	38	27	0	0.09
11	50	25	38	27	0	0.09
12	50	24	37	28	0	0.09
13	50	24	37	28	0	0.09
14	49	24	37	28	0	0.09
15	49	24	37	28	0	0.08
16	48	24	36	29	0	0.08
17	48	24	36	29	0	0.09
18	48	24	36	29	0	0.09
19	48	24	36	29	0	0.09
20	48	23	36	29	0	0.09
21	47	23	35	30	0	0.09
22	47	23	35	30	0	0.09
23	47	23	35	30	0	0.09
24	47	23	35	30	0	0.09
25	47	23	35	30	0	0.09
26	47	23	35	30	0	0.09
27	47	22	35	30	0	0.09
28	46	22	34	31	0	0.09
29	46	22	34	31	0	0.09
30	46	22	34	31	0	0.09
31	46	22	34	31	0	0.09
MTH	49.1	24.2	36.7	879	0	2.77
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	46	22	34	31	0	0.10
2	46	22	34	31	0	0.10
3	46	22	34	31	0	0.10
4	46	22	34	31	0	0.10
5	45	22	34	31	0	0.10
6	45	22	34	31	0	0.10
7	45	21	33	32	0	0.10
8	45	21	33	32	0	0.10
9	45	21	33	32	0	0.11
10	45	21	33	32	0	0.11
11	45	21	33	32	0	0.11
12	45	21	33	32	0	0.11
13	45	21	33	32	0	0.11
14	45	21	33	32	0	0.11
15	45	21	33	32	0	0.11
16	45	21	33	32	0	0.11
17	45	21	33	32	0	0.11
18	45	21	33	32	0	0.11
19	45	21	33	32	0	0.11
20	45	21	33	32	0	0.11
21	45	21	33	32	0	0.11
22	45	21	33	32	0	0.11
23	46	20	33	32	0	0.11
24	46	20	33	32	0	0.11
25	46	20	33	32	0	0.11
26	46	20	33	32	0	0.12
27	46	20	33	32	0	0.12
28	46	20	33	32	0	0.12
29	46	20	33	32	0	0.12
30	46	21	34	31	0	0.12
31	47	21	34	31	0	0.12
MTH	45.5	21.0	33.3	984	0	3.39
	48.1	22.5	35.3	2672	0	9.54

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	21	34	31	0	0.11
2	47	21	34	31	0	0.11
3	47	21	34	31	0	0.12
4	48	21	34	31	0	0.12
5	48	21	34	31	0	0.12
6	48	21	34	31	0	0.12
7	48	21	35	30	0	0.12
8	48	21	35	30	0	0.12
9	48	21	35	30	0	0.12
10	49	21	35	30	0	0.12
11	49	21	35	30	0	0.12
12	49	21	35	30	0	0.12
13	49	22	36	29	0	0.12
14	50	22	36	29	0	0.12
15	50	22	36	29	0	0.12
16	50	22	36	29	0	0.12
17	50	22	36	29	0	0.12
18	51	23	37	28	0	0.12
19	51	23	37	28	0	0.12
20	51	23	37	28	0	0.12
21	51	23	37	28	0	0.12
22	52	23	38	27	0	0.12
23	52	24	38	27	0	0.12
24	52	24	38	27	0	0.12
25	52	24	38	27	0	0.13
26	53	24	39	26	0	0.13
27	53	25	39	26	0	0.13
28	53	25	39	26	0	0.13
MTH	49.9	22.3	36.1	809	0	3.38

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	53	26	39	26	0	0.13
2	54	26	40	25	0	0.13
3	55	26	40	25	0	0.13
4	55	26	40	25	0	0.13
5	55	26	41	24	0	0.13
6	55	26	41	24	0	0.13
7	56	26	41	24	0	0.13
8	56	26	41	24	0	0.13
9	56	27	42	23	0	0.13
10	57	27	42	23	0	0.14
11	57	27	42	23	0	0.14
12	57	28	43	22	0	0.14
13	57	28	43	22	0	0.14
14	58	28	43	22	0	0.14
15	58	28	43	22	0	0.13
16	58	29	44	21	0	0.13
17	59	29	44	21	0	0.13
18	59	29	44	21	0	0.13
19	59	29	44	21	0	0.13
20	60	30	45	20	0	0.13
21	60	30	45	20	0	0.13
22	60	30	45	20	0	0.13
23	60	30	45	20	0	0.13
24	61	31	46	19	0	0.13
25	61	31	46	19	0	0.13
26	61	31	46	19	0	0.13
27	61	31	46	19	0	0.13
28	62	31	47	18	0	0.13
29	62	32	47	18	0	0.12
30	62	32	47	18	0	0.12
31	62	32	47	18	0	0.12
MTH	58.3	28.7	43.5	666	0	4.05
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	33	48	17	0	0.12
2	63	33	48	17	0	0.12
3	63	33	48	17	0	0.11
4	64	33	48	17	0	0.11
5	64	33	48	17	0	0.11
6	64	33	49	16	0	0.11
7	65	34	49	16	0	0.11
8	65	34	49	16	0	0.11
9	65	34	49	16	0	0.11
10	65	34	50	15	0	0.11
11	66	34	50	15	0	0.11
12	66	34	50	15	0	0.11
13	66	34	50	15	0	0.11
14	66	35	51	14	0	0.11
15	67	35	51	14	0	0.11
16	67	35	51	14	0	0.11
17	67	36	52	13	0	0.10
18	67	36	52	13	0	0.11
19	68	36	52	13	0	0.11
20	68	36	52	13	0	0.11
21	68	37	53	12	0	0.11
22	69	37	53	12	0	0.11
23	69	37	53	12	0	0.11
24	69	37	53	12	0	0.11
25	69	38	54	11	0	0.11
26	70	38	54	11	0	0.11
27	70	38	54	11	0	0.11
28	70	39	55	10	0	0.11
29	70	39	55	10	0	0.11
30	71	39	55	10	0	0.11
MTH	66.8	35.5	51.2	414	0	3.31
	66.5	36.4	51.6	1267	30	11.25

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	71	41	56	9	0	0.11
2	71	42	56	9	0	0.12
3	71	42	56	9	0	0.12
4	71	42	56	9	0	0.12
5	72	42	57	8	0	0.12
6	72	42	57	8	0	0.12
7	72	42	57	8	0	0.12
8	73	43	58	8	1	0.12
9	73	43	58	8	1	0.12
10	73	43	58	8	1	0.12
11	73	44	59	7	1	0.12
12	74	44	59	7	1	0.13
13	74	44	59	7	1	0.13
14	74	44	59	7	1	0.13
15	74	45	60	6	1	0.13
16	75	45	60	6	1	0.13
17	75	45	60	6	1	0.13
18	75	46	61	5	1	0.13
19	75	46	61	5	1	0.13
20	76	46	61	5	1	0.13
21	76	46	61	5	1	0.13
22	76	47	62	4	1	0.13
23	76	47	62	4	1	0.13
24	77	47	62	4	1	0.13
25	77	47	62	4	1	0.13
26	77	48	63	4	2	0.13
27	77	49	63	4	2	0.13
28	77	49	63	4	2	0.13
29	78	49	64	3	2	0.13
30	78	50	64	3	2	0.12
31	78	50	64	3	2	0.12
MTH	74.6	45.2	59.9	187	30	3.89

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MARSHALL NORTH CAROLINA Station Number: 315356

Latitude: 35 B 48 * 08 (Longitude: -082 B 40* 02 (Elevation (feet): 2000

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	51	64	3	2	0.12
2	79	51	65	2	2	0.12
3	79	52	65	2	2	0.12
4	79	52	65	2	2	0.12
5	79	52	65	2	2	0.12
6	80	52	66	2	3	0.12
7	80	52	66	2	3	0.12
8	80	52	66	2	3	0.12
9	80	52	66	2	3	0.12
10	80	53	67	1	3	0.12
11	81	53	67	1	3	0.12
12	81	53	67	1	3	0.12
13	81	53	67	1	3	0.12
14	81	53	67	1	3	0.12
15	81	54	68	1	4	0.12
16	81	54	68	1	4	0.12
17	82	54	68	1	4	0.12
18	82	55	69	0	4	0.12
19	82	55	69	0	4	0.12
20	82	55	69	0	4	0.12
21	82	56	69	0	4	0.12
22	82	56	69	0	4	0.12
23	83	56	70	0	5	0.12
24	83	56	70	0	5	0.11
25	83	57	70	0	5	0.11
26	83	57	70	0	5	0.12
27	83	57	70	0	5	0.12
28	83	57	70	0	5	0.12
29	84	57	71	0	6	0.12
30	84	58	71	0	6	0.12
MTH	81.3	54.2	67.8	27	111	3.58

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	58	71	0	6	0.12
2	84	58	71	0	6	0.12
3	84	58	71	0	6	0.12
4	84	59	71	0	6	0.12
5	84	59	71	0	6	0.12
6	85	59	72	0	7	0.12
7	85	59	72	0	7	0.12
8	85	59	72	0	7	0.12
9	85	59	72	0	7	0.12
10	85	59	72	0	7	0.12
11	85	59	72	0	7	0.12
12	85	59	72	0	7	0.12
13	85	59	72	0	7	0.12
14	85	59	72	0	7	0.12
15	85	59	72	0	7	0.12
16	85	59	72	0	7	0.12
17	85	59	72	0	7	0.12
18	85	60	73	0	8	0.12
19	85	60	73	0	8	0.12
20	85	60	73	0	8	0.12
21	85	60	73	0	8	0.12
22	85	60	73	0	8	0.12
23	85	60	73	0	8	0.12
24	86	60	73	0	8	0.12
25	85	60	73	0	8	0.12
26	85	60	73	0	8	0.12
27	85	60	73	0	8	0.12
28	85	60	73	0	8	0.13
29	85	60	73	0	8	0.13
30	85	60	72	0	7	0.13
31	85	60	72	0	7	0.13
MTH	84.9	59.4	72.2	0	224	3.76
SUMMER SEASON:	83.3	57.2	70.3	29	523	11.19

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	60	72	0	7	0.12
2	85	60	72	0	7	0.13
3	85	59	72	0	7	0.13
4	85	59	72	0	7	0.13
5	85	59	72	0	7	0.13
6	85	59	72	0	7	0.13
7	85	59	72	0	7	0.13
8	85	59	72	0	7	0.13
9	85	59	72	0	7	0.13
10	85	59	72	0	7	0.13
11	84	59	72	0	7	0.13
12	84	59	72	0	7	0.13
13	84	59	72	0	7	0.13
14	84	58	71	0	6	0.13
15	84	58	71	0	6	0.13
16	84	58	71	0	6	0.12
17	84	58	71	0	6	0.12
18	84	58	71	0	6	0.12
19	84	58	71	0	6	0.12
20	83	58	71	0	6	0.12
21	83	58	71	0	6	0.12
22	83	58	71	0	6	0.12
23	83	57	70	0	5	0.12
24	83	57	70	0	5	0.12
25	83	57	70	*	5	0.12
26	83	57	70	*	5	0.12
27	83	57	70	*	5	0.12
28	82	56	69	*	5	0.12
29	82	56	69	*	5	0.12
30	82	56	69	*	4	0.12
31	82	56	69	0	4	0.11
MTH	83.8	58.1	71.0	2	188	3.85

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	56	69	0	4	0.11
2	82	56	69	0	4	0.11
3	82	56	69	1	5	0.11
4	81	56	68	1	4	0.11
5	81	56	68	1	4	0.11
6	81	55	68	1	4	0.11
7	81	54	67	1	3	0.11
8	80	54	67	1	3	0.11
9	80	54	67	1	3	0.11
10	80	54	67	1	3	0.10
11	80	54	67	1	3	0.10
12	79	54	67	1	3	0.10
13	79	54	67	1	3	0.10
14	79	53	66	1	2	0.10
15	78	52	65	2	2	0.10
16	78	52	65	2	2	0.10
17	78	52	65	2	2	0.10
18	78	51	65	2	2	0.10
19	77	51	64	3	2	0.09
20	77	51	64	3	2	0.09
21	77	50	64	3	2	0.09
22	77	49	63	4	2	0.09
23	76	49	63	4	2	0.09
24	76	48	62	4	1	0.09
25	76	48	62	4	1	0.09
26	75	48	62	4	1	0.09
27	75	47	61	5	1	0.09
28	75	47	61	5	1	0.08
29	74	46	60	6	1	0.08
30	74	46	60	6	1	0.08
MTH	78.3	51.8	65.1	71	73	2.94
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	46	59	7	1	0.08
2	73	45	59	7	1	0.08
3	73	44	59	7	1	0.08
4	73	43	58	8	1	0.08
5	73	43	58	8	1	0.08
6	73	42	57	9	1	0.08
7	73	42	57	9	1	0.07
8	72	41	56	10	1	0.07
9	71	41	56	10	1	0.07
10	71	41	56	10	1	0.07
11	70	40	55	10	0	0.07
12	70	40	55	10	0	0.07
13	69	39	54	11	0	0.07
14	69	39	54	11	0	0.07
15	69	38	54	11	0	0.07
16	68	38	53	12	0	0.07
17	68	38	53	12	0	0.07
18	68	37	53	12	0	0.07
19	67	37	52	13	0	0.07
20	67	37	52	13	0	0.08
21	67	36	52	13	0	0.08
22	66	36	51	14	0	0.08
23	66	36	51	14	0	0.08
24	66	35	51	14	0	0.08
25	65	35	50	15	0	0.08
26	65	35	50	15	0	0.08
27	65	35	50	15	0	0.08
28	64	34	49	16	0	0.08
29	64	34	49	16	0	0.08
30	64	34	49	16	0	0.09
31	63	34	49	16	0	0.09
MTH	68.6	38.6	53.6	364	10	2.37
AUTUMN SEASON:	68.3	40.2	54.3	1056	83	8.28
ANNUAL:	66.6	39.1	52.9	5024	636	40.26

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	34	48	17	0	0.09
2	63	34	48	17	0	0.09
3	63	34	48	17	0	0.09
4	62	33	47	18	0	0.10
5	62	32	47	18	0	0.10
6	62	32	47	18	0	0.10
7	62	32	47	18	0	0.10
8	60	32	46	19	0	0.10
9	60	32	46	19	0	0.10
10	60	32	46	19	0	0.10
11	60	31	46	19	0	0.10
12	59	31	45	20	0	0.10
13	59	31	45	20	0	0.10
14	59	31	45	20	0	0.10
15	58	30	44	21	0	0.10
16	58	30	44	21	0	0.10
17	58	30	44	21	0	0.10
18	57	30	44	21	0	0.10
19	57	29	43	22	0	0.10
20	57	29	43	22	0	0.10
21	56	29	43	22	0	0.10
22	56	29	43	22	0	0.10
23	55	29	42	23	0	0.10
24	55	29	42	23	0	0.10
25	55	28	42	23	0	0.10
26	54	28	41	24	0	0.10
27	54	28	41	24	0	0.10
28	54	28	41	24	0	0.10
29	54	27	41	24	0	0.10
30	53	27	40	25	0	0.10
MTH	58.2	30.4	44.3	621	0	2.97

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MARSHALL NORTH CAROLINA Station Number: 315356

Latitude: 35B 48* 08(Longitude: -082B 40* 02(Elevation (feet): 2000

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.63	0.58	0.89	0.39	0.86	0.84	0.86	0.52	0.22	0.09	0.81	0.38	26.67
0.010	0.76	0.70	1.05	0.50	1.02	0.98	1.01	0.66	0.30	0.14	0.94	0.48	27.80
0.050	1.23	1.16	1.61	0.93	1.55	1.48	1.53	1.17	0.64	0.36	1.35	0.84	31.05
0.100	1.55	1.48	1.99	1.24	1.91	1.81	1.88	1.53	0.91	0.56	1.61	1.11	32.88
0.200	2.01	1.95	2.52	1.72	2.42	2.27	2.36	2.08	1.34	0.90	1.97	1.50	35.20
0.300	2.39	2.34	2.95	2.13	2.84	2.65	2.76	2.55	1.73	1.23	2.27	1.83	36.94
0.400	2.76	2.72	3.37	2.54	3.23	3.01	3.14	3.00	2.12	1.57	2.54	2.16	38.48
0.500	3.14	3.10	3.79	2.96	3.64	3.37	3.52	3.48	2.54	1.94	2.82	2.50	39.95
0.600	3.55	3.52	4.24	3.43	4.07	3.76	3.94	4.00	3.01	2.37	3.11	2.88	41.45
0.700	4.02	4.02	4.76	3.98	4.57	4.21	4.41	4.61	3.57	2.89	3.45	3.31	43.10
0.800	4.63	4.65	5.43	4.70	5.21	4.77	5.01	5.40	4.31	3.60	3.88	3.88	45.09
0.900	5.57	5.63	6.45	5.82	6.18	5.64	5.93	6.64	5.48	4.74	4.52	4.77	47.95
0.950	6.43	6.52	7.37	6.87	7.07	6.43	6.77	7.79	6.60	5.84	5.10	5.59	50.40
0.990	8.26	8.44	9.33	9.15	8.94	8.09	8.53	10.26	9.04	8.30	6.31	7.36	55.21
0.995	9.01	9.22	10.12	10.08	9.70	8.76	9.25	11.27	10.05	9.34	6.80	8.08	57.05

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MORGANTON NORTH CAROLINA Station Number: 315838

Latitude: 35 B 43 * 50 (Longitude: -081 B 40* 18 (Elevation (feet): 1160

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	31	43	22	0	0.12
2	55	30	43	22	0	0.12
3	55	30	42	23	0	0.12
4	54	30	42	23	0	0.12
5	54	29	42	23	0	0.12
6	54	29	42	23	0	0.12
7	53	29	41	24	0	0.12
8	53	29	41	24	0	0.12
9	53	28	41	24	0	0.12
10	52	28	40	25	0	0.12
11	52	28	40	25	0	0.11
12	52	28	40	25	0	0.11
13	52	28	40	25	0	0.11
14	51	27	39	26	0	0.12
15	51	27	39	26	0	0.12
16	51	27	39	26	0	0.12
17	51	27	39	26	0	0.12
18	51	27	39	26	0	0.12
19	50	27	39	26	0	0.12
20	50	26	38	27	0	0.12
21	50	26	38	27	0	0.12
22	50	26	38	27	0	0.12
23	50	26	38	27	0	0.12
24	50	26	38	27	0	0.12
25	49	26	38	27	0	0.12
26	49	25	37	28	0	0.12
27	49	25	37	28	0	0.12
28	49	25	37	28	0	0.12
29	49	25	37	28	0	0.13
30	49	25	37	28	0	0.13
31	49	25	37	28	0	0.13
MTH	51.4	27.3	39.4	794	0	3.72

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	25	37	28	0	0.13
2	49	25	37	28	0	0.13
3	49	25	37	28	0	0.13
4	49	25	37	28	0	0.13
5	49	25	37	28	0	0.13
6	49	25	37	28	0	0.14
7	48	25	37	28	0	0.14
8	48	25	37	28	0	0.14
9	48	25	36	29	0	0.14
10	48	25	36	29	0	0.14
11	48	25	36	29	0	0.14
12	48	24	36	29	0	0.14
13	48	24	36	29	0	0.14
14	48	24	36	29	0	0.14
15	48	24	36	29	0	0.14
16	48	25	37	28	0	0.14
17	49	25	37	28	0	0.14
18	49	25	37	28	0	0.15
19	49	25	37	28	0	0.15
20	49	25	37	28	0	0.15
21	49	25	37	28	0	0.15
22	49	25	37	28	0	0.15
23	49	25	37	28	0	0.15
24	49	25	37	28	0	0.15
25	49	25	37	28	0	0.15
26	49	25	37	28	0	0.15
27	49	25	37	28	0	0.15
28	49	25	37	28	0	0.15
29	50	25	38	27	0	0.15
30	50	25	38	27	0	0.15
31	50	25	38	27	0	0.15
MTH	48.8	24.9	36.9	872	0	4.43

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	51	26	38	27	0	0.15
2	51	26	38	27	0	0.15
3	51	26	38	27	0	0.15
4	51	26	38	27	0	0.15
5	51	26	39	26	0	0.14
6	52	26	39	26	0	0.14
7	52	26	39	26	0	0.14
8	52	26	39	26	0	0.14
9	52	26	39	26	0	0.14
10	52	27	40	25	0	0.14
11	53	27	40	25	0	0.14
12	53	27	40	25	0	0.15
13	53	27	40	25	0	0.15
14	53	27	40	25	0	0.15
15	53	28	41	24	0	0.15
16	54	28	41	24	0	0.15
17	54	28	41	24	0	0.15
18	54	28	41	24	0	0.15
19	54	28	41	24	0	0.15
20	55	28	42	23	0	0.15
21	55	29	42	23	0	0.15
22	55	29	42	23	0	0.15
23	55	29	42	23	0	0.15
24	56	29	43	22	0	0.15
25	56	30	43	22	0	0.15
26	56	30	43	22	0	0.15
27	56	30	43	22	0	0.15
28	57	30	44	21	0	0.16
MTH	53.5	27.6	40.6	684	0	4.14

WINTER SEASON: 51.2 26.6 38.9 2350 0 12.29

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	32	44	21	0	0.16
2	57	32	44	21	0	0.16
3	58	32	45	20	0	0.16
4	58	32	45	20	0	0.16
5	58	32	45	20	0	0.16
6	58	32	45	20	0	0.16
7	59	32	46	19	0	0.16
8	59	32	46	19	0	0.16
9	60	32	46	19	0	0.16
10	60	32	46	19	0	0.16
11	60	33	47	18	0	0.16
12	61	33	47	18	0	0.16
13	61	33	47	18	0	0.16
14	61	34	48	17	0	0.16
15	61	34	48	17	0	0.16
16	62	34	48	17	0	0.16
17	62	34	48	17	0	0.16
18	62	35	49	16	0	0.16
19	63	35	49	16	0	0.16
20	63	35	49	16	0	0.16
21	63	35	49	16	0	0.16
22	63	36	50	15	0	0.16
23	64	36	50	15	0	0.15
24	64	36	50	15	0	0.15
25	64	37	51	14	0	0.15
26	65	37	51	14	0	0.15
27	65	37	51	14	0	0.15
28	65	37	51	14	0	0.15
29	66	38	52	13	0	0.15
30	66	38	52	13	0	0.14
31	66	38	52	13	0	0.14
MTH	61.7	34.4	48.1	524	0	4.85

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	39	52	13	0	0.14
2	67	39	53	12	0	0.14
3	67	39	53	12	0	0.14
4	67	40	53	12	0	0.13
5	68	40	54	11	0	0.13
6	68	40	54	11	0	0.13
7	68	40	54	11	0	0.13
8	68	40	54	11	0	0.13
9	69	41	55	10	0	0.13
10	69	41	55	10	0	0.13
11	69	41	55	10	0	0.13
12	70	41	56	9	0	0.13
13	70	42	56	9	0	0.12
14	70	42	56	9	0	0.12
15	70	42	56	9	0	0.12
16	71	43	57	8	0	0.12
17	71	43	57	8	0	0.12
18	71	43	57	8	0	0.12
19	71	43	57	8	0	0.12
20	72	44	58	7	0	0.12
21	72	44	58	7	0	0.12
22	72	44	58	7	0	0.12
23	72	45	59	6	0	0.12
24	73	45	59	6	0	0.12
25	73	45	59	6	0	0.12
26	73	46	60	6	1	0.12
27	73	46	60	6	1	0.13
28	74	46	60	6	1	0.13
29	74	46	60	6	1	0.13
30	74	47	61	5	1	0.13
MTH	70.4	42.6	56.5	259	5	3.79

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	75	47	61	5	1	0.13
2	75	48	61	5	1	0.13
3	75	48	61	5	1	0.13
4	76	48	62	4	1	0.13
5	76	49	62	4	1	0.13
6	76	49	62	4	1	0.13
7	76	50	63	4	2	0.14
8	76	50	63	4	2	0.14
9	76	50	63	4	2	0.14
10	77	50	63	4	2	0.14
11	77	50	64	3	2	0.14
12	77	51	64	3	2	0.14
13	77	51	64	3	2	0.14
14	77	51	64	3	2	0.14
15	77	51	64	3	2	0.14
16	78	52	65	3	3	0.15
17	78	53	66	2	3	0.15
18	79	53	66	2	3	0.15
19	79	53	66	2	3	0.15
20	79	53	66	2	3	0.15
21	79	53	66	2	3	0.15
22	79	53	66	2	3	0.15
23	80	54	67	2	4	0.15
24	80	54	67	2	4	0.15
25	80	54	67	2	4	0.15
26	80	55	68	1	4	0.15
27	81	55	68	1	4	0.16
28	81	55	68	1	4	0.16
29	81	56	69	1	5	0.16
30	81	56	69	1	5	0.16
31	82	56	69	1	5	0.16
MTH	78.1	51.9	65.0	85	84	4.49

SPRING SEASON: 70.0 42.9 56.5 868 89 13.13

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MORGANTON NORTH CAROLINA Station Number: 315838

Latitude: 35° 43' 50" Longitude: -081° 40' 18" Elevation (feet): 1160

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	57	69	1	5	0.16
2	82	57	69	1	5	0.16
3	82	57	69	1	5	0.16
4	82	57	70	1	6	0.16
5	83	58	70	1	6	0.16
6	83	58	70	1	6	0.16
7	83	58	70	1	6	0.16
8	83	58	70	1	6	0.16
9	84	58	71	1	7	0.16
10	84	59	72	0	7	0.16
11	84	59	72	0	7	0.16
12	84	59	72	0	7	0.16
13	84	60	72	0	7	0.16
14	84	60	72	0	7	0.16
15	85	60	73	0	8	0.16
16	85	60	73	0	8	0.16
17	85	61	73	0	8	0.16
18	85	61	73	0	8	0.16
19	85	61	73	0	8	0.16
20	86	61	74	0	9	0.16
21	86	61	74	0	9	0.16
22	86	62	74	0	9	0.16
23	86	62	74	0	9	0.16
24	86	62	74	0	9	0.16
25	86	62	74	0	9	0.15
26	87	62	75	0	10	0.15
27	87	63	75	0	10	0.15
28	87	63	75	0	10	0.15
29	87	63	75	0	10	0.15
30	87	63	75	0	10	0.15
MTH	84.7	60.1	72.4	9	231	4.74

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	87	63	75	0	10	0.14
2	88	64	76	0	11	0.14
3	88	64	76	0	11	0.14
4	88	64	76	0	11	0.14
5	88	64	76	0	11	0.14
6	88	64	76	0	11	0.14
7	88	64	76	0	11	0.13
8	88	64	76	0	11	0.13
9	88	64	76	0	11	0.13
10	88	64	76	0	11	0.13
11	89	64	77	0	12	0.13
12	89	64	77	0	12	0.13
13	89	64	77	0	12	0.13
14	89	65	77	0	12	0.13
15	89	65	77	0	12	0.12
16	89	65	77	0	12	0.12
17	89	65	77	0	12	0.12
18	89	65	77	0	12	0.12
19	89	65	77	0	12	0.12
20	89	65	77	0	12	0.12
21	89	65	77	0	12	0.12
22	89	65	77	0	12	0.12
23	89	65	77	0	12	0.12
24	89	65	77	0	12	0.12
25	89	65	77	0	12	0.12
26	89	65	77	0	12	0.12
27	89	65	77	0	12	0.12
28	89	65	77	0	12	0.12
29	89	65	77	0	12	0.12
30	89	65	77	0	12	0.12
31	89	65	77	0	12	0.11
MTH	88.7	64.6	76.7	0	361	3.91
SUMMER SEASON:	86.7	62.7	74.7	9	906	12.39

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	89	65	77	0	12	0.12
2	89	65	77	0	12	0.11
3	88	65	77	0	12	0.11
4	88	65	77	0	12	0.11
5	88	65	76	0	11	0.11
6	88	65	76	0	11	0.11
7	88	65	76	0	11	0.12
8	88	65	76	0	11	0.12
9	88	65	76	0	11	0.12
10	88	65	76	0	11	0.12
11	88	65	76	0	11	0.12
12	87	64	76	0	11	0.12
13	87	64	76	0	11	0.12
14	87	64	76	0	11	0.12
15	87	63	75	0	10	0.12
16	87	63	75	0	10	0.12
17	87	63	75	0	10	0.12
18	87	63	75	0	10	0.12
19	87	63	75	0	10	0.12
20	86	63	75	0	10	0.12
21	86	63	75	0	10	0.12
22	86	62	74	0	9	0.12
23	86	62	74	0	9	0.12
24	86	62	74	0	9	0.12
25	86	62	74	0	9	0.13
26	85	62	74	0	9	0.13
27	85	62	74	0	9	0.13
28	85	61	73	0	8	0.13
29	85	61	73	0	8	0.13
30	85	61	73	0	8	0.13
31	84	61	73	0	8	0.13
MTH	86.8	63.4	75.1	0	314	3.74

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	61	73	0	8	0.13
2	84	61	72	0	7	0.14
3	84	61	72	0	7	0.14
4	84	61	72	0	7	0.14
5	84	61	72	0	7	0.14
6	83	60	71	0	6	0.14
7	83	60	71	0	6	0.14
8	83	60	71	0	6	0.14
9	83	60	71	0	6	0.14
10	82	60	71	0	6	0.14
11	82	59	71	0	6	0.14
12	82	58	70	0	5	0.14
13	81	58	70	0	5	0.14
14	81	57	69	1	5	0.14
15	81	57	69	1	5	0.14
16	81	57	69	1	5	0.14
17	80	57	69	1	5	0.14
18	80	56	68	1	4	0.14
19	80	56	68	1	4	0.14
20	79	55	67	2	4	0.14
21	79	55	67	2	4	0.14
22	78	54	66	2	3	0.14
23	78	54	66	2	3	0.14
24	78	54	66	2	3	0.14
25	78	53	66	2	3	0.14
26	78	52	65	3	3	0.14
27	77	52	65	3	3	0.14
28	77	52	65	3	3	0.14
29	77	51	64	3	2	0.14
30	76	51	64	3	2	0.13
MTH	80.6	56.8	68.7	33	143	4.18

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	51	63	4	2	0.13
2	76	51	63	4	2	0.13
3	75	49	62	5	2	0.13
4	75	49	62	5	2	0.13
5	74	48	61	5	1	0.13
6	74	48	61	5	1	0.13
7	74	47	61	5	1	0.13
8	74	46	60	6	1	0.13
9	73	46	60	6	1	0.13
10	73	45	59	7	1	0.13
11	73	45	59	7	1	0.13
12	72	45	59	7	1	0.12
13	72	44	58	8	1	0.12
14	72	44	58	8	1	0.12
15	71	43	57	8	0	0.12
16	71	43	57	8	0	0.12
17	71	43	57	8	0	0.12
18	70	42	56	9	0	0.12
19	70	42	56	9	0	0.12
20	70	42	56	9	0	0.12
21	69	41	55	10	0	0.12
22	69	41	55	10	0	0.12
23	69	41	55	10	0	0.12
24	68	40	54	11	0	0.12
25	68	40	54	11	0	0.12
26	68	40	54	11	0	0.12
27	67	39	53	12	0	0.12
28	67	39	53	12	0	0.12
29	67	39	53	12	0	0.12
30	66	39	53	12	0	0.12
31	66	38	52	13	0	0.13
MTH	71.0	43.6	57.3	257	18	3.84
AUTUMN SEASON:	70.8	45.0	57.9	806	161	11.81
ANNUAL:	69.7	44.3	57.0	4033	1156	49.62

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	38	52	13	0	0.12
2	66	38	52	13	0	0.12
3	65	38	51	14	0	0.12
4	65	38	51	14	0	0.12
5	65	38	51	14	0	0.13
6	64	38	51	14	0	0.13
7	64	37	50	15	0	0.13
8	64	36	50	15	0	0.13
9	63	36	50	15	0	0.13
10	62	36	49	16	0	0.13
11	62	36	49	16	0	0.13
12	62	36	49	16	0	0.13
13	62	35	49	16	0	0.13
14	61	35	48	17	0	0.13
15	61	35	48	17	0	0.13
16	61	35	48	17	0	0.13
17	60	34	47	18	0	0.13
18	60	34	47	18	0	0.13
19	60	34	47	18	0	0.13
20	59	34	47	18	0	0.13
21	59	33	46	19	0	0.13
22	59	33	46	19	0	0.13
23	58	33	46	19	0	0.13
24	58	32	45	20	0	0.12
25	58	32	45	20	0	0.12
26	57	32	45	20	0	0.12
27	57	31	44	21	0	0.12
28	57	31	44	21	0	0.12
29	56	31	44	21	0	0.12
30	55	31	43	22	0	0.12
MTH	60.9	34.7	47.8	516	0	3.79

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MORGANTON NORTH CAROLINA Station Number: 315838

Latitude: 35B 43* 50(Longitude: -081B 40* 18(Elevation (feet): 1160

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.60	0.33	0.70	0.23	0.67	0.51	0.28	0.40	0.12	0.00	0.60	0.45	30.67
0.010	0.76	0.45	0.88	0.32	0.84	0.66	0.39	0.51	0.18	0.00	0.75	0.57	32.20
0.050	1.34	0.93	1.52	0.73	1.44	1.26	0.84	0.98	0.53	0.36	1.26	1.05	36.67
0.100	1.76	1.32	1.98	1.07	1.86	1.70	1.20	1.34	0.86	0.79	1.62	1.41	39.21
0.200	2.39	1.92	2.67	1.63	2.49	2.39	1.77	1.88	1.46	1.43	2.14	1.94	42.45
0.300	2.93	2.47	3.25	2.14	3.03	2.99	2.29	2.36	2.04	1.99	2.59	2.41	44.90
0.400	3.46	3.01	3.82	2.66	3.55	3.58	2.82	2.83	2.66	2.56	3.02	2.86	47.06
0.500	4.01	3.59	4.40	3.22	4.08	4.21	3.37	3.32	3.34	3.18	3.47	3.34	49.15
0.600	4.61	4.24	5.05	3.85	4.67	4.90	4.00	3.87	4.13	3.89	3.95	3.86	51.29
0.700	5.31	5.02	5.80	4.61	5.36	5.71	4.76	4.51	5.11	4.75	4.52	4.48	53.66
0.800	6.23	6.05	6.78	5.62	6.25	6.78	5.75	5.36	6.44	5.89	5.25	5.28	56.51
0.900	7.66	7.68	8.30	7.25	7.63	8.46	7.34	6.69	8.61	7.74	6.38	6.54	60.64
0.950	8.98	9.21	9.70	8.79	8.90	10.03	8.84	7.94	10.72	9.51	7.43	7.72	64.19
0.990	11.84	12.58	12.72	12.20	11.64	13.43	12.14	10.65	15.46	13.44	9.67	10.26	71.22
0.995	13.01	13.97	13.96	13.62	12.75	14.84	13.50	11.76	17.46	15.09	10.58	11.30	73.90

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MOUNT MITCHELL NORTH CAROLINA Station Number: 315923

Latitude: 35 B 44 * 43 (Longitude: -082 B 16* 37 (Elevation (feet): 6240

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	43	24	34	31	0	0.22
2	42	24	33	32	0	0.22
3	42	24	33	32	0	0.22
4	42	24	33	32	0	0.22
5	42	23	33	32	0	0.22
6	41	23	32	33	0	0.22
7	41	23	32	33	0	0.22
8	41	23	32	33	0	0.22
9	41	22	32	33	0	0.22
10	40	22	31	34	0	0.22
11	40	22	31	34	0	0.22
12	40	22	31	34	0	0.22
13	40	22	31	34	0	0.22
14	40	21	31	34	0	0.22
15	39	21	30	35	0	0.22
16	39	21	30	35	0	0.22
17	39	21	30	35	0	0.22
18	39	21	30	35	0	0.22
19	38	20	29	36	0	0.22
20	38	20	29	36	0	0.22
21	38	20	29	36	0	0.22
22	38	20	29	36	0	0.22
23	38	20	29	36	0	0.22
24	37	19	28	37	0	0.23
25	37	19	28	37	0	0.23
26	37	19	28	37	0	0.23
27	37	19	28	37	0	0.23
28	37	19	28	37	0	0.23
29	36	19	28	37	0	0.23
30	36	18	27	38	0	0.23
31	36	18	27	38	0	0.23
MTH	39.2	21.1	30.2	1079	0	6.90

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	36	18	27	38	0	0.23
2	36	18	27	38	0	0.23
3	36	18	27	38	0	0.23
4	36	18	27	38	0	0.23
5	35	18	26	39	0	0.23
6	35	18	26	39	0	0.24
7	35	18	26	39	0	0.24
8	35	18	26	39	0	0.24
9	35	18	26	39	0	0.24
10	35	17	26	39	0	0.24
11	35	17	26	39	0	0.24
12	34	17	26	39	0	0.23
13	34	17	26	39	0	0.23
14	34	17	26	39	0	0.23
15	34	17	26	39	0	0.23
16	34	17	26	39	0	0.23
17	33	17	25	40	0	0.23
18	33	17	25	40	0	0.23
19	33	17	25	40	0	0.23
20	33	17	25	40	0	0.23
21	33	17	25	40	0	0.22
22	33	17	25	40	0	0.22
23	33	17	25	40	0	0.22
24	33	17	25	40	0	0.22
25	33	17	25	40	0	0.22
26	33	17	25	40	0	0.21
27	34	17	26	39	0	0.21
28	34	17	26	39	0	0.21
29	34	17	26	39	0	0.21
30	34	17	26	39	0	0.20
31	34	17	26	39	0	0.20
MTH	34.2	17.3	25.8	1215	0	7.00

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	34	17	26	39	0	0.20
2	34	17	26	39	0	0.19
3	34	17	26	39	0	0.19
4	35	18	26	39	0	0.19
5	35	18	26	39	0	0.19
6	35	18	26	39	0	0.19
7	35	18	26	39	0	0.18
8	35	18	26	39	0	0.18
9	35	18	27	38	0	0.18
10	35	18	27	38	0	0.18
11	36	18	27	38	0	0.18
12	36	18	27	38	0	0.18
13	36	18	27	38	0	0.18
14	36	18	27	38	0	0.18
15	36	18	27	38	0	0.18
16	36	19	28	37	0	0.19
17	37	19	28	37	0	0.19
18	37	19	28	37	0	0.19
19	37	19	28	37	0	0.19
20	37	19	28	37	0	0.19
21	37	19	28	37	0	0.20
22	37	20	29	36	0	0.20
23	38	20	29	36	0	0.20
24	38	20	29	36	0	0.21
25	38	20	29	36	0	0.21
26	38	20	29	36	0	0.22
27	38	21	30	35	0	0.22
28	39	21	30	35	0	0.23
MTH	36.2	18.7	27.5	1050	0	5.41

WINTER SEASON: 36.5 19.0 27.8 3344 0 19.31

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	39	21	30	35	0	0.23
2	39	21	30	35	0	0.24
3	39	21	30	35	0	0.24
4	40	22	31	34	0	0.25
5	40	22	31	34	0	0.25
6	40	22	31	34	0	0.25
7	40	22	31	34	0	0.26
8	41	23	32	33	0	0.26
9	41	23	32	33	0	0.26
10	41	23	32	33	0	0.26
11	41	23	32	33	0	0.27
12	42	23	33	32	0	0.27
13	42	24	33	32	0	0.27
14	42	24	33	32	0	0.27
15	42	24	33	32	0	0.27
16	42	24	33	32	0	0.27
17	43	25	34	31	0	0.27
18	43	25	34	31	0	0.27
19	43	25	34	31	0	0.27
20	44	26	35	30	0	0.27
21	44	26	35	30	0	0.26
22	44	26	35	30	0	0.26
23	44	26	35	30	0	0.26
24	45	27	36	29	0	0.26
25	45	27	36	29	0	0.25
26	45	27	36	29	0	0.25
27	45	27	36	29	0	0.25
28	46	28	37	28	0	0.24
29	46	28	37	28	0	0.24
30	46	28	37	28	0	0.23
31	46	29	38	27	0	0.23
MTH	42.6	24.6	33.6	973	0	7.93

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	30	38	27	0	0.22
2	47	30	38	27	0	0.22
3	47	30	38	27	0	0.21
4	48	31	39	26	0	0.21
5	48	31	39	26	0	0.20
6	48	31	39	26	0	0.20
7	48	31	40	25	0	0.19
8	49	32	40	25	0	0.19
9	49	32	40	25	0	0.18
10	49	32	41	24	0	0.18
11	49	32	41	24	0	0.18
12	50	32	41	24	0	0.18
13	50	32	41	24	0	0.17
14	50	33	42	23	0	0.17
15	51	33	42	23	0	0.17
16	51	33	42	23	0	0.17
17	51	33	42	23	0	0.17
18	51	34	43	22	0	0.16
19	52	34	43	22	0	0.16
20	52	34	43	22	0	0.16
21	52	35	44	21	0	0.16
22	52	35	44	21	0	0.16
23	53	35	44	21	0	0.16
24	53	35	44	21	0	0.16
25	53	36	45	20	0	0.16
26	53	36	45	20	0	0.17
27	53	37	45	20	0	0.17
28	53	37	45	20	0	0.17
29	54	37	46	19	0	0.17
30	54	38	46	19	0	0.17
MTH	50.6	33.4	42.0	690	0	5.34

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	38	46	19	0	0.17
2	55	38	46	19	0	0.18
3	55	38	47	18	0	0.18
4	55	39	47	18	0	0.18
5	55	39	47	18	0	0.18
6	55	39	47	18	0	0.18
7	56	40	48	17	0	0.19
8	56	40	48	17	0	0.19
9	56	40	48	17	0	0.19
10	56	40	48	17	0	0.19
11	57	41	49	16	0	0.19
12	57	41	49	16	0	0.19
13	57	41	49	16	0	0.19
14	57	41	49	16	0	0.19
15	58	42	50	15	0	0.19
16	58	42	50	15	0	0.20
17	58	42	50	15	0	0.20
18	58	43	51	14	0	0.20
19	59	43	51	14	0	0.20
20	59	43	51	14	0	0.20
21	59	43	51	14	0	0.20
22	59	44	52	13	0	0.20
23	60	44	52	13	0	0.20
24	60	44	52	13	0	0.20
25	60	44	52	13	0	0.20
26	60	45	53	12	0	0.20
27	61	45	53	12	0	0.19
28	61	45	53	12	0	0.19
29	61	45	53	12	0	0.19
30	62	45	54	11	0	0.19
31	62	46	54	11	0	0.19
MTH	58.0	41.9	50.0	465	0	5.93

SPRING SEASON: 50.4 33.3 41.9 2128 0 19.20

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MOUNT MITCHELL NORTH CAROLINA Station Number: 315923

Latitude: 35 B 44 * 43 (Longitude: -082 B 16 * 37 (Elevation (feet): 6240

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	62	46	54	11	0	0.19
2	62	46	54	11	0	0.19
3	63	47	55	10	0	0.19
4	63	47	55	10	0	0.19
5	63	47	55	10	0	0.19
6	63	47	55	10	0	0.19
7	63	47	55	10	0	0.19
8	64	48	56	9	0	0.19
9	64	48	56	9	0	0.18
10	64	48	56	9	0	0.18
11	64	48	56	9	0	0.18
12	64	49	57	8	0	0.18
13	65	49	57	8	0	0.18
14	65	49	57	8	0	0.18
15	65	49	57	8	0	0.18
16	65	49	57	8	0	0.18
17	65	49	57	8	0	0.18
18	66	50	58	7	0	0.18
19	66	50	58	7	0	0.18
20	66	50	58	7	0	0.18
21	66	50	58	7	0	0.18
22	66	50	58	7	0	0.19
23	66	50	58	7	0	0.19
24	66	50	58	7	0	0.19
25	66	51	59	7	1	0.19
26	67	51	59	7	1	0.19
27	67	51	59	7	1	0.19
28	67	51	59	7	1	0.19
29	67	51	59	7	1	0.19
30	67	51	59	7	1	0.19
MTH	64.9	49.0	57.0	247	6	5.57

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	67	52	59	6	0	0.19
2	67	52	59	6	0	0.19
3	67	52	59	6	0	0.20
4	67	52	59	6	0	0.20
5	67	52	59	6	0	0.20
6	68	52	60	5	0	0.20
7	68	52	60	5	0	0.20
8	68	53	60	5	0	0.20
9	68	53	60	5	0	0.20
10	68	53	60	5	0	0.21
11	68	53	60	5	0	0.21
12	68	53	60	5	0	0.21
13	68	53	60	5	0	0.21
14	68	53	61	5	1	0.21
15	68	53	61	5	1	0.21
16	68	53	61	5	1	0.22
17	68	53	61	5	1	0.22
18	68	53	61	5	1	0.22
19	68	53	61	5	1	0.22
20	68	53	61	5	1	0.22
21	68	53	61	5	1	0.22
22	68	53	61	5	1	0.23
23	68	53	61	5	1	0.23
24	68	53	61	4	0	0.23
25	68	53	61	4	0	0.23
26	68	53	61	4	0	0.23
27	68	53	61	4	0	0.23
28	68	53	61	4	0	0.24
29	68	53	61	4	0	0.24
30	69	53	61	4	0	0.24
31	69	53	61	4	0	0.24
MTH	67.9	52.8	60.4	152	10	6.70
SUMMER SEASON:	66.8	51.1	59.0	572	22	19.66

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	69	53	61	5	1	0.24
2	69	53	61	5	1	0.24
3	69	53	61	5	1	0.25
4	69	53	61	5	1	0.25
5	68	53	61	5	1	0.25
6	68	53	61	5	1	0.25
7	68	52	60	5	0	0.25
8	68	52	60	5	0	0.25
9	68	52	60	5	0	0.25
10	68	52	60	5	0	0.25
11	68	52	60	5	0	0.25
12	68	52	60	5	0	0.25
13	68	52	60	5	0	0.25
14	68	52	60	5	0	0.25
15	68	52	60	5	0	0.25
16	68	52	60	5	0	0.25
17	68	52	60	5	0	0.24
18	67	51	59	6	0	0.24
19	67	51	59	6	0	0.24
20	67	51	59	6	0	0.24
21	67	51	59	6	0	0.24
22	67	51	59	6	0	0.24
23	67	51	59	6	0	0.23
24	67	51	59	6	0	0.23
25	67	51	59	6	0	0.23
26	67	51	59	6	0	0.22
27	67	51	59	6	0	0.22
28	66	50	58	7	0	0.22
29	66	50	58	7	0	0.21
30	66	50	58	7	0	0.21
31	66	50	58	7	0	0.20
MTH	67.6	51.6	59.6	173	6	7.39

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	50	58	7	0	0.20
2	65	50	58	7	0	0.20
3	65	50	58	7	0	0.19
4	65	50	57	8	0	0.19
5	65	50	57	8	0	0.18
6	65	50	57	8	0	0.18
7	64	50	57	8	0	0.18
8	64	50	57	8	0	0.17
9	64	49	56	9	0	0.17
10	64	48	56	9	0	0.17
11	64	48	56	9	0	0.17
12	63	48	56	9	0	0.16
13	63	48	56	9	0	0.16
14	63	47	55	10	0	0.16
15	63	47	55	10	0	0.16
16	63	47	55	10	0	0.15
17	63	47	55	10	0	0.15
18	62	47	55	10	0	0.15
19	62	46	54	11	0	0.15
20	62	46	54	11	0	0.15
21	62	46	54	11	0	0.15
22	62	46	54	11	0	0.15
23	61	45	53	12	0	0.15
24	61	45	53	12	0	0.15
25	61	45	53	12	0	0.15
26	61	45	53	12	0	0.14
27	60	44	52	13	0	0.14
28	60	44	52	13	0	0.15
29	60	44	52	13	0	0.15
30	60	43	52	13	0	0.15
MTH	62.8	47.2	55.0	300	0	4.87
AUTUMN SEASON:	55.1	37.9	46.5	1680	0	16.33
ANNUAL:	52.2	35.3	43.8	7724	22	74.50

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	60	43	51	14	0	0.15
2	60	43	51	14	0	0.15
3	60	42	51	14	0	0.15
4	60	41	50	15	0	0.15
5	60	41	50	15	0	0.15
6	60	41	50	15	0	0.15
7	58	41	50	15	0	0.15
8	58	40	49	16	0	0.15
9	58	40	49	16	0	0.15
10	58	40	49	16	0	0.15
11	57	39	48	17	0	0.16
12	57	39	48	17	0	0.16
13	57	39	48	17	0	0.16
14	57	38	48	17	0	0.16
15	56	38	47	18	0	0.16
16	56	38	47	18	0	0.16
17	56	37	47	18	0	0.16
18	55	37	46	19	0	0.16
19	55	37	46	19	0	0.17
20	55	36	46	19	0	0.17
21	54	36	45	20	0	0.17
22	54	36	45	20	0	0.17
23	54	36	45	20	0	0.17
24	54	35	45	20	0	0.18
25	53	35	44	21	0	0.18
26	53	35	44	21	0	0.18
27	53	34	44	21	0	0.18
28	52	34	43	22	0	0.18
29	52	34	43	22	0	0.19
30	52	33	43	22	0	0.19
31	51	33	42	23	0	0.19
MTH	56.0	37.8	46.9	561	0	5.10

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	51	33	42	23	0	0.19
2	51	33	42	23	0	0.19
3	50	32	41	24	0	0.20
4	50	32	41	24	0	0.20
5	50	32	41	24	0	0.20
6	49	31	40	25	0	0.20
7	49	31	40	25	0	0.20
8	49	31	40	25	0	0.21
9	48	30	39	26	0	0.21
10	48	30	39	26	0	0.21
11	48	30	39	26	0	0.21
12	48	30	39	26	0	0.21
13	47	29	38	27	0	0.21
14	47	29	38	27	0	0.21
15	47	29	38	27	0	0.21
16	46	28	37	28	0	0.22
17	46	28	37	28	0	0.22
18	46	28	37	28	0	0.22
19	46	28	37	28	0	0.22
20	45	27	36	29	0	0.22
21	45	27	36	29	0	0.22
22	45	27	36	29	0	0.22
23	45	27	36	29	0	0.22
24	44	26	35	30	0	0.22
25	44	26	35	30	0	0.22
26	44	26	35	30	0	0.22
27	43	26	35	30	0	0.22
28	43	25	34	31	0	0.22
29	43	25	34	31	0	0.22
30	43	25	34	31	0	0.22
MTH	46.7	28.7	37.7	819	0	6.36

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MOUNT MITCHELL NORTH CAROLINA Station Number: 315923

Latitude: 35° 44* 43(Longitude: -082° 16* 37(Elevation (feet): 6240

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.05	0.90	1.83	0.94	1.38	1.14	1.72	1.13	0.21	0.20	1.26	0.97	47.41
0.010	1.30	1.10	2.15	1.15	1.62	1.36	1.99	1.40	0.30	0.30	1.51	1.21	49.63
0.050	2.24	1.84	3.25	1.87	2.44	2.13	2.92	2.39	0.77	0.78	2.39	2.13	56.06
0.100	2.90	2.35	3.97	2.38	2.99	2.64	3.52	3.09	1.19	1.22	2.98	2.78	59.71
0.200	3.88	3.10	5.00	3.11	3.75	3.39	4.36	4.12	1.90	1.96	3.83	3.76	64.34
0.300	4.72	3.73	5.84	3.73	4.38	4.00	5.04	5.01	2.57	2.66	4.55	4.60	67.83
0.400	5.53	4.34	6.64	4.32	4.97	4.59	5.68	5.86	3.27	3.39	5.22	5.41	70.91
0.500	6.37	4.97	7.44	4.92	5.57	5.18	6.33	6.74	4.02	4.19	5.91	6.25	73.87
0.600	7.29	5.65	8.31	5.58	6.21	5.83	7.02	7.70	4.89	5.11	6.66	7.18	76.91
0.700	8.36	6.45	9.31	6.35	6.96	6.58	7.82	8.83	5.95	6.23	7.53	8.27	80.26
0.800	9.75	7.47	10.58	7.33	7.90	7.53	8.83	10.28	7.37	7.73	8.63	9.67	84.30
0.900	11.90	9.06	12.52	8.85	9.34	9.00	10.35	12.54	9.67	10.17	10.33	11.86	90.11
0.950	13.90	10.52	14.29	10.25	10.64	10.34	11.74	14.62	11.88	12.52	11.89	13.89	95.11
0.990	18.17	13.64	18.00	13.23	13.39	13.17	14.64	19.10	16.80	17.76	15.19	18.26	104.97
0.995	19.92	14.91	19.50	14.44	14.50	14.32	15.80	20.92	18.86	19.96	16.53	20.05	108.75

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MURPHY 2 NE NORTH CAROLINA Station Number: 316001

Latitude: 35 B 06 * 45 (Longitude: -084 B 00* 25 (Elevation (feet): 1640

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	31	43	22	0	0.16
2	55	31	43	22	0	0.16
3	55	30	42	23	0	0.16
4	55	30	42	23	0	0.16
5	55	30	42	23	0	0.16
6	55	29	42	23	0	0.16
7	53	29	41	24	0	0.15
8	53	29	41	24	0	0.15
9	53	29	41	24	0	0.15
10	53	29	41	24	0	0.15
11	52	29	41	24	0	0.15
12	52	28	40	25	0	0.15
13	52	28	40	25	0	0.15
14	52	28	40	25	0	0.15
15	51	28	40	25	0	0.15
16	51	27	39	26	0	0.15
17	51	27	39	26	0	0.16
18	51	27	39	26	0	0.16
19	50	27	39	26	0	0.16
20	50	27	39	26	0	0.16
21	50	27	39	26	0	0.16
22	49	27	38	27	0	0.16
23	49	27	38	27	0	0.16
24	49	27	38	27	0	0.16
25	49	27	38	27	0	0.16
26	49	26	38	27	0	0.16
27	49	26	38	27	0	0.17
28	49	26	38	27	0	0.17
29	49	26	38	27	0	0.17
30	48	26	37	28	0	0.17
31	48	26	37	28	0	0.17
MTH	51.4	27.9	39.7	784	0	4.91

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	26	37	28	0	0.17
2	48	26	37	28	0	0.18
3	48	26	37	28	0	0.18
4	48	26	37	28	0	0.18
5	48	26	37	28	0	0.18
6	48	26	37	28	0	0.18
7	48	26	37	28	0	0.18
8	48	26	37	28	0	0.19
9	48	26	37	28	0	0.19
10	48	26	37	28	0	0.19
11	48	26	37	28	0	0.19
12	48	26	37	28	0	0.19
13	48	25	36	29	0	0.19
14	48	25	36	29	0	0.19
15	47	25	36	29	0	0.19
16	48	25	37	28	0	0.19
17	48	25	37	28	0	0.19
18	48	25	37	28	0	0.19
19	48	25	37	28	0	0.19
20	48	25	37	28	0	0.19
21	48	25	37	28	0	0.19
22	48	26	37	28	0	0.19
23	48	26	37	28	0	0.19
24	48	26	37	28	0	0.19
25	48	26	37	28	0	0.19
26	48	26	37	28	0	0.19
27	48	26	37	28	0	0.19
28	48	26	37	28	0	0.19
29	48	26	37	28	0	0.19
30	48	26	37	28	0	0.19
31	48	26	37	28	0	0.19
MTH	48.0	25.7	36.9	871	0	5.81

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	26	38	27	0	0.19
2	50	26	38	27	0	0.18
3	50	26	38	27	0	0.18
4	50	27	38	27	0	0.18
5	50	27	38	27	0	0.18
6	50	27	38	27	0	0.18
7	50	27	38	27	0	0.18
8	51	27	39	26	0	0.18
9	51	27	39	26	0	0.18
10	51	27	39	26	0	0.18
11	51	27	39	26	0	0.18
12	52	27	39	26	0	0.18
13	52	27	40	25	0	0.18
14	52	27	40	25	0	0.18
15	52	27	40	25	0	0.18
16	53	27	40	25	0	0.18
17	53	27	40	25	0	0.18
18	53	28	41	24	0	0.18
19	53	28	41	24	0	0.18
20	54	28	41	24	0	0.18
21	54	28	41	24	0	0.18
22	54	28	41	24	0	0.18
23	54	29	42	23	0	0.18
24	55	29	42	23	0	0.18
25	55	29	42	23	0	0.18
26	55	29	42	23	0	0.18
27	55	30	43	22	0	0.19
28	56	30	43	22	0	0.19
MTH	52.4	27.6	40.0	700	0	5.07

WINTER SEASON: 50.6 27.1 38.9 2355 0 15.79

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	30	43	22	0	0.19
2	56	31	43	22	0	0.19
3	57	31	44	21	0	0.19
4	57	31	44	21	0	0.19
5	57	31	44	21	0	0.19
6	58	32	45	20	0	0.19
7	58	32	45	20	0	0.19
8	58	32	45	20	0	0.19
9	58	32	45	20	0	0.19
10	59	32	46	19	0	0.20
11	59	33	46	19	0	0.20
12	59	33	46	19	0	0.20
13	59	33	46	19	0	0.20
14	60	33	47	18	0	0.20
15	60	34	47	18	0	0.19
16	60	34	47	18	0	0.19
17	60	34	47	18	0	0.19
18	61	34	48	17	0	0.19
19	61	35	48	17	0	0.19
20	61	35	48	17	0	0.19
21	62	35	49	16	0	0.19
22	62	35	49	16	0	0.19
23	63	35	49	16	0	0.19
24	63	35	49	16	0	0.19
25	63	36	50	15	0	0.18
26	64	36	50	15	0	0.18
27	64	36	50	15	0	0.18
28	64	36	50	15	0	0.18
29	65	37	51	14	0	0.18
30	65	37	51	14	0	0.18
31	65	37	51	14	0	0.17
MTH	60.5	33.8	47.2	552	0	5.86

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	38	51	14	0	0.17
2	66	38	52	13	0	0.17
3	66	38	52	13	0	0.17
4	67	38	52	13	0	0.16
5	67	38	52	13	0	0.16
6	67	39	53	12	0	0.16
7	67	39	53	12	0	0.16
8	68	39	53	12	0	0.16
9	68	39	53	12	0	0.15
10	68	39	54	11	0	0.15
11	69	39	54	11	0	0.15
12	69	39	54	11	0	0.15
13	69	39	54	11	0	0.15
14	69	40	55	10	0	0.15
15	70	40	55	10	0	0.15
16	70	40	55	10	0	0.15
17	70	40	55	10	0	0.15
18	70	41	56	9	0	0.15
19	71	41	56	9	0	0.15
20	71	41	56	9	0	0.15
21	71	42	57	8	0	0.15
22	71	42	57	8	0	0.14
23	72	42	57	8	0	0.14
24	72	43	58	8	1	0.14
25	72	43	58	8	1	0.15
26	72	43	58	8	1	0.15
27	72	44	58	8	1	0.15
28	72	44	58	8	1	0.15
29	73	44	59	7	1	0.15
30	73	45	59	7	1	0.15
MTH	69.6	40.6	55.1	303	7	4.58

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	45	59	7	1	0.15
2	73	46	59	7	1	0.15
3	74	46	60	6	1	0.15
4	74	46	60	6	1	0.15
5	74	46	60	6	1	0.15
6	74	46	60	6	1	0.15
7	75	47	61	5	1	0.15
8	75	47	61	5	1	0.15
9	75	47	61	5	1	0.15
10	75	48	62	5	2	0.15
11	75	48	62	5	2	0.15
12	75	49	62	5	2	0.16
13	75	49	62	5	2	0.16
14	76	49	63	4	2	0.16
15	76	50	63	4	2	0.16
16	76	50	63	4	2	0.16
17	76	50	63	4	2	0.16
18	77	51	64	3	2	0.16
19	77	51	64	3	2	0.16
20	77	51	64	3	2	0.16
21	77	52	65	3	3	0.16
22	78	52	65	3	3	0.16
23	78	52	65	3	3	0.16
24	78	52	65	3	3	0.16
25	78	52	65	3	3	0.16
26	79	53	66	2	3	0.16
27	79	53	66	2	3	0.16
28	79	53	66	2	3	0.16
29	79	54	67	2	4	0.16
30	80	54	67	2	4	0.16
31	80	54	67	2	4	0.16
MTH	76.4	49.8	63.1	125	67	4.85

SPRING SEASON: 68.8 41.4 55.2 980 74 15.29

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MURPHY 2 NE NORTH CAROLINA Station Number: 316001

Latitude: 35 B 06 * 45 (Longitude: -084 B 00* 25 (Elevation (feet): 1640

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	55	67	2	4	0.16
2	81	55	68	1	4	0.16
3	81	56	68	1	4	0.16
4	81	56	68	1	4	0.16
5	81	56	68	1	4	0.16
6	81	56	69	1	5	0.16
7	82	56	69	1	5	0.16
8	82	56	69	1	5	0.16
9	82	56	69	1	5	0.16
10	82	56	69	1	5	0.16
11	82	57	70	0	5	0.16
12	82	57	70	0	5	0.15
13	82	58	70	0	5	0.15
14	83	58	71	0	6	0.15
15	83	58	71	0	6	0.15
16	83	58	71	0	6	0.16
17	83	59	71	0	6	0.16
18	83	59	71	0	6	0.16
19	83	59	71	0	6	0.16
20	83	59	71	0	6	0.16
21	84	59	72	0	7	0.16
22	84	60	72	0	7	0.16
23	84	60	72	0	7	0.16
24	84	60	72	0	7	0.16
25	84	60	72	0	7	0.16
26	84	60	72	0	7	0.16
27	84	60	72	0	7	0.16
28	85	61	73	0	8	0.16
29	85	61	73	0	8	0.16
30	85	61	73	0	8	0.16
MTH	82.8	58.1	70.5	11	175	4.76

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	62	73	0	8	0.16
2	85	62	73	0	8	0.16
3	85	62	73	0	8	0.16
4	85	62	74	0	9	0.16
5	85	62	74	0	9	0.16
6	86	62	74	0	9	0.16
7	86	62	74	0	9	0.16
8	86	63	74	0	9	0.16
9	86	63	74	0	9	0.16
10	86	63	74	0	9	0.16
11	86	63	74	0	9	0.16
12	86	63	74	0	9	0.16
13	86	63	74	0	9	0.16
14	86	63	75	0	10	0.16
15	86	63	75	0	10	0.16
16	86	63	75	0	10	0.16
17	86	63	75	0	10	0.16
18	86	63	75	0	10	0.16
19	86	63	75	0	10	0.16
20	86	63	75	0	10	0.16
21	86	63	75	0	10	0.16
22	86	63	75	0	10	0.16
23	86	63	75	0	10	0.16
24	87	63	75	0	10	0.16
25	87	63	75	0	10	0.16
26	87	63	75	0	10	0.16
27	87	63	75	0	10	0.16
28	87	63	75	0	10	0.16
29	87	63	75	0	10	0.16
30	87	63	75	0	10	0.15
31	87	63	75	0	10	0.15
MTH	86.1	62.8	74.5	0	294	4.94

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	87	63	75	0	10	0.16
2	87	63	75	0	10	0.16
3	86	63	75	0	10	0.15
4	86	63	75	0	10	0.15
5	86	63	75	0	10	0.15
6	86	63	75	0	10	0.15
7	86	63	75	0	10	0.15
8	86	63	75	0	10	0.15
9	86	63	75	0	10	0.15
10	86	63	74	0	9	0.15
11	86	63	74	0	9	0.15
12	86	63	74	0	9	0.15
13	86	63	74	0	9	0.15
14	86	63	74	0	9	0.15
15	86	63	74	0	9	0.15
16	86	62	74	0	9	0.15
17	86	62	74	0	9	0.15
18	86	62	74	0	9	0.15
19	85	62	74	0	9	0.15
20	85	61	73	0	8	0.15
21	85	61	73	0	8	0.15
22	85	61	73	0	8	0.15
23	85	61	73	0	8	0.15
24	85	61	73	0	8	0.15
25	85	61	73	0	8	0.15
26	85	61	73	0	8	0.15
27	84	61	73	0	8	0.15
28	84	60	72	0	7	0.15
29	84	60	72	0	7	0.15
30	84	60	72	0	7	0.15
31	84	60	72	0	7	0.14
MTH	85.5	62.0	73.8	0	272	4.66

SUMMER SEASON:	84.8	60.9	72.9	11	741	14.36

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	60	72	0	7	0.15
2	83	60	71	0	6	0.14
3	83	60	71	0	6	0.14
4	83	60	71	0	6	0.14
5	83	60	71	0	6	0.14
6	83	60	71	0	6	0.14
7	82	60	71	0	6	0.14
8	82	58	70	0	5	0.14
9	82	58	70	0	5	0.14
10	82	58	70	0	5	0.14
11	81	58	70	0	5	0.14
12	81	58	70	0	5	0.14
13	81	58	70	0	5	0.14
14	81	57	69	0	4	0.14
15	80	56	68	1	4	0.13
16	80	56	68	1	4	0.13
17	80	56	68	1	4	0.13
18	80	56	68	1	4	0.13
19	79	55	67	2	4	0.13
20	79	55	67	2	4	0.13
21	79	54	66	2	3	0.13
22	79	53	66	2	3	0.12
23	78	53	66	2	3	0.12
24	78	53	66	2	3	0.12
25	78	52	65	3	3	0.12
26	77	52	65	3	3	0.12
27	77	52	65	3	3	0.11
28	77	51	64	3	2	0.11
29	77	50	64	3	2	0.11
30	76	50	63	4	2	0.11
MTH	80.2	56.0	68.1	35	128	3.92

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	50	63	4	2	0.11
2	76	48	62	5	2	0.10
3	76	48	62	5	2	0.10
4	76	47	61	6	2	0.10
5	76	47	61	6	2	0.10
6	76	47	61	6	2	0.10
7	74	46	60	6	1	0.10
8	74	46	60	6	1	0.10
9	73	45	59	7	1	0.09
10	73	45	59	7	1	0.09
11	73	44	59	7	1	0.09
12	72	44	58	8	1	0.09
13	72	44	58	8	1	0.09
14	71	43	57	9	1	0.09
15	71	43	57	9	1	0.09
16	71	42	57	9	1	0.09
17	70	42	56	10	1	0.10
18	70	42	56	10	1	0.10
19	70	41	56	10	1	0.10
20	70	41	56	10	1	0.10
21	69	41	55	10	0	0.10
22	68	40	54	11	0	0.10
23	68	40	54	11	0	0.10
24	68	40	54	11	0	0.10
25	68	39	54	11	0	0.11
26	67	39	53	12	0	0.11
27	67	39	53	12	0	0.11
28	67	39	53	12	0	0.11
29	66	38	52	13	0	0.12
30	66	38	52	13	0	0.12
31	66	38	52	13	0	0.12
MTH	71.0	42.8	56.9	277	26	3.13

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	38	52	14	1	0.13
2	65	38	51	14	0	0.13
3	65	38	51	14	*	0.13
4	65	38	51	14	*	0.14
5	65	37	51	15	*	0.14
6	65	36	50	15	*	0.14
7	64	36	50	15	*	0.14
8	63	36	50	15	*	0.15
9	62	36	49	16	*	0.15
10	62	36	49	16	0	0.15
11	62	35	49	16	0	0.15
12	61	35	48	17	0	0.15
13	61	35	48	17	0	0.15
14	61	35	48	17	0	0.16
15	61	34	48	17	0	0.16
16	60	34	47	18	0	0.16
17	60	34	47	18	0	0.16
18	60	34	47	18	0	0.16
19	59	33	46	19	0	0.16
20	59	33	46	19	0	0.16
21	59	33	46	19	0	0.16
22	58	33	46	19	0	0.16
23	58	32	45	20	0	0.16
24	58	32	45	20	0	0.16
25	57	32	45	20	0	0.16
26	57	31	44	21	0	0.16
27	57	31	44	21	0	0.16
28	56	31	44	21	0	0.16
29	56	31	44	21	0	0.16
30	55	31	43	22	0	0.16
MTH	60.6	34.3	47.5	528	2	4.57

AUTUMN SEASON:	70.6	44.3	57.5	840	156	11.62
ANNUAL:	68.7	43.4	56.1	4186	971	57.06

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: MURPHY 2 NE NORTH CAROLINA Station Number: 316001

Latitude: 35° 06* 45(Longitude: -084° 00* 25(Elevation (feet): 1640

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.21	0.64	1.20	0.91	1.04	0.53	1.06	0.67	0.33	0.09	0.86	0.74	33.29
0.010	1.44	0.81	1.43	1.09	1.23	0.69	1.26	0.83	0.44	0.13	1.04	0.92	35.18
0.050	2.24	1.47	2.24	1.73	1.90	1.29	1.95	1.45	0.91	0.39	1.66	1.57	40.69
0.100	2.78	1.95	2.78	2.15	2.35	1.74	2.40	1.90	1.28	0.64	2.09	2.04	43.86
0.200	3.55	2.68	3.56	2.77	2.99	2.43	3.05	2.55	1.85	1.09	2.71	2.73	47.93
0.300	4.19	3.30	4.21	3.28	3.52	3.03	3.59	3.12	2.36	1.52	3.23	3.32	51.01
0.400	4.80	3.91	4.82	3.76	4.02	3.62	4.10	3.66	2.88	1.98	3.72	3.88	53.74
0.500	5.42	4.55	5.45	4.26	4.53	4.24	4.61	4.23	3.42	2.50	4.22	4.47	56.39
0.600	6.09	5.26	6.13	4.80	5.08	4.93	5.17	4.85	4.03	3.09	4.77	5.11	59.12
0.700	6.86	6.09	6.92	5.42	5.72	5.74	5.82	5.58	4.75	3.83	5.41	5.86	62.14
0.800	7.85	7.16	7.92	6.21	6.53	6.80	6.64	6.52	5.71	4.82	6.23	6.83	65.80
0.900	9.36	8.84	9.46	7.44	7.77	8.46	7.89	7.98	7.22	6.46	7.48	8.34	71.10
0.950	10.74	10.41	10.86	8.55	8.90	10.01	9.04	9.33	8.65	8.04	8.64	9.74	75.69
0.990	13.66	13.79	13.84	10.92	11.29	13.38	11.46	12.25	11.76	11.61	11.08	12.73	84.80
0.995	14.85	15.17	15.05	11.88	12.25	14.76	12.44	13.44	13.06	13.12	12.08	13.95	88.32

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: NORTH FORK 2 NORTH CAROLINA Station Number: 316236

Latitude: 35 B 39 * 41 (Longitude: -082 B 20* 34 (Elevation (feet): 2480

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.11
4						0.11
5						0.11
6						0.11
7						0.11
8						0.11
9						0.11
10						0.11
11						0.11
12						0.11
13						0.11
14						0.11
15						0.11
16						0.11
17						0.11
18						0.11
19						0.11
20						0.11
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.11
28						0.12
29						0.12
30						0.12
31						0.12
MTH						3.47
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.13
3						0.13
4						0.13
5						0.13
6						0.13
7						0.13
8						0.14
9						0.14
10						0.14
11						0.14
12						0.14
13						0.14
14						0.14
15						0.14
16						0.14
17						0.14
18						0.14
19						0.14
20						0.14
21						0.15
22						0.15
23						0.15
24						0.15
25						0.15
26						0.14
27						0.14
28						0.14
29						0.14
30						0.14
31						0.14
MTH						4.31
						11.78

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.14
7						0.14
8						0.14
9						0.14
10						0.14
11						0.14
12						0.14
13						0.14
14						0.14
15						0.14
16						0.14
17						0.14
18						0.14
19						0.14
20						0.14
21						0.15
22						0.15
23						0.15
24						0.15
25						0.15
26						0.15
27						0.15
28						0.15
MTH						4.00

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16
2						0.16
3						0.16
4						0.16
5						0.16
6						0.16
7						0.16
8						0.16
9						0.16
10						0.17
11						0.17
12						0.17
13						0.17
14						0.17
15						0.17
16						0.17
17						0.17
18						0.16
19						0.16
20						0.16
21						0.16
22						0.16
23						0.16
24						0.16
25						0.16
26						0.16
27						0.15
28						0.15
29						0.15
30						0.15
31						0.15
MTH						4.99
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.13
7						0.13
8						0.13
9						0.13
10						0.13
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.13
17						0.13
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.13
24						0.13
25						0.13
26						0.13
27						0.13
28						0.14
29						0.14
30						0.14
MTH						3.98
						13.87

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.15
3						0.15
4						0.15
5						0.15
6						0.15
7						0.15
8						0.16
9						0.16
10						0.16
11						0.16
12						0.16
13						0.16
14						0.16
15						0.16
16						0.16
17						0.16
18						0.16
19						0.16
20						0.16
21						0.17
22						0.17
23						0.16
24						0.16
25						0.16
26						0.16
27						0.16
28						0.16
29						0.16
30						0.16
31						0.16
MTH						4.90

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JUNE							JULY							AUGUST						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.16	1						0.14	1						0.13
2						0.16	2						0.14	2						0.13
3						0.16	3						0.14	3						0.13
4						0.16	4						0.14	4						0.13
5						0.15	5						0.14	5						0.13
6						0.15	6						0.14	6						0.13
7						0.15	7						0.14	7						0.12
8						0.15	8						0.14	8						0.12
9						0.15	9						0.14	9						0.12
10						0.15	10						0.14	10						0.12
11						0.15	11						0.14	11						0.12
12						0.15	12						0.14	12						0.12
13						0.15	13						0.14	13						0.12
14						0.15	14						0.14	14						0.12
15						0.15	15						0.14	15						0.12
16						0.15	16						0.14	16						0.12
17						0.15	17						0.14	17						0.12
18						0.15	18						0.14	18						0.12
19						0.14	19						0.14	19						0.12
20						0.14	20						0.14	20						0.12
21						0.14	21						0.13	21						0.12
22						0.14	22						0.13	22						0.12
23						0.14	23						0.13	23						0.12
24						0.14	24						0.13	24						0.12
25						0.14	25						0.13	25						0.12
26						0.14	26						0.13	26						0.13
27						0.14	27						0.13	27						0.13
28						0.14	28						0.13	28						0.13
29						0.14	29						0.13	29						0.13
30						0.14	30						0.13	30						0.13
							31						0.13	31						0.13
MTH						4.42	MTH						4.23	MTH						3.84
						SUMMER SEASON:							12.49							

SEPTEMBER							OCTOBER							NOVEMBER						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.13	1						0.11	1						0.12
2						0.13	2						0.11	2						0.12
3						0.13	3						0.11	3						0.12
4						0.13	4						0.11	4						0.12
5						0.13	5						0.11	5						0.12
6						0.13	6						0.11	6						0.12
7						0.13	7						0.10	7						0.12
8						0.13	8						0.10	8						0.13
9						0.13	9						0.10	9						0.13
10						0.13	10						0.10	10						0.13
11						0.13	11						0.10	11						0.13
12						0.13	12						0.10	12						0.13
13						0.13	13						0.10	13						0.13
14						0.13	14						0.10	14						0.13
15						0.13	15						0.10	15						0.13
16						0.13	16						0.10	16						0.13
17						0.13	17						0.10	17						0.13
18						0.13	18						0.10	18						0.13
19						0.13	19						0.10	19						0.13
20						0.13	20						0.10	20						0.13
21						0.12	21						0.10	21						0.13
22						0.12	22						0.10	22						0.13
23						0.12	23						0.10	23						0.13
24						0.12	24						0.10	24						0.13
25						0.12	25						0.11	25						0.13
26						0.12	26						0.11	26						0.13
27						0.12	27						0.11	27						0.12
28						0.12	28						0.11	28						0.12
29						0.11	29						0.11	29						0.12
30						0.11	30						0.11	30						0.12
							31						0.12							
MTH						3.78	MTH						3.24	MTH						3.79
						AUTUMN SEASON:							10.81							
						ANNUAL:							48.95							

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Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.68	0.52	0.90	0.65	0.89	0.41	0.55	0.39	0.12	0.12	0.74	0.37	29.87
0.010	0.84	0.66	1.10	0.80	1.08	0.54	0.70	0.51	0.19	0.18	0.89	0.48	31.40
0.050	1.42	1.18	1.78	1.34	1.75	1.08	1.25	0.98	0.52	0.48	1.41	0.92	35.88
0.100	1.83	1.56	2.25	1.71	2.21	1.49	1.65	1.34	0.83	0.75	1.76	1.25	38.44
0.200	2.43	2.13	2.93	2.27	2.88	2.13	2.26	1.90	1.38	1.22	2.27	1.75	41.70
0.300	2.94	2.63	3.50	2.73	3.44	2.71	2.78	2.39	1.90	1.67	2.70	2.19	44.17
0.400	3.43	3.11	4.05	3.18	3.97	3.28	3.28	2.88	2.45	2.14	3.10	2.63	46.35
0.500	3.94	3.61	4.61	3.64	4.52	3.88	3.81	3.39	3.06	2.65	3.51	3.08	48.45
0.600	4.49	4.16	5.21	4.15	5.12	4.55	4.39	3.96	3.76	3.24	3.96	3.59	50.62
0.700	5.14	4.81	5.92	4.74	5.82	5.34	5.08	4.64	4.62	3.96	4.48	4.19	53.01
0.800	5.98	5.65	6.83	5.50	6.70	6.39	5.96	5.52	5.78	4.93	5.15	4.97	55.89
0.900	7.28	6.96	8.23	6.67	8.08	8.04	7.35	6.91	7.67	6.52	6.17	6.20	60.07
0.950	8.47	8.18	9.51	7.76	9.34	9.60	8.63	8.21	9.50	8.04	7.11	7.34	63.66
0.990	11.03	10.81	12.24	10.07	12.01	12.98	11.40	11.05	13.61	11.45	9.09	9.84	70.79
0.995	12.08	11.89	13.35	11.01	13.10	14.38	12.54	12.22	15.33	12.88	9.90	10.86	73.52

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
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NOTES

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This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: OCONALUFTEE NORTH CAROLINA Station Number: 316341

Latitude: 35° 30* 56(Longitude: -083° 18* 19(Elevation (feet): 2040

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	26	41	24	0	0.17
2	56	26	41	24	0	0.17
3	55	26	40	25	0	0.17
4	55	26	40	25	0	0.16
5	55	25	40	25	0	0.16
6	54	25	39	26	0	0.16
7	53	25	39	26	0	0.16
8	53	25	39	26	0	0.16
9	53	24	39	26	0	0.16
10	52	24	38	27	0	0.16
11	52	24	38	27	0	0.16
12	52	24	38	27	0	0.16
13	52	24	38	27	0	0.16
14	51	24	38	27	0	0.16
15	51	23	37	28	0	0.16
16	51	23	37	28	0	0.17
17	51	23	37	28	0	0.17
18	51	23	37	28	0	0.17
19	50	23	37	28	0	0.17
20	50	22	36	29	0	0.17
21	50	22	36	29	0	0.17
22	50	22	36	29	0	0.17
23	50	22	36	29	0	0.17
24	49	22	36	29	0	0.17
25	49	22	36	29	0	0.17
26	48	22	35	30	0	0.18
27	48	22	35	30	0	0.18
28	48	22	35	30	0	0.18
29	48	22	35	30	0	0.18
30	48	22	35	30	0	0.18
31	48	22	35	30	0	0.18
MTH	51.3	23.5	37.4	856	0	5.21
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	22	35	30	0	0.18
2	48	22	35	30	0	0.19
3	48	22	35	30	0	0.19
4	48	21	35	30	0	0.19
5	48	21	35	30	0	0.19
6	48	21	35	30	0	0.19
7	48	21	34	31	0	0.19
8	48	21	34	31	0	0.19
9	48	21	34	31	0	0.19
10	48	21	34	31	0	0.19
11	48	21	34	31	0	0.20
12	48	21	34	31	0	0.20
13	48	21	34	31	0	0.20
14	48	21	34	31	0	0.20
15	47	21	34	31	0	0.20
16	47	21	34	31	0	0.20
17	47	21	34	31	0	0.20
18	47	21	34	31	0	0.20
19	47	21	34	31	0	0.20
20	48	21	35	30	0	0.20
21	48	21	35	30	0	0.20
22	48	21	35	30	0	0.19
23	48	21	35	30	0	0.19
24	48	21	35	30	0	0.19
25	48	21	35	30	0	0.19
26	48	22	35	30	0	0.19
27	48	22	35	30	0	0.19
28	48	22	35	30	0	0.19
29	48	22	35	30	0	0.19
30	48	22	35	30	0	0.18
31	49	22	36	29	0	0.18
MTH	47.9	21.3	34.6	942	0	5.97
	50.6	22.8	36.7	2551	0	16.12

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	22	36	29	0	0.18
2	50	22	36	29	0	0.18
3	50	22	36	29	0	0.18
4	50	22	36	29	0	0.18
5	50	22	36	29	0	0.18
6	50	23	36	29	0	0.18
7	51	23	37	28	0	0.17
8	51	23	37	28	0	0.17
9	51	23	37	28	0	0.17
10	51	23	37	28	0	0.17
11	51	23	37	28	0	0.17
12	52	23	37	28	0	0.17
13	52	23	38	27	0	0.17
14	52	23	38	27	0	0.17
15	53	23	38	27	0	0.17
16	53	23	38	27	0	0.17
17	53	23	38	27	0	0.17
18	53	24	39	26	0	0.17
19	54	24	39	26	0	0.17
20	54	24	39	26	0	0.18
21	54	24	39	26	0	0.18
22	54	25	40	25	0	0.18
23	55	25	40	25	0	0.18
24	55	25	40	25	0	0.18
25	55	25	40	25	0	0.18
26	56	26	41	24	0	0.19
27	56	26	41	24	0	0.19
28	56	26	41	24	0	0.19
MTH	52.6	23.6	38.1	753	0	4.94

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	27	42	23	0	0.19
2	57	27	42	23	0	0.19
3	57	27	42	23	0	0.20
4	57	28	42	23	0	0.20
5	58	28	43	22	0	0.20
6	58	28	43	22	0	0.20
7	59	28	43	22	0	0.20
8	59	28	43	22	0	0.20
9	59	28	44	21	0	0.20
10	59	29	44	21	0	0.20
11	59	29	44	21	0	0.21
12	59	29	44	21	0	0.21
13	60	29	45	20	0	0.21
14	60	30	45	20	0	0.21
15	60	30	45	20	0	0.21
16	60	30	45	20	0	0.21
17	61	30	46	19	0	0.20
18	61	30	46	19	0	0.20
19	62	30	46	19	0	0.20
20	62	30	46	19	0	0.20
21	62	31	47	18	0	0.20
22	63	31	47	18	0	0.20
23	63	31	47	18	0	0.20
24	63	31	47	18	0	0.19
25	63	32	48	17	0	0.19
26	64	32	48	17	0	0.19
27	64	32	48	17	0	0.19
28	64	32	48	17	0	0.19
29	64	33	49	16	0	0.18
30	65	33	49	16	0	0.18
31	65	33	49	16	0	0.18
MTH	60.8	29.9	45.4	608	0	6.13
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	33	49	16	0	0.17
2	66	33	49	16	0	0.17
3	66	34	50	15	0	0.17
4	67	34	50	15	0	0.16
5	67	34	50	15	0	0.16
6	67	34	50	15	0	0.16
7	67	34	51	14	0	0.16
8	67	35	51	14	0	0.15
9	67	35	51	14	0	0.15
10	67	35	51	14	0	0.15
11	68	35	52	13	0	0.15
12	68	36	52	13	0	0.15
13	68	36	52	13	0	0.15
14	68	36	52	13	0	0.15
15	69	36	53	12	0	0.15
16	69	37	53	12	0	0.14
17	69	37	53	12	0	0.14
18	69	37	53	12	0	0.14
19	70	37	54	11	0	0.14
20	70	38	54	11	0	0.14
21	70	38	54	11	0	0.15
22	70	38	54	11	0	0.15
23	71	38	55	10	0	0.15
24	71	39	55	10	0	0.15
25	71	39	55	10	0	0.15
26	72	39	56	9	0	0.15
27	72	40	56	9	0	0.15
28	72	40	56	9	0	0.15
29	72	40	56	9	0	0.16
30	73	41	57	9	1	0.16
MTH	69.0	36.6	52.8	367	1	4.57
	68.7	37.3	53.1	1145	47	16.18

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	42	57	9	1	0.16
2	73	42	57	9	1	0.16
3	73	42	58	8	1	0.17
4	74	42	58	8	1	0.17
5	74	43	58	8	1	0.17
6	74	43	58	8	1	0.17
7	74	43	59	7	1	0.17
8	74	43	59	7	1	0.18
9	75	43	59	7	1	0.18
10	75	43	59	7	1	0.18
11	75	44	60	6	1	0.18
12	75	44	60	6	1	0.18
13	76	44	60	6	1	0.18
14	76	45	61	5	1	0.18
15	76	45	61	5	1	0.18
16	76	46	61	5	1	0.18
17	77	46	62	5	2	0.18
18	77	46	62	5	2	0.18
19	77	47	62	5	2	0.18
20	77	47	62	5	2	0.18
21	77	47	62	5	2	0.18
22	78	47	63	4	2	0.18
23	78	48	63	4	2	0.18
24	78	48	63	4	2	0.18
25	78	48	63	4	2	0.18
26	79	49	64	3	2	0.18
27	79	49	64	3	2	0.18
28	79	49	64	3	2	0.18
29	79	49	64	3	2	0.18
30	79	49	64	3	2	0.18
31	79	49	64	3	2	0.17
MTH	76.3	45.6	61.0	170	46	5.48

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: OCONALUFTEE NORTH CAROLINA Station Number: 316341

Latitude: 35B 30* 56 (Longitude: -083B 18* 19 (Elevation (feet): 2040

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	51	65	3	3	0.17
2	80	51	65	3	3	0.17
3	81	51	66	2	3	0.17
4	81	51	66	2	3	0.17
5	81	51	66	2	3	0.17
6	81	51	66	2	3	0.16
7	81	51	66	2	3	0.16
8	81	52	67	1	3	0.16
9	81	52	67	1	3	0.16
10	82	52	67	1	3	0.16
11	82	52	67	1	3	0.16
12	82	52	67	1	3	0.16
13	82	53	68	1	4	0.16
14	82	53	68	1	4	0.16
15	82	54	68	1	4	0.16
16	82	54	68	1	4	0.16
17	82	54	68	1	4	0.15
18	83	54	69	0	4	0.15
19	83	54	69	0	4	0.15
20	83	55	69	0	4	0.15
21	83	55	69	0	4	0.15
22	84	55	70	0	5	0.15
23	84	55	70	0	5	0.15
24	84	55	70	0	5	0.15
25	84	56	70	0	5	0.15
26	84	56	70	0	5	0.15
27	84	56	70	0	5	0.15
28	84	56	70	0	5	0.15
29	84	56	70	0	5	0.15
30	84	56	70	0	5	0.15
MTH	82.4	53.5	68.0	26	117	4.71

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	57	70	1	6	0.15
2	85	57	71	0	6	0.15
3	85	57	71	0	6	0.15
4	85	57	71	0	6	0.15
5	85	57	71	0	6	0.16
6	85	57	71	0	6	0.16
7	85	57	71	0	6	0.16
8	85	58	71	0	6	0.16
9	85	58	71	0	6	0.16
10	85	58	71	0	6	0.16
11	85	58	72	0	7	0.16
12	85	58	72	0	7	0.16
13	85	58	72	0	7	0.16
14	85	58	72	0	7	0.16
15	86	58	72	0	7	0.16
16	86	58	72	0	7	0.16
17	86	58	72	0	7	0.16
18	86	58	72	0	7	0.16
19	86	58	72	0	7	0.15
20	86	58	72	0	7	0.15
21	86	58	72	0	7	0.15
22	86	58	72	0	7	0.15
23	86	58	72	0	7	0.15
24	86	58	72	0	7	0.15
25	86	58	72	0	7	0.15
26	86	58	72	0	7	0.15
27	86	58	72	0	7	0.15
28	86	58	72	0	7	0.15
29	86	58	72	0	7	0.15
30	86	58	72	0	7	0.15
31	86	58	72	0	7	0.15
MTH	85.5	57.8	71.7	1	207	4.79
SUMMER SEASON:	84.2	55.9	70.1	27	502	13.84

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	58	72	0	7	0.14
2	86	58	72	0	7	0.14
3	86	58	72	0	7	0.14
4	86	58	72	0	7	0.14
5	86	58	72	0	7	0.14
6	86	58	72	0	7	0.14
7	85	58	72	0	7	0.14
8	85	57	71	0	6	0.14
9	85	57	71	0	6	0.14
10	85	57	71	0	6	0.14
11	85	57	71	0	6	0.14
12	85	57	71	0	6	0.14
13	85	57	71	0	6	0.14
14	85	57	71	0	6	0.14
15	85	57	71	0	6	0.14
16	85	57	71	0	6	0.14
17	85	57	71	0	6	0.14
18	85	56	71	0	6	0.14
19	85	56	71	0	6	0.14
20	84	56	70	0	5	0.14
21	84	56	70	0	5	0.14
22	84	56	70	0	5	0.14
23	84	56	70	0	5	0.14
24	84	56	70	0	5	0.14
25	84	56	70	0	5	0.14
26	84	55	70	0	5	0.14
27	84	55	70	0	5	0.14
28	84	55	70	0	5	0.14
29	83	55	69	0	4	0.14
30	83	55	69	0	4	0.14
31	83	55	69	0	4	0.14
MTH	84.7	56.6	70.7	0	178	4.34

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	55	69	0	4	0.14
2	83	55	69	0	4	0.14
3	83	54	68	0	3	0.14
4	83	54	68	0	3	0.14
5	82	54	68	0	3	0.14
6	82	54	68	0	3	0.14
7	82	54	68	0	3	0.14
8	82	53	67	1	3	0.14
9	82	52	67	1	3	0.14
10	82	52	67	1	3	0.14
11	81	52	67	1	3	0.14
12	81	52	67	1	3	0.14
13	81	52	67	1	3	0.14
14	81	51	66	1	2	0.14
15	80	51	66	1	2	0.14
16	80	50	65	2	2	0.14
17	80	50	65	2	2	0.14
18	80	50	65	2	2	0.14
19	79	49	64	3	2	0.14
20	79	49	64	3	2	0.14
21	79	49	64	3	2	0.13
22	78	49	64	3	2	0.13
23	78	48	63	3	1	0.13
24	78	47	63	3	1	0.13
25	78	46	62	4	1	0.13
26	78	46	62	4	1	0.13
27	77	46	62	4	1	0.13
28	77	45	61	5	1	0.12
29	77	45	61	5	1	0.12
30	76	44	60	6	1	0.12
MTH	80.1	50.3	65.2	60	67	4.07

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	44	60	6	1	0.12
2	75	44	59	7	1	0.11
3	75	44	59	7	1	0.11
4	75	44	59	7	1	0.11
5	75	42	58	8	1	0.11
6	75	41	58	8	1	0.11
7	74	40	57	9	1	0.11
8	74	40	57	9	1	0.11
9	73	40	57	9	1	0.10
10	73	39	56	10	1	0.10
11	73	39	56	10	1	0.10
12	72	39	56	10	1	0.10
13	72	38	55	10	0	0.10
14	72	38	55	10	0	0.10
15	71	38	55	10	0	0.10
16	71	37	54	11	0	0.10
17	71	37	54	11	0	0.10
18	70	36	53	12	0	0.11
19	70	36	53	12	0	0.11
20	70	36	53	12	0	0.11
21	70	36	53	12	0	0.11
22	69	35	52	13	0	0.11
23	69	35	52	13	0	0.11
24	69	35	52	13	0	0.11
25	68	34	51	14	0	0.12
26	68	34	51	14	0	0.12
27	67	34	51	14	0	0.12
28	67	33	50	15	0	0.12
29	67	33	50	15	0	0.12
30	66	33	50	15	0	0.13
31	66	33	50	15	0	0.13
MTH	71.1	37.7	54.4	341	12	3.42
AUTUMN SEASON:	70.6	39.3	55.0	989	79	12.24
ANNUAL:	68.5	38.8	53.7	4712	628	58.38

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	33	49	16	0	0.13
2	66	33	49	16	0	0.13
3	65	33	49	16	0	0.14
4	65	33	49	16	0	0.14
5	64	33	48	17	0	0.14
6	64	32	48	17	0	0.15
7	64	32	48	17	0	0.15
8	63	32	48	17	0	0.15
9	63	31	47	18	0	0.15
10	63	31	47	18	0	0.15
11	62	31	47	18	0	0.16
12	62	30	46	19	0	0.16
13	62	30	46	19	0	0.16
14	61	30	46	19	0	0.16
15	61	30	46	19	0	0.16
16	60	30	45	20	0	0.16
17	60	30	45	20	0	0.16
18	60	29	45	20	0	0.16
19	59	29	44	21	0	0.17
20	59	29	44	21	0	0.17
21	59	29	44	21	0	0.17
22	59	28	44	21	0	0.17
23	58	28	43	22	0	0.17
24	58	28	43	22	0	0.17
25	58	28	43	22	0	0.17
26	57	27	42	23	0	0.17
27	57	27	42	23	0	0.17
28	56	27	42	23	0	0.17
29	56	27	42	23	0	0.17
30	56	26	41	24	0	0.17
MTH	60.8	29.9	45.4	588	0	4.75

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: OCONALUFTEE NORTH CAROLINA Station Number: 316341

Latitude: 35° 30* 56(Longitude: -083° 18* 19(Elevation (feet): 2040

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.57	0.85	1.12	0.46	1.81	0.69	0.71	0.41	0.42	0.24	1.69	1.12	37.39
0.010	0.75	1.04	1.35	0.60	2.04	0.86	0.88	0.54	0.55	0.33	1.89	1.33	39.12
0.050	1.48	1.71	2.19	1.17	2.77	1.49	1.52	1.07	1.05	0.72	2.51	2.05	44.10
0.100	2.04	2.18	2.77	1.60	3.23	1.94	1.98	1.48	1.44	1.04	2.90	2.53	46.93
0.200	2.91	2.86	3.60	2.27	3.85	2.60	2.65	2.11	2.03	1.54	3.42	3.22	50.52
0.300	3.68	3.43	4.30	2.86	4.35	3.17	3.23	2.67	2.55	2.00	3.83	3.78	53.22
0.400	4.44	3.98	4.97	3.43	4.81	3.71	3.78	3.23	3.06	2.46	4.21	4.32	55.60
0.500	5.25	4.54	5.66	4.04	5.26	4.28	4.36	3.82	3.60	2.95	4.58	4.86	57.89
0.600	6.15	5.16	6.41	4.72	5.75	4.90	4.99	4.47	4.20	3.50	4.98	5.45	60.24
0.700	7.22	5.88	7.28	5.53	6.30	5.63	5.73	5.25	4.91	4.16	5.43	6.13	62.83
0.800	8.61	6.80	8.39	6.58	6.99	6.57	6.68	6.28	5.84	5.04	5.99	7.00	65.95
0.900	10.83	8.22	10.10	8.23	8.02	8.03	8.16	7.90	7.31	6.43	6.82	8.32	70.44
0.950	12.90	9.52	11.68	9.79	8.94	9.38	9.53	9.41	8.68	7.75	7.56	9.53	74.29
0.990	17.42	12.31	15.03	13.16	10.85	12.29	12.48	12.72	11.66	10.66	9.09	12.08	81.90
0.995	19.29	13.45	16.39	14.55	11.60	13.47	13.68	14.09	12.89	11.87	9.70	13.11	84.80

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: PISGAH FOREST 1 N NORTH CAROLINA Station Number: 316805

Latitude: 35° 16* 04 (Longitude: -082° 42* 10 (Elevation (feet): 2110

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	28	42	23	0	0.18
2	55	28	41	24	0	0.17
3	55	28	41	24	0	0.17
4	55	28	41	24	0	0.17
5	55	28	41	24	0	0.17
6	55	28	41	24	0	0.17
7	54	27	40	25	0	0.17
8	53	27	40	25	0	0.17
9	53	27	40	25	0	0.16
10	52	27	40	25	0	0.16
11	52	26	39	26	0	0.16
12	52	26	39	26	0	0.16
13	52	26	39	26	0	0.16
14	51	26	39	26	0	0.16
15	51	25	38	27	0	0.16
16	51	25	38	27	0	0.16
17	51	25	38	27	0	0.16
18	51	25	38	27	0	0.16
19	50	25	38	27	0	0.16
20	50	25	38	27	0	0.17
21	49	25	37	28	0	0.17
22	49	25	37	28	0	0.17
23	49	25	37	28	0	0.17
24	49	25	37	28	0	0.17
25	49	25	37	28	0	0.17
26	49	24	37	28	0	0.17
27	49	24	37	28	0	0.17
28	49	24	37	28	0	0.18
29	48	24	36	29	0	0.18
30	48	24	36	29	0	0.18
31	48	24	36	29	0	0.18
MTH	51.3	25.8	38.6	820	0	5.21

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	24	36	29	0	0.18
2	48	24	36	29	0	0.19
3	48	24	36	29	0	0.19
4	48	24	36	29	0	0.19
5	48	24	36	29	0	0.19
6	48	24	36	29	0	0.20
7	48	24	36	29	0	0.20
8	48	24	36	29	0	0.20
9	48	24	36	29	0	0.20
10	48	24	36	29	0	0.20
11	48	24	36	29	0	0.20
12	48	24	36	29	0	0.20
13	48	24	36	29	0	0.21
14	48	23	35	30	0	0.21
15	48	23	35	30	0	0.21
16	48	23	36	29	0	0.21
17	48	23	36	29	0	0.21
18	48	23	36	29	0	0.21
19	48	23	36	29	0	0.21
20	48	23	36	29	0	0.21
21	48	23	36	29	0	0.21
22	48	23	36	29	0	0.21
23	48	23	36	29	0	0.21
24	48	23	36	29	0	0.21
25	48	23	36	29	0	0.20
26	49	23	36	29	0	0.20
27	49	23	36	29	0	0.20
28	49	24	36	29	0	0.20
29	49	24	36	29	0	0.20
30	49	24	36	29	0	0.20
31	49	24	36	29	0	0.20
MTH	48.2	23.6	35.9	901	0	6.26

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	24	37	28	0	0.19
2	50	24	37	28	0	0.19
3	50	24	37	28	0	0.19
4	50	24	37	28	0	0.19
5	50	24	37	28	0	0.19
6	50	24	37	28	0	0.19
7	50	24	37	28	0	0.19
8	50	25	37	28	0	0.19
9	51	25	38	27	0	0.19
10	51	25	38	27	0	0.19
11	51	25	38	27	0	0.18
12	51	25	38	27	0	0.18
13	51	25	38	27	0	0.18
14	51	25	38	27	0	0.19
15	51	25	38	27	0	0.19
16	52	25	39	26	0	0.19
17	52	25	39	26	0	0.19
18	53	25	39	26	0	0.19
19	53	25	39	26	0	0.19
20	53	25	39	26	0	0.19
21	53	26	40	25	0	0.19
22	53	26	40	25	0	0.19
23	54	26	40	25	0	0.19
24	54	26	40	25	0	0.20
25	54	27	41	24	0	0.20
26	54	27	41	24	0	0.20
27	55	27	41	24	0	0.20
28	55	27	41	24	0	0.20
MTH	51.9	25.2	38.6	739	0	5.34

WINTER SEASON: 50.4 24.8 37.7 2460 0 16.81

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	28	42	23	0	0.21
2	56	29	42	23	0	0.21
3	56	29	42	23	0	0.21
4	56	29	42	23	0	0.21
5	57	29	43	22	0	0.22
6	57	29	43	22	0	0.22
7	57	29	43	22	0	0.22
8	57	29	43	22	0	0.22
9	57	30	44	21	0	0.22
10	58	30	44	21	0	0.22
11	58	30	44	21	0	0.22
12	58	30	44	21	0	0.22
13	58	31	45	20	0	0.22
14	59	31	45	20	0	0.22
15	59	31	45	20	0	0.22
16	59	31	45	20	0	0.22
17	60	32	46	19	0	0.22
18	60	32	46	19	0	0.22
19	60	32	46	19	0	0.22
20	60	32	46	19	0	0.21
21	61	33	47	18	0	0.21
22	61	33	47	18	0	0.21
23	61	33	47	18	0	0.21
24	61	33	47	18	0	0.21
25	62	33	48	17	0	0.20
26	62	34	48	17	0	0.20
27	62	34	48	17	0	0.20
28	62	34	48	17	0	0.19
29	63	34	49	16	0	0.19
30	63	34	49	16	0	0.19
31	64	34	49	16	0	0.18
MTH	59.4	31.4	45.4	608	0	6.54

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	35	49	16	0	0.18
2	65	35	50	15	0	0.17
3	65	35	50	15	0	0.17
4	65	35	50	15	0	0.17
5	65	36	50	15	0	0.16
6	66	36	51	14	0	0.16
7	66	36	51	14	0	0.16
8	66	36	51	14	0	0.16
9	66	36	51	14	0	0.15
10	67	37	52	13	0	0.15
11	67	37	52	13	0	0.15
12	67	37	52	13	0	0.15
13	67	37	52	13	0	0.15
14	68	38	53	12	0	0.15
15	68	38	53	12	0	0.14
16	68	38	53	12	0	0.14
17	68	38	53	12	0	0.14
18	69	39	54	11	0	0.14
19	69	39	54	11	0	0.14
20	69	39	54	11	0	0.14
21	69	40	55	10	0	0.14
22	70	40	55	10	0	0.15
23	70	40	55	10	0	0.15
24	70	40	55	10	0	0.15
25	70	41	56	9	0	0.15
26	71	41	56	9	0	0.15
27	71	41	56	9	0	0.15
28	71	41	56	9	0	0.16
29	71	42	57	9	1	0.16
30	71	42	57	9	1	0.16
MTH	68.0	38.2	53.1	359	2	4.59

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	43	57	8	0	0.16
2	72	43	57	8	0	0.17
3	72	43	58	8	1	0.17
4	72	44	58	8	1	0.17
5	72	44	58	8	1	0.18
6	73	44	58	8	1	0.18
7	73	45	59	7	1	0.18
8	73	45	59	7	1	0.18
9	73	45	59	7	1	0.19
10	73	46	60	7	2	0.19
11	74	46	60	6	1	0.19
12	74	46	60	6	1	0.19
13	74	46	60	6	1	0.19
14	74	46	60	6	1	0.19
15	74	47	61	5	1	0.19
16	75	47	61	5	1	0.19
17	75	47	61	5	1	0.19
18	75	47	61	5	1	0.20
19	75	47	61	5	1	0.20
20	75	48	62	5	2	0.20
21	76	48	62	5	2	0.20
22	76	49	63	4	2	0.20
23	76	49	63	4	2	0.20
24	76	50	63	4	2	0.20
25	76	50	63	4	2	0.19
26	76	50	63	4	2	0.19
27	77	50	64	3	2	0.19
28	77	51	64	3	2	0.19
29	77	51	64	3	2	0.19
30	77	51	64	3	2	0.19
31	77	51	64	3	2	0.19
MTH	74.6	47.1	60.9	170	42	5.83

SPRING SEASON: 67.3 38.9 53.1 1137 44 16.96

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: PISGAH FOREST 1 N NORTH CAROLINA Station Number: 316805

Latitude: 35° 16* 04 (Longitude: -082° 42* 10 (Elevation (feet): 2110

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	51	64	2	1	0.19
2	78	53	65	2	2	0.18
3	78	53	65	2	2	0.18
4	79	53	66	2	3	0.18
5	79	53	66	2	3	0.18
6	79	54	66	2	3	0.18
7	79	54	66	2	3	0.18
8	80	54	67	1	3	0.18
9	80	54	67	1	3	0.17
10	80	54	67	1	3	0.17
11	80	54	67	1	3	0.17
12	80	54	67	1	3	0.17
13	80	55	68	1	4	0.17
14	81	55	68	1	4	0.17
15	81	55	68	1	4	0.17
16	81	55	68	1	4	0.17
17	81	55	68	1	4	0.17
18	81	56	69	0	4	0.17
19	82	56	69	0	4	0.17
20	82	56	69	0	4	0.17
21	82	56	69	0	4	0.17
22	82	57	70	0	5	0.17
23	82	57	70	0	5	0.17
24	82	57	70	0	5	0.16
25	82	57	70	0	5	0.16
26	83	57	70	0	5	0.16
27	83	57	70	0	5	0.16
28	83	57	70	0	5	0.17
29	83	58	71	0	6	0.17
30	83	58	71	0	6	0.17
MTH	80.8	55.2	68.0	24	115	5.15
					SUMMER SEASON:	

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	58	71	0	6	0.17
2	83	59	71	0	6	0.17
3	84	59	71	0	6	0.17
4	84	59	71	0	6	0.17
5	84	59	71	0	6	0.17
6	84	59	71	0	6	0.17
7	84	59	72	0	7	0.17
8	84	59	72	0	7	0.17
9	84	60	72	0	7	0.17
10	84	60	72	0	7	0.17
11	84	60	72	0	7	0.17
12	84	60	72	0	7	0.17
13	84	60	72	0	7	0.17
14	84	60	72	0	7	0.17
15	84	60	72	0	7	0.17
16	84	60	72	0	7	0.17
17	84	60	72	0	7	0.17
18	84	60	72	0	7	0.17
19	84	60	72	0	7	0.17
20	84	60	72	0	7	0.17
21	85	60	73	0	8	0.17
22	85	60	73	0	8	0.17
23	85	60	73	0	8	0.17
24	85	60	73	0	8	0.17
25	84	60	72	0	7	0.17
26	84	60	72	0	7	0.17
27	84	60	72	0	7	0.17
28	84	60	72	0	7	0.18
29	84	60	72	0	7	0.18
30	84	60	72	0	7	0.18
31	84	60	72	0	7	0.18
MTH	84.1	59.7	71.9	0	215	5.31
	82.5	57.9	70.3	24	510	15.99

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	60	72	0	7	0.17
2	84	60	72	0	7	0.17
3	84	60	72	0	7	0.17
4	84	60	72	0	7	0.17
5	84	60	72	0	7	0.17
6	84	60	72	0	7	0.18
7	84	60	72	0	7	0.18
8	84	60	72	0	7	0.18
9	84	59	72	0	7	0.18
10	83	59	71	0	6	0.18
11	83	59	71	0	6	0.18
12	83	59	71	0	6	0.18
13	83	59	71	0	6	0.18
14	83	59	71	0	6	0.18
15	83	59	71	0	6	0.18
16	83	59	71	0	6	0.18
17	83	59	71	0	6	0.18
18	83	59	71	0	6	0.18
19	82	59	71	0	6	0.18
20	82	58	70	0	5	0.18
21	82	58	70	0	5	0.18
22	82	58	70	0	5	0.18
23	82	58	70	0	5	0.18
24	82	58	70	0	5	0.18
25	82	58	70	0	5	0.18
26	82	58	70	0	5	0.18
27	81	58	70	0	5	0.18
28	81	58	70	0	5	0.18
29	81	57	69	0	4	0.18
30	81	57	69	0	4	0.18
31	81	57	69	0	4	0.18
MTH	82.7	58.8	70.8	0	180	5.53

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	57	69	0	4	0.18
2	81	57	69	0	4	0.18
3	80	57	69	0	4	0.18
4	80	57	69	0	4	0.18
5	80	57	69	0	4	0.18
6	80	57	68	0	3	0.18
7	79	56	67	1	3	0.18
8	79	56	67	1	3	0.18
9	79	55	67	1	3	0.18
10	79	55	67	1	3	0.18
11	79	55	67	1	3	0.17
12	78	54	66	2	3	0.17
13	78	54	66	2	3	0.17
14	78	54	66	2	3	0.17
15	77	53	65	2	2	0.17
16	77	53	65	2	2	0.17
17	77	53	65	2	2	0.17
18	77	52	65	2	2	0.17
19	77	51	64	3	2	0.17
20	77	51	64	3	2	0.17
21	76	51	64	3	2	0.17
22	76	51	64	3	2	0.16
23	76	50	63	4	2	0.16
24	76	50	63	4	2	0.16
25	75	49	62	4	1	0.16
26	75	49	62	4	1	0.16
27	75	49	62	4	1	0.16
28	74	48	61	5	1	0.15
29	74	48	61	5	1	0.15
30	74	47	61	5	1	0.15
MTH	77.5	52.9	65.2	66	73	5.08
					AUTUMN SEASON:	
					ANNUAL:	

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	47	60	6	1	0.15
2	73	47	60	6	1	0.15
3	73	46	59	7	1	0.15
4	73	46	59	7	1	0.15
5	73	46	59	7	1	0.14
6	72	45	58	8	1	0.14
7	72	44	58	8	1	0.14
8	71	43	57	9	1	0.14
9	71	43	57	9	1	0.14
10	71	42	57	9	1	0.14
11	71	42	57	9	1	0.14
12	71	42	57	9	1	0.14
13	70	41	56	9	0	0.14
14	70	40	55	10	0	0.14
15	70	40	55	10	0	0.14
16	69	40	55	10	0	0.14
17	69	39	54	11	0	0.14
18	69	39	54	11	0	0.14
19	68	39	54	11	0	0.14
20	68	38	53	12	0	0.14
21	68	38	53	12	0	0.15
22	68	38	53	12	0	0.15
23	67	37	52	13	0	0.15
24	67	37	52	13	0	0.15
25	67	37	52	13	0	0.15
26	66	37	52	13	0	0.15
27	66	36	51	14	0	0.15
28	66	36	51	14	0	0.16
29	65	36	51	14	0	0.16
30	65	35	50	15	0	0.16
31	65	35	50	15	0	0.16
MTH	69.3	40.4	54.9	326	12	4.53
	68.9	41.7	55.4	962	85	15.08
	67.3	40.8	54.1	4583	639	64.84

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	35	50	15	0	0.17
2	65	35	50	15	0	0.17
3	64	35	49	16	0	0.17
4	64	35	49	16	0	0.17
5	64	34	49	16	0	0.17
6	63	34	49	16	0	0.18
7	62	34	48	17	0	0.18
8	62	34	48	17	0	0.18
9	62	33	48	17	0	0.18
10	61	33	47	18	0	0.18
11	61	33	47	18	0	0.18
12	61	33	47	18	0	0.19
13	61	32	47	18	0	0.19
14	60	32	46	19	0	0.19
15	60	32	46	19	0	0.19
16	60	32	46	19	0	0.19
17	60	32	46	19	0	0.19
18	59	31	45	20	0	0.19
19	59	31	45	20	0	0.19
20	59	31	45	20	0	0.19
21	58	31	45	20	0	0.19
22	58	30	44	21	0	0.19
23	58	30	44	21	0	0.19
24	57	30	44	21	0	0.18
25	57	29	43	22	0	0.18
26	57	29	43	22	0	0.18
27	56	29	43	22	0	0.18
28	56	29	43	22	0	0.18
29	55	29	42	23	0	0.18
30	55	29	42	23	0	0.18
MTH	60.0	31.9	46.0	570	0	5.47

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: PISGAH FOREST 1 N NORTH CAROLINA Station Number: 316805

Latitude: 35° 16* 04(Longitude: -082° 42* 10(Elevation (feet): 2110

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.03	0.51	1.17	0.45	0.93	0.58	0.77	0.44	0.21	0.00	1.43	0.64	39.61
0.010	1.26	0.68	1.42	0.59	1.14	0.75	0.96	0.59	0.32	0.00	1.66	0.82	41.65
0.050	2.11	1.34	2.32	1.16	1.93	1.41	1.67	1.24	0.81	0.35	2.41	1.49	47.57
0.100	2.70	1.84	2.93	1.59	2.48	1.90	2.17	1.75	1.24	0.83	2.90	1.99	50.96
0.200	3.57	2.62	3.83	2.26	3.30	2.64	2.92	2.56	1.98	1.56	3.58	2.74	55.27
0.300	4.31	3.31	4.58	2.85	3.99	3.29	3.56	3.29	2.68	2.23	4.13	3.38	58.53
0.400	5.01	3.99	5.30	3.43	4.65	3.93	4.18	4.02	3.40	2.92	4.65	4.02	61.42
0.500	5.74	4.71	6.03	4.05	5.33	4.59	4.82	4.79	4.19	3.67	5.17	4.68	64.20
0.600	6.53	5.51	6.84	4.73	6.08	5.34	5.53	5.67	5.09	4.54	5.73	5.41	67.07
0.700	7.46	6.46	7.77	5.55	6.96	6.21	6.36	6.71	6.20	5.59	6.38	6.27	70.23
0.800	8.65	7.71	8.96	6.61	8.08	7.35	7.43	8.08	7.68	7.02	7.19	7.39	74.05
0.900	10.50	9.68	10.81	8.30	9.83	9.14	9.09	10.27	10.07	9.33	8.42	9.14	79.57
0.950	12.20	11.52	12.50	9.87	11.44	10.81	10.63	12.33	12.37	11.56	9.53	10.77	84.32
0.990	15.84	15.55	16.11	13.31	14.88	14.43	13.93	16.84	17.50	16.55	11.86	14.29	93.74
0.995	17.32	17.21	17.58	14.73	16.29	15.92	15.29	18.72	19.65	18.65	12.79	15.73	97.36

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ROSMAN NORTH CAROLINA Station Number: 317486

Latitude: 35 B 08 * 48 (Longitude: -082 B 49* 30 (Elevation (feet): 2200

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.22
2						0.22
3						0.22
4						0.22
5						0.22
6						0.22
7						0.21
8						0.21
9						0.21
10						0.21
11						0.21
12						0.21
13						0.21
14						0.21
15						0.21
16						0.21
17						0.21
18						0.21
19						0.21
20						0.21
21						0.22
22						0.22
23						0.22
24						0.22
25						0.22
26						0.22
27						0.23
28						0.23
29						0.23
30						0.23
31						0.23
MTH						6.73
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.24
2						0.24
3						0.24
4						0.24
5						0.25
6						0.25
7						0.25
8						0.25
9						0.25
10						0.25
11						0.25
12						0.25
13						0.26
14						0.26
15						0.26
16						0.26
17						0.26
18						0.26
19						0.25
20						0.25
21						0.25
22						0.25
23						0.25
24						0.25
25						0.25
26						0.25
27						0.25
28						0.24
29						0.24
30						0.24
31						0.24
MTH						7.73
						20.82

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.23
2						0.23
3						0.23
4						0.23
5						0.23
6						0.22
7						0.22
8						0.22
9						0.22
10						0.22
11						0.22
12						0.22
13						0.22
14						0.22
15						0.22
16						0.22
17						0.22
18						0.22
19						0.22
20						0.23
21						0.23
22						0.23
23						0.23
24						0.24
25						0.24
26						0.24
27						0.24
28						0.25
MTH						6.36

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.25
2						0.26
3						0.26
4						0.26
5						0.26
6						0.27
7						0.27
8						0.27
9						0.27
10						0.27
11						0.27
12						0.27
13						0.27
14						0.27
15						0.27
16						0.27
17						0.27
18						0.27
19						0.27
20						0.27
21						0.27
22						0.26
23						0.26
24						0.26
25						0.26
26						0.25
27						0.25
28						0.24
29						0.24
30						0.23
31						0.23
MTH						8.09
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.22
2						0.22
3						0.21
4						0.21
5						0.20
6						0.20
7						0.20
8						0.19
9						0.19
10						0.19
11						0.18
12						0.18
13						0.18
14						0.18
15						0.18
16						0.18
17						0.18
18						0.18
19						0.17
20						0.17
21						0.18
22						0.18
23						0.18
24						0.18
25						0.18
26						0.18
27						0.18
28						0.19
29						0.19
30						0.19
MTH						5.64
						20.53

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.19
2						0.20
3						0.20
4						0.20
5						0.21
6						0.21
7						0.21
8						0.21
9						0.21
10						0.22
11						0.22
12						0.22
13						0.22
14						0.22
15						0.22
16						0.22
17						0.23
18						0.23
19						0.23
20						0.23
21						0.23
22						0.23
23						0.23
24						0.23
25						0.23
26						0.23
27						0.23
28						0.23
29						0.22
30						0.22
31						0.22
MTH						6.80

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ROSMAN NORTH CAROLINA Station Number: 317486

Latitude: 35 B 08 * 48 (Longitude: -082 B 49 * 30 (Elevation (feet): 2200

Climate Division: NC 01 Southern Mountains

JUNE							JULY							AUGUST						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.22	1						0.22	1						0.22
2						0.22	2						0.22	2						0.22
3						0.22	3						0.22	3						0.22
4						0.22	4						0.22	4						0.22
5						0.22	5						0.22	5						0.21
6						0.22	6						0.22	6						0.21
7						0.22	7						0.22	7						0.21
8						0.22	8						0.22	8						0.21
9						0.22	9						0.22	9						0.21
10						0.21	10						0.22	10						0.21
11						0.21	11						0.22	11						0.21
12						0.21	12						0.23	12						0.21
13						0.21	13						0.23	13						0.21
14						0.21	14						0.23	14						0.21
15						0.21	15						0.23	15						0.21
16						0.21	16						0.23	16						0.21
17						0.21	17						0.23	17						0.21
18						0.21	18						0.23	18						0.21
19						0.21	19						0.23	19						0.21
20						0.21	20						0.23	20						0.21
21						0.21	21						0.23	21						0.21
22						0.21	22						0.22	22						0.21
23						0.21	23						0.22	23						0.21
24						0.21	24						0.22	24						0.21
25						0.21	25						0.22	25						0.21
26						0.21	26						0.22	26						0.21
27						0.22	27						0.22	27						0.21
28						0.22	28						0.22	28						0.21
29						0.22	29						0.22	29						0.21
30						0.22	30						0.22	30						0.20
							31						0.22	31						0.20
MTH						6.43	MTH						6.92	MTH						6.53
						SUMMER SEASON:							19.88							

SEPTEMBER							OCTOBER							NOVEMBER						
Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP	Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.21	1						0.17	1						0.20
2						0.21	2						0.17	2						0.20
3						0.21	3						0.17	3						0.21
4						0.21	4						0.17	4						0.21
5						0.21	5						0.17	5						0.21
6						0.21	6						0.16	6						0.22
7						0.20	7						0.16	7						0.22
8						0.20	8						0.16	8						0.22
9						0.20	9						0.16	9						0.22
10						0.20	10						0.16	10						0.22
11						0.20	11						0.16	11						0.23
12						0.20	12						0.16	12						0.23
13						0.20	13						0.16	13						0.23
14						0.20	14						0.16	14						0.23
15						0.20	15						0.16	15						0.23
16						0.20	16						0.16	16						0.23
17						0.20	17						0.16	17						0.23
18						0.19	18						0.16	18						0.23
19						0.19	19						0.16	19						0.23
20						0.19	20						0.17	20						0.23
21						0.19	21						0.17	21						0.23
22						0.19	22						0.17	22						0.23
23						0.19	23						0.17	23						0.23
24						0.19	24						0.17	24						0.23
25						0.18	25						0.18	25						0.23
26						0.18	26						0.18	26						0.23
27						0.18	27						0.18	27						0.23
28						0.18	28						0.18	28						0.23
29						0.18	29						0.19	29						0.23
30						0.17	30						0.19	30						0.23
							31						0.20							
MTH						5.86	MTH						5.24	MTH						6.73
						AUTUMN SEASON:							17.83							
						ANNUAL:							79.06							

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: ROSMAN NORTH CAROLINA Station Number: 317486

Latitude: 35° 08* 48(Longitude: -082° 49* 30(Elevation (feet): 2200

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.16	0.65	1.43	0.67	0.74	1.01	0.58	0.43	0.30	0.00	1.19	0.58	43.10
0.010	1.44	0.85	1.74	0.86	0.96	1.25	0.77	0.60	0.43	0.00	1.45	0.77	45.87
0.050	2.47	1.65	2.84	1.59	1.82	2.11	1.60	1.33	1.04	0.55	2.36	1.58	54.07
0.100	3.21	2.25	3.60	2.12	2.46	2.72	2.24	1.92	1.56	1.18	3.00	2.20	58.84
0.200	4.29	3.17	4.71	2.93	3.44	3.62	3.25	2.88	2.41	2.05	3.92	3.19	64.98
0.300	5.22	3.99	5.64	3.64	4.31	4.38	4.16	3.76	3.21	2.81	4.70	4.07	69.67
0.400	6.11	4.79	6.53	4.33	5.15	5.11	5.07	4.64	4.03	3.58	5.44	4.95	73.85
0.500	7.04	5.63	7.45	5.05	6.04	5.87	6.03	5.58	4.92	4.41	6.20	5.87	77.91
0.600	8.05	6.57	8.45	5.84	7.03	6.70	7.10	6.65	5.93	5.34	7.03	6.92	82.11
0.700	9.24	7.69	9.61	6.79	8.20	7.67	8.39	7.94	7.15	6.46	8.00	8.16	86.77
0.800	10.77	9.14	11.09	8.01	9.73	8.91	10.08	9.64	8.78	7.96	9.24	9.79	92.45
0.900	13.15	11.43	13.39	9.92	12.12	10.85	12.76	12.35	11.41	10.36	11.15	12.37	100.72
0.950	15.35	13.57	15.50	11.70	14.35	12.63	15.29	14.93	13.92	12.65	12.91	14.80	107.90
0.990	20.07	18.24	20.00	15.56	19.21	16.46	20.82	20.60	19.48	17.71	16.66	20.12	122.25
0.995	22.00	20.16	21.83	17.15	21.21	18.02	23.11	22.96	21.81	19.83	18.19	22.32	127.80

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: SWANNANOA 2 E NORTH CAROLINA Station Number: 318442

Latitude: 35 B 36 * 00 (Longitude: -082 B 22* 00 (Elevation (feet): 2241

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.11
2						0.11
3						0.10
4						0.10
5						0.10
6						0.10
7						0.10
8						0.10
9						0.09
10						0.09
11						0.09
12						0.09
13						0.09
14						0.09
15						0.09
16						0.09
17						0.09
18						0.09
19						0.09
20						0.09
21						0.09
22						0.09
23						0.09
24						0.09
25						0.09
26						0.09
27						0.09
28						0.09
29						0.10
30						0.10
31						0.10
MTH						2.92
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.10
2						0.10
3						0.10
4						0.10
5						0.11
6						0.11
7						0.11
8						0.11
9						0.11
10						0.11
11						0.11
12						0.11
13						0.12
14						0.12
15						0.12
16						0.12
17						0.12
18						0.12
19						0.12
20						0.12
21						0.12
22						0.12
23						0.12
24						0.12
25						0.12
26						0.12
27						0.12
28						0.12
29						0.12
30						0.12
31						0.12
MTH						3.56
						9.97

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.12
6						0.12
7						0.12
8						0.12
9						0.12
10						0.12
11						0.12
12						0.12
13						0.12
14						0.12
15						0.12
16						0.12
17						0.12
18						0.13
19						0.13
20						0.13
21						0.13
22						0.13
23						0.13
24						0.13
25						0.13
26						0.13
27						0.14
28						0.14
MTH						3.49

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.15
7						0.15
8						0.15
9						0.15
10						0.15
11						0.15
12						0.15
13						0.15
14						0.15
15						0.15
16						0.15
17						0.15
18						0.15
19						0.15
20						0.14
21						0.14
22						0.14
23						0.14
24						0.14
25						0.14
26						0.14
27						0.13
28						0.13
29						0.13
30						0.13
31						0.13
MTH						4.43
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.11
6						0.11
7						0.11
8						0.11
9						0.11
10						0.11
11						0.11
12						0.11
13						0.11
14						0.11
15						0.10
16						0.10
17						0.10
18						0.11
19						0.11
20						0.11
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.12
28						0.12
29						0.12
30						0.12
MTH						3.35
						12.17

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.13
3						0.13
4						0.13
5						0.13
6						0.13
7						0.14
8						0.14
9						0.14
10						0.14
11						0.14
12						0.14
13						0.14
14						0.14
15						0.15
16						0.15
17						0.15
18						0.15
19						0.15
20						0.15
21						0.15
22						0.15
23						0.15
24						0.15
25						0.15
26						0.15
27						0.14
28						0.14
29						0.14
30						0.14
31						0.14
MTH						4.39

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: SWANNANOA 2 E NORTH CAROLINA Station Number: 318442

Latitude: 35 B 36 * 00 (Longitude: -082 B 22* 00 (Elevation (feet): 2241

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.14
2						0.14
3						0.14
4						0.14
5						0.14
6						0.13
7						0.13
8						0.13
9						0.13
10						0.13
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.13
17						0.13
18						0.13
19						0.12
20						0.12
21						0.12
22						0.12
23						0.12
24						0.12
25						0.12
26						0.12
27						0.12
28						0.12
29						0.12
30						0.12
MTH						3.83
					SUMMER SEASON:	

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.12
6						0.12
7						0.12
8						0.12
9						0.12
10						0.12
11						0.12
12						0.12
13						0.12
14						0.12
15						0.12
16						0.12
17						0.11
18						0.11
19						0.11
20						0.11
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.11
28						0.11
29						0.11
30						0.11
31						0.11
MTH						3.57
						10.68

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.11
2						0.11
3						0.11
4						0.11
5						0.10
6						0.10
7						0.10
8						0.10
9						0.10
10						0.10
11						0.10
12						0.10
13						0.10
14						0.10
15						0.10
16						0.10
17						0.10
18						0.10
19						0.10
20						0.11
21						0.11
22						0.11
23						0.11
24						0.11
25						0.11
26						0.11
27						0.11
28						0.11
29						0.11
30						0.12
31						0.12
MTH						3.28

SEPTEMBER

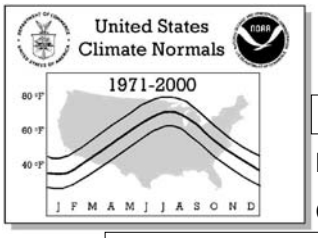
Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.12
2						0.12
3						0.12
4						0.12
5						0.12
6						0.12
7						0.12
8						0.12
9						0.12
10						0.12
11						0.13
12						0.13
13						0.13
14						0.13
15						0.13
16						0.13
17						0.12
18						0.12
19						0.12
20						0.12
21						0.12
22						0.12
23						0.12
24						0.12
25						0.12
26						0.12
27						0.12
28						0.11
29						0.11
30						0.11
MTH						3.63
					AUTUMN SEASON:	
					ANNUAL:	

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.11
2						0.11
3						0.10
4						0.10
5						0.10
6						0.10
7						0.10
8						0.10
9						0.10
10						0.10
11						0.10
12						0.10
13						0.10
14						0.09
15						0.09
16						0.09
17						0.09
18						0.09
19						0.10
20						0.10
21						0.10
22						0.10
23						0.10
24						0.10
25						0.10
26						0.10
27						0.10
28						0.10
29						0.11
30						0.11
31						0.11
MTH						3.10
						10.33
						43.15

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1						0.11
2						0.11
3						0.12
4						0.12
5						0.12
6						0.12
7						0.12
8						0.12
9						0.12
10						0.12
11						0.12
12						0.12
13						0.13
14						0.13
15						0.13
16						0.13
17						0.13
18						0.12
19						0.12
20						0.12
21						0.12
22						0.12
23						0.12
24						0.12
25						0.12
26						0.12
27						0.12
28						0.11
29						0.11
30						0.11
MTH						3.60



CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: SWANNANOA 2 E NORTH CAROLINA Station Number: 318442

Latitude: 35° 36* 00(Longitude: -082° 22* 00(Elevation (feet): 2241

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.64	0.41	0.78	0.45	0.88	0.71	0.22	0.54	0.14	0.06	0.66	0.42	25.43
0.010	0.78	0.52	0.95	0.57	1.06	0.86	0.31	0.67	0.21	0.10	0.79	0.53	26.83
0.050	1.27	0.97	1.55	1.01	1.66	1.39	0.70	1.11	0.56	0.33	1.29	0.92	30.96
0.100	1.60	1.30	1.97	1.33	2.07	1.75	1.02	1.42	0.86	0.57	1.63	1.20	33.32
0.200	2.08	1.80	2.58	1.80	2.66	2.26	1.55	1.87	1.39	0.99	2.12	1.61	36.35
0.300	2.49	2.24	3.09	2.21	3.15	2.70	2.03	2.26	1.89	1.43	2.53	1.96	38.65
0.400	2.88	2.67	3.58	2.61	3.61	3.12	2.52	2.62	2.41	1.89	2.92	2.30	40.68
0.500	3.28	3.12	4.08	3.02	4.08	3.54	3.04	3.00	2.98	2.41	3.32	2.66	42.65
0.600	3.72	3.61	4.63	3.48	4.59	4.00	3.64	3.42	3.63	3.02	3.76	3.04	44.68
0.700	4.22	4.20	5.27	4.01	5.19	4.54	4.35	3.90	4.43	3.78	4.27	3.50	46.92
0.800	4.87	4.96	6.08	4.70	5.95	5.23	5.30	4.52	5.50	4.82	4.93	4.08	49.64
0.900	5.87	6.15	7.35	5.78	7.11	6.29	6.82	5.48	7.24	6.53	5.93	5.00	53.58
0.950	6.78	7.27	8.50	6.79	8.17	7.26	8.27	6.37	8.91	8.20	6.86	5.84	56.98
0.990	8.74	9.68	10.98	8.94	10.43	9.32	11.46	8.26	12.65	11.99	8.82	7.66	63.73
0.995	9.53	10.67	11.98	9.83	11.34	10.16	12.79	9.03	14.22	13.59	9.62	8.40	66.33

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: SWANNANOA 2 SSE NORTH CAROLINA Station Number: 318448

Latitude: 35° 34* 00(Longitude: -082° 23* 00(Elevation (feet): 4320

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	31	39	26	0	0.14
2	47	29	38	27	0	0.13
3	46	30	38	27	0	0.13
4	46	30	38	27	0	0.13
5	45	30	38	27	0	0.13
6	45	29	37	28	0	0.13
7	45	29	37	28	0	0.13
8	45	29	37	28	0	0.13
9	45	29	37	28	0	0.13
10	44	28	36	29	0	0.12
11	44	28	36	29	0	0.12
12	44	28	36	29	0	0.12
13	44	28	36	29	0	0.12
14	43	27	35	30	0	0.12
15	43	27	35	30	0	0.12
16	43	27	35	30	0	0.12
17	43	27	35	30	0	0.12
18	43	27	35	30	0	0.12
19	42	26	34	31	0	0.12
20	42	26	34	31	0	0.12
21	42	26	34	31	0	0.12
22	42	26	34	31	0	0.12
23	42	26	34	31	0	0.13
24	41	25	33	32	0	0.13
25	41	25	33	32	0	0.13
26	41	25	33	32	0	0.13
27	41	25	33	32	0	0.13
28	41	25	33	32	0	0.13
29	41	25	33	32	0	0.13
30	40	24	32	33	0	0.13
31	40	24	32	33	0	0.14
MTH	43.2	27.1	35.2	925	0	3.92
					WINTER SEASON:	

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	40	24	32	33	0	0.14
2	40	24	32	33	0	0.14
3	40	24	32	33	0	0.14
4	40	23	32	33	0	0.14
5	40	23	32	33	0	0.14
6	40	23	32	33	0	0.15
7	40	23	32	33	0	0.15
8	40	23	31	34	0	0.15
9	40	23	31	34	0	0.15
10	40	23	31	34	0	0.15
11	40	23	31	34	0	0.15
12	40	23	31	34	0	0.15
13	40	23	31	34	0	0.15
14	40	23	31	34	0	0.15
15	39	23	31	34	0	0.15
16	39	23	31	34	0	0.16
17	39	23	31	34	0	0.16
18	39	23	31	34	0	0.16
19	39	23	31	34	0	0.16
20	39	23	31	34	0	0.16
21	39	23	31	34	0	0.16
22	39	23	31	34	0	0.16
23	39	23	31	34	0	0.16
24	39	23	31	34	0	0.16
25	39	23	31	34	0	0.16
26	39	23	31	34	0	0.15
27	40	23	32	33	0	0.15
28	40	23	32	33	0	0.15
29	40	23	32	33	0	0.15
30	40	23	32	33	0	0.15
31	41	23	32	33	0	0.15
MTH	39.7	23.1	31.4	1042	0	4.70
	42.0	25.3	33.7	2821	0	12.79

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	41	23	32	33	0	0.15
2	41	24	32	33	0	0.15
3	41	24	32	33	0	0.15
4	41	24	33	32	0	0.15
5	41	24	33	32	0	0.15
6	42	24	33	32	0	0.15
7	42	24	33	32	0	0.14
8	42	24	33	32	0	0.14
9	42	24	33	32	0	0.14
10	42	25	34	31	0	0.14
11	42	25	34	31	0	0.14
12	43	25	34	31	0	0.14
13	43	25	34	31	0	0.14
14	43	25	34	31	0	0.14
15	43	25	34	31	0	0.15
16	43	26	35	30	0	0.15
17	44	26	35	30	0	0.15
18	44	26	35	30	0	0.15
19	44	26	35	30	0	0.15
20	44	27	36	29	0	0.15
21	45	27	36	29	0	0.15
22	45	27	36	29	0	0.15
23	45	27	36	29	0	0.15
24	45	27	36	29	0	0.16
25	46	28	37	28	0	0.16
26	46	28	37	28	0	0.16
27	46	28	37	28	0	0.16
28	46	28	37	28	0	0.16
MTH	43.3	25.6	34.5	854	0	4.17

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	29	38	27	0	0.16
2	47	30	38	27	0	0.17
3	47	30	38	27	0	0.17
4	49	30	39	26	0	0.17
5	49	30	39	26	0	0.17
6	49	30	39	26	0	0.17
7	49	30	39	26	0	0.17
8	49	30	40	25	0	0.17
9	49	31	40	25	0	0.18
10	49	31	40	25	0	0.18
11	49	31	40	25	0	0.18
12	50	31	41	24	0	0.18
13	50	32	41	24	0	0.18
14	50	32	41	24	0	0.18
15	50	32	41	24	0	0.18
16	51	32	42	23	0	0.18
17	51	33	42	23	0	0.18
18	51	33	42	23	0	0.18
19	51	33	42	23	0	0.18
20	52	33	43	22	0	0.18
21	52	34	43	22	0	0.18
22	52	34	43	22	0	0.18
23	53	34	44	21	0	0.17
24	53	34	44	21	0	0.17
25	54	34	44	21	0	0.17
26	54	34	44	21	0	0.17
27	54	35	45	20	0	0.17
28	54	35	45	20	0	0.17
29	55	35	45	20	0	0.17
30	55	35	45	20	0	0.16
31	55	36	46	19	0	0.16
MTH	51.0	32.4	41.7	722	0	5.38
					SPRING SEASON:	

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	37	46	19	0	0.16
2	56	37	46	19	0	0.16
3	56	37	47	18	0	0.15
4	57	37	47	18	0	0.15
5	57	37	47	18	0	0.15
6	57	38	47	18	0	0.15
7	57	38	48	17	0	0.15
8	58	38	48	17	0	0.15
9	58	38	48	17	0	0.15
10	58	38	48	17	0	0.14
11	59	39	49	16	0	0.14
12	59	39	49	16	0	0.14
13	59	39	49	16	0	0.14
14	59	39	49	16	0	0.14
15	60	40	50	15	0	0.14
16	60	40	50	15	0	0.14
17	60	40	50	15	0	0.14
18	61	41	51	14	0	0.14
19	61	41	51	14	0	0.14
20	61	41	51	14	0	0.14
21	61	41	51	14	0	0.14
22	62	42	52	13	0	0.14
23	62	42	52	13	0	0.14
24	62	42	52	13	0	0.14
25	62	42	52	13	0	0.14
26	63	43	53	12	0	0.14
27	63	43	53	12	0	0.14
28	63	43	53	12	0	0.14
29	63	43	53	12	0	0.15
30	64	44	54	12	1	0.15
MTH	59.8	40.0	49.9	455	1	4.33
	59.3	40.3	49.8	1420	21	14.58

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	64	45	54	11	0	0.15
2	64	45	54	11	0	0.15
3	64	46	55	10	0	0.15
4	65	46	55	10	0	0.15
5	65	46	55	10	0	0.15
6	65	46	55	10	0	0.15
7	65	46	56	9	0	0.15
8	65	46	56	9	0	0.16
9	66	46	56	9	0	0.16
10	66	46	56	9	0	0.16
11	66	46	56	9	0	0.16
12	66	47	57	9	1	0.16
13	67	47	57	9	1	0.16
14	67	48	58	8	1	0.16
15	67	48	58	8	1	0.16
16	67	49	58	8	1	0.16
17	67	49	58	8	1	0.16
18	67	49	58	8	1	0.16
19	68	49	59	7	1	0.16
20	68	50	59	7	1	0.16
21	68	50	59	7	1	0.16
22	68	50	59	7	1	0.16
23	69	50	60	6	1	0.16
24	69	51	60	6	1	0.16
25	69	51	60	6	1	0.16
26	69	51	60	6	1	0.16
27	69	51	60	6	1	0.16
28	69	52	61	5	1	0.16
29	70	52	61	5	1	0.16
30	70	52	61	5	1	0.15
31	70	52	61	5	1	0.15
MTH	67.1	48.5	57.8	243	20	4.87

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: SWANNANOA 2 SSE NORTH CAROLINA Station Number: 318448

Latitude: 35 B 34 * 00 (Longitude: -082 B 23 * 00 (Elevation (feet): 4320

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	70	53	61	5	1	0.15
2	70	53	62	4	1	0.15
3	71	53	62	4	1	0.15
4	71	53	62	4	1	0.15
5	71	54	62	4	1	0.15
6	71	54	62	4	1	0.15
7	71	54	63	3	1	0.15
8	71	54	63	3	1	0.15
9	71	55	63	3	1	0.15
10	71	55	63	3	1	0.15
11	71	55	63	3	1	0.14
12	71	55	63	3	1	0.14
13	71	55	63	3	1	0.14
14	72	56	64	3	2	0.14
15	72	56	64	3	2	0.14
16	72	56	64	3	2	0.14
17	73	56	65	2	2	0.14
18	73	56	65	2	2	0.14
19	73	57	65	2	2	0.14
20	73	57	65	2	2	0.14
21	73	57	65	2	2	0.14
22	73	57	65	2	2	0.14
23	73	57	65	2	2	0.14
24	73	57	65	2	2	0.14
25	74	58	66	1	2	0.14
26	74	58	66	1	2	0.14
27	74	58	66	1	2	0.14
28	74	58	66	1	2	0.14
29	74	58	66	1	2	0.14
30	74	58	66	1	2	0.14
MTH	72.2	55.8	64.0	77	47	4.30
SUMMER SEASON:						

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	59	67	1	3	0.14
2	74	59	67	1	3	0.14
3	74	59	67	1	3	0.14
4	75	59	67	1	3	0.14
5	75	60	67	1	3	0.14
6	75	60	67	1	3	0.14
7	75	60	67	1	3	0.14
8	75	60	67	1	3	0.14
9	75	60	67	1	3	0.14
10	75	60	67	1	3	0.14
11	75	60	67	1	3	0.14
12	75	60	67	1	3	0.14
13	75	60	67	1	3	0.14
14	75	60	67	1	3	0.14
15	75	60	68	1	4	0.14
16	75	60	68	1	4	0.14
17	75	60	68	1	4	0.14
18	76	60	68	1	4	0.14
19	76	60	68	1	4	0.14
20	76	60	68	1	4	0.14
21	76	60	68	1	4	0.14
22	76	60	68	1	4	0.14
23	76	60	68	1	4	0.14
24	76	60	68	1	4	0.14
25	76	60	68	1	4	0.14
26	76	60	68	1	4	0.14
27	76	60	68	1	4	0.14
28	76	60	68	0	3	0.15
29	76	60	68	0	3	0.15
30	75	60	68	0	3	0.15
31	75	60	68	0	3	0.15
MTH	75.3	59.9	67.6	27	106	4.38
SUMMER SEASON:	73.9	58.0	65.9	143	231	13.15

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	60	68	0	3	0.14
2	75	60	68	1	4	0.14
3	75	60	67	1	3	0.14
4	75	60	67	1	3	0.14
5	75	60	67	1	3	0.14
6	75	59	67	1	3	0.14
7	75	59	67	1	3	0.14
8	75	59	67	1	3	0.14
9	75	59	67	1	3	0.14
10	75	59	67	1	3	0.14
11	75	59	67	1	3	0.14
12	75	59	67	1	3	0.14
13	75	59	67	1	3	0.14
14	75	59	67	1	3	0.14
15	74	59	67	1	3	0.14
16	74	59	67	1	3	0.14
17	74	58	66	1	2	0.14
18	74	58	66	1	2	0.14
19	74	58	66	1	2	0.15
20	74	58	66	1	2	0.15
21	74	58	66	1	2	0.15
22	74	58	66	1	2	0.15
23	73	57	65	2	2	0.15
24	73	57	65	2	2	0.15
25	73	57	65	2	2	0.15
26	73	57	65	2	2	0.15
27	73	57	65	2	2	0.15
28	73	57	65	2	2	0.15
29	72	57	65	2	2	0.15
30	72	57	65	2	2	0.15
31	72	56	64	2	1	0.15
MTH	74.1	58.4	66.3	39	78	4.47

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	56	64	2	1	0.15
2	72	56	64	2	1	0.15
3	71	56	64	2	1	0.15
4	71	56	63	3	1	0.15
5	71	56	63	3	1	0.14
6	71	56	63	3	1	0.14
7	71	55	63	3	1	0.14
8	70	55	63	3	1	0.14
9	70	54	62	4	1	0.14
10	70	54	62	4	1	0.14
11	70	54	62	4	1	0.14
12	69	54	62	4	1	0.14
13	69	54	62	4	1	0.14
14	69	53	61	5	1	0.14
15	69	53	61	5	1	0.14
16	69	53	61	5	1	0.14
17	68	53	61	5	1	0.14
18	68	53	61	5	1	0.14
19	68	53	61	5	1	0.14
20	68	52	60	5	0	0.13
21	67	51	59	6	0	0.13
22	67	51	59	6	0	0.13
23	67	51	59	6	0	0.13
24	67	51	59	6	0	0.13
25	66	50	58	7	0	0.13
26	66	50	58	7	0	0.13
27	66	50	58	7	0	0.13
28	65	49	57	8	0	0.12
29	65	49	57	8	0	0.12
30	65	48	57	8	0	0.12
MTH	68.6	52.9	60.8	145	19	4.10
AUTUMN SEASON:						
ANNUAL:						

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	65	48	56	9	0	0.12
2	65	47	56	10	*	0.12
3	64	47	56	10	*	0.11
4	64	47	56	10	*	0.11
5	64	46	55	10	*	0.11
6	63	46	55	10	*	0.11
7	63	46	55	10	0	0.11
8	63	45	54	11	0	0.11
9	63	45	54	11	0	0.11
10	62	45	54	11	0	0.11
11	62	44	53	12	0	0.11
12	62	44	53	12	0	0.11
13	61	44	53	12	0	0.11
14	61	43	52	13	0	0.11
15	61	43	52	13	0	0.11
16	61	43	52	13	0	0.11
17	60	42	51	14	0	0.11
18	60	42	51	14	0	0.11
19	60	42	51	14	0	0.11
20	59	41	50	15	0	0.11
21	59	41	50	15	0	0.11
22	59	41	50	15	0	0.11
23	58	41	50	15	0	0.11
24	58	40	49	16	0	0.11
25	58	40	49	16	0	0.12
26	58	40	49	16	0	0.12
27	57	39	48	17	0	0.12
28	57	39	48	17	0	0.12
29	57	39	48	17	0	0.12
30	56	38	47	18	0	0.12
31	56	38	47	18	0	0.13
MTH	60.5	42.8	51.7	414	3	3.51
AUTUMN SEASON:	60.1	43.3	51.8	1228	24	11.92
ANNUAL:	58.8	41.7	50.3	5612	276	52.44

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	56	38	47	18	0	0.13
2	56	38	47	19	*	0.13
3	55	38	47	19	*	0.13
4	55	38	46	19	*	0.14
5	55	37	46	19	*	0.14
6	55	36	45	20	*	0.14
7	55	36	45	20	0	0.14
8	54	36	45	20	0	0.14
9	52	36	44	21	0	0.14
10	52	36	44	21	0	0.14
11	52	36	44	21	0	0.15
12	52	35	44	21	0	0.15
13	51	35	43	22	0	0.15
14	51	35	43	22	0	0.15
15	51	35	43	22	0	0.15
16	51	34	43	22	0	0.15
17	50	34	42	23	0	0.15
18	50	34	42	23	0	0.15
19	50	33	42	23	0	0.15
20	49	33	41	24	0	0.15
21	49	33	41	24	0	0.15
22	49	33	41	24	0	0.15
23	49	32	41	24	0	0.15
24	48	32	40	25	0	0.15
25	48	32	40	25	0	0.14
26	48	32	40	25	0	0.14
27	48	31	40	25	0	0.14
28	47	31	39	26	0	0.14
29	47	31	39	26	0	0.14
30	47	31	39	26	0	0.14
MTH	51.1	34.4	42.8	669	2	4.31

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: SWANNANOA 2 SSE NORTH CAROLINA Station Number: 318448

Latitude: 35B 34* 00(Longitude: -082B 23* 00(Elevation (feet): 4320

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.79	0.53	1.01	0.49	1.09	0.81	0.65	0.41	0.19	0.08	0.87	0.63	31.27
0.010	0.97	0.68	1.22	0.63	1.29	0.98	0.80	0.55	0.28	0.13	1.05	0.78	32.95
0.050	1.61	1.22	1.96	1.18	1.96	1.57	1.39	1.09	0.69	0.40	1.64	1.31	37.90
0.100	2.05	1.61	2.47	1.59	2.41	1.98	1.80	1.51	1.05	0.66	2.04	1.68	40.73
0.200	2.70	2.21	3.19	2.21	3.04	2.56	2.42	2.16	1.65	1.15	2.62	2.22	44.34
0.300	3.25	2.72	3.80	2.76	3.57	3.04	2.95	2.74	2.21	1.64	3.09	2.68	47.08
0.400	3.77	3.23	4.38	3.29	4.06	3.51	3.45	3.32	2.79	2.17	3.55	3.13	49.51
0.500	4.31	3.75	4.98	3.86	4.56	3.98	3.98	3.93	3.41	2.75	4.01	3.59	51.86
0.600	4.91	4.33	5.62	4.48	5.11	4.50	4.56	4.60	4.13	3.43	4.51	4.09	54.28
0.700	5.59	5.00	6.37	5.21	5.73	5.10	5.24	5.41	5.00	4.28	5.09	4.67	56.95
0.800	6.48	5.88	7.33	6.17	6.53	5.86	6.11	6.47	6.16	5.43	5.84	5.42	60.18
0.900	7.85	7.26	8.81	7.68	7.74	7.04	7.47	8.14	8.04	7.34	6.97	6.59	64.86
0.950	9.10	8.54	10.16	9.08	8.84	8.13	8.72	9.71	9.84	9.19	8.01	7.67	68.90
0.990	11.80	11.30	13.04	12.13	11.17	10.42	11.42	13.13	13.84	13.38	10.21	9.97	76.91
0.995	12.89	12.43	14.21	13.39	12.11	11.35	12.52	14.54	15.51	15.16	11.11	10.91	80.00

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: TAPOCO NORTH CAROLINA Station Number: 318492

Latitude: 35 B 26 * 49 (Longitude: -083 B 56* 23 (Elevation (feet): 1110

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	57	35	46	19	0	0.16
2	57	35	46	19	0	0.16
3	57	34	45	20	0	0.16
4	57	34	45	20	0	0.16
5	57	34	45	20	0	0.16
6	57	34	45	20	0	0.16
7	56	33	44	21	0	0.16
8	55	33	44	21	0	0.16
9	55	33	44	21	0	0.16
10	54	33	44	21	0	0.16
11	54	32	43	22	0	0.16
12	54	32	43	22	0	0.16
13	54	32	43	22	0	0.16
14	53	32	43	22	0	0.16
15	53	32	43	22	0	0.16
16	52	32	42	23	0	0.16
17	52	32	42	23	0	0.16
18	52	32	42	23	0	0.16
19	52	31	42	23	0	0.16
20	52	31	42	23	0	0.17
21	51	31	41	24	0	0.17
22	51	31	41	24	0	0.17
23	51	31	41	24	0	0.17
24	51	31	41	24	0	0.17
25	51	31	41	24	0	0.17
26	51	30	41	24	0	0.17
27	51	30	41	24	0	0.17
28	51	30	41	24	0	0.17
29	50	30	40	25	0	0.17
30	50	30	40	25	0	0.18
31	50	30	40	25	0	0.18
MTH	53.2	32.0	42.6	694	0	5.10
WINTER SEASON:						

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	50	30	40	25	0	0.18
2	50	30	40	25	0	0.18
3	50	30	40	25	0	0.18
4	50	30	40	25	0	0.18
5	50	30	40	25	0	0.18
6	50	30	40	25	0	0.18
7	50	29	40	25	0	0.18
8	50	29	40	25	0	0.19
9	50	29	40	25	0	0.19
10	50	29	39	26	0	0.19
11	50	29	39	26	0	0.19
12	50	29	39	26	0	0.19
13	50	29	39	26	0	0.19
14	50	29	39	26	0	0.19
15	50	29	39	26	0	0.19
16	49	29	39	26	0	0.19
17	49	29	39	26	0	0.19
18	49	29	39	26	0	0.19
19	50	29	40	25	0	0.19
20	50	29	40	25	0	0.19
21	50	29	40	25	0	0.19
22	50	29	40	25	0	0.19
23	50	29	40	25	0	0.19
24	50	29	40	25	0	0.19
25	50	29	40	25	0	0.19
26	50	29	40	25	0	0.19
27	51	29	40	25	0	0.19
28	51	29	40	25	0	0.19
29	51	29	40	25	0	0.19
30	51	29	40	25	0	0.19
31	51	29	40	25	0	0.19
MTH	50.1	29.2	39.7	784	0	5.82
	52.6	30.8	41.8	2094	0	16.13

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	52	29	40	25	0	0.19
2	52	30	41	24	0	0.19
3	52	30	41	24	0	0.18
4	52	30	41	24	0	0.18
5	52	30	41	24	0	0.18
6	52	30	41	24	0	0.18
7	52	30	41	24	0	0.18
8	53	30	42	23	0	0.18
9	53	30	42	23	0	0.18
10	53	30	42	23	0	0.18
11	54	30	42	23	0	0.18
12	54	30	42	23	0	0.18
13	54	30	42	23	0	0.18
14	54	31	43	22	0	0.18
15	55	31	43	22	0	0.18
16	55	31	43	22	0	0.18
17	55	31	43	22	0	0.19
18	55	32	44	21	0	0.19
19	56	32	44	21	0	0.19
20	56	32	44	21	0	0.19
21	56	32	44	21	0	0.19
22	56	33	45	20	0	0.19
23	57	33	45	20	0	0.19
24	57	33	45	20	0	0.19
25	57	33	45	20	0	0.19
26	58	34	46	19	0	0.20
27	58	34	46	19	0	0.20
28	58	34	46	19	0	0.20
MTH	54.6	31.3	43.0	616	0	5.21

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	59	34	46	19	0	0.20
2	59	34	46	19	0	0.20
3	59	35	47	18	0	0.20
4	60	35	47	18	0	0.20
5	60	35	47	18	0	0.21
6	60	36	48	17	0	0.21
7	60	37	48	17	0	0.21
8	60	37	48	17	0	0.21
9	60	37	48	17	0	0.21
10	61	37	49	17	1	0.21
11	62	37	50	16	1	0.21
12	62	37	50	16	1	0.21
13	62	37	50	16	1	0.21
14	63	38	51	15	1	0.21
15	63	38	51	15	1	0.21
16	63	38	51	14	0	0.21
17	64	38	51	14	0	0.21
18	64	38	51	14	0	0.21
19	64	38	51	14	0	0.21
20	64	39	52	13	0	0.21
21	65	39	52	13	0	0.20
22	65	39	52	13	0	0.20
23	65	40	53	12	0	0.20
24	66	40	53	12	0	0.20
25	66	40	53	12	0	0.20
26	66	40	53	12	0	0.19
27	67	40	54	11	0	0.19
28	67	41	54	11	0	0.19
29	67	41	54	11	0	0.19
30	67	41	54	11	0	0.18
31	68	41	55	10	0	0.18
MTH	63.2	38.0	50.6	452	6	6.28
SPRING SEASON:						

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	69	41	55	10	0	0.18
2	70	41	55	10	0	0.18
3	70	41	55	10	0	0.17
4	70	42	56	9	0	0.17
5	70	42	56	9	0	0.17
6	70	42	56	9	0	0.17
7	70	42	56	9	0	0.16
8	71	42	57	8	0	0.16
9	71	43	57	8	0	0.16
10	71	43	57	8	0	0.16
11	71	43	57	8	0	0.16
12	71	43	57	8	0	0.16
13	72	44	58	7	0	0.15
14	72	44	58	7	0	0.15
15	72	44	58	7	0	0.15
16	72	44	58	7	0	0.15
17	73	44	59	6	0	0.15
18	73	45	59	6	0	0.15
19	73	45	59	6	0	0.15
20	73	45	59	6	0	0.15
21	73	45	59	6	0	0.15
22	74	46	60	6	1	0.15
23	74	46	60	6	1	0.15
24	75	46	61	5	1	0.15
25	75	46	61	5	1	0.16
26	75	47	61	5	1	0.16
27	75	47	61	5	1	0.16
28	75	47	61	5	1	0.16
29	75	47	61	5	1	0.16
30	76	48	62	4	1	0.16
MTH	72.4	44.2	58.3	210	9	4.76
	71.4	44.7	58.1	749	114	16.67

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	49	62	4	1	0.16
2	76	49	62	4	1	0.17
3	77	49	63	4	2	0.17
4	77	49	63	4	2	0.17
5	77	49	63	4	2	0.17
6	77	50	63	4	2	0.17
7	77	50	63	4	2	0.17
8	77	50	64	3	2	0.17
9	77	50	64	3	2	0.18
10	78	50	64	3	2	0.18
11	78	51	65	3	3	0.18
12	78	51	65	3	3	0.18
13	78	51	65	3	3	0.18
14	78	52	65	3	3	0.18
15	78	52	65	3	3	0.18
16	78	52	65	3	3	0.18
17	78	52	65	3	3	0.18
18	78	52	65	3	3	0.19
19	79	53	66	3	4	0.19
20	79	53	66	3	4	0.19
21	80	53	67	2	4	0.19
22	80	54	67	2	4	0.19
23	80	54	67	2	4	0.19
24	80	54	67	2	4	0.19
25	80	54	67	2	4	0.19
26	80	54	67	2	4	0.19
27	81	55	68	2	5	0.19
28	81	55	68	2	5	0.19
29	81	55	68	2	5	0.19
30	82	56	69	1	5	0.19
31	82	56	69	1	5	0.19
MTH	78.7	52.1	65.4	87	99	5.63

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: TAPOCO NORTH CAROLINA Station Number: 318492

Latitude: 35 B 26 * 49 (Longitude: -083 B 56* 23 (Elevation (feet): 1110

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	57	69	1	5	0.19
2	82	57	69	1	5	0.19
3	82	57	69	1	5	0.19
4	83	58	70	1	6	0.19
5	83	58	70	1	6	0.19
6	83	58	70	1	6	0.19
7	83	58	70	1	6	0.18
8	83	58	71	0	6	0.18
9	84	58	71	0	6	0.18
10	84	59	71	0	6	0.18
11	84	59	72	0	7	0.18
12	84	59	72	0	7	0.18
13	84	59	72	0	7	0.18
14	84	59	72	0	7	0.18
15	85	59	72	0	7	0.18
16	85	59	72	0	7	0.18
17	85	59	72	0	7	0.18
18	85	59	72	0	7	0.18
19	85	59	72	0	7	0.18
20	85	60	73	0	8	0.18
21	85	60	73	0	8	0.19
22	86	60	73	0	8	0.19
23	86	60	73	0	8	0.19
24	86	60	73	0	8	0.19
25	86	60	73	0	8	0.19
26	86	60	73	0	8	0.19
27	86	60	73	0	8	0.19
28	86	61	74	0	9	0.19
29	86	61	74	0	9	0.19
30	87	61	74	0	9	0.19
MTH	84.5	59.1	71.8	7	211	5.56

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	87	61	74	0	9	0.19
2	87	61	74	0	9	0.19
3	87	61	74	0	9	0.19
4	87	62	74	0	9	0.19
5	87	62	74	0	9	0.19
6	87	62	75	0	10	0.19
7	87	62	75	0	10	0.19
8	87	62	75	0	10	0.19
9	87	62	75	0	10	0.19
10	87	62	75	0	10	0.19
11	87	62	75	0	10	0.19
12	87	63	75	0	10	0.19
13	87	63	75	0	10	0.19
14	87	63	75	0	10	0.19
15	87	63	75	0	10	0.19
16	87	63	75	0	10	0.19
17	87	63	75	0	10	0.18
18	87	63	75	0	10	0.18
19	87	63	75	0	10	0.18
20	87	63	75	0	10	0.18
21	88	63	75	0	10	0.18
22	88	63	75	0	10	0.18
23	88	63	75	0	10	0.17
24	88	63	76	0	11	0.17
25	88	63	76	0	11	0.17
26	88	63	76	0	11	0.17
27	88	63	76	0	11	0.17
28	88	63	75	0	10	0.16
29	88	63	75	0	10	0.16
30	88	63	75	0	10	0.16
31	88	63	75	0	10	0.16
MTH	87.4	62.6	75.0	0	309	5.61
SUMMER SEASON:	86.1	61.2	73.7	7	806	15.27

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	88	63	75	0	10	0.15
2	88	63	75	0	10	0.15
3	88	63	75	0	10	0.15
4	88	63	75	0	10	0.14
5	88	63	75	0	10	0.14
6	87	63	75	0	10	0.14
7	87	63	75	0	10	0.14
8	87	63	75	0	10	0.14
9	87	62	75	0	10	0.13
10	87	62	75	0	10	0.13
11	87	62	75	0	10	0.13
12	87	62	75	0	10	0.13
13	87	62	75	0	10	0.13
14	87	62	75	0	10	0.13
15	86	62	74	0	9	0.13
16	86	62	74	0	9	0.13
17	86	62	74	0	9	0.13
18	86	62	74	0	9	0.12
19	86	62	74	0	9	0.12
20	86	62	74	0	9	0.12
21	86	62	74	0	9	0.12
22	86	62	74	0	9	0.13
23	86	62	74	0	9	0.13
24	86	61	74	0	9	0.13
25	85	61	73	0	8	0.13
26	85	61	73	0	8	0.13
27	85	61	73	0	8	0.13
28	85	61	73	0	8	0.13
29	85	61	73	0	8	0.13
30	85	61	73	0	8	0.13
31	84	61	73	0	8	0.13
MTH	86.4	62.0	74.2	0	286	4.10

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	84	61	72	0	7	0.14
2	84	61	72	0	7	0.14
3	84	61	72	0	7	0.14
4	84	61	72	0	7	0.14
5	84	61	72	0	7	0.14
6	83	60	71	0	6	0.14
7	83	60	71	0	6	0.14
8	82	60	71	0	6	0.14
9	82	60	71	0	6	0.14
10	82	59	71	0	6	0.15
11	82	59	71	0	6	0.15
12	82	59	71	0	6	0.15
13	82	58	70	0	5	0.15
14	81	58	70	0	5	0.15
15	81	58	70	0	5	0.14
16	80	58	69	1	5	0.14
17	80	58	69	1	5	0.14
18	80	57	69	1	5	0.14
19	80	57	69	1	5	0.14
20	80	56	68	1	4	0.14
21	79	56	68	1	4	0.14
22	79	55	67	2	4	0.14
23	79	55	67	2	4	0.14
24	78	55	67	2	4	0.13
25	78	55	67	2	4	0.13
26	78	54	66	2	3	0.13
27	78	54	66	2	3	0.13
28	77	53	65	3	3	0.12
29	77	53	65	3	3	0.12
30	77	52	65	3	3	0.12
MTH	80.7	57.5	69.1	27	151	4.15

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	76	52	64	4	3	0.12
2	76	52	64	4	3	0.11
3	75	52	63	4	2	0.11
4	75	52	63	4	2	0.11
5	75	50	62	5	2	0.11
6	75	50	62	5	2	0.10
7	74	50	62	5	2	0.10
8	74	48	61	6	2	0.10
9	74	48	61	6	2	0.10
10	73	48	61	6	2	0.10
11	73	48	61	6	2	0.10
12	73	47	60	6	1	0.10
13	72	46	59	7	1	0.10
14	72	46	59	7	1	0.10
15	72	46	59	7	1	0.09
16	71	45	58	8	1	0.10
17	71	45	58	8	1	0.10
18	71	45	58	8	1	0.10
19	70	45	58	8	1	0.10
20	70	44	57	9	1	0.10
21	70	44	57	9	1	0.10
22	69	44	57	9	1	0.10
23	69	44	57	9	1	0.10
24	69	44	57	9	1	0.10
25	68	43	56	9	0	0.10
26	68	42	55	10	0	0.11
27	68	42	55	10	0	0.11
28	68	42	55	10	0	0.11
29	67	42	55	10	0	0.11
30	67	41	54	11	0	0.12
31	67	41	54	11	0	0.12
MTH	71.4	46.1	58.8	230	37	3.23
AUTUMN SEASON:	71.3	47.2	59.3	709	190	11.96
ANNUAL:	70.4	46.0	58.2	3559	1110	60.03

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	67	41	54	12	1	0.13
2	67	41	54	12	1	0.13
3	66	41	53	12	0	0.13
4	66	41	53	12	0	0.13
5	66	41	53	12	0	0.14
6	65	41	53	12	0	0.14
7	64	40	52	13	0	0.14
8	64	40	52	13	0	0.14
9	64	40	52	13	0	0.15
10	63	39	51	14	0	0.15
11	63	39	51	14	0	0.15
12	63	39	51	14	0	0.15
13	63	39	51	14	0	0.15
14	62	38	50	15	0	0.16
15	62	38	50	15	0	0.16
16	62	38	50	15	0	0.16
17	61	38	50	15	0	0.16
18	61	37	49	16	0	0.16
19	61	37	49	16	0	0.16
20	60	37	49	16	0	0.16
21	60	37	49	16	0	0.16
22	59	37	48	17	0	0.16
23	59	37	48	17	0	0.16
24	59	36	48	17	0	0.16
25	58	36	47	18	0	0.17
26	58	36	47	18	0	0.17
27	58	36	47	18	0	0.17
28	58	35	47	18	0	0.16
29	57	35	46	19	0	0.16
30	57	35	46	19	0	0.16
MTH	61.8	38.2	50.0	452	2	4.58

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: TAPOCO NORTH CAROLINA Station Number: 318492

Latitude: 35B 26* 49(Longitude: -083B 56* 23(Elevation (feet): 1110

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	1.08	1.07	1.22	0.81	1.36	0.73	0.74	0.48	0.44	0.00	1.30	0.90	38.52
0.010	1.31	1.28	1.47	0.99	1.60	0.93	0.93	0.62	0.57	0.00	1.49	1.10	40.29
0.050	2.11	2.00	2.33	1.64	2.37	1.65	1.67	1.15	1.09	0.49	2.12	1.80	45.40
0.100	2.65	2.48	2.92	2.09	2.88	2.18	2.20	1.54	1.48	0.91	2.52	2.28	48.30
0.200	3.44	3.18	3.76	2.75	3.60	2.97	3.00	2.13	2.08	1.47	3.07	2.97	51.98
0.300	4.11	3.75	4.47	3.30	4.19	3.66	3.69	2.64	2.61	1.91	3.52	3.56	54.74
0.400	4.74	4.30	5.14	3.83	4.74	4.32	4.36	3.14	3.13	2.36	3.94	4.12	57.18
0.500	5.38	4.85	5.83	4.37	5.30	5.01	5.06	3.67	3.68	2.83	4.35	4.70	59.53
0.600	6.08	5.45	6.57	4.97	5.90	5.77	5.83	4.25	4.28	3.35	4.80	5.33	61.94
0.700	6.90	6.15	7.44	5.66	6.59	6.67	6.73	4.94	5.00	3.98	5.31	6.06	64.59
0.800	7.94	7.04	8.54	6.55	7.46	7.83	7.91	5.83	5.94	4.79	5.95	6.99	67.78
0.900	9.55	8.40	10.24	7.93	8.79	9.64	9.74	7.23	7.43	6.08	6.92	8.44	72.38
0.950	11.03	9.64	11.79	9.19	10.00	11.32	11.44	8.54	8.81	7.29	7.79	9.77	76.32
0.990	14.17	12.28	15.09	11.90	12.54	14.95	15.10	11.36	11.82	9.93	9.60	12.60	84.10
0.995	15.44	13.34	16.43	13.00	13.56	16.44	16.61	12.52	13.06	11.02	10.33	13.74	87.08

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: TRYON NORTH CAROLINA Station Number: 318744

Latitude: 35 B 12 * 15 (Longitude: -082 B 14* 17 (Elevation (feet): 1080

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	58	36	47	18	0	0.16
2	58	35	47	18	0	0.16
3	58	35	46	19	0	0.15
4	57	35	46	19	0	0.15
5	57	34	46	19	0	0.15
6	56	34	45	20	0	0.15
7	56	34	45	20	0	0.15
8	56	34	45	20	0	0.15
9	56	34	45	20	0	0.15
10	55	33	44	21	0	0.15
11	55	33	44	21	0	0.15
12	55	33	44	21	0	0.15
13	55	33	44	21	0	0.15
14	55	33	44	21	0	0.15
15	54	32	43	22	0	0.15
16	54	32	43	22	0	0.15
17	54	32	43	22	0	0.15
18	54	32	43	22	0	0.15
19	54	32	43	22	0	0.16
20	53	32	43	22	0	0.16
21	53	31	42	23	0	0.16
22	53	31	42	23	0	0.16
23	53	31	42	23	0	0.16
24	53	31	42	23	0	0.16
25	53	31	42	23	0	0.16
26	53	31	42	23	0	0.16
27	52	31	42	23	0	0.17
28	52	31	42	23	0	0.17
29	52	30	41	24	0	0.17
30	52	30	41	24	0	0.17
31	52	30	41	24	0	0.17
MTH	54.5	32.5	43.5	666	0	4.85

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	52	30	41	24	0	0.17
2	52	30	41	24	0	0.18
3	52	30	41	24	0	0.18
4	52	30	41	24	0	0.18
5	52	30	41	24	0	0.18
6	52	30	41	24	0	0.18
7	52	30	41	24	0	0.19
8	52	30	41	24	0	0.19
9	51	30	41	24	0	0.19
10	51	30	41	24	0	0.19
11	51	30	41	24	0	0.19
12	51	30	41	24	0	0.19
13	51	30	41	24	0	0.19
14	51	30	41	24	0	0.19
15	51	30	41	24	0	0.19
16	52	30	41	24	0	0.19
17	52	30	41	24	0	0.19
18	52	30	41	24	0	0.19
19	52	30	41	24	0	0.19
20	52	30	41	24	0	0.19
21	52	30	41	24	0	0.19
22	52	30	41	24	0	0.19
23	52	30	41	24	0	0.19
24	52	31	41	24	0	0.19
25	52	31	41	24	0	0.19
26	52	31	41	24	0	0.19
27	52	31	41	24	0	0.19
28	52	31	41	24	0	0.19
29	53	31	42	23	0	0.19
30	53	31	42	23	0	0.19
31	53	31	42	23	0	0.18
MTH	51.9	30.3	41.1	741	0	5.81

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	31	42	23	0	0.18
2	54	31	42	23	0	0.18
3	54	31	42	23	0	0.18
4	54	31	43	22	0	0.18
5	55	31	43	22	0	0.18
6	55	31	43	22	0	0.18
7	55	31	43	22	0	0.18
8	55	31	43	22	0	0.17
9	55	32	43	22	0	0.17
10	56	32	44	21	0	0.17
11	56	32	44	21	0	0.17
12	56	32	44	21	0	0.18
13	56	32	44	21	0	0.18
14	56	32	44	21	0	0.18
15	57	32	45	20	0	0.18
16	57	32	45	20	0	0.18
17	57	32	45	20	0	0.18
18	58	32	45	20	0	0.18
19	58	32	45	20	0	0.18
20	58	33	46	19	0	0.18
21	59	33	46	19	0	0.19
22	59	33	46	19	0	0.19
23	59	33	46	19	0	0.19
24	59	34	47	18	0	0.19
25	60	34	47	18	0	0.19
26	60	34	47	18	0	0.20
27	60	34	47	18	0	0.20
28	60	35	48	17	0	0.20
MTH	56.9	32.3	44.6	571	0	5.11

WINTER SEASON: 54.4 31.7 43.1 1978 0 15.77

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	61	36	48	17	0	0.21
2	61	36	48	17	0	0.21
3	61	36	48	17	0	0.21
4	62	36	49	16	0	0.21
5	62	36	49	16	0	0.22
6	63	36	49	16	0	0.22
7	63	37	50	15	0	0.22
8	63	37	50	15	0	0.22
9	63	37	50	15	0	0.22
10	63	38	51	14	0	0.22
11	64	38	51	14	0	0.22
12	64	38	51	14	0	0.22
13	64	38	51	14	*	0.23
14	65	39	52	14	*	0.23
15	65	39	52	14	*	0.23
16	65	40	53	13	*	0.22
17	65	40	53	13	*	0.22
18	66	40	53	12	*	0.22
19	66	40	53	12	0	0.22
20	66	40	53	12	0	0.22
21	66	40	53	12	0	0.22
22	67	40	54	11	0	0.22
23	67	41	54	11	0	0.22
24	67	41	54	11	0	0.21
25	68	41	55	10	0	0.21
26	68	41	55	10	0	0.21
27	68	41	55	10	0	0.20
28	69	41	55	10	0	0.20
29	69	41	55	10	0	0.20
30	69	42	56	9	0	0.19
31	70	42	56	9	0	0.19
MTH	65.2	39.0	52.1	403	4	6.66

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	71	42	56	9	0	0.19
2	71	42	56	9	0	0.18
3	72	43	57	8	0	0.18
4	72	43	57	8	0	0.17
5	72	43	57	8	0	0.17
6	72	43	57	8	0	0.17
7	72	43	58	7	0	0.17
8	72	44	58	7	0	0.16
9	72	44	58	7	0	0.16
10	73	44	58	7	0	0.16
11	73	44	59	6	0	0.16
12	73	45	59	6	0	0.15
13	73	45	59	6	0	0.15
14	73	45	59	6	0	0.15
15	73	45	59	6	0	0.15
16	73	45	59	6	0	0.15
17	74	46	60	6	1	0.15
18	75	46	61	5	1	0.15
19	75	46	61	5	1	0.15
20	75	46	61	5	1	0.15
21	75	47	61	5	1	0.15
22	75	47	61	5	1	0.15
23	76	47	62	4	1	0.15
24	76	48	62	4	1	0.15
25	76	48	62	4	1	0.15
26	76	48	62	4	1	0.15
27	76	48	62	4	1	0.15
28	76	48	62	4	1	0.16
29	77	49	63	4	2	0.16
30	77	50	64	3	2	0.16
MTH	73.9	45.5	59.7	176	16	4.75

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	51	64	3	2	0.16
2	78	51	64	3	2	0.16
3	78	51	64	3	2	0.17
4	78	51	64	3	2	0.17
5	78	52	65	2	2	0.17
6	79	52	65	2	2	0.17
7	79	52	65	2	2	0.18
8	79	52	66	2	3	0.18
9	79	52	66	2	3	0.18
10	79	52	66	2	3	0.18
11	79	53	66	2	3	0.18
12	79	53	66	2	3	0.18
13	79	53	66	2	3	0.19
14	79	53	66	2	3	0.19
15	80	54	67	2	4	0.19
16	80	55	68	1	4	0.19
17	80	55	68	1	4	0.19
18	81	55	68	1	4	0.19
19	81	55	68	1	4	0.19
20	81	55	68	1	4	0.19
21	81	55	68	1	4	0.19
22	81	56	69	1	5	0.19
23	82	56	69	1	5	0.19
24	82	56	69	1	5	0.20
25	82	56	69	1	5	0.20
26	82	56	69	1	5	0.20
27	82	57	70	1	6	0.20
28	83	57	70	1	6	0.20
29	83	57	70	1	6	0.20
30	83	58	71	0	6	0.20
31	83	58	71	0	6	0.20
MTH	80.3	54.2	67.3	48	118	5.77

SPRING SEASON: 73.1 46.2 59.7 627 138 17.18

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: TRYON NORTH CAROLINA Station Number: 318744

Latitude: 35B 12* 15 (Longitude: -082B 14* 17 (Elevation (feet): 1080

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	59	71	0	6	0.20
2	84	59	71	*	7	0.20
3	84	59	71	*	6	0.20
4	84	60	72	*	7	0.20
5	84	60	72	*	7	0.19
6	84	60	72	*	7	0.19
7	85	60	73	0	8	0.19
8	85	60	73	0	8	0.19
9	85	61	73	0	8	0.19
10	85	61	73	0	8	0.19
11	85	61	73	0	8	0.19
12	85	62	74	0	9	0.19
13	86	62	74	0	9	0.19
14	86	62	74	0	9	0.19
15	86	62	74	0	9	0.19
16	86	62	74	0	9	0.19
17	86	62	74	0	9	0.19
18	86	63	75	0	10	0.19
19	87	63	75	0	10	0.19
20	87	63	75	0	10	0.18
21	87	63	75	0	10	0.18
22	87	63	75	0	10	0.18
23	87	63	75	0	10	0.18
24	87	64	76	0	11	0.18
25	88	64	76	0	11	0.18
26	88	64	76	0	11	0.18
27	88	64	76	0	11	0.18
28	88	64	76	0	11	0.18
29	88	64	76	0	11	0.18
30	88	65	77	0	12	0.17
MTH	86.0	62.0	74.0	1	272	5.62

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	88	66	77	0	12	0.17
2	89	66	77	0	12	0.17
3	89	66	77	0	12	0.17
4	89	66	77	0	12	0.17
5	89	66	77	0	12	0.17
6	89	66	78	0	13	0.17
7	89	66	78	0	13	0.17
8	89	67	78	0	13	0.17
9	89	67	78	0	13	0.17
10	89	67	78	0	13	0.16
11	89	67	78	0	13	0.16
12	89	67	78	0	13	0.16
13	89	67	78	0	13	0.16
14	89	67	78	0	13	0.16
15	89	67	78	0	13	0.16
16	89	67	78	0	13	0.17
17	89	67	78	0	13	0.17
18	89	67	78	0	13	0.17
19	89	67	78	0	13	0.17
20	89	67	78	0	13	0.17
21	89	67	78	0	13	0.17
22	90	67	79	0	14	0.17
23	90	67	79	0	14	0.17
24	90	67	79	0	14	0.17
25	90	67	79	0	14	0.17
26	89	67	78	0	13	0.17
27	89	67	78	0	13	0.18
28	89	67	78	0	13	0.18
29	89	67	78	0	13	0.18
30	89	67	78	0	13	0.18
31	89	67	78	0	13	0.18
MTH	89.1	66.8	78.0	0	402	5.26

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	89	67	78	0	13	0.19
2	89	67	78	0	13	0.19
3	89	67	78	0	13	0.19
4	89	67	78	0	13	0.19
5	89	67	78	0	13	0.19
6	89	67	78	0	13	0.19
7	88	67	78	0	13	0.19
8	88	67	78	0	13	0.20
9	88	67	78	0	13	0.20
10	88	67	78	0	13	0.20
11	88	67	77	0	12	0.20
12	88	67	77	0	12	0.20
13	88	67	77	0	12	0.20
14	88	67	77	0	12	0.20
15	88	67	77	0	12	0.20
16	87	66	77	0	12	0.20
17	87	66	77	0	12	0.20
18	87	65	76	0	11	0.20
19	87	65	76	0	11	0.20
20	87	65	76	0	11	0.21
21	87	65	76	0	11	0.21
22	87	65	76	0	11	0.21
23	86	65	76	0	11	0.21
24	86	64	75	0	10	0.21
25	86	64	75	0	10	0.20
26	86	64	75	0	10	0.20
27	86	64	75	0	10	0.20
28	86	64	75	0	10	0.20
29	85	64	75	0	10	0.20
30	85	64	74	0	9	0.20
31	85	64	74	0	9	0.20
MTH	87.3	65.8	76.6	0	358	6.18

SUMMER SEASON: 87.5 64.8 76.2 1 1032 17.06

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	85	64	74	0	9	0.20
2	85	64	74	0	9	0.20
3	84	64	74	0	9	0.20
4	84	63	73	0	8	0.20
5	84	63	73	0	8	0.20
6	84	63	73	0	8	0.20
7	84	63	73	0	8	0.19
8	83	63	73	0	8	0.19
9	83	62	72	0	7	0.19
10	83	61	72	0	7	0.19
11	83	61	72	0	7	0.19
12	83	61	72	0	7	0.19
13	82	61	72	0	7	0.19
14	82	60	71	0	6	0.19
15	82	60	71	0	6	0.19
16	82	60	71	0	6	0.19
17	81	60	71	0	6	0.18
18	81	60	71	0	6	0.18
19	81	59	70	0	5	0.18
20	81	59	70	0	5	0.18
21	80	58	69	1	5	0.18
22	80	58	69	1	5	0.18
23	80	57	69	1	5	0.18
24	79	57	68	1	4	0.18
25	79	57	68	1	4	0.17
26	79	56	68	1	4	0.17
27	79	55	67	2	4	0.17
28	78	55	67	2	4	0.17
29	78	55	67	2	4	0.17
30	78	54	66	2	3	0.17
MTH	81.6	59.8	70.7	14	184	5.56

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	78	54	66	2	3	0.17
2	77	54	65	3	3	0.16
3	77	54	65	3	3	0.16
4	77	54	65	3	3	0.16
5	76	54	65	3	3	0.16
6	76	53	64	3	2	0.16
7	76	53	64	3	2	0.16
8	76	51	63	4	2	0.16
9	75	50	63	4	2	0.16
10	75	49	62	5	2	0.16
11	75	49	62	5	2	0.16
12	74	49	62	5	2	0.16
13	74	48	61	5	1	0.16
14	74	48	61	5	1	0.16
15	73	48	61	5	1	0.16
16	73	47	60	6	1	0.16
17	73	47	60	6	1	0.16
18	72	47	60	6	1	0.16
19	72	46	59	7	1	0.15
20	72	46	59	7	1	0.15
21	71	46	59	7	1	0.16
22	71	45	58	8	1	0.16
23	71	45	58	8	1	0.16
24	71	45	58	8	1	0.16
25	70	45	58	8	1	0.16
26	70	44	57	8	0	0.16
27	70	44	57	8	0	0.16
28	69	44	57	8	0	0.16
29	68	44	56	9	0	0.16
30	68	44	56	9	0	0.16
31	68	43	56	9	0	0.16
MTH	73.0	48.1	60.6	180	42	4.95

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	68	43	56	10	1	0.16
2	68	43	55	10	0	0.16
3	67	43	55	10	0	0.16
4	67	43	55	10	0	0.16
5	66	43	54	11	0	0.16
6	66	43	54	11	0	0.16
7	66	43	54	11	0	0.16
8	65	43	54	11	0	0.17
9	65	41	53	12	0	0.17
10	65	41	53	12	0	0.17
11	64	41	53	12	0	0.17
12	64	40	52	13	0	0.17
13	64	40	52	13	0	0.17
14	63	40	52	13	0	0.17
15	63	39	51	14	0	0.17
16	63	39	51	14	0	0.17
17	63	39	51	14	0	0.17
18	62	39	51	14	0	0.17
19	62	38	50	15	0	0.16
20	62	38	50	15	0	0.16
21	61	38	50	15	0	0.16
22	61	37	49	16	0	0.16
23	61	37	49	16	0	0.16
24	60	37	49	16	0	0.16
25	60	37	49	16	0	0.16
26	59	37	48	17	0	0.16
27	59	37	48	17	0	0.16
28	59	36	48	17	0	0.16
29	58	36	47	18	0	0.16
30	58	36	47	18	0	0.16
MTH	63.0	39.6	51.3	411	1	4.91

AUTUMN SEASON: 72.5 49.1 60.9 605 227 15.42

ANNUAL: 71.9 48.0 60.0 3211 1397 65.43

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: TRYON NORTH CAROLINA Station Number: 318744

Latitude: 35B 12* 15(Longitude: -082B 14* 17(Elevation (feet): 1080

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.77	0.30	0.96	0.45	0.76	0.68	0.61	0.19	0.08	0.07	0.79	0.59	36.74
0.010	0.97	0.43	1.20	0.59	0.96	0.87	0.79	0.29	0.14	0.12	0.98	0.75	38.98
0.050	1.74	0.98	2.08	1.17	1.71	1.60	1.46	0.82	0.49	0.43	1.64	1.37	45.57
0.100	2.29	1.44	2.72	1.62	2.26	2.13	1.96	1.32	0.88	0.78	2.11	1.83	49.39
0.200	3.12	2.19	3.66	2.31	3.08	2.94	2.72	2.20	1.62	1.44	2.79	2.53	54.29
0.300	3.83	2.88	4.46	2.93	3.79	3.64	3.38	3.06	2.40	2.12	3.37	3.13	58.02
0.400	4.52	3.58	5.24	3.54	4.48	4.32	4.02	3.97	3.24	2.88	3.92	3.72	61.35
0.500	5.25	4.34	6.05	4.18	5.20	5.04	4.70	4.97	4.20	3.73	4.49	4.34	64.57
0.600	6.04	5.20	6.94	4.90	5.99	5.83	5.45	6.13	5.34	4.75	5.12	5.02	67.90
0.700	6.98	6.23	7.98	5.75	6.93	6.76	6.33	7.55	6.77	6.03	5.85	5.83	71.59
0.800	8.19	7.60	9.32	6.86	8.13	7.97	7.48	9.48	8.74	7.79	6.79	6.87	76.07
0.900	10.08	9.80	11.41	8.63	10.02	9.87	9.28	12.64	12.03	10.74	8.24	8.51	82.59
0.950	11.83	11.89	13.35	10.28	11.77	11.63	10.97	15.69	15.26	13.63	9.59	10.04	88.24
0.990	15.62	16.52	17.51	13.89	15.54	15.46	14.61	22.55	22.62	20.23	12.46	13.34	99.50
0.995	17.17	18.44	19.22	15.38	17.09	17.02	16.10	25.44	25.76	23.05	13.63	14.69	103.85

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: WATERVILLE 2 NORTH CAROLINA Station Number: 319123

Latitude: 35 B 46 * 27 (Longitude: -083 B 05* 53 (Elevation (feet): 1440

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	33	44	21	0	0.11
2	54	33	44	21	0	0.11
3	53	33	43	22	0	0.11
4	53	33	43	22	0	0.11
5	53	33	43	22	0	0.11
6	52	32	42	23	0	0.11
7	52	32	42	23	0	0.11
8	52	32	42	23	0	0.11
9	52	32	42	23	0	0.11
10	51	32	42	23	0	0.12
11	51	31	41	24	0	0.12
12	51	31	41	24	0	0.12
13	51	31	41	24	0	0.12
14	51	31	41	24	0	0.12
15	50	30	40	25	0	0.12
16	50	30	40	25	0	0.12
17	50	30	40	25	0	0.12
18	50	30	40	25	0	0.12
19	49	30	40	25	0	0.12
20	49	30	40	25	0	0.12
21	49	29	39	26	0	0.12
22	49	29	39	26	0	0.12
23	49	29	39	26	0	0.12
24	49	29	39	26	0	0.12
25	49	29	39	26	0	0.12
26	48	29	39	26	0	0.12
27	48	29	39	26	0	0.12
28	48	28	38	27	0	0.12
29	48	28	38	27	0	0.12
30	48	28	38	27	0	0.12
31	48	28	38	27	0	0.12
MTH	50.4	30.5	40.5	759	0	3.63

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	28	38	27	0	0.12
2	48	28	38	27	0	0.12
3	48	28	38	27	0	0.12
4	48	28	38	27	0	0.12
5	48	28	38	27	0	0.12
6	48	28	38	27	0	0.12
7	47	28	38	27	0	0.12
8	47	28	38	27	0	0.13
9	47	27	37	28	0	0.13
10	47	27	37	28	0	0.13
11	47	27	37	28	0	0.13
12	47	27	37	28	0	0.13
13	47	27	37	28	0	0.13
14	47	27	37	28	0	0.13
15	47	27	37	28	0	0.13
16	47	27	37	28	0	0.13
17	47	27	37	28	0	0.13
18	47	27	37	28	0	0.13
19	47	27	37	28	0	0.13
20	47	27	37	28	0	0.13
21	48	27	38	27	0	0.13
22	48	27	38	27	0	0.13
23	48	27	38	27	0	0.13
24	48	27	38	27	0	0.13
25	48	27	38	27	0	0.13
26	48	28	38	27	0	0.13
27	48	28	38	27	0	0.13
28	48	28	38	27	0	0.13
29	48	28	38	27	0	0.13
30	48	28	38	27	0	0.13
31	48	28	38	27	0	0.13
MTH	47.6	27.5	37.6	849	0	3.96
WINTER SEASON:	49.9	29.3	39.7	2283	0	11.40

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	49	28	38	27	0	0.13
2	49	28	39	26	0	0.13
3	50	28	39	26	0	0.13
4	50	28	39	26	0	0.13
5	50	28	39	26	0	0.13
6	50	28	39	26	0	0.13
7	50	28	39	26	0	0.13
8	50	29	39	26	0	0.13
9	51	29	40	25	0	0.13
10	51	29	40	25	0	0.13
11	51	29	40	25	0	0.13
12	51	29	40	25	0	0.13
13	51	29	40	25	0	0.13
14	52	30	41	24	0	0.13
15	52	30	41	24	0	0.14
16	52	30	41	24	0	0.14
17	52	30	41	24	0	0.14
18	52	30	41	24	0	0.14
19	53	31	42	23	0	0.14
20	53	31	42	23	0	0.14
21	53	31	42	23	0	0.14
22	53	31	42	23	0	0.14
23	54	31	43	22	0	0.14
24	54	32	43	22	0	0.14
25	54	32	43	22	0	0.14
26	55	32	44	21	0	0.15
27	55	32	44	21	0	0.15
28	55	33	44	21	0	0.15
MTH	51.9	29.9	40.9	675	0	3.81

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	55	34	44	21	0	0.15
2	57	34	45	20	0	0.15
3	57	34	45	20	0	0.15
4	57	34	45	20	0	0.15
5	57	34	46	19	0	0.15
6	58	34	46	19	0	0.15
7	58	35	46	19	0	0.15
8	58	35	46	19	0	0.15
9	58	35	47	18	0	0.16
10	59	35	47	18	0	0.16
11	59	35	47	18	0	0.16
12	59	36	48	17	0	0.16
13	60	36	48	17	0	0.16
14	60	36	48	17	0	0.16
15	60	36	48	17	*	0.16
16	60	37	49	16	*	0.16
17	61	37	49	16	*	0.16
18	61	37	49	16	*	0.16
19	61	38	50	16	*	0.16
20	62	38	50	15	*	0.15
21	62	38	50	15	*	0.15
22	62	38	50	15	*	0.15
23	63	39	51	14	*	0.15
24	63	39	51	14	0	0.15
25	63	39	51	14	0	0.15
26	63	39	51	14	0	0.15
27	64	39	52	13	0	0.15
28	64	40	52	13	0	0.15
29	64	40	52	13	0	0.15
30	64	40	52	13	0	0.15
31	65	40	53	12	0	0.14
MTH	60.5	36.8	48.7	508	1	4.75
SPRING SEASON:	68.8	44.4	56.6	869	97	13.80

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	66	41	53	12	0	0.14
2	66	41	53	12	0	0.14
3	66	41	53	12	0	0.14
4	66	41	54	11	0	0.14
5	67	41	54	11	0	0.14
6	67	42	54	11	0	0.14
7	67	42	55	10	0	0.14
8	68	42	55	10	0	0.14
9	68	42	55	10	0	0.14
10	68	42	55	10	0	0.13
11	68	43	56	9	0	0.13
12	69	43	56	9	0	0.13
13	69	43	56	9	0	0.13
14	69	43	56	9	0	0.13
15	70	44	57	8	0	0.13
16	70	44	57	8	0	0.13
17	70	44	57	8	0	0.13
18	70	44	57	8	0	0.13
19	70	45	58	7	0	0.13
20	71	45	58	7	0	0.13
21	71	45	58	7	0	0.13
22	71	46	59	7	1	0.13
23	71	46	59	7	1	0.13
24	72	46	59	7	1	0.14
25	72	46	59	7	1	0.14
26	72	46	59	7	1	0.14
27	72	47	60	6	1	0.14
28	73	47	60	6	1	0.14
29	73	47	60	6	1	0.14
30	73	47	60	6	1	0.14
MTH	69.5	43.9	56.7	257	9	4.06

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	73	49	61	5	1	0.14
2	74	49	61	5	1	0.14
3	74	49	61	5	1	0.15
4	74	49	61	5	1	0.15
5	74	50	62	5	2	0.15
6	74	50	62	5	2	0.15
7	74	50	62	5	2	0.15
8	74	50	62	5	2	0.15
9	75	51	63	4	2	0.15
10	75	51	63	4	2	0.16
11	75	51	63	4	2	0.16
12	75	51	63	4	2	0.16
13	75	51	63	4	2	0.16
14	76	52	64	4	3	0.16
15	76	52	64	4	3	0.16
16	76	53	65	3	3	0.16
17	77	53	65	3	3	0.16
18	77	53	65	3	3	0.16
19	77	53	65	3	3	0.17
20	77	53	65	3	3	0.17
21	77	54	66	2	3	0.17
22	78	54	66	2	3	0.17
23	78	55	67	2	4	0.17
24	78	55	67	2	4	0.17
25	78	55	67	2	4	0.17
26	79	55	67	2	4	0.17
27	79	55	67	2	4	0.17
28	79	55	67	2	4	0.17
29	79	55	67	2	4	0.17
30	80	56	68	2	5	0.17
31	80	57	69	1	5	0.18
MTH	76.4	52.5	64.5	104	87	4.99

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: WATERVILLE 2 NORTH CAROLINA Station Number: 319123

Latitude: 35 B 46 * 27 (Longitude: -083 B 05 * 53 (Elevation (feet): 1440

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	81	58	69	1	5	0.18
2	81	58	69	1	5	0.18
3	81	58	69	1	5	0.18
4	81	58	69	1	5	0.18
5	82	59	70	0	5	0.18
6	82	59	71	0	6	0.18
7	82	59	71	0	6	0.18
8	82	59	71	0	6	0.18
9	82	59	71	0	6	0.18
10	82	59	71	0	6	0.18
11	83	59	71	0	6	0.18
12	83	59	71	0	6	0.18
13	83	60	71	0	6	0.18
14	83	60	72	0	7	0.18
15	83	60	72	0	7	0.18
16	84	60	72	0	7	0.18
17	84	60	72	0	7	0.18
18	84	60	72	0	7	0.18
19	84	60	72	0	7	0.19
20	84	61	73	0	8	0.19
21	84	61	73	0	8	0.19
22	84	62	73	0	8	0.19
23	84	62	73	0	8	0.19
24	84	62	73	0	8	0.18
25	84	62	73	0	8	0.18
26	84	62	73	0	8	0.18
27	85	63	74	0	9	0.18
28	85	63	74	0	9	0.18
29	85	63	74	0	9	0.18
30	85	63	74	0	9	0.18
MTH	83.2	60.3	71.8	4	207	5.45

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	63	74	0	9	0.18
2	86	63	74	0	9	0.18
3	86	63	74	0	9	0.18
4	86	63	74	0	9	0.18
5	86	64	75	0	10	0.18
6	86	64	75	0	10	0.18
7	86	64	75	0	10	0.18
8	86	64	75	0	10	0.18
9	86	64	75	0	10	0.18
10	86	64	75	0	10	0.18
11	86	64	75	0	10	0.18
12	86	64	75	0	10	0.18
13	86	64	75	0	10	0.17
14	86	64	75	0	10	0.17
15	86	64	75	0	10	0.17
16	86	64	75	0	10	0.17
17	86	64	75	0	10	0.17
18	87	64	76	0	11	0.17
19	87	65	76	0	11	0.17
20	87	65	76	0	11	0.17
21	87	65	76	0	11	0.17
22	87	65	76	0	11	0.16
23	86	65	76	0	11	0.16
24	86	65	76	0	11	0.16
25	86	65	76	0	11	0.16
26	86	65	76	0	11	0.16
27	86	65	76	0	11	0.16
28	86	65	76	0	11	0.16
29	86	65	76	0	11	0.15
30	86	65	75	0	10	0.15
31	86	65	75	0	10	0.15
MTH	86.2	64.3	75.3	0	318	5.26
SUMMER SEASON:	84.6	62.7	73.7	4	803	14.93

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	86	65	75	0	10	0.15
2	86	65	75	0	10	0.15
3	86	64	75	0	10	0.15
4	86	64	75	0	10	0.14
5	86	64	75	0	10	0.14
6	86	64	75	0	10	0.14
7	86	64	75	0	10	0.14
8	86	64	75	0	10	0.14
9	86	64	75	0	10	0.14
10	86	64	75	0	10	0.14
11	86	64	75	0	10	0.14
12	86	64	75	0	10	0.14
13	86	64	75	0	10	0.14
14	85	64	75	0	10	0.13
15	84	64	74	0	9	0.13
16	84	64	74	0	9	0.13
17	84	64	74	0	9	0.13
18	84	63	74	0	9	0.13
19	84	63	74	0	9	0.13
20	84	63	74	0	9	0.13
21	83	63	73	0	8	0.13
22	83	63	73	0	8	0.13
23	83	63	73	0	8	0.13
24	83	63	73	0	8	0.13
25	83	63	73	0	8	0.13
26	83	63	73	0	8	0.13
27	83	62	73	0	8	0.13
28	82	62	72	0	7	0.13
29	82	62	72	0	7	0.14
30	82	62	72	0	7	0.14
31	82	62	72	0	7	0.14
MTH	84.4	63.5	74.0	0	278	4.22

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	62	72	0	7	0.14
2	82	61	71	0	6	0.14
3	82	61	71	0	6	0.14
4	81	61	71	0	6	0.14
5	81	61	71	0	6	0.14
6	81	61	71	0	6	0.14
7	81	61	71	0	6	0.14
8	80	60	70	0	5	0.14
9	80	60	70	0	5	0.14
10	80	60	70	0	5	0.14
11	80	60	70	0	5	0.14
12	79	60	70	0	5	0.14
13	79	59	69	0	4	0.14
14	79	59	69	0	4	0.14
15	78	58	68	1	4	0.13
16	78	58	68	1	4	0.13
17	78	58	68	1	4	0.13
18	78	57	68	1	4	0.13
19	78	57	68	1	4	0.13
20	77	57	67	1	3	0.13
21	77	56	67	1	3	0.13
22	76	56	66	2	3	0.12
23	76	56	66	2	3	0.12
24	76	55	66	2	3	0.12
25	76	54	65	3	3	0.12
26	75	54	65	3	3	0.11
27	75	53	64	3	2	0.11
28	75	53	64	3	2	0.11
29	74	53	64	3	2	0.10
30	74	52	63	4	2	0.10
MTH	78.3	57.8	68.1	32	125	3.88
AUTUMN SEASON:	68.5	46.9	57.8	802	147	9.47
ANNUAL:	67.9	45.8	57.0	3958	1047	49.60

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	74	52	63	4	2	0.10
2	73	52	62	5	2	0.10
3	73	52	62	5	2	0.09
4	73	52	62	5	2	0.09
5	73	50	61	5	1	0.09
6	73	50	61	5	1	0.09
7	72	49	60	6	1	0.08
8	72	49	60	6	1	0.08
9	71	48	60	6	1	0.08
10	70	48	59	7	1	0.08
11	70	47	59	7	1	0.08
12	69	47	58	8	1	0.08
13	69	47	58	8	1	0.07
14	69	46	58	8	1	0.07
15	68	46	57	9	1	0.07
16	68	46	57	9	1	0.07
17	68	45	57	9	1	0.07
18	67	45	56	9	0	0.07
19	67	45	56	9	0	0.07
20	67	44	56	9	0	0.07
21	66	44	55	10	0	0.07
22	66	44	55	10	0	0.07
23	66	43	55	10	0	0.07
24	66	42	54	11	0	0.07
25	66	42	54	11	0	0.07
26	65	42	54	11	0	0.08
27	65	41	53	12	0	0.08
28	65	41	53	12	0	0.08
29	64	41	53	12	0	0.08
30	64	41	53	12	0	0.08
31	63	41	52	13	0	0.08
MTH	68.5	45.9	57.2	263	21	2.43
AUTUMN SEASON:	68.5	46.9	57.8	802	147	9.47
ANNUAL:	67.9	45.8	57.0	3958	1047	49.60

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	41	52	13	0	0.09
2	63	41	52	13	0	0.09
3	63	41	52	13	*	0.09
4	62	41	51	14	*	0.09
5	62	40	51	14	*	0.09
6	62	39	51	14	*	0.09
7	62	39	51	15	*	0.10
8	61	39	50	15	*	0.10
9	61	39	50	15	*	0.10
10	61	39	50	15	*	0.10
11	60	38	49	16	*	0.10
12	60	38	49	16	0	0.10
13	60	38	49	16	0	0.11
14	59	38	49	16	0	0.11
15	59	37	48	17	0	0.11
16	59	37	48	17	0	0.11
17	58	37	48	17	0	0.11
18	58	36	47	18	0	0.11
19	58	36	47	18	0	0.11
20	58	36	47	18	0	0.11
21	57	36	47	18	0	0.11
22	57	35	46	19	0	0.11
23	57	35	46	19	0	0.11
24	56	35	46	19	0	0.11
25	56	34	45	20	0	0.11
26	56	34	45	20	0	0.11
27	55	34	45	20	0	0.12
28	55	34	45	20	0	0.12
29	54	34	44	21	0	0.12
30	54	34	44	21	0	0.12
MTH	58.9	37.2	48.1	507	1	3.16

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: WATERVILLE 2 NORTH CAROLINA Station Number: 319123

Latitude: 35° 46* 27(Longitude: -083° 05* 53(Elevation (feet): 1440

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.89	0.79	1.31	0.42	2.01	0.97	1.27	0.65	0.64	0.20	0.91	0.70	33.82
0.010	1.05	0.94	1.50	0.55	2.21	1.18	1.48	0.80	0.78	0.27	1.04	0.84	35.14
0.050	1.60	1.47	2.16	1.05	2.84	1.92	2.21	1.37	1.31	0.55	1.47	1.34	38.96
0.100	1.96	1.82	2.58	1.44	3.22	2.44	2.69	1.77	1.68	0.78	1.75	1.68	41.10
0.200	2.48	2.33	3.16	2.03	3.73	3.18	3.36	2.36	2.22	1.13	2.13	2.17	43.80
0.300	2.90	2.75	3.63	2.55	4.12	3.81	3.91	2.86	2.67	1.46	2.44	2.58	45.83
0.400	3.30	3.14	4.07	3.06	4.49	4.41	4.43	3.35	3.11	1.78	2.72	2.97	47.60
0.500	3.71	3.55	4.51	3.60	4.84	5.03	4.95	3.85	3.56	2.12	3.01	3.37	49.30
0.600	4.15	3.99	4.99	4.20	5.22	5.70	5.52	4.40	4.05	2.50	3.32	3.80	51.04
0.700	4.65	4.50	5.53	4.91	5.64	6.48	6.16	5.04	4.63	2.95	3.67	4.30	52.95
0.800	5.29	5.15	6.21	5.83	6.16	7.48	6.98	5.87	5.37	3.55	4.11	4.94	55.24
0.900	6.28	6.14	7.24	7.30	6.94	9.02	8.23	7.15	6.51	4.50	4.77	5.92	58.53
0.950	7.17	7.05	8.17	8.66	7.62	10.45	9.37	8.33	7.57	5.40	5.37	6.82	61.34
0.990	9.05	8.97	10.12	11.64	9.02	13.47	11.75	10.88	9.82	7.37	6.62	8.73	66.84
0.995	9.81	9.75	10.90	12.86	9.57	14.70	12.71	11.91	10.74	8.19	7.12	9.51	68.94

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

Release Date: December 1, 2001 **National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina**

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: WAYNESVILLE 1 E NORTH CAROLINA Station Number: 319147

Latitude: 35 B 28 * 52 (Longitude: -082 B 58* 05 (Elevation (feet): 2658

Climate Division: NC 01 Southern Mountains

DECEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	27	40	25	0	0.13
2	54	27	40	25	0	0.13
3	52	27	40	25	0	0.13
4	52	26	39	26	0	0.13
5	52	26	39	26	0	0.13
6	52	26	39	26	0	0.13
7	52	25	39	26	0	0.13
8	52	25	39	26	0	0.13
9	52	25	38	27	0	0.13
10	51	25	38	27	0	0.13
11	51	25	38	27	0	0.13
12	51	24	38	27	0	0.13
13	50	24	37	28	0	0.13
14	50	24	37	28	0	0.13
15	50	24	37	28	0	0.13
16	50	24	37	28	0	0.13
17	50	24	37	28	0	0.13
18	49	23	36	29	0	0.13
19	49	23	36	29	0	0.13
20	49	23	36	29	0	0.13
21	49	23	36	29	0	0.13
22	49	23	36	29	0	0.13
23	49	23	36	29	0	0.13
24	48	23	36	29	0	0.13
25	48	22	35	30	0	0.13
26	48	22	35	30	0	0.13
27	48	22	35	30	0	0.13
28	48	22	35	30	0	0.13
29	48	22	35	30	0	0.13
30	48	22	35	30	0	0.13
31	47	22	35	30	0	0.14
MTH	50.1	24.0	37.1	866	0	4.04
				WINTER SEASON:		

JANUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	47	22	35	30	0	0.14
2	47	22	35	30	0	0.14
3	47	22	35	30	0	0.14
4	47	22	34	31	0	0.14
5	47	22	34	31	0	0.14
6	47	22	34	31	0	0.14
7	47	22	34	31	0	0.14
8	47	22	34	31	0	0.14
9	47	22	34	31	0	0.15
10	47	22	34	31	0	0.15
11	47	22	34	31	0	0.15
12	47	21	34	31	0	0.15
13	47	21	34	31	0	0.15
14	46	21	34	31	0	0.15
15	47	21	34	31	0	0.15
16	47	21	34	31	0	0.15
17	47	21	34	31	0	0.15
18	47	21	34	31	0	0.15
19	47	21	34	31	0	0.15
20	47	21	34	31	0	0.15
21	47	21	34	31	0	0.15
22	47	21	34	31	0	0.15
23	47	21	34	31	0	0.15
24	47	21	34	31	0	0.15
25	47	21	34	31	0	0.15
26	47	22	35	30	0	0.15
27	47	22	35	30	0	0.16
28	47	22	35	30	0	0.16
29	47	22	35	30	0	0.16
30	47	22	35	30	0	0.16
31	48	22	35	30	0	0.16
MTH	47.0	21.6	34.3	952	0	4.62
	49.2	23.2	36.2	2594	0	13.20

FEBRUARY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	48	22	35	30	0	0.15
2	48	22	35	30	0	0.16
3	48	22	35	30	0	0.16
4	48	23	35	30	0	0.16
5	48	23	35	30	0	0.16
6	49	23	36	29	0	0.16
7	49	23	36	29	0	0.16
8	49	23	36	29	0	0.16
9	50	23	36	29	0	0.16
10	50	23	36	29	0	0.16
11	50	23	36	29	0	0.16
12	50	23	37	28	0	0.16
13	50	24	37	28	0	0.16
14	50	24	37	28	0	0.16
15	50	24	37	28	0	0.16
16	50	24	37	28	0	0.16
17	51	24	38	27	0	0.16
18	51	25	38	27	0	0.16
19	51	25	38	27	0	0.16
20	51	25	38	27	0	0.16
21	52	25	39	26	0	0.16
22	52	25	39	26	0	0.17
23	52	26	39	26	0	0.17
24	52	26	39	26	0	0.17
25	53	26	40	25	0	0.17
26	53	26	40	25	0	0.17
27	54	26	40	25	0	0.17
28	54	26	40	25	0	0.17
MTH	50.5	24.1	37.3	776	0	4.54

MARCH

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	54	28	41	24	0	0.17
2	55	28	41	24	0	0.17
3	55	28	41	24	0	0.17
4	55	28	42	23	0	0.17
5	55	28	42	23	0	0.18
6	56	28	42	23	0	0.18
7	56	28	42	23	0	0.18
8	56	29	43	22	0	0.18
9	57	29	43	22	0	0.18
10	57	29	43	22	0	0.18
11	57	29	43	22	0	0.18
12	57	30	44	21	0	0.18
13	58	30	44	21	0	0.18
14	58	30	44	21	0	0.17
15	58	30	44	21	0	0.17
16	58	31	45	20	0	0.17
17	59	31	45	20	0	0.17
18	59	31	45	20	0	0.17
19	59	31	45	20	0	0.17
20	60	32	46	19	0	0.17
21	60	32	46	19	0	0.17
22	60	32	46	19	0	0.17
23	60	32	46	19	0	0.16
24	60	32	46	19	0	0.16
25	61	33	47	18	0	0.16
26	61	33	47	18	0	0.16
27	61	33	47	18	0	0.16
28	61	33	47	18	0	0.16
29	62	34	48	17	0	0.15
30	62	34	48	17	0	0.15
31	62	34	48	17	0	0.15
MTH	58.4	30.7	44.6	634	0	5.24
				SPRING SEASON:		

APRIL

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	34	48	17	0	0.15
2	63	34	48	17	0	0.14
3	63	34	49	16	0	0.14
4	64	35	49	16	0	0.14
5	64	35	49	16	0	0.14
6	64	35	49	16	0	0.13
7	64	35	50	15	0	0.13
8	64	36	50	15	0	0.13
9	64	36	50	15	0	0.13
10	64	36	50	15	0	0.13
11	65	36	51	14	0	0.13
12	65	36	51	14	0	0.13
13	65	37	51	14	0	0.13
14	65	37	51	14	0	0.12
15	65	37	51	14	0	0.12
16	66	37	52	13	0	0.12
17	66	38	52	13	0	0.12
18	66	38	52	13	0	0.12
19	67	38	53	12	0	0.12
20	67	38	53	12	0	0.12
21	67	39	53	12	0	0.12
22	67	39	53	12	0	0.12
23	68	39	54	11	0	0.12
24	68	40	54	11	0	0.12
25	68	40	54	11	0	0.12
26	68	40	54	11	0	0.13
27	69	40	55	10	0	0.13
28	69	41	55	10	0	0.13
29	69	41	55	10	0	0.13
30	69	41	55	10	0	0.13
MTH	65.9	37.4	51.7	399	0	3.84
	65.8	38.0	52.0	1228	31	13.51

MAY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	70	42	56	9	0	0.13
2	70	43	56	9	0	0.13
3	70	43	56	9	0	0.13
4	70	43	56	9	0	0.13
5	71	43	57	9	1	0.14
6	71	43	57	9	1	0.14
7	72	43	57	9	1	0.14
8	72	44	58	8	1	0.14
9	72	44	58	8	1	0.14
10	72	44	58	8	1	0.14
11	72	44	58	8	1	0.14
12	72	45	59	7	1	0.14
13	73	45	59	7	1	0.14
14	73	45	59	7	1	0.14
15	73	46	60	6	1	0.14
16	73	46	60	6	1	0.14
17	74	46	60	6	1	0.15
18	74	46	60	6	1	0.15
19	74	47	61	5	1	0.15
20	74	47	61	5	1	0.15
21	74	47	61	5	1	0.15
22	75	47	61	5	1	0.15
23	75	48	62	4	1	0.15
24	75	48	62	4	1	0.15
25	75	49	62	4	1	0.15
26	75	49	62	4	1	0.15
27	75	49	62	4	1	0.15
28	76	49	63	4	2	0.15
29	76	50	63	4	2	0.15
30	76	50	63	4	2	0.14
31	77	50	64	3	2	0.14
MTH	73.3	46.0	59.7	195	31	4.43

CLIMATOGRAPHY OF THE UNITED STATES NO. 84, 1971-2000

Daily Normals of Temperature, Precipitation, and Heating and Cooling Degree Days

Station Name: WAYNESVILLE 1 E NORTH CAROLINA Station Number: 319147

Latitude: 35 B 28 * 52 (Longitude: -082 B 58* 05 (Elevation (feet): 2658

Climate Division: NC 01 Southern Mountains

JUNE

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	77	50	64	3	2	0.15
2	77	51	64	3	2	0.14
3	78	50	64	3	2	0.14
4	78	50	64	3	2	0.14
5	78	51	64	2	1	0.14
6	78	51	64	2	1	0.14
7	78	52	65	2	2	0.14
8	78	52	65	2	2	0.14
9	78	52	65	2	2	0.14
10	79	52	65	1	1	0.14
11	79	53	66	1	2	0.14
12	79	53	66	1	2	0.14
13	79	53	66	1	2	0.14
14	79	53	66	1	2	0.14
15	79	54	67	1	3	0.14
16	80	54	67	1	3	0.14
17	80	54	67	1	3	0.13
18	80	54	67	1	3	0.13
19	80	54	67	1	3	0.13
20	80	54	67	1	3	0.13
21	81	55	68	0	3	0.13
22	81	55	68	0	3	0.13
23	81	55	68	0	3	0.13
24	81	55	68	0	3	0.13
25	81	56	69	0	4	0.13
26	81	56	69	0	4	0.13
27	81	56	69	0	4	0.12
28	82	56	69	0	4	0.12
29	82	56	69	0	4	0.12
30	82	56	69	0	4	0.12
MTH	79.6	53.4	66.5	33	79	4.03

JULY

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	82	56	69	0	4	0.12
2	82	57	69	*	4	0.12
3	82	57	69	*	5	0.12
4	82	57	69	*	5	0.12
5	82	57	69	*	4	0.12
6	82	57	70	*	5	0.12
7	83	57	70	*	5	0.12
8	83	57	70	0	5	0.12
9	83	57	70	0	5	0.11
10	83	57	70	0	5	0.11
11	83	57	70	0	5	0.11
12	83	57	70	0	5	0.11
13	83	57	70	0	5	0.11
14	83	57	70	0	5	0.11
15	83	57	70	0	5	0.11
16	83	57	70	0	5	0.11
17	83	57	70	0	5	0.11
18	83	58	71	0	6	0.11
19	83	58	71	0	6	0.11
20	83	58	71	0	6	0.11
21	83	58	71	0	6	0.11
22	83	58	71	0	6	0.12
23	83	58	71	0	6	0.12
24	83	58	71	0	6	0.12
25	83	58	71	0	6	0.12
26	83	58	71	0	6	0.12
27	83	57	70	0	5	0.12
28	83	57	70	0	5	0.12
29	83	57	70	0	5	0.12
30	83	57	70	0	5	0.12
31	83	57	70	0	5	0.12
MTH	82.8	57.3	70.1	2	161	3.59
SUMMER SEASON:	81.3	55.6	68.5	47	372	11.73

AUGUST

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	83	57	70	0	5	0.12
2	83	57	70	0	5	0.12
3	83	57	70	0	5	0.13
4	83	57	70	0	5	0.13
5	83	57	70	0	5	0.13
6	83	57	70	0	5	0.13
7	82	57	70	0	5	0.13
8	82	57	70	0	5	0.13
9	82	57	70	0	5	0.13
10	82	57	70	0	5	0.13
11	82	57	70	0	5	0.13
12	82	57	70	0	5	0.13
13	82	57	70	0	5	0.13
14	82	57	70	0	5	0.13
15	82	57	70	0	5	0.13
16	82	57	69	0	4	0.13
17	82	57	69	0	4	0.13
18	81	57	69	0	4	0.14
19	81	57	69	0	4	0.14
20	81	56	68	1	4	0.14
21	81	56	68	1	4	0.14
22	81	56	68	1	4	0.14
23	81	56	68	1	4	0.14
24	81	56	68	1	4	0.14
25	80	54	67	1	3	0.14
26	80	54	67	1	3	0.14
27	80	54	67	1	3	0.14
28	80	54	67	1	3	0.13
29	80	54	67	1	3	0.13
30	80	54	67	1	3	0.13
31	80	54	67	1	3	0.13
MTH	81.5	56.2	68.9	12	132	4.11

SEPTEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	80	54	67	1	3	0.13
2	80	54	67	1	3	0.13
3	79	54	66	1	2	0.13
4	79	54	66	1	2	0.13
5	79	54	66	1	2	0.13
6	78	54	66	1	2	0.13
7	78	54	66	1	2	0.13
8	78	52	65	2	2	0.13
9	78	52	65	2	2	0.13
10	78	52	65	2	2	0.13
11	77	52	65	2	2	0.13
12	77	52	65	2	2	0.13
13	77	51	64	2	1	0.12
14	77	51	64	2	1	0.12
15	76	50	63	3	1	0.12
16	76	50	63	3	1	0.12
17	76	50	63	3	1	0.12
18	76	50	63	3	1	0.12
19	75	49	62	4	1	0.12
20	75	49	62	4	1	0.12
21	75	48	62	4	1	0.12
22	74	48	61	5	1	0.11
23	74	48	61	5	1	0.11
24	74	47	61	5	1	0.11
25	74	46	60	6	1	0.11
26	74	46	60	6	1	0.11
27	73	46	60	6	1	0.11
28	73	46	60	6	1	0.10
29	73	45	59	6	0	0.10
30	72	44	58	7	0	0.10
MTH	76.2	50.1	63.2	97	42	3.60

OCTOBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	72	44	58	8	1	0.10
2	71	44	57	9	1	0.10
3	71	43	57	9	1	0.10
4	71	42	57	9	1	0.10
5	71	41	56	9	0	0.09
6	71	41	56	9	0	0.09
7	71	40	55	10	0	0.09
8	71	40	55	10	0	0.09
9	71	40	55	10	0	0.09
10	69	39	54	11	0	0.09
11	69	39	54	11	0	0.09
12	69	38	54	11	0	0.09
13	68	38	53	12	0	0.09
14	68	38	53	12	0	0.09
15	68	37	53	12	0	0.09
16	67	37	52	13	0	0.09
17	67	36	52	13	0	0.09
18	67	36	52	13	0	0.09
19	66	36	51	14	0	0.09
20	66	36	51	14	0	0.09
21	66	35	51	14	0	0.09
22	65	35	50	15	0	0.09
23	65	35	50	15	0	0.09
24	65	34	50	15	0	0.10
25	65	34	50	15	0	0.10
26	64	34	49	16	0	0.10
27	64	34	49	16	0	0.10
28	64	33	49	16	0	0.10
29	63	33	48	17	0	0.10
30	63	33	48	17	0	0.10
31	63	33	48	17	0	0.11
MTH	67.5	37.4	52.5	392	4	2.92
AUTUMN SEASON:	67.3	39.1	53.2	1119	48	10.33
ANNUAL:	65.9	39.0	52.5	4988	451	48.77

NOVEMBER

Date	MAX	MIN	AVG	HDD	CDD	PRCP
1	63	33	48	17	0	0.11
2	62	33	48	18	*	0.11
3	62	33	48	18	*	0.11
4	62	32	47	18	*	0.12
5	62	32	47	18	*	0.12
6	62	31	46	19	*	0.12
7	62	31	46	19	0	0.12
8	61	31	46	19	0	0.12
9	60	31	46	19	0	0.12
10	59	31	45	20	0	0.13
11	59	31	45	20	0	0.13
12	59	31	45	20	0	0.13
13	59	30	45	20	0	0.13
14	58	30	44	21	0	0.13
15	58	30	44	21	0	0.13
16	58	30	44	21	0	0.13
17	58	30	44	21	0	0.13
18	57	29	43	22	0	0.13
19	57	29	43	22	0	0.13
20	57	29	43	22	0	0.13
21	57	29	43	22	0	0.13
22	56	28	42	23	0	0.13
23	56	28	42	23	0	0.14
24	56	28	42	23	0	0.14
25	55	28	42	23	0	0.14
26	55	27	41	24	0	0.13
27	55	27	41	24	0	0.13
28	55	27	41	24	0	0.13
29	54	27	41	24	0	0.13
30	54	27	40	25	0	0.13
MTH	58.3	29.8	44.1	630	2	3.81

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Latitude: 35B 28* 52(Longitude: -082B 58* 05(Elevation (feet): 2658

Climate Division: NC 01 Southern Mountains

PRECIPITATION PROBABILITIES

Probability	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0.005	0.65	0.67	1.08	0.49	1.35	0.59	0.96	0.55	0.19	0.10	1.05	0.77	30.72
0.010	0.81	0.83	1.29	0.62	1.54	0.73	1.11	0.69	0.27	0.15	1.21	0.92	32.19
0.050	1.42	1.44	2.01	1.12	2.14	1.27	1.61	1.23	0.65	0.42	1.73	1.48	36.46
0.100	1.86	1.87	2.50	1.49	2.52	1.65	1.93	1.62	0.97	0.66	2.07	1.86	38.89
0.200	2.52	2.51	3.19	2.04	3.04	2.22	2.37	2.20	1.49	1.08	2.54	2.40	41.98
0.300	3.08	3.06	3.77	2.51	3.46	2.71	2.73	2.71	1.99	1.49	2.91	2.86	44.31
0.400	3.62	3.58	4.32	2.97	3.84	3.17	3.07	3.20	2.49	1.91	3.27	3.30	46.36
0.500	4.19	4.13	4.88	3.45	4.23	3.66	3.40	3.71	3.03	2.37	3.62	3.74	48.34
0.600	4.81	4.73	5.48	3.98	4.64	4.19	3.77	4.27	3.65	2.91	4.00	4.23	50.37
0.700	5.54	5.43	6.18	4.61	5.11	4.82	4.18	4.93	4.39	3.57	4.43	4.79	52.61
0.800	6.48	6.33	7.08	5.42	5.70	5.62	4.71	5.79	5.39	4.45	4.98	5.51	55.31
0.900	7.95	7.74	8.45	6.68	6.59	6.88	5.50	7.12	6.99	5.90	5.81	6.62	59.21
0.950	9.31	9.04	9.70	7.86	7.39	8.04	6.22	8.36	8.52	7.29	6.55	7.63	62.56
0.990	12.24	11.84	12.35	10.40	9.05	10.53	7.72	11.03	11.90	10.41	8.11	9.79	69.17
0.995	13.44	12.98	13.42	11.44	9.71	11.55	8.32	12.13	13.32	11.72	8.73	10.66	71.70

PRECIPITATION QUINTILES

Level	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00
	0.13	0.31	0.23	0.05	0.00	0.00	0.73	0.97	0.15	0.30	0.03	0.13
2	0.14	0.32	0.24	0.06	0.01	0.00	0.74	0.98	0.16	0.31	0.04	0.14
	0.42	1.06	0.61	0.28	0.28	0.06	1.58	1.84	0.89	0.58	0.39	0.29
3	0.43	1.07	0.62	0.29	0.29	0.07	1.59	1.85	0.90	0.59	0.40	0.30
	1.19	1.43	1.19	0.47	0.59	0.15	2.07	2.43	1.68	1.01	0.64	0.72
4	1.20	1.44	1.20	0.48	0.60	0.16	2.08	2.44	1.69	1.02	0.65	0.73
	1.71	2.19	2.05	0.88	0.86	0.80	3.11	3.35	2.53	1.38	1.85	1.79
5	1.72	2.20	2.06	0.89	0.87	0.81	3.12	3.36	2.54	1.39	1.86	1.80
	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19
6 >	4.82	4.27	4.22	2.29	2.25	2.62	6.49	7.90	8.60	7.10	3.81	3.19

Abbreviations:

MAX = Maximum Temperature (degrees Fahrenheit)
MIN = Minimum Temperature (degrees Fahrenheit)
AVG = Average Temperature (degrees Fahrenheit)

NOTES

HDD = Heating Degree Days (base 65)
CDD = Cooling Degree Days (base 65)
PRCP = Precipitation Amount (inches)

MTH = Monthly Means / Totals
SEASON = Seasonal Means / Totals
ANNUAL = Annual Means / Totals

This publication presents daily temperature, precipitation, and heating and cooling degree day normals for stations based on the 1971-2000 record *adjusted* to the present station location. Stations contained in the monthly normals (Climatography of the United States No. 81) are included. Precipitation-only stations have no data in the temperature and degree day fields on Pages 1 and 2. Latitude and longitude values are presented in DD MM SS, where DD=Degrees, MM=Minutes, and SS=Seconds. Small differences between monthly values in this publication and the monthly normals presented in Climatography of the United States No.81 are attributable to smoothing techniques applied to this data set, as described below.

Daily Normals Tables:

The daily values presented in these tables are not simple means of the observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function. The procedure involved constructing a cumulative series of monthly sums from the monthly normals. The cumulative series was for a 24-month period (July, August, …, December, January, …, December, January, …, June), so that the interpolating function could adequately fit the end points in the annual series. This process was applied independently to all six elements. No normal values for February 29 are included; in common practice, the normal values for the 28th are used for the 29th in each leap year. Thus, for leap years, the February monthly total degree days or precipitation are calculated by adding the daily value for the 28th to the monthly total. February temperature averages are likewise not adjusted for leap years. For most stations, the monthly heating and cooling degree day normals (base 65 degrees Fahrenheit) are derived from monthly normal temperature using an estimation technique developed by H.C.S. Thom. An asterisk (*) for a daily degree day value indicates a daily normal of less than one degree day, but not equal to zero. Seasonal means / totals correspond to the three months listed immediately above.

Precipitation Probabilities and Quintiles Tables:

The precipitation probabilities are the monthly precipitation totals that correspond to the indicated probability levels. The probability levels are based on the 1971-2000 historical sequential monthly precipitation. The historical precipitation data are the adjusted values from the monthly normals (Climatography of the United States No. 81).

When historical climate data are accumulated and examined, they generally follow a certain pattern called a statistical distribution. While temperature usually follows a Gaussian or bell-shaped distribution, precipitation does not because it is zero-bounded. Precipitation generally follows a Gamma distribution, where most values are near zero with rapidly diminishing higher values. Thus, the Gamma distribution was used to estimate the precipitation values in the probability and quintile tables published above. The probability table shows the amount of precipitation expected at fifteen probability levels (0.005, 0.01, 0.05, 0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 0.95, 0.99, and 0.995) for each month of the year and for the annual total. For example, if 1.77 inches corresponds to the 0.20 probability level, that means that on average, 2 out of 10 years will have 1.77 inches *or less* of precipitation in that month. It also means that, on average, 8 out of 10 years will have *more than* 1.77 inches of precipitation in that month.

The precipitation quintiles show the expected precipitation values at the five quintile levels for each of the twelve months: 1. First Quintile (0-20%); 2. Second Quintile (20-40%); 3. Third Quintile (40-60%); 4. Fourth Quintile (60-80%); 5. Fifth Quintile (80-100%). For example, if 2.91 and 4.07 inches are the bounds for the second quintile (level 2), then a monthly total precipitation amount for that month falling in the range 2.91 to 4.07 would be classified as a second quintile precipitation amount and that month would be considered relatively dry. The first line (level 0 <) in the table shows the minimum precipitation value derived from the historical record. Quintile level 0 would be used if a future precipitation observation is less than the 1971-2000 value. Level 6 > would be used if the observed value is more than the 1971-2000 maximum.

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