c.1

U. S. DEPARTMENT OF COMMERCE
LUTHER H. HODGES, Secretary
WEATHER BUREAU
F. W. REICHELDERFER, Chief

CLIMATOGRAPHY OF THE UNITED STATES NO. 81-27

DECENNIAL CENSUS OF UNITED STATES CLIMATE—

MONTHLY NORMALS OF TEMPERATURE, PRECIPITATION, AND HEATING DEGREE DAYS

NORTH CAROLINA

LIBRARY
APR 5 - 1962
WEATHER BUREAU

WASHINGTON, D. C.:1962

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. - Price 5 cents

PREFACE

The climatological standard normals presented in this publication are based on records for the 30-year period 1931-1960 inclusive. For the first time, normals have been computed for substations and divisions using a base period identical to that used for first-order stations.

Previous normals were published in Weather Bureau Technical Paper No. 31, "Monthly Normal Temperatures, Precipitation, and Degree Days," and were based on records for the period 1921-1950. Earlier sets of normals are described in [1].

This is the first series of publications resulting from the project "The Decennial Census of United States Climate, 1960." The project is a continuation of earlier censuses of the climate of the United States that date back to the early 19th Century and are described in [2]. Future publications of this project will be listings of daily normals of temperature, and degree days; summaries of hourly observations; and listings of monthly divisional averages of temperature and precipitation.

Units used in this publication are degrees F. for temperatures, and inches for precipitation. The heating degree day normals are derived from the monthly normal temperatures, and are computed on the standard base of 65°F. Monthly normals of less than 5 degree days are shown as zero.

Standard Normals for Weather Bureau First Order Stations

A normal of a climatological element is an arithmetic mean for a specific period of record which estimates the true mean of the element at the current exposure of the meteorological instrument measuring the element. The true mean is the mean of all possible observations (population) at the current exposure. It is from this population that future observations will come, not from values in the past record. This is what makes it important to obtain an estimate of this mean. The true mean can never be known exactly but must be estimated from a sample of the past record ([3] p. 53 section 4. 3). The normals presented here are estimates of the true mean obtained from the 30-year sample record 1931-1960. They are called standard normals because they conform to the World Meteorological Organization standard for climatological normals.

If no exposure changes have occurred at a station the normal is estimated by simply averaging the 30 values from the 1931-1960 record. Since it is next to impossible to maintain a multiple purpose network of meteorological stations without having exposure changes, it is first necessary to find and evaluate these changes and then make adjustments for them if necessary.

Heterogeneities in record due to exposure changes are found in two ways: by determining them from the station histories and by use of statistical tests. The statistical test when standardized for the purpose is easy to apply and will often find heterogeneities which are not defined by the station histories as well as those which have been so determined. Two statistical tests were employed: one for temperature and the other for precipitation. These are described in [4].

After the periods of heterogeneity have been determined, adjustments are applied to remove the heterogeneities introduced into the mean. This is done by comparing the record at the base station, for which the normal is desired, to the record at a supplementary station with a homogeneous period which covers the heterogeneous period at the base station. The difference method is applied to the monthly average maximum and minimum temperatures and the ratio method to the monthly total precipitation. A weighted average of the various partial means of the adjusted and unadjusted record is then prepared to give the normal. Brief discussions of the methods of adjustment are found in [3] (p. 49, section 4. 24).

Normal heating degree days are derived by the method described in [5].

Normals for Substations and Divisions

Normals for substations were computed somewhat differently than those for first-order stations. Monthly substation normals are the simple arithmetic averages of the monthly values of temperature and precipitation for the period 1931-1960. These were computed for only those substations that were active during the entire period and no attempt was made to adjust for minor changes in location of the observing site, or for changes in the time of observation. Normals were not computed for substations that were moved a significant distance during the 1931-1960 period. Missing values in the data series were estimated by methods described in [6]. Substations whose locations were essentially unchanged during the 1931-1960 period are identified in the tables.

Monthly divisional normals are the means of the monthly divisional averages of temperature and precipitation for the period 1931-1960. In calculating the monthly divisional averages, all of the stations in the division that furnished both temperature and precipitation data during the particular month were used. The averages therefore were obtained from a variable station sample. As a result, the divisional normals often differ from the averages of the normals for stations in the division.

Annual substation and divisional normals are the averages of the 12 monthly temperature normals and the sums of the 12 monthly precipitation normals.

References

1. U. S. Weather Bureau, "History of Climatological Publications," Key to Meteorological Records Documentation No. 4. 1, Washington, D. C., 1958.

2. H. E. Landsberg, "The Decennial United States Census of Climate 1960 and Its Antecedents," Key to Meteorological Records Documentation No. 6. 2, U. S. Weather Bureau, Washington, D. C., 1960.

3. U. S. Weather Bureau, Climatology at Work, Gerald L. Barger, ed., Washington, D. C., 1960.

4. H. C. S. Thom, "Tests of Significance for Temperature and Precipitation Normals," U. S. Weather Bureau Manuscript, 1961.

5. H. C. S. Thom, "The Rational Relationship Between Heating Degree Days and Temperature," Monthly Weather Review, Vol. 82, No. 1, January 1954.

6. U. S. Weather Bureau, Administrative Manual, Vol. III, Chap. C-05, paras. C-0509 and C-0510.

NOTES

1. Station Names

In Table I, "AP" after the city name indicates "airport station" "CO" indicates "city office station." Figures and letters following the station name indicate a rural location, and refer to the distance and direction of the station from the nearest post office.

# indicates a station whose location has been essentially unchanged during the period 1931-1960.

H indicates the ground elevation of the station in feet above sea level, as of December 31, 1960.

G indicates the elevation at hygrothermometer site (where different from "H").

T indicates the height of the thermometer in feet above the ground as of December 31, 1960.

/NO TEST/ indicates that significant difference tests were not made.

2. Table Content

* indicates that the departure of the 1951-60 record from the 1921-50 normal is statistically significant, but through the adjustments for changes in location and exposure the absolute difference between old and new normals may even in these cases be very small.

T in the data tables indicates a monthly precipitation amount of only a trace.

February monthly normals are for a 28-day month.

TABLE I - NORMALS FOR FIRST ORDER STATIONS

STATION		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ANNUAL
#ASHEVILLE CO	H2203 T 78													
MAX TEMP		49.0	50.7	56.9	67.6*	76.2*	83.2	85.0*	84.0*	78.7	69.3	57.4	49.7	67.3
MIN TEMP		30.4	30.5	35.5	44.4*	52.5*	60.3	63.7	62.9	56.8	45.8	35.5*	30.2	45.7
AVG TEMP		39.7	40.6	46.2	56.0*	64.4*	71.8	74.4*	73.5*	67.8	57.6	46.5*	40.0	56.5
DEG DAYS		784	683	592	273*	87*	0	0	0	48	245	555*	775	4042
PRECIP		3.17	3.04	3.74	3.19*	2.87	3.52	4.31*	3.63	2.78	2.49	2.22	2.92	37.88
CAPE HATTERAS-BUXTON	H 7 T 6													
MAX TEMP		53.2	53.5	58.0	66.3*	74.8	81.7	83.8*	83.5*	79.8	71.3	62.8	54.8	68.6
MIN TEMP		39.9	39.5	44.0	52.2	61.1	68.6*	72.2	71.6	68.3	59.4	49.5	41.5	55.7
AVG TEMP		46.6	46.5	51.0	59.3*	68.0	75.2*	78.0*	77.6*	74.1	65.4	56.2	48.2	62.2
DEG DAYS		580	518	440	177*	25	0	0	0	0	78	273	521	2612
PRECIP		3.90	3.93	4.16	2.29	3.98	4.14	6.15	6.42	5.89	4.24	4.09*	4.58	54.47
CHARLOTTE AP	H 725 T 5													
MAX TEMP		53.4	55.7	62.0	72.0*	80.4*	87.6	88.8	87.8*	82.9	73.8	62.7	53.3	71.7
MIN TEMP		33.3	33.7	39.0	48.6*	57.6*	65.6	68.5	67.5*	61.8	50.2	39.1	33.1	49.8
AVG TEMP		43.4	44.7	50.5	60.3*	69.0*	76.6	78.7	77.7*	72.4	62.0	50.9	43.2	60.8
DEG DAYS		670	568	465	153*	22*	0	0	0	12	136	423	676	3125
PRECIP		3.53	3.55	4.39	3.49*	3.11	3.61	4.88	4.22	3.49	2.96	2.53	3.62	43.38
#GREENSBORO AP	H 891 T 6													
MAX TEMP		49.6	51.8	58.9	69.3*	78.8	86.1	87.7*	86.4	80.9	71.5	59.8	50.2	69.3
MIN TEMP		29.8	30.2	35.8	45.4*	54.9*	63.4	66.9	65.9	59.3	47.0	36.0	29.6	47.0
AVG TEMP		39.7	41.0	47.4	57.4*	66.9*	74.8	77.3*	76.2	70.1	59.3	47.9	39.9	58.2
DEG DAYS		784	672	552	234*	47*	0	0	0	33	192	513	778	3805
PRECIP		3.40	3.30	3.69	3.43	3.29*	3.47	4.79	4.61	3.66	2.71	2.68	3.13	42.16
RALEIGH AP	H 433 T 7													
MAX TEMP		51.9	54.0	61.1	71.8*	79.4	86.3	88.1*	87.1	82.0	72.8*	62.2	52.3	70.8
MIN TEMP		31.3	31.9	37.8	46.8*	55.7*	63.9*	67.6	66.7	60.4	48.2	37.7	31.4	48.3
AVG TEMP		41.6	43.0	49.5	59.3*	67.6*	75.1*	77.9*	76.9	71.2	60.5*	50.0	41.9	59.5
DEG DAYS		725	616	487	180*	34*	0	0	0	21	164*	450	716	3393
PRECIP		3.22	3.23	3.35	3.52	3.52	3.70	5.49	5.20	3.85*	2.71	2.77	3.02	43.58
WILMINGTON AP	H 30 T 6													
MAX TEMP		58.4	59.4	65.1	73.6	81.0*	87.4	89.0	88.1	84.0*	75.7*	66.8	59.3	74.0
MIN TEMP		37.3	37.9	43.2	51.4*	60.0*	67.9	70.9	70.7	66.4	55.0	43.9	37.1	53.5
AVG TEMP		47.9	48.7	54.2	62.5*	70.5*	77.7	80.0	79.4	75.2*	65.4*	55.4	48.2	63.8
DEG DAYS		546	462	357	96*	0	0	0	0	0	74*	291	521	2347
PRECIP		2.85	3.42	4.03*	2.86	3.52	4.26*	7.68	6.86	6.29	3.01	3.09	3.42	51.29
WINSTON SALEM AP	H 967 T 6													
MAX TEMP		49.8	51.8*	59.1	69.6*	79.3*	86.6	88.2*	86.8*	81.2	71.8	59.9	50.3	69.5
MIN TEMP		31.5	31.5	37.4	47.0*	56.2*	64.7	67.8	66.8	61.6	48.7	37.8	31.5	48.5
AVG TEMP		40.7	41.7*	48.3	58.3*	67.8*	75.7	78.0*	76.8*	71.4	60.3	48.9	40.9	59.1
DEG DAYS		753	652*	524	207*	37*	0	0	0	21	171	483	747	3595
PRECIP		3.68	3.48	4.01	3.62	4.01	3.64	4.63	4.31	3.55	3.07	2.78	3.35	44.13

TABLE II - NORMALS BY CLIMATOLOGICAL DIVISIONS

STATIONS (By Divisions)	TEMPERATURE (°F)												PRECIPITATION (In.)											
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	ANNUAL	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	ANNUAL
SOUTHERN MOUNTAINS																										
ALTAPASS	.	.	.	.	.	.	.	.	.	.	.	.	.	4.05	3.56	5.11	4.35	3.81	3.71	4.83	4.55	3.88	3.10	3.50	3.80	48.25
ANDREWS 2 E	39.3	40.6	46.3	55.5	63.7	71.0	73.8	72.8	67.6	57.2	46.0	39.5	56.1	6.45	6.67	6.47	5.27	4.24	5.00	6.32	4.91	3.34	3.14	4.11	6.10	62.02
#ASHEVILLE CO	39.7	40.6	46.2	56.0	64.4	71.8	74.4	73.5	67.8	57.6	46.5	40.0	56.5	3.17	3.04	3.74	3.19	2.87	3.52	4.31	3.63	2.78	2.49	2.22	2.92	37.88
BREVARD	.	.	.	.	.	.	.	.	.	.	.	.	.	5.75	5.55	6.18	5.03	4.83	4.94	6.51	6.05	4.46	4.31	4.25	5.63	63.49
#CANTON 1 SW	.	.	.	.	.	.	.	.	.	.	.	.	.	3.46	3.53	4.00	3.30	3.00	3.13	4.70	4.40	2.83	2.61	2.35	3.00	40.31
#CAROLEEN	42.8	44.6	50.7	60.6	69.2	77.0	79.3	78.2	72.5	61.6	50.0	42.3	60.7	4.34	4.25	5.12	4.04	3.55	3.68	4.98	5.02	3.95	3.25	3.18	4.39	49.75
#CULLOWHEE	40.7	42.0	47.1	55.9	63.8	70.9	73.9	73.2	67.9	57.7	46.4	40.3	56.7	4.59	4.66	4.94	3.79	3.60	3.55	5.07	4.31	2.91	2.76	2.88	4.40	47.46
#ENKA	.	.	.	.	.	.	.	.	.	.	.	.	.	3.19	3.17	3.91	3.20	3.21	3.42	4.89	4.09	2.81	2.70	2.49	2.91	39.99
#HENDERSONVILLE	39.9	41.2	46.9	56.0	63.9	71.2	73.7	72.8	67.1	56.9	46.1	39.6	56.3	4.76	4.58	5.48	4.54	4.15	4.82	6.16	5.52	4.04	3.75	3.60	4.72	56.12
#HIGHLANDS 2 S	39.3	39.9	45.0	54.2	61.9	68.3	70.1	69.4	65.1	56.2	46.1	39.9	54.6	7.17	6.76	7.66	6.28	5.40	6.55	9.32	7.51	4.93	5.06	5.16	7.33	79.13
HOT SPRINGS 2	40.3	41.7	47.2	57.2	65.7	73.2	76.0	75.3	70.2	59.6	47.5	40.6	57.9	3.43	3.69	4.23	3.69	3.37	4.39	5.41	4.43	2.96	2.48	2.64	2.95	43.67
#MARSHALL 2 NE	37.7	38.7	44.3	54.1	62.9	70.4	73.4	72.4	66.8	56.1	44.6	37.7	54.9	3.22	3.29	3.84	3.18	2.98	3.64	4.72	3.56	2.52	2.19	2.29	2.79	38.22
#MORGANTON	42.3	43.5	49.1	58.7	66.8	74.7	77.1	76.0	70.2	59.9	49.2	42.0	59.1	4.27	3.95	4.89	3.90	3.64	3.69	5.12	5.42	4.46	3.55	3.03	4.11	50.03
#MT MITCHELL TVA	.	.	.	.	.	.	.	.	.	.	.	.	.	5.36	5.84	6.74	5.89	5.14	5.51	7.82	7.79	6.56	5.99	5.09	5.80	73.53
#MURPHY	.	.	.	.	.	.	.	.	.	.	.	.	.	5.65	5.85	5.93	4.95	3.72	4.45	5.61	4.52	3.01	2.83	3.65	5.07	55.24
#SWANNANOA 2 E	.	.	.	.	.	.	.	.	.	.	.	.	.	3.54	3.43	4.08	3.34	2.96	3.54	4.34	4.56	3.51	3.19	2.65	3.24	42.38
#TAPOCO	.	.	.	.	.	.	.	.	.	.	.	.	.	5.38	5.71	5.76	4.74	4.15	4.67	5.70	5.03	3.04	2.94	3.64	4.94	55.70
#TRYON	44.3	45.7	51.4	60.1	67.9	74.9	77.1	76.0	70.7	61.2	51.2	44.0	60.4	5.29	5.34	6.35	4.83	4.33	4.41	6.21	6.48	4.52	4.35	3.90	5.48	61.49
WAYNESVILLE 1 E	38.9	39.9	45.2	54.2	61.8	68.6	71.3	70.5	64.7	55.1	44.7	38.8	54.5	4.65	4.32	4.95	3.58	3.51	3.41	5.01	4.02	2.74	2.86	2.88	3.99	45.92
DIVISION	39.5	40.5	46.0	55.2	63.3	70.5	73.0	72.2	66.9	57.0	46.1	39.5	55.8	4.83	4.71	5.49	4.45	4.00	4.47	5.94	5.45	3.84	3.60	3.54	4.71	55.03
NORTHERN MOUNTAINS																										
#BANNER ELK	34.3	34.9	40.0	49.1	57.0	64.0	66.7	65.8	60.8	51.5	40.9	34.8	50.0	3.99	4.12	4.63	4.33	4.13	4.52	6.11	5.34	3.89	3.27	3.44	3.82	51.59
BOONE	35.1	35.8	40.8	50.2	58.8	66.2	68.9	68.2	62.4	52.9	42.3	36.1	51.5	4.06	4.04	5.10	4.65	4.51	4.39	6.34	5.41	4.38	3.83	4.02	4.07	54.80
#ELKIN	.	.	.	.	.	.	.	.	.	.	.	.	.	3.58	3.37	4.36	3.78	3.95	4.29	5.07	5.61	3.86	3.28	3.02	3.57	47.74
#JEFFERSON	.	.	.	.	.	.	.	.	.	.	.	.	.	3.48	3.44	4.11	3.83	4.09	3.82	5.50	5.82	4.00	3.23	3.22	3.52	48.06
#LENOIR	41.7	42.9	48.6	58.1	66.2	73.4	76.1	75.2	69.9	59.6	48.7	41.5	58.5	3.90	4.03	4.63	4.14	3.93	4.33	5.04	5.65	3.85	3.63	2.85	3.77	49.75
#MOUNT AIRY	39.6	40.9	47.2	57.1	65.7	73.3	76.2	75.0	69.3	58.9	47.4	39.6	57.5	3.66	3.44	4.33	3.83	4.18	4.12	5.39	4.80	3.56	3.28	3.00	3.47	47.06
NORTH WILKESBORO	.	.	.	.	.	.	.	.	.	.	.	.	.	3.92	3.75	4.66	3.78	3.96	4.08	5.80	5.55	3.78	3.72	3.06	3.72	49.78
#PARKER 1 E	34.8	35.7	40.8	50.7	58.9	65.8	68.4	67.5	62.5	53.1	42.3	35.5	51.3	3.98	4.23	4.72	4.11	4.83	4.56	5.92	5.35	3.71	2.64	3.02	3.47	50.54
DIVISION	36.8	37.8	43.2	52.7	61.0	68.2	70.9	69.9	64.5	54.9	44.1	37.2	53.4	3.89	3.99	4.79	4.24	4.26	4.40	5.85	5.60	4.11	3.52	3.37	3.82	51.84
NORTHERN PIEDMONT																										
CHAPEL HILL 2 W	43.3	44.7	51.0	60.7	69.0	76.5	79.0	77.8	72.7	62.0	51.6	43.4	61.0	3.67	3.66	3.82	3.78	3.23	3.48	5.71	5.01	3.91	2.79	3.18	3.55	45.79
#DURHAM	42.2	43.4	49.9	59.6	68.2	75.8	78.4	77.2	71.4	60.7	50.0	41.9	59.9	3.30	3.36	3.57	3.37	3.17	3.74	5.35	4.73	3.44	2.68	2.90	3.04	42.65
#GRAHAM	.	.	.	.	.	.	.	.	.	.	.	.	.	3.50	3.51	3.74	3.67	3.50	3.86	5.08	5.01	3.94	3.02	2.88	3.24	44.95
#GREENSBORO AP	39.7	41.0	47.4	57.4	66.9	74.8	77.3	76.2	70.1	59.3	47.9	39.9	58.2	3.40	3.30	3.69	3.43	3.29	3.47	4.79	4.61	3.66	2.71	2.68	3.13	42.16
#HENDERSON 2 SW	41.7	43.0	49.6	59.6	67.9	75.7	78.4	77.1	71.3	60.6	50.4	41.9	59.8	3.51	3.22	3.99	3.76	3.80	4.03	5.95	4.94	3.45	2.68	3.10	3.15	45.58
#HIGH POINT	.	.	.	.	.	.	.	.	.	.	.	.	.	3.60	3.57	3.92	3.80	3.57	3.68	5.52	5.06	4.03	2.59	2.88	3.47	45.69
LAKE NICHIE	.	.	.	.	.	.	.	.	.	.	.	.	.	3.44	3.48	3.82	3.61	3.69	3.54	5.52	4.82	3.79	2.86	2.88	2.93	44.38
LOUISBURG	41.7	43.1	49.6	59.6	68.4	76.2	79.1	77.7	72.0	60.9	50.1	41.7	60.0	3.54	3.69	3.83	3.58	3.61	3.93	5.85	5.35	4.05	2.63	3.25	3.28	46.59
#MANGUMS STORE	.	.	.	.	.	.	.	.	.	.	.	.	.	3.38	3.14	3.80	3.68	3.18	3.86	5.09	4.71	3.30	2.59	3.09	3.16	42.98
#OXFORD 2 SW	41.9	43.1	49.3	59.4	67.8	75.4	78.1	76.8	71.3	60.6	50.5	42.1	59.7	3.45	3.31	3.70	3.77	3.93	4.45	5.44	4.77	3.56	2.74	3.07	3.17	45.36
#REIDSVILLE	41.9	43.1	49.5	59.6	68.1	75.8	78.4	77.3	71.5	61.2	50.6	42.3	59.9	3.37	3.26	3.80	3.74	3.79	3.51	4.34	4.24	4.09	3.21	2.94	3.08	43.37
#ROUGEMONT	.	.	.	.	.	.	.	.	.	.	.	.	.	3.41	3.21	3.86	3.92	3.72	4.21	5.72	4.91	3.68	3.01	3.16	3.09	45.90
#ROXBORO 2 WNW	.	.	.	.	.	.	.	.	.	.	.	.	.	3.48	3.26	3.57	3.71	3.78	4.00	4.97	4.56	4.12	2.78	2.95	3.08	44.26
WINSTON SALEM AP	40.7	41.7	48.3	58.3	67.8	75.7	78.0	76.8	71.4	60.3	48.9	40.9	59.1	3.68	3.48	4.01	3.62	4.01	3.64	4.63	4.31	3.55	3.07	2.78	3.35	44.13
DIVISION	41.6	42.9	49.3	59.3	67.9	75.6	78.2	76.9	71.3	60.6	50.0	41.7	59.6	3.51	3.44	3.83	3.67	3.58	3.81	5.27	4.73	3.82	2.85	2.96	3.25	44.72

TABLE II - NORMALS BY CLIMATOLOGICAL DIVISIONS

NORTH CAROLINA

STATIONS (By Divisions)	TEMPERATURE (°F) JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	ANNUAL	PRECIPITATION (In.) JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	ANNUAL
CENTRAL PIEDMONT																										
#ASHEBORO 2 W	43.3	44.9	51.2	60.9	68.7	76.0	78.4	77.2	71.7	61.6	51.4	43.5	60.7	3.67	3.49	4.07	3.64	3.69	3.81	5.54	4.85	3.65	2.97	2.69	3.31	45.38
#HICKORY	41.3	42.4	48.6	58.6	67.3	75.1	77.4	76.3	70.9	60.6	49.0	41.1	59.1	4.11	4.05	4.73	3.78	3.62	3.88	4.99	5.65	3.81	3.40	3.08	4.05	49.15
MONCURE 3 SE	41.5	43.1	49.5	59.5	67.8	75.9	78.5	77.4	71.7	60.5	49.6	41.3	59.7	3.56	3.68	3.96	3.79	3.90	3.62	3.84	5.51	4.29	2.89	3.16	3.45	48.65
#NEUSE	*	*	*	*	*	*	*	*	*	*	*	*	*	3.53	3.68	3.68	3.77	3.53	4.07	5.49	3.58	4.14	2.89	3.20	3.45	47.01
RALEIGH AP	41.6	43.0	49.5	59.3	67.6	75.1	77.9	76.9	71.2	60.5	50.0	41.9	59.5	3.22	3.23	3.35	3.52	3.52	3.70	5.49	5.20	3.85	2.71	2.77	3.02	43.58
#RALEIGH 3 W	*	*	*	*	*	*	*	*	*	*	*	*	*	3.42	3.39	3.85	3.63	3.86	4.07	5.56	4.98	4.36	2.85	3.07	3.24	46.28
#RALEIGH STATE COLLEGE	43.3	44.3	50.7	60.6	69.2	76.9	79.4	78.0	72.5	62.3	51.8	43.6	61.1	3.33	3.49	3.72	3.78	3.80	3.94	5.90	5.35	4.57	2.77	3.01	3.20	46.86
#RANDLEMAN	*	*	*	*	*	*	*	*	*	*	*	*	*	3.62	3.72	3.83	3.65	3.68	3.66	5.78	5.12	4.09	2.90	2.86	3.36	46.27
#SALISBURY	42.2	43.8	50.1	60.3	69.2	76.9	79.2	78.0	72.0	61.0	49.8	41.8	60.4	3.91	3.65	4.39	3.76	3.79	3.77	5.59	4.89	3.91	3.12	2.96	3.61	47.35
STATESVILLE 2 NNE	42.3	44.0	49.7	59.7	68.2	75.9	78.0	76.8	71.7	61.6	50.5	42.2	60.1	4.06	3.86	4.69	3.73	3.52	3.64	5.07	4.63	3.73	3.30	3.04	3.81	47.08
DIVISION	42.4	43.9	50.1	60.0	68.3	76.0	78.5	77.3	71.7	61.3	50.4	42.4	60.2	3.73	3.66	4.17	3.71	3.71	3.79	5.60	5.07	4.00	3.01	2.99	3.52	46.96
SOUTHERN PIEDMONT																										
#ALBEMARLE	43.5	45.0	50.9	60.4	69.1	76.8	78.9	77.7	72.1	61.5	50.9	42.9	60.8	3.65	3.59	4.13	3.87	3.20	3.82	6.22	4.61	4.43	2.77	2.80	3.46	46.55
CHARLOTTE AP	43.4	44.7	50.5	60.3	69.0	76.6	78.7	77.7	72.4	62.0	50.9	43.2	60.8	3.53	3.55	4.39	3.49	3.11	3.61	4.88	4.22	3.49	2.96	2.53	3.62	43.38
#GASTONIA	44.2	45.9	52.0	62.0	70.5	78.0	79.8	78.8	73.2	62.4	51.7	44.0	61.9	3.91	4.09	4.66	3.95	3.64	3.21	4.93	4.57	4.10	3.51	2.87	3.94	47.38
#MONROE 4 SE	44.8	46.3	52.1	61.1	69.7	77.4	79.5	78.3	72.9	62.4	52.1	44.4	61.8	3.53	3.57	3.85	3.74	3.08	3.67	5.31	5.04	3.81	2.64	2.68	3.41	44.33
#MOUNT GILEAD 4 W	*	*	*	*	*	*	*	*	*	*	*	*	*	3.20	3.16	3.61	3.59	2.87	3.78	5.72	4.58	4.00	2.66	2.76	3.19	43.12
#PINEHURST	44.1	45.6	51.8	61.7	70.0	77.2	79.2	78.2	72.7	62.4	51.9	43.9	61.6	3.55	3.79	4.18	4.01	3.66	4.30	6.90	5.74	4.04	3.09	3.07	3.55	49.88
SHELBY 3 N	*	*	*	*	*	*	*	*	*	*	*	*	*	4.04	4.11	4.60	3.69	3.52	3.64	5.09	4.68	3.46	3.31	3.02	4.15	47.31
SOUTHERN PINES 2 W	44.9	46.3	52.2	61.5	69.8	77.4	78.9	77.7	72.9	62.7	52.6	45.1	61.8	3.47	3.71	4.27	4.08	3.80	4.78	7.11	5.50	4.35	3.30	2.92	3.38	50.67
DIVISION	43.8	45.3	51.4	61.0	69.6	77.2	79.3	78.2	72.8	62.3	51.6	43.7	61.4	3.60	3.66	4.28	3.79	3.42	3.86	5.71	5.00	4.03	2.97	2.79	3.53	46.64
SOUTHERN COASTAL PLAIN																										
#ELIZABETHTOWN LOCK 2	*	*	*	*	*	*	*	*	*	*	*	*	*	2.78	3.25	3.61	3.23	2.98	4.63	6.14	6.02	4.58	3.03	2.75	3.03	46.03
#FAYETTEVILLE 2 SE	45.3	46.0	52.4	62.2	70.4	78.0	80.3	79.1	74.2	63.4	53.0	44.6	62.4	3.02	3.39	3.89	3.80	3.64	4.16	6.06	6.00	4.39	2.25	2.83	3.01	46.44
LUMBERTON 6 NW	45.9	47.3	53.7	62.8	70.6	77.4	79.5	78.5	73.6	63.2	52.8	45.4	62.6	2.86	3.50	3.87	3.78	3.25	4.56	6.21	4.91	4.23	2.52	2.69	3.10	45.48
#RED SPRINGS	*	*	*	*	*	*	*	*	*	*	*	*	*	2.90	3.39	3.69	3.65	3.37	4.54	5.47	5.37	4.07	2.35	2.83	3.29	44.92
#SLOAN 3 S	46.0	46.8	52.9	61.6	68.9	75.9	78.9	77.7	73.1	62.9	53.3	45.7	62.0	3.12	3.52	3.82	2.95	3.61	5.17	7.22	5.71	5.04	2.57	2.83	3.21	48.77
#SOUTHPORT	48.7	49.1	54.2	62.7	70.8	77.6	80.2	79.7	75.9	66.5	57.0	49.5	64.3	3.00	3.65	3.94	2.57	3.17	3.87	6.56	5.71	7.08	3.27	3.17	3.50	49.49
#WILLARD 1 N	47.3	48.5	54.1	62.5	70.3	77.2	79.6	78.6	74.1	64.0	54.3	46.9	63.1	2.86	3.54	3.67	2.76	3.66	4.73	7.56	5.98	5.28	2.78	2.88	3.27	48.97
WILMINGTON AP	47.9	48.7	54.2	62.5	70.5	77.7	80.0	79.4	75.2	65.4	55.4	48.2	63.8	2.85	3.42	4.03	2.86	3.52	4.26	7.68	6.86	6.29	3.01	3.09	3.42	51.29
DIVISION	46.8	47.8	53.5	62.4	70.3	77.3	79.7	78.7	74.1	64.0	54.2	46.6	63.0	3.06	3.51	3.90	3.23	3.56	4.50	6.94	5.94	5.23	2.77	2.96	3.32	48.92
CENTRAL COASTAL PLAIN																										
GOLDSBORO 1 SSW	44.7	46.0	52.5	62.3	70.6	78.0	80.5	79.1	74.0	63.3	53.0	44.6	62.4	3.32	3.37	3.85	3.79	3.85	4.78	7.50	5.62	4.35	2.87	3.10	3.21	49.61
#GREENVILLE	*	*	*	*	*	*	*	*	*	*	*	*	*	3.34	3.40	3.60	3.47	3.38	4.08	6.79	5.58	4.84	2.77	3.03	3.26	47.54
#KINSTON	45.3	46.4	52.9	62.1	70.2	77.4	80.0	79.4	74.2	63.8	53.5	45.2	62.5	3.03	3.46	3.50	3.18	3.64	4.62	7.09	5.83	4.79	2.58	2.95	3.17	47.84
NEW BERN 3 NW	46.6	47.7	53.5	62.8	70.8	77.8	80.2	79.3	74.7	64.7	54.7	46.8	63.3	3.27	3.85	3.96	3.10	3.91	4.54	8.17	6.98	6.68	3.17	3.65	4.13	55.41
#NEW HOLLAND	47.0	47.2	52.8	61.0	68.9	75.9	78.8	78.2	73.9	64.6	55.1	47.2	62.6	3.52	3.80	3.65	3.07	3.77	4.74	7.18	6.71	5.86	3.35	3.71	4.01	53.37
#SMITHFIELD	44.1	45.4	51.8	61.3	69.4	77.0	79.4	78.3	72.9	62.3	52.0	43.9	61.5	3.42	3.57	3.86	3.97	3.56	4.57	6.04	6.08	4.19	2.81	3.03	3.24	48.34
DIVISION	45.5	46.5	52.5	61.7	70.0	77.3	79.8	79.0	74.2	64.0	54.0	45.8	62.5	3.39	3.64	3.79	3.35	3.69	4.46	7.04	6.16	5.33	3.12	3.38	3.55	50.90
NORTHERN COASTAL PLAIN																										
CAPE HATTERAS BUXTON	46.6	46.5	51.0	59.3	68.0	75.2	78.0	77.6	74.1	65.4	56.2	48.2	62.2	3.90	3.93	4.16	2.29	3.98	4.14	6.15	6.42	5.89	4.24	4.09	4.58	54.47
#EDENTON	43.5	44.7	50.9	60.5	69.2	76.9	79.5	78.0	72.8	62.1	52.0	43.8	61.2	3.63	3.40	3.87	3.46	3.39	4.13	6.84	6.28	4.75	2.81	3.31	3.01	48.88
#ELIZABETH CITY	44.6	45.2	51.2	60.4	68.9	76.4	79.5	78.2	73.3	63.1	53.3	45.0	61.6	3.61	3.76	3.84	3.42	3.29	3.82	7.11	6.41	5.08	3.18	3.50	3.25	50.27
#ENFIELD 3 S	*	*	*	*	*	*	*	*	*	*	*	*	*	3.36	3.38	3.69	3.30	3.54	3.74	5.61	5.20	3.50	2.62	2.64	2.89	43.47
#HATTERAS	47.6	47.4	52.0	60.1	68.5	75.8	78.9	78.8	75.4	66.6	57.5	49.2	63.2	3.92	4.01	4.21	2.99	4.07	4.06	6.28	6.58	6.02	4.47	4.31	4.87	55.79
#MANTEO	45.3	45.6	51.0	59.5	68.4	75.9	79.2	78.3	74.0	64.2	54.8	46.7	61.9	3.25	3.49	3.31	2.59	2.95	3.27	5.84	5.52	4.66	3.08	3.22	3.13	44.31
#NASHVILLE	42.8	44.2	50.8	60.4	69.0	76.6	79.2	77.8	72.4	61.8	51.2	42.9	60.8	3.46	3.44	3.69	3.61	3.87	3.86	5.88	6.02	4.31	2.71	2.99	3.17	47.01
#ROCKY MOUNT POWER PLANT	*	*	*	*	*	*	*	*	*	*	*	*	*	3.25	3.29	3.69	3.53	3.59	4.10	6.55	5.80	4.45	2.82	3.10	3.00	47.17
#ROCKY MOUNT 8 ESE	*	*	*	*	*	*	*	*	*	*	*	*	*	3.44	3.78	3.84	3.36	3.49	4.39	6.12	5.68	4.18	2.75	3.22	3.04	47.29
SCOTLAND NECK 5 NE	*	*	*	*	*	*	*	*	*	*	*	*	*	3.43	3.67	3.80	3.54	3.60	4.76	5.98	5.44	4.22	3.04	3.02	3.14	47.64
#TARBORO	43.2	44.3	51.3	61.2	69.9	77.2	80.0	78.8	73.5	62.4	51.7	43.3	61.4	3.47	3.49	3.93	3.40	3.57	4.49	6.08	6.17	4.28	2.87	3.16	3.20	48.11
#WELDON	42.4	43.4	50.0	60.0	69.0	77.0	79.9	78.3	72.6	61.5	51.1	42.5	60.6	3.29	3.37	3.43	3.36	3.71	3.38	5.66	5.26	3.97	2.51	2.82	2.89	43.65
#WILLIAMSTON 1 ESE	*	*	*	*	*	*	*	*	*	*	*	*	*	3.25	3.45	3.80	3.54	3.55	4.28	6.74	6.04	4.41	2.69	3.10	2.98	47.83
DIVISION	44.0	44.9	50.9	60.2	68.8	76.3	79.2	78.1	73.2	62.8	52.8	44.5	61.3	3.50	3.57	3.78	3.30	3.55	4.00	6.28	6.02	4.69	3.00	3.29	3.32	48.30

☆U. S. GOVERNMENT PRINTING OFFICE : 1962 O - 630524

1963 REVISIONS AND ADDITIONS TO CLIMATOGRAPHY OF THE UNITED STATES NO. 81-27 NORTH CAROLINA

TABLE I — NORMALS FOR FIRST ORDER STATIONS

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
CHARLOTTE AP													
G 735 T 4													
MAX TEMP	51.4	53.7	60.0	71.0	79.4	87.6	88.8	87.8	81.9	72.8	60.7	51.3	70.5
MIN TEMP	34.0	34.7	40.0	49.6	58.6	66.6	69.5	69.5	63.8	52.2	40.1	34.1	51.1
AVG TEMP	42.7	44.2	50.0	60.3	69.0	77.1	79.2	78.7	72.9	62.5	50.4	42.7	60.8
DEG DAYS	691	582	481	156	22	0	0	0	6	124	438	691	3191
CAPE HATTERAS-BUXTON													
H 7 T 6													
PRECIP				2.99									

REVISIONS TO FIRST ORDER STATIONS IN TABLE I AFFECT THE SAME STATIONS IN TABLE II.

USCOMM-WB-Asheville, N. C. -3/31/64- 2000

LIBRARY
JUL 9 1964
WEATHER BUREAU