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U. S. DEPARTMENT OF COMMERCE
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CLIMATOGRAPHY OF THE UNITED STATES NO. 81-5

DECENNIAL CENSUS OF UNITED STATES CLIMATE—

MONTHLY NORMALS OF TEMPERATURE, PRECIPITATION, AND HEATING DEGREE DAYS

COLORADO

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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

COLORADO

STATION		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ANNUAL
ALAMOSA AP H7536 T 5														
	MAX TEMP	35.6	41.0	49.0*	58.9*	68.1	78.6*	82.5*	80.3	75.2*	64.2	48.9*	37.9	60.0
	MIN TEMP	- .8*	5.9*	15.2	24.7	33.4	41.4*	47.2*	45.7*	36.1	24.6	10.0	.4	23.7
	AVG TEMP	17.4*	23.5*	32.1*	41.8*	50.8	60.0*	64.9*	63.0*	55.7*	44.4	29.5	19.2	41.9
	DEG DAYS	1476*	1162*	1020*	696*	440	168*	65*	99*	279*	639	1065	1420	8529
	PRECIP	.26	.17	.26*	.69*	.73	.49	1.07	.98	.77	.60	.29	.25	6.56
COLORADO SPRINGS AP H6173 T 6														
	MAX TEMP	42.9*	44.8*	49.6	58.8	68.4	79.5*	85.2	83.8	77.0*	65.7	52.3	45.7*	62.8
	MIN TEMP	14.2	17.1	21.8*	31.4*	40.5	48.9	54.7	53.6*	45.1*	34.9*	22.6*	17.7	33.5
	AVG TEMP	28.6*	31.0*	35.7*	45.1*	54.5	64.2*	70.0	68.7*	61.1*	50.3*	37.5*	31.7*	48.2
	DEG DAYS	1128*	952*	908*	597*	332	93*	16	31*	144*	456*	825*	1032*	6514
	PRECIP	.29	.33	.61	1.31	2.13*	1.59	2.37	2.16	1.07	.69	.40*	.24*	13.19
DENVER AP H5292 T 5														
	MAX TEMP	43.1*	45.6	50.9	60.5	69.5	81.0*	87.4	85.8	78.0*	66.6	52.7	46.2*	63.9
	MIN TEMP	16.8	19.3	24.8	34.3	43.8*	53.0*	59.4*	58.2*	49.0	38.2	25.6	20.0*	36.9
	AVG TEMP	30.0*	32.5	37.9	47.4	56.7*	67.0*	73.4*	72.0*	63.5*	52.4	39.2	33.1*	50.4
	DEG DAYS	1085*	910	840	528	279*	60*	0	9*	105*	403	774	989*	5982
	PRECIP	.55	.69*	1.21	2.11	2.70*	1.44*	1.53*	1.28	1.13	1.01	.69	.47	14.81
#DENVER CO H5221 T106														
	MAX TEMP	43.5	45.7	50.3	60.0	68.9	80.4*	86.7	85.0	77.2*	66.2	52.8	46.9*	63.6
	MIN TEMP	21.6*	23.4	28.0	37.2	46.5	55.8*	62.1	61.1	51.9	41.4	29.5	24.7*	40.3
	AVG TEMP	32.6*	34.6	39.2	48.6	57.7	68.1*	74.4	73.1	64.6*	53.8	41.2	35.8*	52.0
	DEG DAYS	1004*	851	800	492	254	48*	0	0	90*	366	714	905*	5524
	PRECIP	.49	.63	1.07*	1.85	2.41	1.27	1.22	1.09	.91	.93	.62	.40	12.89
GRAND JUNCTION AP H4849 T 6														
	MAX TEMP	34.8*	41.8	52.8	64.9	75.4	85.9	92.5	89.0*	81.1	67.4	49.5	38.1	64.4
	MIN TEMP	17.1*	23.4	30.2	39.6	49.0	56.7*	63.8	62.0	54.4	42.6	28.0	20.0	40.6
	AVG TEMP	26.0*	32.6	41.5	52.3	62.2	71.3*	78.2	75.5*	67.8	55.0	38.8	29.1	52.5
	DEG DAYS	1209*	907	729	387	146	21*	0	0	30	313	786	1113	5641
	PRECIP	.64	.69	.75*	.75	.60	.42	.57*	1.07	.91	.74	.58	.57	8.29
PUEBLO AP H4639 T 5														
	MAX TEMP	45.3*	48.5	54.9	65.8	75.3	86.9*	92.1*	89.7*	82.5*	70.8	55.7	48.7*	68.0
	MIN TEMP	14.7	19.2	25.3	35.5	45.8*	55.2*	60.8*	59.5*	50.6	38.7	24.3	17.6*	37.3
	AVG TEMP	30.0*	33.9	40.1	50.7	60.6*	71.1*	76.5*	74.6*	66.6*	54.8	40.0	33.2*	52.7
	DEG DAYS	1085*	871	772	429	174*	15*	0	0	54*	326	750	986*	5462
	PRECIP	.31	.48	.52	1.18	1.80	1.22*	1.02	1.85	.84	.99*	.53	.30*	11.84

TABLE II - NORMALS BY CLIMATOLOGICAL DIVISIONS

TEMPERATURE (°F) PRECIPITATION (In.)

STATIONS (By Divisions)	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
ARKANSAS DRAINAGE BASIN																										
BUENA VISTA	24.8	27.3	33.1	41.3	49.8	58.9	63.6	62.1	56.1	47.0	34.2	27.5	43.8	.46	.55	.62	1.16	1.07	.56	1.69	1.37	.70	.70	.45	.36	9.69
#CANON CITY	36.6	38.4	42.9	51.7	60.6	70.1	75.8	74.3	67.0	56.7	44.7	39.3	54.8	.49	.45	.82	1.76	2.07	1.12	1.49	1.77	.90	.78	.64	.37	12.66
COLORADO SPRINGS AP	28.6	31.0	35.7	45.1	54.5	64.2	70.0	68.7	61.1	50.3	37.5	31.7	48.2	.29	.33	.61	1.31	2.13	1.59	2.37	2.16	1.07	.69	.40	.24	13.19
#EADS	•	•	•	•	•	•	•	•	•	•	•	•	•	.39	.42	.71	1.39	2.26	1.92	2.06	2.00	1.00	.84	.49	.30	13.78
#HASWELL	•	•	•	•	•	•	•	•	•	•	•	•	•	.34	.37	.53	1.25	2.13	1.69	1.81	1.64	1.07	.73	.45	.23	12.24
#LAKE MORAINE	•	•	•	•	•	•	•	•	•	•	•	•	•	.72	.99	1.58	3.29	3.50	2.19	3.89	3.77	1.75	1.21	.77	.61	24.27
LAMAR	29.9	34.9	41.6	52.8	62.9	73.5	79.1	77.4	68.6	56.0	40.4	32.8	54.2	.50	.45	.79	1.30	2.40	2.07	1.85	2.07	1.08	.79	.56	.34	14.20
#LAS ANIMAS 1 N	30.5	35.1	43.1	54.2	64.4	74.6	79.1	77.2	68.8	56.0	40.6	33.5	54.8	.48	.35	.68	1.20	2.09	1.45	1.83	1.70	.94	.70	.48	.35	12.25
LEADVILLE	17.9	19.3	23.2	32.2	42.0	51.4	56.9	55.6	49.6	39.4	26.4	20.3	36.2	1.32	1.51	1.71	1.83	1.44	1.13	2.73	2.11	1.35	1.11	1.07	1.17	18.48
LIMON 1 SSW	27.7	30.2	35.7	45.9	55.5	65.7	71.7	70.5	62.1	51.0	36.9	30.8	48.6	.41	.42	.95	1.55	2.32	1.79	2.20	2.25	1.32	.79	.56	.38	14.94
#MONUMENT 2 WSW	28.4	29.9	34.0	42.5	51.6	61.3	67.6	66.3	59.3	49.2	36.8	31.9	46.6	.55	.82	1.46	2.51	2.80	1.65	2.55	2.54	1.34	1.02	.81	.50	18.55
#NORTH LAKE	•	•	•	•	•	•	•	•	•	•	•	•	•	.92	1.14	1.76	2.30	2.53	1.38	2.95	2.98	1.43	1.26	.92	.77	20.34
#ORDWAY	•	•	•	•	•	•	•	•	•	•	•	•	•	.40	.40	.70	1.27	1.92	1.14	1.43	1.51	1.15	.58	.43	.35	11.28
#PENROSE 3 NNW	•	•	•	•	•	•	•	•	•	•	•	•	•	.34	.38	.65	1.43	1.97	1.18	1.72	1.67	.87	.80	.47	.31	11.79
PUEBLO AP	30.0	33.9	40.1	50.7	60.6	71.1	76.5	74.6	66.6	54.8	40.0	33.2	52.7	.31	.48	.52	1.18	1.80	1.22	1.82	1.85	.84	.99	.53	.30	11.84
#ROCKY FORD 2 ESE	30.0	34.7	41.5	52.3	61.7	71.9	76.8	74.9	66.7	54.5	39.7	32.5	53.1	.43	.35	.72	1.45	2.02	1.26	1.74	1.70	1.07	.79	.46	.32	12.31
RUSH 2 NNE	•	•	•	•	•	•	•	•	•	•	•	•	•	.24	.27	.58	1.33	2.29	1.70	2.07	2.39	1.18	.66	.32	.19	13.22
#SALIDA	•	•	•	•	•	•	•	•	•	•	•	•	•	.41	.53	.80	1.32	1.34	.77	1.48	1.47	.77	1.00	.55	.43	10.87
SPRINGFIELD	•	•	•	•	•	•	•	•	•	•	•	•	•	.47	.46	1.05	1.31	2.58	2.01	2.07	1.79	1.16	.85	.55	.43	14.73
TWO BUTTES 1 NW	•	•	•	•	•	•	•	•	•	•	•	•	•	.44	.48	.89	1.36	2.32	1.95	1.69	1.97	1.04	.80	.53	.38	13.85
DIVISION	28.7	31.7	37.2	46.9	56.1	66.1	71.3	69.8	62.4	51.6	37.8	31.5	49.3	.53	.58	.95	1.68	2.25	1.49	2.10	2.10	1.12	.90	.61	.46	14.77
COLORADO DRAINAGE BASIN																										
#AMES	•	•	•	•	•	•	•	•	•	•	•	•	•	1.96	2.12	2.34	2.72	1.92	1.32	2.34	3.05	2.25	2.37	1.33	1.69	25.41
CEDAREDGE	27.4	31.8	38.7	48.1	56.9	65.5	71.9	69.6	62.6	51.6	37.5	30.1	49.3	.93	.98	.95	1.12	.85	.74	.91	1.32	1.04	1.14	.67	.86	11.51
COLLBRAN	22.8	27.6	36.1	46.4	54.8	63.2	69.4	67.2	59.4	48.7	34.4	26.2	46.4	1.02	1.22	1.30	1.56	1.10	.74	1.00	1.41	1.28	1.27	.98	.95	13.83
#CORTEZ	27.5	31.9	38.5	47.4	55.9	64.7	71.3	69.6	62.2	51.0	37.2	29.5	48.9	1.06	1.10	1.09	1.09	.86	.54	1.21	1.51	1.41	1.46	.75	1.12	13.20
CRESTED BUTTE	13.5	16.3	22.6	33.4	44.2	52.3	58.0	56.9	50.1	40.3	25.7	16.8	35.8	2.68	2.56	2.36	1.73	1.31	1.43	1.95	2.27	1.66	1.43	1.52	2.10	23.00
DELTA 1 E	26.4	33.1	41.6	51.6	60.8	68.8	74.8	72.3	64.6	52.9	37.1	28.5	51.0	.53	.49	.50	.72	.62	.52	.62	1.13	.83	.94	.40	.45	7.75
DILLON	15.2	17.5	22.8	32.7	42.2	49.7	54.9	53.7	47.7	38.3	25.0	18.3	34.8	1.43	1.55	2.08	2.17	1.71	1.20	1.89	1.63	1.17	1.11	1.18	1.30	18.42
DURANGO	25.3	29.7	36.7	45.1	52.5	60.6	67.0	66.0	59.0	48.7	36.1	27.9	46.2	1.61	1.30	1.49	1.29	1.13	.85	1.81	2.36	1.73	1.86	.98	1.63	18.04
#FORT LEWIS	23.0	25.9	31.7	41.2	49.0	57.2	63.6	61.9	55.7	45.6	33.2	25.9	42.8	1.64	1.71	1.55	1.48	1.19	.90	1.75	2.14	1.80	2.03	.99	1.60	18.78
FRASER	12.7	15.5	21.7	32.5	41.9	49.7	54.8	53.0	46.1	36.3	22.9	15.4	33.5	1.52	1.51	1.67	1.90	1.77	1.41	1.64	1.54	1.17	1.03	1.13	1.14	17.43
FRUITA 2 N	26.0	32.2	41.3	51.6	61.0	69.4	75.9	73.3	64.9	52.7	37.4	28.5	51.2	.73	.64	.75	.74	.48	.44	.65	1.02	.89	.77	.58	.62	8.31
GLENWOOD SPRINGS 1 N	24.8	29.7	37.9	47.6	56.3	64.3	71.1	69.0	61.6	51.0	36.4	27.4	48.1	1.80	1.75	1.53	1.90	1.36	1.19	1.36	1.67	1.41	1.40	1.21	1.45	18.03
GRAND JUNCTION AP	26.0	32.6	41.5	52.3	62.2	71.3	78.2	75.5	67.8	55.0	38.8	29.1	52.5	.64	.69	.75	.75	.60	.42	.57	1.07	.91	.74	.58	.57	8.29
GUNNISON	11.4	15.6	26.2	39.7	48.3	56.6	62.3	60.6	53.3	43.0	28.2	16.4	38.5	.97	.98	.81	.80	.76	.78	1.47	1.46	.89	.72	.60	.76	11.00
#HAYDEN	•	•	•	•	•	•	•	•	•	•	•	•	•	1.24	1.14	1.30	1.50	1.47	1.21	1.25	1.19	1.24	1.46	1.09	1.36	15.45
#IGNACIO 1 N	23.4	28.4	36.4	45.3	53.4	61.8	68.3	66.8	59.6	48.9	35.2	26.9	46.2	1.30	1.17	1.19	1.07	1.00	.72	1.40	1.77	1.31	1.58	.75	1.19	14.45
MESA VERDE NP	29.8	33.0	38.6	48.1	57.0	67.4	72.9	70.8	64.4	52.7	39.5	32.1	50.5	1.93	1.95	1.76	1.32	1.05	.70	1.68	2.01	1.53	1.66	.98	1.71	18.28
#MONTROSE NO 2	26.5	31.3	39.1	48.8	57.9	67.3	73.3	70.8	63.3	51.5	36.8	28.6	49.6	.65	.60	.65	.98	.74	.49	.70	1.25	.96	.93	.57	.59	9.11
#NORTHDALE	22.5	26.6	34.3	43.8	52.0	60.7	68.0	66.2	58.4	47.1	33.5	25.9	44.9	1.07	1.01	1.08	1.10	.91	.58	1.11	1.50	1.49	1.56	.94	1.07	13.42
#NORWOOD	•	•	•	•	•	•	•	•	•	•	•	•	•	1.08	1.21	1.31	1.45	1.02	.84	1.59	2.13	1.49	1.61	.93	1.07	15.73
PALISADE 1 S	•	•	•	•	•	•	•	•	•	•	•	•	•	.50	.61	.66	.98	.67	.51	.65	.96	1.15	1.01	.60	.46	8.76
PITKIN	•	•	•	•	•	•	•	•	•	•	•	•	•	1.45	1.36	1.41	1.41	1.15	.91	1.86	1.82	1.23	1.00	.89	1.19	15.68
#RICO	•	•	•	•	•	•	•	•	•	•	•	•	•	2.46	2.46	2.49	2.23	1.61	1.19	2.39	2.80	2.49	2.40	1.66	2.31	26.49
RIFLE 2 ENE	23.2	29.1	38.3	48.3	56.7	64.5	71.0	68.9	60.6	49.9	35.9	26.7	47.8	.92	.80	.91	1.01	.79	.69	.98	1.20	.92	1.09	.78	.84	10.93
SHOSHONE	•	•	•	•	•	•	•	•	•	•	•	•	•	1.80	1.81	1.67	2.19	1.37	1.22	1.11	1.66	1.32	1.54	1.37	1.73	18.79
SILVERTON	16.7	19.0	23.8	33.2	41.9	49.7	55.1	54.1	48.2	39.0	26.6	19.3	35.6	1.46	1.67	2.08	1.76	1.39	1.41	2.47	2.82	2.28	2.26	1.16	1.50	22.26
STEAMBOAT SPRINGS	15.1	19.6	27.5	39.1	48.5	55.5	62.0	60.6	53.1	43.3	28.7	18.9	39.3	2.41	2.31	2.27	2.35	2.06	1.56	1.40	1.49	1.48	1.79	1.90	2.45	23.47
TELLURIDE	21.5	23.8	28.3	37.5	45.3	53.4	58.6	57.1	51.8	42.8	30.5	23.5	39.5	1.89	2.10	2.30	2.56	1.72	1.22	2.31	2.93	1.90	1.89	1.23	1.74	23.79
DIVISION	21.2	25.3	32.6	42.8	51.7	60.1	66.4	64.5	57.3	46.7	32.7	24.4	43.8	1.38	1.35	1.46	1.46	1.19	.93	1.38	1.69	1.33	1.37	1.01	1.24	15.79
KANSAS DRAINAGE BASIN																										
BURLINGTON	29.7	33.0	38.9	49.7	59.0	69.4	75.5	73.8	65.8	53.9	39.7	33.0	51.8	.42	.48	.99	1.64	2.53	2.52	2.57	2.23	1.23	.88	.43	.43	16.35
CHEYENNE WELLS	29.4	32.5	39.0	50.2	59.8	70.1	76.0	74.6	66.1	54.3	39.9	32.2	52.0	.34	.37	.76	1.45	2.23	2.30	2.43	2.55	1.10	.78	.43	.23	14.97
HOLYOKE	27.3	30.4	36.6	48.2	58.1	68.5	75.6	73.9	64.3	52.2	37.7	30.3	50.3	.31	.35	.99	1.91	3.19	3.37	2.46	2.00	1.48	.92	.44	.39	17.81
LEROY 7 WSW	•	•	•	•	•	•	•	•	•	•	•	•	•	.62	.57	1.40	2.21	2.88	2.75	2.04	1.91	1.28	.92	.73	.66	17.97
WRAY	27.6	31.4	38.1	49.5	59.3	69.4	76.0	73.9	64.4	52.2	38.1	30.8	50.9	.42	.46	.91	2.09	3.08	2.57	2.68	2.22	1.41	.79	.44	.42	17.49
YUMA	•	•	•	•	•	•	•	•	•	•	•	•	•	.42	.46	1.07	1.69	2.83	2.62	2.63	1.95	1.24	.93	.49	.40	16.73
DIVISION	28.1	31.4	37.4	48.5	58.2	68.6	75.1	73.5	64.7	53.0	38.4	31.2	50.7	.40	.43	.94	1.69	2.76	2.53	2.50	2.16	1.32	.88	.48	.40	16.49

TABLE II - NORMALS BY CLIMATOLOGICAL DIVISIONS

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
PLATTE DRAINAGE BASIN																										
BOULDER	32.7	34.7	39.3	48.7	57.4	67.5	73.6	72.1	64.3	53.7	41.4	35.8	51.8	.72	.83	1.75	2.75	3.36	1.89	1.41	1.64	1.25	1.39	.96	.62	18.57
#BYERS	28.8	31.9	37.5	47.2	56.6	67.3	73.7	72.2	63.8	52.4	38.5	31.9	50.2	.43	.47	.87	1.86	2.54	1.58	2.01	1.49	1.14	.72	.54	.40	14.05
#CHEESMAN	28.0	30.1	35.1	43.5	52.1	62.1	67.1	65.8	59.3	49.0	37.3	31.6	46.8	.45	.57	.95	1.97	2.05	1.13	2.33	2.06	1.13	.85	.59	.40	14.48
DENVER AP	30.0	32.5	37.9	47.4	56.7	67.0	73.4	72.0	63.5	52.4	39.2	33.1	50.4	.55	.69	1.21	2.11	2.70	1.44	1.53	1.28	1.13	1.01	.69	.47	14.81
#DENVER CO	32.6	34.6	39.2	48.6	57.7	68.1	74.4	73.1	64.6	53.8	41.2	35.8	52.0	.49	.63	1.07	1.85	2.41	1.27	1.22	1.09	.91	.93	.62	.40	12.89
#EDGEWATER	31.5	34.4	39.5	49.1	57.9	68.2	74.0	72.5	63.9	52.7	40.2	35.0	51.6	.65	.73	1.20	2.28	2.82	1.42	1.33	1.32	1.03	1.12	.79	.45	15.14
ESTES PARK	26.3	27.7	31.4	39.6	47.7	56.3	62.2	60.9	54.1	45.3	34.5	29.8	43.0	.53	.82	1.05	2.03	2.22	1.72	2.13	1.86	1.24	1.00	.82	.65	16.07
FORT COLLINS	26.6	29.7	36.2	46.4	55.4	64.9	71.0	69.2	60.7	49.8	36.7	30.4	48.1	.38	.50	.95	1.86	2.90	1.73	1.15	1.53	1.20	1.08	.49	.42	14.19
FORT LUPTON	•	•	•	•	•	•	•	•	•	•	•	•	•	.49	.48	.70	1.71	2.65	1.42	1.25	1.25	1.02	.84	.46	.35	12.62
FORT MORGAN	24.3	28.8	36.6	47.9	57.7	67.9	73.9	72.0	62.7	51.2	36.2	28.0	48.9	.34	.27	.71	1.51	2.58	1.73	1.76	1.38	1.20	.73	.36	.29	12.86
#GREELEY	24.1	28.4	36.0	47.1	57.0	67.3	73.7	71.7	62.1	49.8	35.1	27.6	48.3	.35	.36	.72	1.45	2.49	1.42	1.19	.81	.76	.85	.39	.33	11.12
#GROVER 1 W	26.9	29.2	34.7	45.0	54.4	64.6	71.6	70.1	61.5	50.7	37.1	30.8	48.1	.33	.43	.73	1.17	2.61	2.03	2.08	1.51	1.06	.65	.40	.30	13.30
#HARTSEL	•	•	•	•	•	•	•	•	•	•	•	•	•	.43	.34	.50	.92	1.09	.88	2.13	2.08	.94	.66	.39	.35	10.71
#HAWTHORNE	•	•	•	•	•	•	•	•	•	•	•	•	•	.87	1.03	1.92	3.36	3.74	1.94	1.59	1.54	1.45	1.52	1.11	.75	20.82
IDAHO SPRINGS	26.1	27.8	32.3	40.7	48.5	57.5	62.8	61.6	55.0	45.6	34.4	29.2	43.5	.40	.60	.95	2.05	2.23	1.42	2.19	2.14	1.12	.84	.66	.40	15.00
JULESBURG	27.7	31.2	37.5	49.4	59.3	69.3	76.4	74.5	64.7	52.6	38.2	30.3	50.9	.41	.44	1.00	1.74	2.94	2.78	2.20	1.93	1.23	.73	.50	.42	16.32
#KASSLER	32.7	35.0	40.0	49.6	58.2	67.9	74.0	72.7	65.4	55.0	41.9	35.9	52.4	.72	.93	1.62	2.75	2.90	1.51	1.42	1.48	1.22	1.33	.95	.58	17.41
#LONGMONT 2 ESE	27.0	30.4	36.9	47.0	56.3	65.6	71.6	70.2	61.7	50.6	37.0	30.8	48.8	.35	.44	.77	1.63	2.66	1.45	1.09	.88	1.06	.92	.46	.32	12.03
PARKER 9 E	•	•	•	•	•	•	•	•	•	•	•	•	•	.35	.41	.71	1.83	2.38	1.49	1.86	1.71	1.00	.85	.53	.29	13.41
SPICER	•	•	•	•	•	•	•	•	•	•	•	•	•	.93	1.00	1.28	1.52	1.35	1.04	1.33	1.43	1.07	.91	1.02	1.18	14.06
STERLING	24.8	28.9	36.0	47.9	57.4	67.4	73.9	72.2	62.3	50.8	36.4	28.2	48.9	.33	.32	.76	1.50	2.60	2.58	1.84	1.54	1.12	.75	.41	.35	14.10
#WATERDALE	28.5	30.8	36.7	46.4	55.0	64.0	70.5	68.9	61.1	50.1	37.6	31.9	48.5	.43	.55	1.11	2.08	2.91	1.88	1.35	1.30	1.45	1.12	.54	.42	15.14
DIVISION	26.5	29.1	34.8	44.6	53.7	63.2	69.4	67.8	59.7	49.0	36.1	29.9	47.0	.50	.60	1.03	1.90	2.53	1.71	1.77	1.56	1.15	.95	.63	.48	14.81
RIO GRANDE DRAINAGE BASIN																										
ALAMOSA AP	17.4	23.5	32.1	41.8	50.8	60.0	64.9	63.0	55.7	44.4	29.5	19.2	41.9	.26	.17	.26	.69	.73	.49	1.07	.98	.77	.60	.29	.25	6.56
DEL NORTE	20.8	25.8	33.6	42.7	50.9	59.1	63.6	62.2	56.3	46.5	33.1	23.7	43.2	.46	.29	.50	.77	.87	.59	1.19	1.57	.88	.82	.37	.34	8.65
HERMIT 7 ESE	12.7	16.0	23.2	34.4	43.0	50.7	56.4	55.2	48.7	39.2	25.5	15.1	35.0	1.01	.62	.94	1.29	1.18	1.00	1.90	2.23	1.40	1.87	.80	.83	15.07
MANASSA	18.1	24.9	32.8	42.2	50.8	59.2	63.5	61.9	55.8	45.7	31.2	21.5	42.3	.37	.23	.31	.58	.81	.48	.83	1.26	.74	.63	.26	.26	6.76
SAGUACHE	•	•	•	•	•	•	•	•	•	•	•	•	•	.36	.27	.42	.69	.77	.61	1.36	1.54	.74	.72	.31	.31	8.10
DIVISION	17.2	22.7	30.5	40.2	48.4	56.9	61.9	60.5	54.1	44.1	29.9	20.2	40.6	.61	.49	.72	.96	.98	.66	1.44	1.65	.99	1.02	.49	.53	10.54

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1963 REVISIONS AND ADDITIONS TO CLIMATOGRAPHY OF THE UNITED STATES NO. 81-5 COLORADO

TABLE I — NORMALS FOR FIRST ORDER STATIONS

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
COLORADO SPRINGS AP G6173 T 6													
MAX TEMP	41.9	44.8	49.6	58.8	68.4	78.5	84.2	82.8	76.0	64.7	51.3	44.7	62.1
MIN TEMP	15.2	18.1	22.8	32.4	41.5	50.9	56.7	55.6	47.1	35.9	23.6	18.7	34.9
AVG TEMP	28.6	31.5	36.2	45.6	55.0	64.7	70.5	69.2	61.6	50.3	37.5	31.7	48.5
DEG DAYS	1128	938	893	582	319	84	9	25	132	456	825	1032	6423
DENVER AP G5283 T 5													
MAX TEMP	42.1	44.6	49.9	60.5	70.5	82.0	88.4	86.8	79.0	66.6	51.7	45.2	63.9
MIN TEMP	14.8	18.3	22.8	32.3	41.8	51.0	57.4	56.2	47.0	36.2	23.6	18.0	35.0
AVG TEMP	28.5	31.5	36.4	46.4	56.2	66.5	72.9	71.5	63.0	51.4	37.7	31.6	49.5
DEG DAYS	1132	938	887	558	288	66	6	9	117	428	819	1035	6283

TABLE II — NORMALS BY CLIMATOLOGICAL DIVISIONS

ARKANSAS DRAINAGE BASIN

LIMON 10 SSW
(CORRECTION TO NAME ONLY)

PLATTE DRAINAGE BASIN

GROVER 10 W
(CORRECTION TO NAME ONLY)

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

USCOMM-WB-Asheville, N. C. -3/31/64- 1900

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