U. S. DEPARTMENT OF COMMERCE
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WEATHER BUREAU
F. W. REICHELDERFER, Chief

CLIMATOGRAPHY OF THE UNITED STATES NO. 81-43

DECENNIAL CENSUS OF UNITED STATES CLIMATE—

MONTHLY NORMALS OF TEMPERATURE, PRECIPITATION, AND HEATING DEGREE DAYS

ALASKA

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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

STATION		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ANNUAL
ANCHORAGE AP-INTL	H 90 T 6													
MAX TEMP		20.5	26.4	32.6	43.8	53.9	62.6	64.6	63.2	55.3*	41.8*	28.9	21.8	43.0
MIN TEMP		4.3*	9.5*	13.9*	27.5	37.8*	46.3*	49.5*	48.0*	40.2	28.2*	15.5	6.8	27.3
AVG TEMP		12.4*	18.0*	23.3*	35.7	45.9*	54.5*	57.1*	55.6	47.8*	35.0*	22.2	14.3	35.2
DEG DAYS		1631*	1316*	1293*	879	592*	315*	245*	291	516*	930*	1284	1572	10864
PRECIP		.80	.71*	.51*	.42	.52	.98	1.86*	2.57	2.50	1.87	1.03	.94	14.71
ANNETTE AP	H 110 T 12													
MAX TEMP		38.4	39.7*	42.8*	48.5	54.9	59.8*	62.2	63.6*	58.7	51.1	44.5	40.1	50.4
MIN TEMP		30.3	30.5*	32.7*	37.3	42.5	47.8	51.4	52.2	48.5	42.3*	36.3	31.9	40.3
AVG TEMP		34.4	35.1*	37.8*	42.9	48.7	53.8*	56.8	57.9*	53.6	46.7*	40.4	36.0	45.4
DEG DAYS		949	837*	843*	663	505	336*	257	223*	342	567*	738	899	7159
PRECIP		11.36	8.54*	9.55*	9.12*	7.07*	5.67	6.02	7.51*	9.88	16.88*	14.65*	12.11*	118.36
#BARROW AP	H 22 T 12													
MAX TEMP		- 9.4	-12.2*	- 8.1*	7.4	23.5	37.5*	44.9	42.7	33.8	21.4	5.3	- 5.0*	15.1
MIN TEMP		-23.0	-24.4*	-21.1	- 7.0	13.3	28.7	33.3	33.1	27.2	11.8	- 6.7	-17.4*	4.0
AVG TEMP		-16.2	-18.3*	-14.6*	.2	18.4	33.1*	39.1	37.9	30.5	16.6	- .7	-11.2*	9.6
DEG DAYS		2517	2332*	2468*	1944	1445	957*	803	840	1035	1500	1971	2362*	20174
PRECIP		.18	.17	.11	.11*	.12	.36*	.77	.90*	.64	.50	.23	.17	4.35
BARTER ISLAND AP	H 39 T 7													
MAX TEMP		- 9.9	-13.3*	- 7.7	8.6	25.9	39.1*	47.5*	45.2	36.0	22.6	6.5	- 3.7*	16.4
MIN TEMP		-23.6	-25.9	-22.1	- 6.8	15.5	29.3	35.0	34.7	28.2	11.7	- 6.1	-17.1	4.4
AVG TEMP		-16.8	-19.6*	-14.9	.9	20.7	34.2*	41.3*	40.0	32.1	17.2	.2	-10.4*	10.4
DEG DAYS		2536	2369*	2477	1923	1373	924*	735*	775	987	1482	1944	2337*	19862
PRECIP		.40	.35	.20	.17	.25*	.51*	.88	1.05	.94*	.84	.40	.29	6.28
BETHEL AP	H 125 T 6													
MAX TEMP		10.8	14.1	19.4	33.9	47.0	59.6*	61.8	58.3	51.1	37.6	24.2	12.7*	35.9
MIN TEMP		- 3.7	2.2	3.8	17.9	31.0*	43.5	47.5	46.2*	38.1	25.1	10.1	- 3.2*	21.5
AVG TEMP		3.6	8.2	11.6	25.9	39.0*	51.6*	54.7	52.3*	44.6	31.4	17.2	4.8*	28.7
DEG DAYS		1903	1590	1655	1173	806*	402*	319	394*	612	1042	1434	1866*	13196
PRECIP		1.12*	1.12*	1.03*	.58	.95	1.18	2.03	4.20*	2.59	1.54*	1.06	1.02*	18.42
COLD BAY AP	H 90 T 6													
MAX TEMP		33.3	33.7	33.5	38.3	44.6	50.3	54.3	55.7*	52.5	44.7	38.4	32.9	42.7
MIN TEMP		22.9	23.6*	23.5*	28.3*	34.3	40.3	45.0	46.9*	42.5	35.5*	30.1	23.5*	33.0
AVG TEMP		28.1	28.7*	28.5*	33.3*	39.5	45.3	49.7	51.3*	47.5	40.1*	34.3	28.2*	37.9
DEG DAYS		1144	1016*	1132*	951*	791	591	474	425*	525	772*	921	1141*	9883
PRECIP		2.32	3.17	1.75	1.46*	2.29*	1.95	1.82	4.25	4.32	4.59	3.79*	2.59	34.30
CORDOVA AP	H 40 T 6													
MAX TEMP		31.6	35.2	38.2	44.2	51.7*	58.1	60.3	60.5*	56.0	47.7*	38.5	32.9	46.2
MIN TEMP		14.5*	17.1	19.9*	28.1*	35.6	42.3*	46.1	44.2*	39.1*	31.9*	23.6	18.2	30.1
AVG TEMP		23.1*	26.2	29.1*	36.2*	43.7*	50.2*	53.2	52.4*	47.6*	39.8*	31.1	25.6	38.2
DEG DAYS		1299*	1086	1113*	864*	660*	444*	366	391*	522*	791*	1017	1221	9764
PRECIP		6.10*	4.64	3.84*	4.32	5.06*	3.48*	6.27*	8.06	12.51	11.90*	8.02	6.78	80.98
FAIRBANKS AP	H 436 T 7													
MAX TEMP		- .8	9.5	23.5	42.1	59.1*	71.1*	71.7	65.3*	53.9	35.4	13.4	2.1	37.2
MIN TEMP		-21.4	-15.3	- 5.7	16.6	35.1	45.6	47.6*	43.2	33.3*	17.0*	- 5.6	-17.5	14.4
AVG TEMP		-11.1	- 2.9	8.9	29.4	47.1*	58.4*	59.7*	54.3*	43.6*	26.2*	3.9	- 7.7	25.8
DEG DAYS		2359	1901	1739	1068	555*	222*	171*	332*	642*	1203*	1833	2254	14279
PRECIP		.89*	.52	.40*	.25*	.71	1.39	1.84	2.20*	1.10	.85*	.60*	.54	11.29
JUNEAU AP	H 17 T 6													
MAX TEMP		30.1*	32.1	36.5	45.4	53.6*	60.8	62.7*	61.5	55.2	46.5	39.2	32.7	46.4
MIN TEMP		20.0*	21.4	24.3*	30.5*	37.6	43.7	47.8	46.6*	42.5	36.7	29.4	24.0	33.7
AVG TEMP		25.1*	26.8	30.4*	38.0*	45.6*	52.3	55.3*	54.1*	48.9	41.6	34.3	28.4	40.1
DEG DAYS		1237*	1070	1073*	810*	601*	381	301*	338*	483	725	921	1135	9075
PRECIP		4.00*	3.06	3.27	2.87	3.24	3.39	4.49*	5.02	6.67	8.33	6.06	4.22*	54.62
KING SALMON AP	H 44 T 7													
MAX TEMP		20.8	25.2	27.8*	40.8	51.9	60.9	63.0	61.4	55.3	42.7	29.4	20.7*	41.7
MIN TEMP		5.9*	9.5*	11.1*	24.8	34.7	41.9	46.8	47.8	40.5*	28.6*	14.6	5.6*	26.0
AVG TEMP		13.4*	17.4*	19.5*	32.8	43.3	51.4	54.9	54.6	47.9*	35.7*	22.0	13.2*	33.8
DEG DAYS		1600*	1333*	1411*	966	673	408	313	322	513*	908*	1290	1606*	11343
PRECIP		1.07	.95	.96	.64	.96	1.40	2.06*	3.43	3.08	2.15*	1.46	1.02	19.18
KOTZEBUE AP	H 10 T 5													
MAX TEMP		1.3	3.2	6.7	22.7	37.6*	50.0*	58.6	55.7	45.9	29.6*	12.9	2.6*	27.2
MIN TEMP		-12.7	-11.2	-10.9	3.7	24.2*	37.6	46.8	45.4	35.8	19.8*	1.9	- 9.8	14.2
AVG TEMP		- 5.7	- 4.0	- 2.1	13.2	30.9*	43.8*	52.7	50.6	40.9	24.7*	7.4	- 3.6*	20.7
DEG DAYS		2192	1932	2080	1554	1057*	636*	381	446	723	1249*	1728	2127*	16105
PRECIP		.39*	.30	.28	.31	.33	.49	1.46	2.16*	1.22*	.59	.36	.29	8.19
MCGRATH AP	H 334 T 7													
MAX TEMP		.8	11.5	22.1	39.8	54.8*	67.5	68.6	63.0	52.2	34.2*	13.4	1.6*	35.8
MIN TEMP		-18.7	-11.3	- 5.6	15.3	33.3*	45.4	48.7	45.2	35.5	19.4*	- 2.9	-15.6	15.7
AVG TEMP		- 9.0	.1	8.3	27.6	44.1*	56.5	58.7	54.1	43.9	26.8*	5.3	- 7.0*	25.8
DEG DAYS		2294	1817	1758	1122	648*	258	208	338	633	1184*	1791	2232*	14283
PRECIP		1.26	1.14	.93*	.47	.88	1.66*	2.43	3.79	2.61	1.32*	1.08	1.01*	18.58
NOME AP	H 13 T 8													
MAX TEMP		11.5	13.3	16.3	28.4	41.2*	52.4	54.6	54.2	47.8	35.4	22.6	12.9*	32.6
MIN TEMP		- 2.7	- 2.4	- .5	13.9	28.8*	39.3	44.4	43.8*	35.9	24.0	10.3	- .4*	19.5
AVG TEMP		4.4	5.5	7.9	21.2	35.0*	45.9	49.5	49.0*	41.9	29.7	16.5	6.3*	26.1
DEG DAYS		1879	1666	1770	1314	930*	573	481	496*	693	1094	1455	1820*	14171
PRECIP		1.02*	.94*	.88	.80	.69	.93	2.29	3.80	2.67	1.71	1.16*	.99*	17.88
SAINT PAUL ISLAND AP	H 22 T 10													
MAX TEMP		29.7	27.8	29.0	32.7*	39.2	45.3	49.4	51.0	49.1	41.2	36.5	30.5*	38.5
MIN TEMP		21.1	18.7	19.3	24.0*	30.3	36.3	41.6	44.1	40.1*	33.1*	29.2	22.3*	30.0
AVG TEMP		25.4	23.3	24.2	28.4*	34.8	40.8	45.5	47.6	44.6*	37.4*	32.9	26.4*	34.3
DEG DAYS		1228	1168	1265	1098*	936	726	605	539	612*	856*	963	1197*	11193
PRECIP		1.81	1.23	1.06	.96*	1.30	1.15	2.25	3.29*	3.07	3.15	2.50	1.83*	23.60
SHEMYA AP	H 122 T 5	/NO TEST/												
MAX TEMP		33.9	33.6	35.0	38.3	40.8	44.4	49.2	52.5	51.3	41.8	38.6	34.2	41.1
MIN TEMP		28.6	27.9	29.7	32.6	35.2	39.2	43.6	46.9	45.3	37.5	33.0	28.6	35.7
AVG TEMP		31.3	30.8	32.9	35.5	38.0	41.8	46.4	49.7	48.3	39.7	35.8	31.4	38.4
‡DEG DAYS		1045	958	995	885	837	696	577	475	501	784	876	1042	9671
PRECIP		2.50	2.28	2.57	2.06	2.40	1.32	2.15	2.12	2.25	2.76	2.72	2.14	27.27
YAKUTAT AP	H 28 T 12													
MAX TEMP		34.4	35.8	39.8	44.6	52.2*	57.6	60.5*	60.6*	56.7*	48.9	40.9	34.2	47.2
MIN TEMP		20.2	21.4	23.0*	29.4	37.0	43.3	47.7	47.0*	41.7	34.8*	26.7	22.0	32.9
AVG TEMP		27.3	28.6	31.4*	37.0	44.6*	50.5	54.1*	53.8*	49.2*	41.9*	33.8	28.1	40.0
DEG DAYS		1169	1019	1042*	840	632*	435	338*	347*	474*	716*	936	1144	9092
PRECIP		10.86*	8.20	8.69*	7.23	7.98	5.06*	8.43	10.92	16.55	19.59*	16.03	12.27	131.81

‡ Degree Day Normals have been included although their reliability is somewhat questionable because they were prepared from limited data.

TABLE II - NORMALS BY CLIMATOLOGICAL DIVISIONS

ALASKA

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
SOUTHEASTERN																										
ANNETTE AP	34.4	35.1	37.8	42.9	48.7	53.8	56.8	57.9	53.6	46.7	40.4	36.0	45.4	11.36	8.54	9.55	9.12	7.07	5.67	6.02	7.51	9.88	16.88	14.65	12.11	118.36
ANNEX CREEK	22.6	25.9	32.6	39.9	47.2	53.7	54.9	53.3	48.8	41.5	32.3	25.0	39.8	8.04	6.65	6.19	5.63	6.49	5.23	7.10	10.44	14.24	16.89	12.61	9.60	109.11
JUNEAU	28.5	29.9	34.3	41.0	48.3	54.8	56.9	56.2	51.3	43.9	36.3	30.6	42.7	7.23	5.86	6.02	5.91	5.53	4.48	6.10	7.61	10.34	13.40	10.48	8.02	90.98
JUNEAU AP	25.1	26.8	30.4	38.0	45.6	52.3	55.3	54.1	48.9	41.6	34.3	28.4	40.1	4.00	3.06	3.27	2.87	3.24	3.39	4.49	5.02	6.67	8.33	6.06	4.22	54.62
KETCHIKAN	35.1	36.2	38.7	43.6	50.1	55.2	58.2	58.9	54.6	47.6	40.9	36.7	46.3	13.90	11.24	12.29	12.12	8.63	7.23	8.13	10.65	14.08	22.26	17.84	15.64	154.01
SITKA MAGNETIC	32.3	33.3	35.8	40.8	46.4	51.4	54.8	55.5	51.9	45.2	38.6	33.6	43.3	7.77	6.38	6.95	5.35	4.66	3.46	5.20	7.86	11.49	15.27	12.01	10.17	96.57
#TREE POINT LIGHT STA	*	*	*	*	*	*	*	*	*	*	*	*	*	9.38	6.86	7.71	7.01	4.65	4.44	5.07	6.67	8.36	13.72	11.55	10.69	96.11
WRANGELL	29.7	31.5	36.2	42.7	49.7	54.9	57.3	56.5	51.7	44.9	37.3	32.0	43.7	7.27	5.89	5.43	5.05	4.13	3.96	5.25	6.31	8.27	12.61	9.90	8.33	82.40
DIVISION	29.4	30.9	35.0	41.1	47.6	53.3	56.0	55.9	51.3	44.2	37.2	31.4	42.8	8.91	6.87	6.97	6.11	5.09	4.07	5.12	7.02	10.12	15.01	12.15	10.20	97.64
SOUTH COAST																										
CORDOVA AP	23.1	26.2	29.1	36.2	43.7	50.2	53.2	52.4	47.6	39.8	31.1	25.6	38.2	6.10	4.64	3.84	4.32	5.06	3.48	6.27	8.06	12.51	11.90	8.02	6.78	80.98
SEWARD	24.7	27.8	30.6	37.9	44.7	51.7	55.5	55.4	49.4	40.4	31.2	25.1	39.5	5.79	5.67	3.75	4.42	3.79	2.28	3.24	5.50	9.19	10.00	7.29	6.43	67.35
VALDEZ	18.2	21.8	26.2	34.9	43.1	50.4	52.9	51.6	46.0	37.2	26.2	19.7	35.7	5.79	4.88	3.70	2.96	3.48	2.61	4.72	6.48	8.38	7.95	6.27	5.15	62.37
YAKUTAT AP	27.3	28.6	31.4	37.0	44.6	50.5	54.1	53.8	49.2	41.9	33.8	28.1	40.0	10.86	8.20	8.69	7.23	7.98	5.06	8.43	10.92	16.55	19.59	16.03	12.27	131.81
DIVISION	27.1	28.8	30.7	36.7	43.1	49.7	53.4	53.4	48.4	40.5	32.9	27.8	39.4	7.53	6.47	5.54	5.53	6.26	4.24	5.70	7.61	10.62	12.00	9.48	8.41	89.39
SOUTHWESTERN ISLANDS																										
COLD BAY AP	28.1	28.7	28.5	33.3	39.5	45.3	49.7	51.3	47.5	40.1	34.3	28.2	37.9	2.32	3.17	1.75	1.46	2.29	1.95	1.82	4.25	4.32	4.59	3.79	2.59	34.30
SAINT PAUL ISLAND AP	25.4	23.3	24.2	28.4	34.8	40.8	45.5	47.6	44.6	37.4	32.9	26.4	34.3	1.81	1.23	1.06	.96	1.30	1.15	2.25	3.29	3.07	3.15	2.50	1.83	23.60
SHEMYA AP	31.3	30.8	32.9	35.5	38.0	41.8	46.4	49.7	48.3	39.7	35.8	31.4	38.4	2.50	2.28	2.57	2.06	2.40	1.32	2.15	2.12	2.25	2.76	2.72	2.14	27.27
DIVISION	30.0	29.8	30.4	34.2	38.9	44.0	48.5	50.9	47.5	41.1	35.8	31.4	38.5	3.83	3.73	3.11	2.72	3.07	2.16	2.54	3.67	4.41	5.12	4.69	4.12	43.17
COPPER RIVER																										
DIVISION	2.3	9.0	17.7	31.0	42.8	52.3	54.2	51.4	43.4	29.9	13.3	7.3	29.6	1.62	1.43	.83	.68	.88	1.44	2.36	2.68	2.48	2.38	1.96	2.01	20.75
COOK INLET																										
ANCHORAGE AP INTL	12.4	18.0	23.3	35.7	45.9	54.5	57.1	55.6	47.8	35.0	22.2	14.3	35.2	.80	.71	.51	.42	.52	.98	1.86	2.57	2.50	1.87	1.03	.94	14.71
HOMER FAA	*	*	*	*	*	*	*	*	*	*	*	*	*	2.05	1.44	1.38	1.30	1.07	1.05	1.76	2.82	2.76	3.51	2.70	2.63	24.47
#MATANUSKA AGR EXP STA	12.1	18.8	24.6	37.1	47.2	55.4	57.7	55.4	47.7	35.6	21.9	13.2	35.6	.90	.73	.43	.39	.74	1.30	2.24	2.90	2.39	1.59	1.01	.92	15.54
TALKEETNA FAA AP	9.4	15.5	20.3	33.8	44.8	55.1	57.9	54.7	46.0	33.1	18.8	9.6	33.3	1.76	1.72	1.44	.75	1.34	1.77	3.19	5.33	4.46	2.85	1.79	1.62	28.02
DIVISION	12.3	18.2	23.3	35.2	45.1	53.5	56.4	54.4	46.8	35.0	21.9	13.3	34.6	1.50	1.17	1.01	.81	1.02	1.40	2.36	3.45	3.33	2.58	1.73	1.62	21.98
BRISTOL BAY																										
KING SALMON AP	13.4	17.4	19.5	32.8	43.3	51.4	54.9	54.6	47.9	35.7	22.0	13.2	33.8	1.07	.95	.96	.64	.96	1.40	2.06	3.43	3.08	2.15	1.46	1.02	19.18
DIVISION	11.1	16.7	18.8	30.0	42.4	50.7	52.9	53.6	46.8	33.3	22.0	12.6	32.6	1.38	1.24	1.13	.92	1.47	1.61	2.23	4.27	3.49	2.73	1.64	1.39	23.50
WEST CENTRAL																										
BETHEL AP	3.6	8.2	11.6	25.9	39.0	51.6	54.7	52.3	44.6	31.4	17.2	4.8	28.7	1.12	1.12	1.03	.58	.95	1.18	2.03	4.20	2.59	1.54	1.06	1.02	18.42
HOLY CROSS	.5	6.5	12.4	29.0	43.2	55.3	57.6	54.2	45.1	30.3	13.9	1.9	29.2	1.10	1.19	1.03	.48	.82	1.16	2.06	3.90	2.78	1.49	1.07	.92	18.00
NOME AP	4.4	5.5	7.9	21.2	35.0	45.9	49.5	49.0	41.9	29.7	16.5	6.3	26.1	1.02	.94	.88	.80	.69	.93	2.29	3.80	2.67	1.71	1.16	.99	17.88
DIVISION	2.8	6.4	9.5	24.3	37.5	49.1	52.8	51.0	43.3	30.4	16.1	6.8	27.5	.93	.92	.85	.57	.74	.96	2.00	3.69	2.68	1.54	1.04	.85	16.77
INTERIOR BASIN																										
ALLAKAKET	*	*	*	*	*	*	*	*	*	*	*	*	*	.94	.72	.59	.28	.68	1.39	2.27	2.71	1.59	1.11	.83	.76	13.87
FAIRBANKS AP	-11.1	- 2.9	8.9	29.4	47.1	58.4	59.7	54.3	43.6	26.2	3.9	- 7.7	25.8	.89	.52	.40	.25	.71	1.39	1.84	2.20	1.10	.85	.60	.54	11.29
FORT YUKON FAA	*	*	*	*	*	*	*	*	*	*	*	*	*	.46	.35	.32	.18	.32	.64	.89	1.14	.78	.58	.48	.38	6.52
MCGRATH AP	- 9.0	.1	8.3	27.6	44.1	56.5	58.7	54.1	43.9	26.8	5.3	- 7.0	25.8	1.26	1.14	.93	.47	.88	1.66	2.43	3.79	2.61	1.32	1.08	1.01	18.58
MC KINLEY PARK	1.4	7.1	13.2	28.5	41.5	52.2	54.6	50.4	41.3	25.9	10.4	2.1	27.4	.83	.69	.37	.47	.68	1.93	2.59	2.81	1.54	.98	.75	.65	14.29
TANANA FAA	-10.5	- 4.6	5.7	25.6	44.0	56.9	58.6	53.1	41.7	23.9	2.2	- 9.9	23.9	.74	.60	.47	.21	.73	1.25	2.07	2.91	1.69	.95	.69	.58	12.89
#UNIVERSITY EXP STA	- 7.3	.9	12.6	30.7	46.9	57.9	59.7	54.7	44.5	27.5	6.2	- 5.9	27.4	.83	.51	.42	.24	.80	1.48	2.10	2.44	1.36	.93	.63	.57	12.31
DIVISION	- 9.5	- 3.1	7.3	26.3	43.9	56.2	58.4	53.1	42.2	24.5	3.4	- 9.4	24.4	.79	.61	.48	.30	.74	1.49	2.18	2.55	1.58	.99	.72	.63	13.06
ARCTIC DRAINAGE																										
#BARROW AP	-16.2	-18.3	-14.6	.2	18.4	33.1	39.1	37.9	30.5	16.6	- .7	-11.2	9.6	.18	.17	.11	.11	.12	.36	.77	.90	.64	.50	.23	.17	4.35
BARTER ISLAND AP	-16.8	-19.6	-14.9	.9	20.7	34.2	41.3	40.0	32.1	17.2	.2	-10.4	10.4	.40	.35	.20	.17	.25	.51	.88	1.05	.94	.84	.40	.29	6.28
KOTZEBUE AP	- 5.7	- 4.0	- 2.1	13.2	30.9	43.8	52.7	50.6	40.9	24.7	7.4	- 3.6	20.7	.39	.30	.28	.31	.33	.49	1.46	2.16	1.22	.59	.36	.29	8.19
DIVISION	-12.2	-13.5	- 9.5	5.7	23.7	37.9	44.7	43.2	35.1	21.0	4.1	- 7.7	14.4	.27	.26	.21	.23	.22	.45	1.08	1.56	.98	.70	.39	.28	6.63

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1963 REVISIONS AND ADDITIONS TO CLIMATOGRAPHY OF THE UNITED STATES NO. 81-43
ALASKA
TABLE I — NORMALS FOR FIRST ORDER STATIONS

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
ANNETTE AP													
G 110 T 4													
MAX TEMP	38.4	39.7	42.8	49.5	55.9	60.8	63.2	64.6	59.7	51.1	44.5	40.1	50.9
MIN TEMP	30.3	30.5	32.7	37.3	42.5	47.8	51.4	52.2	48.5	42.3	36.3	31.9	40.3
AVG TEMP	34.4	35.1	37.8	43.4	49.2	54.3	57.3	58.4	54.1	46.7	40.4	36.0	45.6
DEG DAYS	949	837	843	648	490	321	242	208	327	567	738	899	7069
BARROW AP													
H 22 T 12													
PRECIP	.18	.17	.11	.11	.12	.36	.77	.90	.64	.50	.23	.17	4.26
COLD BAY AP H 90 T 6													
MAX TEMP	32.6	32.7									38.6	33.4	42.6
MIN TEMP	23.0	23.3	24.0									24.1	33.1
AVG TEMP	27.8	28.0	28.8								34.4	28.8	
DEG DAYS	1153	1036	1122								918	1122	9880
KOTZEBUE AP													
H 10 T 5													
PRECIP	.39	.30	.28	.31	.33	.49	1.46	2.16	1.22	.59	.36	.29	8.18
SAINT PAUL IS AP H 22 T 10													
AVG TEMP										37.2			
DEG DAYS										862			11199
SHEMYA AP													
H 122 T 6													
AVG TEMP	31.3	30.8	32.4	35.5	38.0	41.8	46.4	49.7	48.3	39.7	35.8	31.4	38.4
DEG DAYS	1045	958	1011	885	837	696	577	475	501	784	876	1042	9687

TABLE II — NORMALS BY CLIMATOLOGICAL DIVISIONS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
TEMPERATURE (°F.)													
COPPER RIVER DIVISION												3.5	29.2
BRISTOL BAY DIVISION	11.5			31.0			54.7			34.5		12.1	32.9
WEST CENTRAL DIVISION												4.9	27.3
INTERIOR BASIN DIVISION												-8.3	24.5
ARCTIC DRAINAGE DIVISION												-7.4	
PRECIPITATION (In.)													
BRISTOL BAY DIVISION	1.49			.99			2.31			2.83			23.86

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

USCOMM-WB-Asheville, N. C. -3/31/64- 2200

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