

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

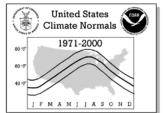




### 20 MICHIGAN



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



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

(This Page Intentionally Left Blank)

### **United States** Climate Normals 1971-2000 J F M A M J J A S O N D

#### CLIMATOGRAPHY OF THE UNITED STATES NO. 81

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

**MICHIGAN** Page 3

#### **NOTES**

#### **Product Description:**

This Climatography includes 1971-2000 normals of monthly and annual maximum, minimum, and mean temperature (degrees F), monthly and annual total precipitation (inches), and heating and cooling degree days (base 65 degrees F). Normals stations include both National Weather Service Cooperative Network and Principal Observation (First-Order) locations in the 50 states, Puerto Rico, the Virgin Islands, and Pacific Islands.

#### Abbreviations:

No. = Station Number in State Map

WBAN ID = Weather Bureau Army Navy ID, if assigned

**Elements** = Input Elements (X=Maximum Temperature,

N=Minimum Temperature, P=Precipitation)

Call = 3-Letter Station Call Sign, if assigned

MAX = Normal Maximum Temperature (degrees Fahrenheit)

MEAN = Average of MAX and MIN (degrees Fahrenheit)

MIN = Normal Minimum Temperature (degrees Fahrenheit)

HDD = Total Heating Degree Days (base 65 degrees Fahrenheit)

CDD = Total Cooling Degree Days (base 65 degrees Fahrenheit)

Latitude = Latitude in degrees, minutes, and hemisphere (N=North, S=South) COOP ID = Cooperative Network ID (1:2=State ID, 3:6=Station Index) Longitude = Longitude in degrees, minutes, and hemisphere (W=West, E=East)

Elev = Elevation in feet above mean sea level

Flag 1 = \* if a published Local Climatological Data station

Flag 2 = + if WMO Fully Qualified (see *Note* below)

HIGHEST MEAN/YEAR = Maximum Mean Monthly Value/Year, 1971-2000 MEDIAN = Median Mean Monthly Value/Year, 1971-2000

LOWEST MEAN/YEAR = Minimum Mean Monthly Value/Year, 1971-2000

MAX OBS TIME ADJUSTMENT = Add to MAX to Get Midnight Obs. Schedule

MIN OBS TIME ADJUSTMENT = Add to MIN to Get Midnight Obs. Schedule

Note: In 1989, the World Meteorological Organization (WMO) prescribed standards of data completeness for the 1961-1990 WMO Standard Normals. For full qualification, no more than three consecutive year-month values can be missing for a given month or no more than five overall values can be missing for a given month (out of 30 values). Stations meeting these standards are indicated with a '+' sign in Flag 2. Otherwise, stations are included in the normals if they have at least 10 year-month values for each month and have been active since January 1999 or were a previous normals station.

Map Legend: Numbers correspond to 'No.' in Station Inventory; Shaded Circles indicate Temperature and Precipitation Stations, Triangles (Point Up) indicate Precipitation-Only Stations, Triangles (Point Down) indicate Temperature-Only Stations, and Hexagons indicate stations with Flag 1 = \*.

#### Computational Procedures:

A climate normal is defined, by convention, as the arithmetic mean of a climatological element computed over three consecutive decades (WMO,1989). Ideally, the data record for such a 30-year period should be free of any inconsistencies in observational practices (e.g., changes in station location, instrumentation, time of observation, etc.) and be serially complete (i.e., no missing values). When present, inconsistencies can lead to a nonclimatic bias in one period of a station's record relative to another, yielding an "inhomogeneous" data record. Adjustments and estimations can make a climate record "homogeneous" and serially complete, and allow a climate normal to be calculated simply as the average of the 30 monthly values.

The methodology employed to generate the 1971-2000 normals is not the same as in previous normals, as it addresses inhomogeneity and missing data value problems using several steps. The technique developed by Karl et al. (1986) is used to adjust monthly maximum and minimum temperature observations of conterminous U.S. stations to a consistent midnight-to-midnight schedule. All monthly temperature averages and precipitation totals are cross-checked against archived daily observations to ensure internal consistency. Each monthly observation is evaluated using a modified quality control procedure (Peterson et al., 1998), where station observation departures are computed, compared with neighboring stations, and then flagged and estimated where large differences with neighboring values exist. Missing or discarded temperature and precipitation observations are replaced using a weighting function derived from the observed relationship between a candidate's monthly observations and those of up to 20 neighboring stations whose observations are most strongly correlated with the candidate site. For temperature estimates, neighboring stations were selected from the U.S. Historical Climatology Network (USHCN; Karl et al. 1990). For precipitation estimates, all available stations were potential neighbors, maximizing station density for estimating the more spatially variable precipitation values.

Peterson and Easterling (1994) and Easterling and Peterson (1995) outline the method for adjusting temperature inhomogeneities. This technique involves comparing the record of the candidate station with a reference series generated from neighboring data. The reference series is reconstructed using a weighted average of first difference observations (the difference from one year to the next) for neighboring stations with the highest correlation with the candidate. The underlying assumption behind this methodology is that temperatures over a region have similar tendencies in variation. If this assumption is violated, the potential discontinuity is evaluated for statistical significance. Where significant discontinuities are detected, the difference in average annual temperatures before and after the inhomogeneity is applied to adjust the mean of the earlier block with the mean of the latter block of data. Such an evaluation requires a minimum of five years between discontinuities. Consequently, if multiple changes occur within five years or if a change occurs very near the end of the normals period (e.g., after 1995), the discontinuity may not be detectable using this methodology.

The monthly normals for maximum and minimum temperature and precipitation are computed simply by averaging the appropriate 30 values from the 1971-2000 record. The monthly average temperature normals are computed by averaging the corresponding monthly maximum and minimum normals. The annual temperature normals are calculated by taking the average of the 12 monthly normals. The annual precipitation and degree day normals are the sum of the 12 monthly normals. Trace precipitation totals are shown as zero. Precipitation totals include rain and the liquid equivalent of frozen and freezing precipitation (e.g., snow, sleet, freezing rain, and hail). For many NWS locations, indicated with an '\*' next to 'HDD' and 'CDD' in the degree day table, degree day normals are computed directly from daily values for the 1971-2000 period. For all other stations, estimated degree day totals are based on a modification of the rational conversion formula developed by Thom (1966), using daily spline-fit means and standard deviations of average temperature as inputs.

Easterling, D.R, and T.C. Peterson, 1995: A new method for detecting and adjusting for undocumented discontinuities in climatological time series. Intl. J. Clim., 15, 369-377. Karl, T.R., C.N. Williams, Jr., P.J. Young, and W.M. Wendland, 1986: A model to estimate the time of observation bias associated with monthly mean maximum, minimum, and mean temperatures for the United States, J. Clim. Appl. Met., 25, 145-160.

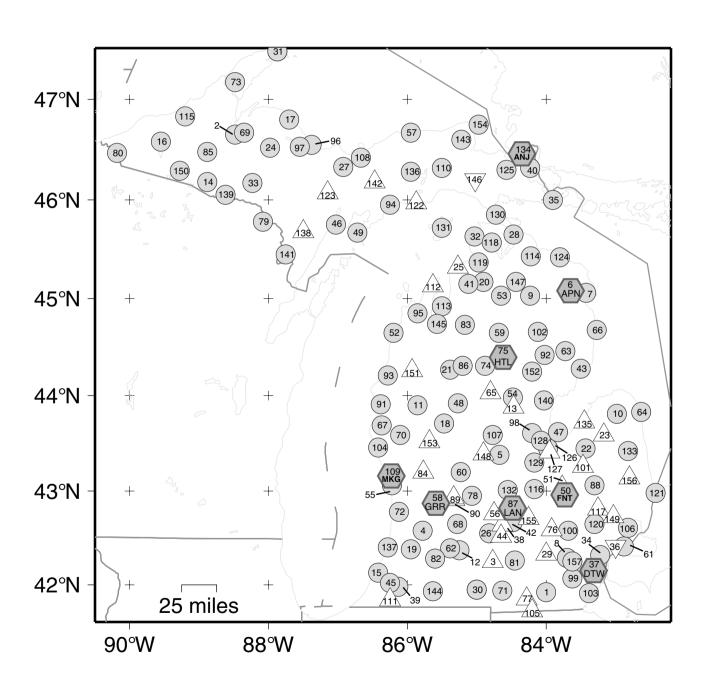
Peterson, T.C., and D.R. Easterling, 1994: Creation of homogeneous composite climatological reference series. Intl. J. Clim., 14, 671-679.

Peterson, T.C., R. Vose, R. Schmoyer, and V. Razuvaev, 1998: Global Historical Climatology Network (GHCN) quality control of monthly temperature data. Intl. J. Clim., 18, 1169-1179. Thom, H.C.S., 1966: Normal degree days above any base by the universal truncation coefficient, Month. Wea. Rev., 94, 461-465.

World Meteorological Organization, 1989: Calculation of Monthly and Annual 30-Year Standard Normals, WCDP-No. 10, WMO-TD/No. 341, Geneva: World Meteorological Organization.

Release Date: Revised 02/2002\* National Climatic Data Center/NESDIS/NOAA, Asheville, North Carolina

### 20 - MICHIGAN



# United States Climate Normals 1971-2000 00 -7 10

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No.   COOP ID   WBAN ID   Elements   Station   Name   Call   Latitude   Longitude   Elev	*	+ + + + + + + + + + + + + + + + + + + +
2       200089       XNP       ALBERTA FORD FOR CEN       46 39 N       88 29 W       1310         3       200094       P       ALBION       42 15 N       84 46 W       940         4       200128       XNP       ALLEGAN 5 NE       42 35 N       85 47 W       750         5       200146       XNP       ALMA       43 23 N       84 40 W       760         6       200164       94849       XNP       ALPENA COLLINS AP       APN 45 04 N       83 35 W       689         7       200169       14814       XNP       ALPENA WASTEWATER PL       45 04 N       83 26 W       590         8       200230       XNP       ANN ARBOR UNIV OF MICH       42 18 N       83 43 W       900         9       200343       XNP       ATLANTA 5 WNW       45 02 N       84 14 W       1170         10       200417       XNP       BAD AXE       43 48 N       83 00 W       715         11       200446       XNP       BALDWIN       43 54 N       85 51 W       930         12       200552       XNP       BATTLE CREEK 5 NW       42 22 N       85 16 W       930         13       200632       P       BEAVERTON 1 ESE	*	+ + + + + +
7 200169 14814 XNP ALPENA WASTEWATER PL 45 04 N 83 26 W 590 8 200230 XNP ANN ARBOR UNIV OF MICH 42 18 N 83 43 W 900 9 200343 XNP ATLANTA 5 WNW 45 02 N 84 14 W 1170 10 200417 XNP BAD AXE 43 48 N 83 00 W 715 11 200446 XNP BALDWIN 43 54 N 85 51 W 835 12 200552 XNP BATTLE CREEK 5 NW 42 22 N 85 16 W 930 13 200632 P BEAVERTON 1 ESE 43 53 N 84 28 W 708	*	+ + + + + +
7 200169 14814 XNP ALPENA WASTEWATER PL 45 04 N 83 26 W 590 8 200230 XNP ANN ARBOR UNIV OF MICH 42 18 N 83 43 W 900 9 200343 XNP ATLANTA 5 WNW 45 02 N 84 14 W 1170 10 200417 XNP BAD AXE 43 48 N 83 00 W 715 11 200446 XNP BALDWIN 43 54 N 85 51 W 835 12 200552 XNP BATTLE CREEK 5 NW 42 22 N 85 16 W 930 13 200632 P BEAVERTON 1 ESE 43 53 N 84 28 W 708	*	+ + + + + +
7 200169 14814 XNP ALPENA WASTEWATER PL 45 04 N 83 26 W 590 8 200230 XNP ANN ARBOR UNIV OF MICH 42 18 N 83 43 W 900 9 200343 XNP ATLANTA 5 WNW 45 02 N 84 14 W 1170 10 200417 XNP BAD AXE 43 48 N 83 00 W 715 11 200446 XNP BALDWIN 43 54 N 85 51 W 835 12 200552 XNP BATTLE CREEK 5 NW 42 22 N 85 16 W 930 13 200632 P BEAVERTON 1 ESE 43 53 N 84 28 W 708	*	+ + + +
7       200169       14814       XNP       ALPENA WASTEWATER PL       45 04 N 83 26 W 590         8       200230       XNP       ANN ARBOR UNIV OF MICH       42 18 N 83 43 W 900         9       200343       XNP       ATLANTA 5 WNW       45 02 N 84 14 W 1170         10       200417       XNP       BAD AXE       43 48 N 83 00 W 715         11       200446       XNP       BALDWIN       43 54 N 85 51 W 835         12       200552       XNP       BATTLE CREEK 5 NW       42 22 N 85 16 W 930         13       200632       P       BEAVERTON 1 ESE       43 53 N 84 28 W 708         14       200647       XNP       BEECHWOOD 7 WNW       46 11 N 88 53 W 1660         15       200710       94871       XNP       BENTON HARBOR AP       BEH 42 08 N 86 25 W 628         16       200718       XNP       BERGLAND DAM       46 35 N 89 33 W 1300		+ + + +
8       200230       XNP       ANN ARBOR UNIV OF MICH       42 18 N 83 43 W 900         9       200343       XNP       ATLANTA 5 WNW       45 02 N 84 14 W 1170         10       200417       XNP       BAD AXE       43 48 N 83 00 W 715         11       200446       XNP       BALDWIN       43 54 N 85 51 W 835         12       200552       XNP       BATTLE CREEK 5 NW       42 22 N 85 16 W 930         13       200632       P BEAVERTON 1 ESE       43 53 N 84 28 W 708         14       200647       XNP       BEECHWOOD 7 WNW       46 11 N 88 53 W 1660         15       200710       94871       XNP       BENTON HARBOR AP       BEH 42 08 N 86 25 W 628         16       200718       XNP       BERGLAND DAM       46 35 N 89 33 W 1300		+
10   200417   XNP   BAD AXE   43 48 N 83 00 W 715     11   200446   XNP   BALDWIN   43 54 N 85 51 W 835     12   200552   XNP   BATTLE CREEK 5 NW   42 22 N 85 16 W 930     13   200632   P   BEAVERTON 1 ESE   43 53 N 84 28 W 708     14   200647   XNP   BEECHWOOD 7 WNW   46 11 N 88 53 W 1660     15   200710   94871   XNP   BENTON HARBOR AP   BEH 42 08 N 86 25 W 628     16   200718   XNP   BERGLAND DAM   46 35 N 89 33 W 1300     17   18   18   18   18   18   18     18   19   19   18   18   18     19   10   10   18   18     10   10   10   18     11   12   13   18     12   13   14   17     13   14   17     14   17   18     15   200710   94871   XNP   BERGLAND DAM   46 35 N 89 33 W 1300     15   200718   XNP   BERGLAND DAM   46 35 N 89 33 W 1300     16   200718   XNP   BERGLAND DAM   46 35 N 89 33 W 1300     17   17   18   18     18   18   19     19   19   19     10   19   19     10   19   19     11   19   19     12   19   19     13   19     14   19   19     15   19   19     16   19   19     17   19     18   19     19   19     10   19     11   19     12   19     13   19     14   19     15   19     16   19     17   19     18   19     19     10   19     10   19     10   19     11   19     12   19     13     14   19     15   19     16   19     17   19     18   19     19   19     19   19     10   19     10   19     10   19     10   19     10   19     10   19     10   19     10   19     10   19     10   19     10   19     10   19     11   19     12   19     13   19     14   19     15   19     16   19     17   19     18     19     19     10		+
11       200446       XNP       BALDWIN       43       54       N       85       51       W       835         12       200552       XNP       BATTLE CREEK 5       NW       42       22       N       85       16       W       930         13       200632       P       BEAVERTON 1       ESE       43       53       N       84       28       W       708         14       200647       XNP       BEECHWOOD 7       WNW       46       11       N       88       53       W       1660         15       200710       94871       XNP       BENTON HARBOR AP       BEH       42       08       N       86       25       W       628         16       200718       XNP       BERGLAND DAM       46       35       N       89       33       W       1300		
12       200552       XNP       BATTLE CREEK 5 NW       42       22 N       85       16 W       930         13       200632       P       BEAVERTON 1 ESE       43       53 N       84       28 W       708         14       200647       XNP       BEECHWOOD 7 WNW       46       11 N       88       53 W       1660         15       200710       94871       XNP       BENTON HARBOR AP       BEH 42       08 N       86       25 W       628         16       200718       XNP       BERGLAND DAM       46       35 N       89       33 W       1300		+
13 200632 P BEAVERTON 1 ESE 43 53 N 84 28 W 708 14 200647 XNP BEECHWOOD 7 WNW 46 11 N 88 53 W 1660 15 200710 94871 XNP BENTON HARBOR AP BEH 42 08 N 86 25 W 628 16 200718 XNP BERGLAND DAM 46 35 N 89 33 W 1300		
15 200710 94871 XNP BENTON HARBOR AP BEH 42 08 N 86 25 W 628 16 200718 XNP BERGLAND DAM 46 35 N 89 33 W 1300		
16 200718 XNP BERGLAND DAM 46 35 N 89 33 W 1300		+
		+
17		+
19 200864 XNP BLOOMINGDALE 42 23 N 85 58 W 725		+
20 200925 XNP BOYNE FALLS 45 10 N 84 55 W 735		+
21		+
22 201299 ANP CARO REGIONAL CENTER 43 27 N 83 27 W 670 23 201361 P CASS CITY 1 SSW 43 35 N 83 11 W 698		+
24 201439 XNP CHAMPION VAN RIPER PRK 46 31 N 87 59 W 1565		+
25 201468 P CHARLEVOIX 45 19 N 85 16 W 593		+
26 201476		+
28 201492 XNP CHEBOYGAN 45 39 N 84 28 W 590		+
29 201502 P CHELSEA 42 20 N 84 01 W 900		
30		+
32 201896 XNP CROSS VILLAGE 1 S 45 38 N 85 02 W 743		+
33 201922 XNP CRYSTAL FALLS 6 NE 46 10 N 88 14 W 1360		
34 202015 XNP DEARBORN 42 19 N 83 14 W 605		+
35		+
37 202103 94847 XNP DETROIT METRO AP DTW 42 14 N 83 20 W 637	*	+
38 202140 P DIMONDALE 1 WSW 42 38 N 84 39 W 875		
39		+
40 202296 ANP DONBAR FOREST EXP SIN 40 19 N 84 14 W 600 41 202381 XNP EAST JORDAN 45 09 N 85 08 W 590		+
42 202395 XNP EAST LANSING 4 S 42 40 N 84 29 W 880		+
43 202423 XNP EAST TAWAS 44 17 N 83 30 W 586		+
44     202437     P EATON RAPIDS     42 31 N 84 39 W 870       45     202445     XNP EAU CLAIRE 4 NE     42 01 N 86 15 W 870		+
46 202626 14824 XNP ESCANABA ESC 45 45 N 87 02 W 591		·
48 202671 XNP EVART 43 55 N 85 16 W 1025		
49       202737       XNP       FAYETTE 4 SW       45 40 N 86 43 W 745         50       202846       14826       XNP       FLINT BISHOP INTL AP       FNT 42 58 N 83 45 W 770	*	+
51 202851 P FLINT / W 43 02 N 83 46 W 6/9		
52 202984 XNP FRANKFORT 2 NE 44 39 N 86 12 W 865		+
53 203096 XNP GAYLORD GLR 45 02 N 84 40 W 1350 54 203170 14828 XNP GLADWIN 43 59 N 84 29 W 775		+ +
55 203290 XNP GRAND HAVEN FIRE DEPT 43 04 N 86 13 W 620		
56 203306 P GRAND LEDGE 1 NW 42 46 N 84 46 W 800		+
57 203319 14859 XNP GRAND MARAIS 2 E 46 40 N 85 57 W 624	*	+
58 203333 94860 XNP GRAND RAPIDS INTL AP GRR 42 53 N 85 31 W 793 59 203391 XNP GRAYLING 44 39 N 84 42 W 1140		+ +
60 203429 XNP GREENVILLE 2 NNE 43 12 N 85 15 W 882		+
61 203477 XNP GROSSE POINTE FARMS 42 24 N 82 53 W 613		+
62       203504       XNP       GULL LAKE BIOL STA       42 24 N 85 23 W 910         63       203529       XNP       HALE LOUD DAM       44 28 N 83 43 W 815		+ +
64 203585 XNP HARBOR BEACH 1 SSE P58 43 50 N 82 39 W 600		+
65 203616 P HARRISON 1 NNW 44 02 N 84 48 W 1156		
66 203628 XNP HARRISVILLE 2 NNE 44 41 N 83 17 W 585		_
67     203632     XNP     HART     43 41 N 86 22 W 700       68     203661     XNP     HASTINGS     42 39 N 85 17 W 820		+ +
69 203744 XNP HERMAN 46 40 N 88 21 W 1740		+
70 203769 XNP HESPERIA 4 WNW 43 35 N 86 06 W 780		

# United States Climate Normals 1971-2000 60 T 10 T

#### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

			4	STATION IN	VENTORY						
No.	COOP ID	WBAN ID	Elements	Station Name	Call	Latitude	Longitude	Elev	Flag 1	Flag 2	
71	203823		XNP	HILLSDALE		41 56 N 42 47 N	84 38 W			+	
72 73	203858 203908	14858	XNP XNP	HOLLAND HOUGHTON CO AP (HANCOCK)	CMX	42 47 N 47 10 N	86 07 W	610 1074		+	
74	203932	11000	XNP	HOUGHTON CO AP (HANCOCK) HOUGHTON LAKE 6 WSW HOUGHTON LAKE ROSCOMMON	0.111	44 19 N	84 54 W	1135		+	
75		94814	XNP	HOUGHTON LAKE ROSCOMMON	HTL	44 22 N	84 41 W	1151	*	+	
76 77	203947 203969		P P	HOWELL WWTP HUDSON 3 E		42 36 N 41 51 N	83 56 W 84 18 W	917 875		+	
78	204078		****	T01777 0 0077		40 55 37	05 05	805		+	
79	204090		XNP	IRON MTN-KINGSFORD WWTP	IMT	45 47 N	88 05 W	1060		+	
80 81	204104 204150	14833	XNP XNP	IONIA Z SSW IRON MTN-KINGSFORD WWTP IRONWOOD JACKSON CO AP KALAMAZOO STATE HOSPITAL	JXN	46 28 N 42 16 N	90 11 W	1430 998		+	
82	204244	11000	XNP	KALAMAZOO STATE HOSPITAL	AZO	42 17 N	85 36 W	950			
83	204257		XNP	KALKASKA		44 44 N	85 10 W	1040			
84 85	204320 204328		P XNP	KALKASKA KENT CITY 2 SW KENTON		43 12 N 46 29 N	85 46 W 88 53 W	840 1167		+	
86	204502		XNP	LAKE CITY EXP FARM		44 19 N	85 12 W	1240		+	
87	204641	14836	XNP	LANSING CAPITAL CITY AP	LAN	42 47 N	84 35 W	841	*	+	
88 89	204655 204939		XNP P	LAPEER WWTP		43 04 N	83 18 W	820 760		+	
90	204944		P	LOWELL		42 56 N	85 20 W	640		+	
91	204954		XNP	LANSING CAPITAL CITY AP LAPEER WWTP LOWELL 2 SE LOWELL LUDINGTON 4 SE LUPTON 1 S MANISTEE 3 SE MANISTIQUE MAPLE CITY MARQUETTE MARQUETTE CO AP MIDLAND MILAN 4 ESE MILFORD GM PROVING GR MILLINGTON 3 SE MIO HYDRO PLANT MONROE MONTAGUE 4 NW MORENCI		43 54 N	86 24 W	690			
92 93	204967 205065		XNP XNP	LUPTON I S MANISTEE 3 SE		44 25 N 44 13 N	84 01 W 86 18 W	900 670		+	
94	205073		XNP	MANISTIQUE		45 57 N	86 15 W	620			
95	205097		XNP	MAPLE CITY		44 51 N	85 51 W	730		+	
96 97	205178 205184	14838 94850	XNP XNP	MARQUETTE MARQUETTE CO AD	МОТ	46 33 N	87 23 W	665 1415		+	
98	205434	J 1030	XNP	MIDLAND	1101	43 37 N	84 12 W	640		+	
99	205450		XNP	MILAN 4 ESE		42 04 N	83 37 W	670			
100 101	205452 205488		XNP P	MILFORD GM PROVING GR		42 35 N	83 41 W	990 820		+	
102	205531		XNP	MIO HYDRO PLANT		44 40 N	84 08 W	960		+	
103	205558		XNP	MONROE		41 55 N	83 24 W	590		+	
104 105	205567 205603		XNP P	MONTAGUE 4 NW MORENCI		43 28 N 41 43 N	86 25 W 84 13 W	650 770			
106	205650	14804	XNP	MORENCI MOUNT CLEMENS ANG BASE MT PLEASANT UNIV MUNISING MUSKEGON COUNTY AP NEWBERRY 3 S NILES NORTHPORT 2 W OLD MISSION 3 SSW ONAWAY STATE PARK ONTONAGON 6 SE OWOSSO WWTP	MTC	42 36 N	82 49 W	580			
107	205662		XNP	MT PLEASANT UNIV		43 35 N	84 46 W	796			
108 109	205690 205712	14840	XNP XNP	MUNISING MUSKEGON COUNTY AP	MKG	46 25 N 43 10 N	86 40 W 86 14 W	680 625	*	+	
110	205816		XNP	NEWBERRY 3 S		46 19 N	85 30 W	850			
111	205892		P	NILES		41 50 N	86 16 W	650		+	
112 113	206007 206158		P XNP	OLD MISSION 3 SSW		45 08 N	85 39 W	750 650			
114	206184		XNP	ONAWAY STATE PARK		45 26 N	84 14 W	690		+	
115	206220		XNP	ONTONAGON 6 SE OWOSSO WWTP		46 50 N	89 12 W	790		,	
116 117	206300 206303		XNP P	OWOSSO WWTP OXFORD 1 S			84 11 W 83 15 W	730 1040		+	
118	206438	14841	XNP	PELLSTON RGNL AP	PLN	45 34 N	84 48 W	715		+	
119 120	206507 206658		XNP XNP	PETOSKEY DONTIAC STATE HOSDITAL	אייית	45 22 N	84 59 W 83 18 W	610 982		++	
121	206680		XNP	PONTIAC STATE HOSPITAL PORT HURON	PIK	42 59 N	83 18 W 82 25 W	590		+	
122	206686		P	PORT INLAND		45 58 N	85 52 W	610			
123 124	207068 207094		P XNP	ROCK 1 E ROGERS CITY			87 09 W 83 49 W	940 615			
124	207094		XNP	RUDYARD 4 N			83 49 W 84 35 W	754			
126	207217		XNP	SAGINAW CONSUMERS PWR CO			83 58 W	600			
127 128	207222 207227	14845	P XNP	SAGINAW # 3 SAGINAW TRI STATE AP	МБС		83 57 W 84 05 W	600 660		+	
129	207253	11010	XNP	SAINT CHARLES	כטויו		84 10 W	600		•	
130	207274		XNP	ST IGNACE MACKINAC BR		45 51 N	84 43 W	600			
131 132	207277 207280		XNP XNP	ST JAMES 2 S BEAVER IS ST JOHNS			85 31 W 84 33 W	670 743		+	
133	207350		XNP	SANDUSKY			82 49 W	774			
134	207366	14847	XNP	SAULT STE MARIE AP	ANJ			718	*	+	
135 136	207419 207515		P XNP	SEBEWAING SENEY WILDLIFE REFUGE			83 28 W 85 57 W	584 710			
137	207690		XNP	SOUTH HAVEN			86 17 W	620			
138	207742		P	SPALDING 1 SSE			87 30 W	860		+	
139 140	207812 207820		XNP XNP	STAMBAUGH 2 SSE STANDISH 5 SW			88 37 W 84 02 W	1560 645		+	
T 10	20/020		VIAL	CITEDIOII 2 DW		1 / C C1	UI UZ W	0 ± 5		'	



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

J F	MAMIJASOND	-								
			STATION INVI							
No.	COOP ID WBAN			Call		Longitude		Flag 1		
141 142	207867 207880	X	STEPHENSON 8 WNW STEUBEN			87 45 W 86 28 W	710 740		+	
143	208043	X	TAHQUAMENON FALLS STPK			85 13 W	745			
144	208184		THREE RIVERS	mr.70		85 38 W	810		+	
145 146	208251 1485 208293		TRAVERSE CITY AP TROUT LAKE	TVC		85 35 W 85 01 W	618 840		+	
147	208417		VANDERBILT 11 ENE		45 10 N	84 26 W	925		+	
148 149	208468 208650		VESTABURG WASHINGTON			84 55 W 83 02 W	915 745			
150	208680	X	WASHINGTON WATERSMEET 5 W				1625			
151	208772		WELLSTON TIPPY DAM		44 15 N		650		+	
152 153	208800 208890	X	WEST BRANCH 3 SE WHITE CLOUD 4 SE		44 15 N 43 31 N		885 880		+	
154	208920	X	WHITEFISH POINT		46 45 N	84 59 W	605		+	
155	209006		WILLIAMSTON 3 NE			84 15 W	895			
156 157	209188 209218	X	YALE 1 NNW YPSILANTI E MICH UNIV			82 48 W 83 38 W	820 780		+ +	

## United States Climate Normals 1971-2000 1971-2000 1971-2000

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No.	Station Name	Element	JAN	FEB	MAR	APR	TEMF May	PERATU JUN	JUL	RMALS ( AUG	(Degrees SEP	s Fahrer OCT	nheit) NOV	DEC	ANNUAL
001	ADRIAN 2 NNE	MAX	32.1	35.6	46.4	58.7	71.1	80.0	84.0	81.7	74.1	61.7	48.0	36.1	59.1
		MEAN MIN	23.5	26.2 16.8	36.1 25.7	47.0 35.3	58.4 45.7	67.5 55.0	71.6	69.5 57.2	61.8 49.4	50.1 38.4	39.0 29.9	28.3	48.3
002	ALBERTA FORD FOR CEN	MAX	19.8	25.8	36.4	49.7	64.9	73.3	78.0	75.5	65.8	54.2	37.1	24.6	50.4
		MEAN	10.4	14.8	24.9	38.2	52.1	60.9	66.1	64.2	55.2	44.4	29.5	16.4	39.8
004	ALLEGAN 5 NE	MIN	0.9	3.7	13.4	26.6 56.2	39.2	48.4 77.5	54.1	52.9 79.5	44.6	34.6	21.9 45.2	8.2	29.0 56.5
004	ALLEGAN 5 NE	MAX MEAN	21.6	24.1	33.5	44.6	55.9	65.2	69.7	67.8	60.1	48.7	37.7	27.0	46.3
		MIN	14.4	15.6	23.8	33.0	43.4	52.8	57.5	56.1	48.3	38.0	30.1	20.7	36.1
005	ALMA	MAX	28.5	31.7	42.2	55.7	69.2	78.3	82.8	80.1	72.0	59.6	45.1	33.4	56.6
		MEAN MIN	20.7 12.9	22.9 14.1	32.5 22.7	44.8 33.8	57.1 44.9	66.3 54.2	70.7	68.4 56.6	60.3 48.6	48.7 37.8	36.9 28.7	26.4 19.3	46.3 36.0
006	ALPENA COLLINS AP	MAX	26.1	28.2	37.3	50.3	64.3	73.8	79.0	76.1	67.4	55.6	42.2	31.2	52.6
		MEAN	17.8	19.0	28.0	40.3	52.2	61.3	66.7	64.5	56.3	45.6	34.6	24.0	42.5
007	ALPENA WASTEWATER PL	MIN MAX	9.5	9.7	18.7 36.1	30.2	40.0	48.8	54.5 76.7	52.9 75.3	45.2 67.7	35.6 55.4	27.0 42.5	16.9	32.4 51.7
007		MEAN	19.4	20.1	28.6	40.6	52.4	62.1	68.1	66.6	58.9	47.5	36.0	25.7	43.8
000		MIN	12.0	12.1	21.1	32.8	44.0	53.4	59.4	57.9	50.1	39.5	29.4	19.4	35.9
008	ANN ARBOR UNIV OF MICH	MAX MEAN	30.1 23.4	33.9 26.4	45.2 36.1	58.0 47.7	70.5 59.4	79.2 68.4	83.0 72.6	80.7 70.7	73.5 63.4	61.1 51.6	46.8 39.6	34.7 28.5	58.1 49.0
		MIN	16.6	18.9	27.0	37.3	48.3	57.6	62.1	60.7	53.2	42.1	32.4	22.3	39.9
009	ATLANTA 5 WNW	MAX	24.7	28.1	38.5	52.3	66.8	75.3	80.4	77.5	68.8	56.4	41.7	29.7	53.4
		MEAN MIN	16.3 7.9	18.4 8.6	28.5 18.5	41.4 30.5	54.2 41.6	63.0 50.6	67.9	65.7 53.9	57.6 46.4	46.4 36.3	34.4 27.0	22.7 15.7	43.0
010	BAD AXE	MAX	27.2	29.2	39.0	52.0	65.8	75.4	80.1	77.6	69.8	57.8	44.1	32.3	54.2
		MEAN	20.4	21.7	30.7	42.3	54.7	64.2	69.1	67.0	59.7	48.7	37.4	26.5	45.2
011	DALDUM	MIN	13.6	14.2	22.4	32.6	43.6	53.0	58.1	56.3	49.5	39.6	30.6	20.6	36.2
011	BALDWIN	MAX MEAN	28.6 19.7	32.4 21.6	42.7 30.9	56.0 43.2	69.8 55.3	78.0 63.4	82.1	79.8 66.0	71.4 58.1	59.1 47.2	44.8 35.9	33.2	56.5 44.5
		MIN	10.8	10.7	19.1	30.4	40.8	48.8	53.2	52.1	44.8	35.3	27.0	17.3	32.5
012	BATTLE CREEK 5 NW	MAX	30.9	34.9	45.8	58.6	70.6	78.9	82.5	80.3	72.7	60.7	47.0	35.0	58.2
		MEAN MIN	23.1 15.3	26.3 17.7	35.8 25.8	47.3 35.9	58.4 46.1	67.1 55.2	71.0	68.9 57.5	61.3 49.9	50.1 39.4	38.8	27.7 20.4	48.0 37.8
014	BEECHWOOD 7 WNW	MAX	21.5	27.8	38.1	52.6	67.3	74.0	77.9	75.9	66.9	54.8	37.4	24.9	51.6
		MEAN	11.9	17.3	27.0	40.3	53.4	61.2	65.6	64.1	55.6	44.4	29.6	16.7	40.6
015	BENTON HARBOR AP	MIN MAX	2.3	6.7 34.5	15.8 44.9	28.0 56.1	39.5	48.4 77.0	53.3	52.2 79.5	44.2 72.5	34.0	21.7	8.5	29.6 57.2
013	BENTON HARBOR AF	MEAN	23.8	27.2	36.2	46.4	57.1	66.6	71.0	69.2	62.1	51.5	39.8	28.7	48.3
		MIN	17.4	19.8	27.5	36.6	46.4	56.2	60.9	58.8	51.6	41.8	32.6	22.7	39.4
016	BERGLAND DAM	MAX MEAN	20.0	25.6 13.5	35.8 23.3	49.6 37.5	64.7 51.3	73.1 60.6	77.5	75.7 63.0	65.7 54.0	53.9 43.2	37.0 29.0	24.7 16.1	50.3 38.9
		MIN	-0.2	1.4	10.8	25.3	37.8	48.1	52.6	50.3	42.3	32.4	20.9	7.5	27.4
017	BIG BAY 2 SE	MAX	23.5	28.0	37.0	49.8	64.6	72.8	78.3	75.9	67.7	55.6	40.5	28.6	51.9
		MEAN	15.8	18.8	27.4	39.0	51.2	60.1	65.8	64.5	56.9	46.3	33.6	21.8	41.8
018	BIG RAPIDS WATERWORKS	MIN MAX	8.0	9.6	17.7 42.4	28.1 55.8	37.8	47.3 77.7	53.3	53.0 79.3	46.1	36.9 58.6	26.7 44.2	14.9	31.6 56.2
		MEAN	20.2	22.7	31.7	44.0	56.3	64.9	69.5	67.3	58.9	47.5	36.0	25.4	45.4
010	DI COMINGDAL E	MIN		12.8	21.0	32.1	43.2	52.0	56.9	55.2	46.9	36.4		17.7	34.5
019	BLOOMINGDALE	MAX MEAN	30.6	34.2 25.4	44.4 34.5	56.8 45.7	69.3 56.9	78.5 66.1	82.5	80.7 68.6	73.1 61.0	61.2 50.0	47.2 38.9	35.5 28.3	57.8 47.4
		MIN		16.5		34.6	44.5	53.7	57.8	56.5	48.9	38.7	30.5	21.1	36.9
020	BOYNE FALLS	MAX	27.6	31.4	41.8	55.8	69.9	77.9	82.1	79.5	70.8	59.1	44.0	32.2	56.0
		MEAN MIN	19.6 11.5	21.2 11.0	30.7 19.5	43.2	55.4 40.8	64.2 50.4	68.6 55.0	66.8 54.0	59.0 47.2	48.5 37.9	36.5 29.0	25.4 18.5	44.9 33.8
021	CADILLAC	MAX	25.9	28.9	38.7	52.0	66.3	74.8	79.2	76.7	68.3	55.9	42.0	30.6	53.3
		MEAN		18.8	28.0	40.9	53.4	62.4	66.9	64.7	56.5	45.6	34.2	23.3	42.7
022	CARO REGIONAL CENTER	MIN MAX	9.1 29.5	8.7	17.2 43.9	29.8	40.4	49.9 79.7	54.5	52.6 81.1	44.7 73.4	35.2	26.3 46.5	16.0 34.1	32.0 57.9
044	CARO REGIONAL CENTER	MEAN	21.8	24.2	34.2	45.8	57.6	66.4	71.0	68.8	61.3	50.1	38.7	27.3	47.3
		MIN	14.0	15.5	24.4	34.0	44.1	53.1	58.0	56.5	49.1	39.2	30.9	20.5	36.6
024	CHAMPION VAN RIPER PRK	MAX	22.4	28.2	38.2	51.9	67.1	74.6	78.8	76.6	67.1	55.1	38.3	26.3	52.1
		MEAN MIN	11.3	15.2 2.1	24.6 11.0	37.7	51.2 35.3	59.5 44.3	64.3	62.5 48.4	54.2 41.2	43.5	29.4 20.5	16.9 7.4	39.2 26.3
026	CHARLOTTE	MAX	28.9	32.3	42.8	55.5	68.0	77.0	80.7	78.4	71.2	59.3	45.4	33.6	56.1
		MEAN	22.0	24.2	34.1	45.7	57.2	66.4	70.2	68.2	60.7	49.4	38.0	27.3	47.0
027	CHATHAM EXP FARM 2	MIN MAX	15.0 24.8	16.1 28.9	25.3 38.0	35.8 51.0	46.3	55.7 74.8	59.7 79.0	57.9 76.7	50.2	39.5 56.8	30.6	21.0	37.8 53.0
52,		MEAN	15.5	18.4	26.7	38.9	52.0	60.9	65.4	64.5	56.7	46.0	32.8	21.3	41.6
									51.7	52.2		35.2		12.7	

# United States Climate Normals 1971-2000 60 7 10 77 10 77 10 77

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

						TEME	DEDATH	DE NO	OMAL C	(Dograd	o Eobror	aboit)		
No. Station Name	Element	JAN	FEB	MAR	APR	MAY	PERATU JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
028 CHEBOYGAN	MAX	26.3	28.3	36.6	48.7	62.1	71.5	77.4	75.5	67.6	55.8	42.5	31.5	52.0
	MEAN	17.3	18.0	26.7	39.1	51.3	61.1	67.3	65.6	57.8	46.5	35.2	24.3	42.5
030 COLDWATER STATE SCHOOL	MIN MAX	8.2	7.6	16.7 43.8	29.5	40.4	50.7 78.0	57.1	55.6 79.2	48.0 71.7	37.1 59.5	27.9 45.3	17.0 33.4	33.0 56.6
030 COLDWATER STATE SCHOOL	MEAN	21.6	25.0	34.8	46.0	57.8	67.0	70.7	68.5	61.0	49.6	37.8	26.8	47.2
	MIN	14.3	16.9	25.7	35.6	46.7	55.9	59.9	57.8	50.2	39.6	30.3	20.1	37.8
031 COPPER HARBOR FT WILKIN		23.7	26.5	34.6	46.5	60.5	68.1	74.8	74.1	65.7	53.9	39.3	28.8	49.7
	MEAN	16.7 9.7	18.2	26.6 18.6	38.1	49.7 38.8	57.5 46.8	64.7	65.0 55.9	57.4 49.0	46.4 38.9	33.6 27.8	22.7 16.6	41.4 33.0
032 CROSS VILLAGE 1 S	MIN MAX	25.3	27.2	37.1	49.5	62.5	70.6	75.5	74.2	66.6	55.4	41.4	30.6	51.3
USE CROSS VIBERGE I S	MEAN	17.6	17.7	27.4	39.6	51.5	60.4	65.9	65.0	57.6	46.7	34.7	24.4	42.4
	MIN	9.8	8.2	17.6	29.6	40.5	50.1	56.3	55.7	48.6	38.0	28.0	18.1	33.4
033 CRYSTAL FALLS 6 NE	MAX	20.8	26.3	36.5	50.5	65.8	74.0	78.6	75.9	66.2	53.7	37.4	25.1	50.9
	MEAN MIN	9.4 -2.1	13.7	24.4 12.2	38.3	51.7 37.6	60.5 47.0	65.2	63.1 50.3	54.1 41.9	43.0	29.2	15.8 6.4	39.0 27.1
034 DEARBORN	MAX	33.2	36.6	46.8	59.6	72.3	81.3	85.7	84.0	76.6	64.0	50.4	38.4	60.7
	MEAN	24.7	27.4	36.8	48.2	59.8	69.1	73.7	72.1	64.4	52.4	41.3	30.3	50.0
	MIN	16.1	18.2	26.8	36.8	47.3	56.9	61.6	60.2	52.1	40.7	32.1	22.1	39.2
035 DETOUR VILLAGE	MAX	23.7	25.7	34.2	46.4	60.0	69.4	75.2	73.8	64.6	52.8	40.9	30.2	49.7
	MEAN MIN	15.3	16.3	25.3 16.3	38.0	50.4	59.8 50.1	65.9	65.2 56.6	56.8 49.0	45.5 38.1	34.8 28.6	23.3	41.4 33.0
036 DETROIT CITY AP	MAX	32.9	35.9	46.2	58.7	71.7	80.1	84.5	82.1	74.6	62.2	49.3	37.8	59.7
	MEAN	26.4	28.9	37.8	49.0	61.2	70.2	75.0	73.2	65.5	53.8	42.5	31.6	51.3
	MIN	19.8	21.8	29.4	39.3	50.7	60.3	65.5	64.2	56.3	45.3	35.6	25.4	42.8
037 DETROIT METRO AP	MAX	31.1	34.4	45.2	57.8	70.2	79.0	83.4	81.4	73.7	61.2	47.8	35.9	58.4
	MEAN MIN	24.5 17.8	27.2	36.9 28.5	48.1	59.8 49.4	69.0 58.9	73.5	71.8 62.2	63.9 54.1	51.9 42.5	40.7	29.6 23.4	49.7 41.0
039 DOWAGIAC 1 W	MAX	31.2	35.0	45.5	57.7	69.8	79.1	83.1	80.9	73.8	62.0	47.8	36.0	58.5
	MEAN	22.8	25.9	35.7	46.9	58.2	67.4	71.3	69.2	61.7	50.4	38.9	28.2	48.1
	MIN	14.4	16.7	25.9	36.1	46.5	55.6	59.5	57.4	49.5	38.8	30.0	20.4	37.6
040 DUNBAR FOREST EXP STN	MAX	21.7	24.4	33.9	47.2	62.9	70.8	75.8	73.6	64.7	52.9	39.1	27.2	49.5
	MEAN	11.8	13.2	23.2 12.5	36.9 26.5	50.3 37.6	58.6 46.4	64.0 52.2	63.0 52.4	54.9 45.0	43.9	31.9 24.6	19.4 11.5	39.3 29.0
041 EAST JORDAN	MIN MAX	28.8	32.0	41.6	55.0	69.3	77.4	81.6	79.2	71.5	60.1	45.1	33.5	56.3
off Bibl ockbin	MEAN	20.6	21.8	30.6	42.7	54.7	63.1	67.9	66.1	58.7	48.6	36.8	26.4	44.8
	MIN	12.3	11.5	19.6	30.4	40.1	48.8	54.2	52.9	45.9	37.1	28.5	19.3	33.4
042 EAST LANSING 4 S	MAX	28.7	32.0	42.8	55.6	68.4	77.8	81.8	79.7	72.2	59.9	45.7	33.7	56.5
	MEAN MIN	21.0	23.5 14.9	33.5 24.1	45.2 34.8	57.0 45.6	66.4 54.9	70.4	68.4 57.0	60.7 49.1	49.2 38.4	37.6 29.5	26.6 19.5	46.6 36.7
043 EAST TAWAS	MAX	28.8	31.0	40.1	52.2	65.8	74.7	79.9	77.4	70.2	57.8	44.6	33.7	54.7
	MEAN	21.0	22.5	31.4	42.9	54.7	63.6	68.9	67.3	60.1	48.9	37.9	27.0	45.5
	MIN	13.2	13.9	22.7	33.6	43.5	52.5	57.8	57.2	49.9	40.0	31.1	20.3	36.3
045 EAU CLAIRE 4 NE	MAX	31.1	35.5	46.8	59.3	71.4	80.3	84.0	81.5	73.9	61.9	47.9	35.6	59.1
	MEAN MIN	24.2 17.2	27.9 20.2	37.8 28.7	48.8	60.2 49.0	69.3 58.3	73.5	71.6 61.6	64.2 54.4	52.8 43.7	40.7 33.4	29.2	50.0 40.9
046 ESCANABA	MAX	25.2	27.7	35.8	46.1	59.6	70.0	76.0	74.6	66.5	54.5	41.5	30.3	50.7
	MEAN	16.1	17.8	26.8	38.2	51.0	60.7	66.6	65.6	57.5	46.7	34.3	22.6	42.0
	MIN	7.0	7.9	17.8	30.2	42.3	51.3	57.1	56.5	48.5	38.9	27.0	14.9	33.3
047 ESSEXVILLE	MAX	28.2	30.6	40.5	53.8	67.1	76.8	81.5	79.0	70.9	58.6	45.0	33.3	55.4
	MEAN MIN	21.0 13.8	23.0 15.4	32.5 24.4	44.8 35.7	57.4 47.6	66.8 56.8	71.5	69.4 59.7	61.4 51.8	49.9	38.3 31.5	27.2 21.0	46.9 38.4
048 EVART	MAX	27.0	30.6	40.6	54.3	67.9	76.4	80.8	78.1	69.8	57.6	43.3	32.0	54.9
	MEAN	17.7	20.0	29.6	42.5	54.4	63.1	67.6	65.5	57.3	45.6	34.4	23.9	43.5
	MIN	8.4	9.3	18.5	30.7	40.9	49.8	54.4	52.8	44.7	33.5	25.5	15.7	32.0
049 FAYETTE 4 SW	MAX	24.1	27.2	35.8	47.7	60.9	69.2	74.6	73.5	65.4	54.3	41.0	29.5	50.3
	MEAN MIN	17.9 11.6	20.7 14.1	29.2 22.6	40.4 33.0	52.4 43.8	61.0 52.8	67.1 59.6	66.5 59.5	58.9 52.4	48.4	36.2 31.3	24.3 19.0	43.6 36.8
050 FLINT BISHOP INTL AP	MAX	29.2	32.3	43.1	56.2	69.0	77.7	82.0	79.5	71.9	59.7	46.3	34.2	56.8
	MEAN	21.3	23.8	33.7	45.4	57.1	66.2	70.6	68.5	60.7	49.2	38.1	26.7	46.8
050 ===================================	MIN	13.3	15.3	24.3	34.6	45.2	54.6	59.1	57.4	49.4	38.6	29.8	19.1	36.7
052 FRANKFORT 2 NE	MAX MEAN	28.4	31.0 24.3	39.9 32.1	51.8	64.8 54.7	73.5 63.4	78.1	76.2 67.7	68.7 60.4	57.5 49.9	44.0 38.2	32.8 27.6	53.9 46.1
	MEAN	16.8	17.5	24.3	34.3	44.5	53.4	59.0	59.2	52.1	49.9	32.4	27.6	38.2
053 GAYLORD	MAX	25.2	29.0	39.4	53.4	67.8	76.1	80.0	77.3	68.3	56.4	41.3	29.8	53.7
	MEAN	17.4	19.6	28.9	41.5	54.4	63.1	67.5	65.6	57.5	46.6	34.1	23.0	43.3
054 653 7555	MIN	9.6	10.2	18.3	29.5	41.0	50.1	55.0	53.9	46.7	36.8	26.8	16.2	32.8
054 GLADWIN	MAX MEAN	27.3 18.3	30.5	40.9 30.4	54.6 42.8	68.7 55.4	77.4 64.4	82.1	79.5 66.8	71.0 58.4	58.9 46.8	44.2 35.4	32.5 24.7	55.6 44.4
	MEAN			19.8	31.0	42.1		55.9		45.8	34.7		16.9	33.2
	,							1					,	

## United States Climate Normals 1971-2000 60 7 40 77 J F M A M J J A S O N D

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

							TEME	PERATU	RE NO	RMALS	Degree	s Fahrer	heit)		
No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
055	GRAND HAVEN FIRE DEPT	MAX	29.8	32.8	42.5	54.6	66.5	75.3	79.3	77.9	71.0	59.3	45.8	34.7	55.8
		MEAN	24.2	26.6	34.8	45.5	56.5	65.5	70.4	69.2	62.1	51.2	39.6	29.3	47.9
057	GRAND MARAIS 2 E	MIN	18.5	20.3	27.0 38.5	36.3	46.5	55.7 72.0	76.6	60.5 76.5	53.2	43.1	33.3	23.8	40.0 52.6
057	GRAND MARAIS 2 E	MAX MEAN	18.4	29.3	28.1	39.2	50.4	58.8	63.9	64.3	57.2	46.5	34.3	23.6	42.1
		MIN	10.5	11.0	17.6	27.9	37.2	45.5	51.1	52.1	46.0	36.4	26.8	16.4	31.5
058	GRAND RAPIDS INTL AP	MAX	29.3	32.6	43.3	56.6	69.6	78.4	82.3	79.7	71.7	59.6	45.5	33.7	56.9
		MEAN	22.4	25.0	34.6	46.3	58.1	67.1	71.4	69.4	61.3	49.9	38.4	27.6	47.6
059	GRAYLING	MIN MAX	15.6 25.4	17.4 28.2	25.9	36.1 52.1	46.6	55.8 75.8	60.5 79.9	59.0 77.3	51.0	40.2	31.2	21.4	38.4 53.3
035	GRAIDING	MEAN	16.0	17.2	26.7	40.1	52.8	62.1	66.5	64.3	56.0	44.9	33.5	22.3	41.9
		MIN	6.5	6.2	15.1	28.1	38.9	48.4	53.1	51.2	43.6	33.8	25.1	14.5	30.4
060	GREENVILLE 2 NNE	MAX	29.0	32.9	43.7	57.7	70.1	78.8	82.8	80.4	72.7	60.7	45.9	33.7	57.4
		MEAN MIN	21.0 12.9	23.9	33.4	45.6 33.4	57.2 44.2	66.0 53.2	70.1	68.2 56.0	60.4 48.1	49.3	37.3 28.6	26.1 18.5	46.5 35.7
061	GROSSE POINTE FARMS	MAX	31.7	34.7	44.5	57.0	69.6	78.9	83.3	80.8	74.1	61.5	48.6	36.6	58.4
""		MEAN	25.3	27.7	36.4	47.6	59.4	68.7	73.6	71.8	65.0	53.2	41.8	30.7	50.1
		MIN	18.8	20.7	28.3	38.1	49.1	58.5	63.9	62.8	55.8	44.9	34.9	24.8	41.7
062	GULL LAKE BIOL STA	MAX	31.5	35.9	47.4	60.7	73.4	82.0	85.5	82.9	75.6	63.3	48.4	35.9	60.2
		MEAN	23.7	26.7	36.8	48.5	60.4	69.4	73.5	71.5	64.2	52.7	40.5	28.9	49.7
063	HALE LOUD DAM	MIN MAX	15.8 26.4	17.4 28.6	26.1 39.2	36.3	47.3 65.0	56.7 74.5	79.4	60.1 76.5	52.7 68.4	42.0	32.6	21.9	39.2 53.4
003	HALE LOOD DAN	MEAN	17.6	18.7	29.1	41.5	53.4	62.9	67.8	65.7	58.0	46.8	35.0	24.0	43.4
		MIN	8.8	8.8	18.9	30.8	41.8	51.2	56.2	54.9	47.5	37.0	27.5	16.9	33.4
064	HARBOR BEACH 1 SSE	MAX	27.7	29.5	37.8	48.9	61.2	70.4	76.1	74.8	68.3	56.7	44.1	33.0	52.4
		MEAN	21.0	22.4	30.7	41.3	52.7	61.9	67.6	66.4	59.6	48.6	37.6	27.1	44.7
000	HADDIONILLE O MAIE	MIN	14.2	15.3	23.6	33.7	44.2	53.3	59.1	58.0	50.9	40.4	31.1	21.2	37.1
066	HARRISVILLE 2 NNE	MAX MEAN	27.8 19.6	29.3	38.0 29.5	49.1	60.5 51.0	70.8 60.9	76.5	75.0 65.5	68.1 58.8	56.2 47.4	42.8 35.7	32.6 25.4	52.2 43.5
		MIN	11.4	11.8	20.9	31.4	41.5	50.9	57.2	56.0	49.5	38.5	28.5	18.1	34.6
067	HART	MAX	27.9	30.4	40.1	52.6	65.7	74.7	79.3	76.9	69.2	57.2	43.9	32.7	54.2
		MEAN	21.2	22.7	31.6	43.2	54.9	64.2	68.9	67.2	59.6	48.2	36.9	26.8	45.5
		MIN	14.5	14.9	23.0	33.7	44.1	53.7	58.5	57.4	49.9	39.2	29.9	20.8	36.6
068	HASTINGS	MAX MEAN	30.3	34.0 24.4	44.4 33.8	57.0 45.4	69.7 57.2	78.8 66.5	82.7 70.6	80.6 68.6	73.1 60.7	61.0 49.3	46.8	35.0 27.4	57.8 47.0
		MIN	13.7	14.7	23.2	33.7	44.7	54.2	58.5	56.5	48.3	37.6	29.8	19.8	36.2
069	HERMAN	MAX	20.1	26.1	36.2	50.3	65.5	72.9	76.6	74.1	65.2	53.1	36.2	24.3	50.1
		MEAN	11.8	15.9	25.2	38.3	52.1	60.2	64.5	62.7	54.4	43.6	29.1	17.1	39.6
		MIN	3.5	5.7	14.2	26.2	38.7	47.4	52.4	51.2	43.5	34.0	22.0	9.8	29.1
070	HESPERIA 4 WNW	MAX	29.3	32.5 22.6	42.3	55.2 43.3	68.1	76.6 63.6	81.1	78.9 66.5	71.0 58.6	59.1	45.6	34.3	56.2 45.1
		MEAN MIN	20.7 12.1	12.7	31.4 20.5	31.3	54.8 41.4	50.5	68.4 55.7	54.1	46.2	47.7 36.2	36.6 27.5	26.4 18.5	33.9
071	HILLSDALE	MAX	28.7	32.5	43.2	56.0	68.3	77.7	81.7	79.6	72.3	60.0	45.9	33.6	56.6
		MEAN	20.6	23.4	33.6	45.3	56.9	66.4	70.4	68.1	60.7	49.0	37.5	26.3	46.5
		MIN	12.5	14.2	23.9	34.5	45.5	55.0	59.0	56.5	49.1	38.0	29.1	19.0	36.4
072	HOLLAND	MAX	31.1	34.6	44.8	56.7	69.2	78.5	82.5	80.9	73.0	60.7	47.4	35.9	57.9
		MEAN MIN	24.4 17.6	26.9 19.1	35.7 26.6	46.4 36.1	57.8 46.3	66.9 55.2	71.4	70.0 59.0	62.4 51.8	51.2 41.6	40.0 32.6	29.4 22.9	48.5 39.1
073	HOUGHTON CO AP (HANCOCK		21.6	24.8	33.7	47.1	62.3	70.8	75.9	73.6	63.3	51.6	36.8	26.0	49.0
	, , , , , , , , , , , , , , , , , , , ,	MEAN	14.6	17.0	25.7	38.3	51.6	60.1	65.6	64.2	54.8	44.0	31.0	19.9	40.6
		MIN	7.6	9.1	17.6	29.5	40.8	49.3	55.2	54.7	46.2	36.4	25.1	13.8	32.1
074	HOUGHTON LAKE 6 WSW	MAX	26.2	29.6	39.8	53.1	67.3	76.1	80.8	77.9	69.2	56.7	42.6	31.0	54.2
		MEAN MIN	16.9 7.5	18.7 7.7	27.9 15.9	40.6	52.9 38.5	61.7 47.3	66.1 51.4	63.4 48.9	55.2 41.2	44.6 32.5	33.9 25.1	23.0 14.9	42.1
075	HOUGHTON LAKE ROSCOMMON		25.9	29.3	39.4	53.0	67.2	75.5	80.0	77.1	68.3	56.0	41.9	30.5	53.7
0,3	noodiron Ente Robestinon	MEAN	17.8	19.9	29.3	41.8	53.9	62.2	66.7	64.6	56.8	46.1	34.8	23.7	43.1
		MIN	9.7		19.2	30.6	40.7	48.9	53.4	52.2	45.3	36.2	27.6	16.8	32.6
078	IONIA 2 SSW	MAX	28.0	31.2	42.1	55.2	68.8	78.0	82.0	79.4	71.7	59.0	44.7	32.9	56.1
		MEAN	20.8	23.1	33.2	45.1	57.7	66.8	71.0	68.9	61.1	49.2	37.3	26.5	46.7
079	IRON MTN-KINGSFORD WWTP	MIN	13.6 23.6	15.0 28.8	24.3	34.9	46.6	55.5 76.3	59.9	58.3 78.0	50.5	39.3	29.9	20.1	37.3 53.3
0,9	THOM PITTY RETRIGOPORD WWIP	MEAN	12.1	16.7	27.5	41.1	54.4	63.4	67.9	65.9	56.8	45.2	31.2	18.4	41.7
		MIN	0.6	4.5	16.1	28.9	40.9	50.4	55.4	53.8	44.9	34.0	22.4	9.0	30.1
080	IRONWOOD	MAX	19.3	25.6	35.6	49.7	64.2	72.5	76.5	74.5	65.0	53.0	36.4	24.0	49.7
		MEAN	9.5	14.7	25.0	39.0	52.4	61.2	65.6	63.5	54.7	43.6	28.9	15.7	39.5
001	TACKSON CO AD	MIN	-0.3	3.7	14.3	28.2	40.6	49.8	54.6	52.5	44.3	34.2	21.4	7.3	29.2
OST	JACKSON CO AP	MAX MEAN	29.6	33.2 25.0	44.4 35.0	57.4 46.6	69.7 57.9	79.1 67.2	82.7	80.3 69.1	72.7 61.4	60.3	46.8 38.7	34.4 27.4	57.6 47.6
		MIN		16.7		35.8	46.1		59.8		50.1	39.4	30.5	20.3	37.7
												-			

# United States Climate Normals 1971-2000 00 -7 10

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

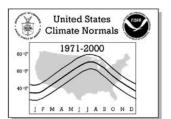
No.	Station Name	Element	JAN	FEB	MAR	APR	TEMP May	PERATU JUN	RE NOF JUL	RMALS AUG	(Degree: SEP	s Fahrer OCT	nheit) NOV	DEC	ANNUAL
082	KALAMAZOO STATE HOSPITA	MAX	31.6	36.2	47.1	60.1	72.0	80.6	84.2	81.9	74.5	62.8	48.3	36.3	59.6
		MEAN	24.3	28.1	37.3	49.0	60.5	69.3	73.2	71.2	63.8	52.7	40.5	29.3	49.9
		MIN	17.0	19.9	27.5	37.8	48.9	57.9	62.1	60.5	53.1	42.5	32.7	22.3	40.2
083	KALKASKA	MAX	24.4	27.5	37.6	51.1	65.3	74.5	77.9	76.0	67.2	55.3	40.8	29.8	52.3
		MEAN MIN	16.2 7.9	17.2 6.8	26.7 15.7	40.0	53.0 40.6	62.4 50.3	66.0 54.0	64.3 52.5	56.2 45.2	45.6 35.9	33.9 26.9	23.1 16.4	42.1 31.8
0.85	KENTON	MAX	23.4	29.2	39.2	53.7	68.3	75.9	79.4	76.5	67.0	55.0	39.5	26.7	52.8
003	KENTON	MEAN	12.2	16.7	26.5	39.8	53.0	61.5	65.5	63.6	55.1	44.3	31.1	17.9	40.6
		MIN	1.0	4.2	13.8	25.8	37.6	47.1	51.5	50.7	43.1	33.6	22.7	9.0	28.3
086	LAKE CITY EXP FARM	MAX	25.9	29.3	39.0	52.6	66.7	75.5	79.9	77.2	68.6	56.3	42.1	30.6	53.6
		MEAN	16.9	18.7	28.1	41.3	53.5	62.4	66.8	64.7	56.4	45.3	33.8	22.7	42.6
		MIN	7.9	8.1	17.2	29.9	40.3	49.3	53.6	52.1	44.1	34.3	25.5	14.7	31.4
087	LANSING CAPITAL CITY AP		29.4	32.6	43.5	56.6	69.4	78.1	82.1	79.7	72.0	59.8	46.0	34.1	56.9
		MEAN MIN	21.6 13.9	24.0 15.4	33.9 24.3	45.5 34.5	57.1 44.8	66.2 54.3	70.3	68.4 57.0	60.5 48.9	49.2 38.6	38.0 30.1	26.9 19.7	46.8 36.7
088	LAPEER WWTP	MAX	28.5	31.4	42.3	55.0	67.9	77.1	81.6	79.1	71.3	59.2	45.5	33.9	56.1
000	BILL BILL WILL	MEAN	20.8	22.6	32.3	44.1	56.3	65.5	70.1	67.7	60.0	48.6	37.5	26.9	46.0
		MIN	13.0	13.8	22.3	33.1	44.7	53.8	58.6	56.2	48.7	38.0	29.4	19.8	36.0
091	LUDINGTON 4 SE	MAX	29.0	33.5	43.1	56.6	68.9	76.9	81.4	79.3	70.8	58.9	44.8	33.3	56.4
		MEAN	22.3	25.5	33.3	44.8	55.7	64.5	69.4	68.0	60.0	49.4	37.7	27.1	46.5
		MIN	15.6	17.4	23.5	33.0	42.5	52.0	57.4	56.6	49.2	39.8	30.6	20.8	36.5
092	LUPTON 1 S	MAX	26.9	30.8	40.9	54.7	68.5	77.1	81.5	78.9	70.5	57.9	43.6	31.6	55.2
		MEAN MIN	15.8 4.7	18.2 5.5	28.0 15.0	41.1 27.5	53.3 38.1	62.1 47.0	66.6 51.7	64.3 49.7	56.4 42.2	44.9 31.9	33.6 23.6	22.4	42.2 29.2
U 0 3	MANISTEE 3 SE	MAX	30.0	33.3	42.3	55.0	67.4	76.4	80.7	78.5	71.4	59.9	46.0	34.3	56.3
093	MANISIEE 3 SE	MEAN	23.6	25.7	33.5	44.7	55.7	64.6	69.5	68.1	61.3	50.9	39.3	28.5	47.1
		MIN	17.1	18.0	24.6	34.3	43.9	52.7	58.3	57.7	51.2	41.9	32.6	22.7	37.9
094	MANISTIQUE	MAX	24.5	26.9	34.9	46.3	58.4	67.6	73.3	73.0	64.5	53.1	40.5	29.6	49.4
		MEAN	15.6	17.8	26.4	37.9	49.4	58.3	64.3	63.9	55.8	45.1	33.4	22.1	40.8
		MIN	6.7	8.7	17.8	29.4	40.3	49.0	55.2	54.8	47.0	37.1	26.3	14.5	32.2
095	MAPLE CITY	MAX	28.5	32.0	41.1	54.0	67.7	77.2	81.3	79.1	70.7	59.0	44.6	33.2	55.7
		MEAN	21.8	23.7	31.6	42.9	54.7	64.2	69.2	67.7	60.1	49.5	37.6	27.1	45.8
006	MARQUETTE	MIN MAX	15.1 25.1	15.3 28.8	22.0	31.8	41.6	51.1 69.7	57.0 75.6	56.2 74.4	49.4 65.9	40.0 54.7	30.6	21.0	35.9 50.8
090	MARQUEITE	MEAN	18.1	21.2	29.6	40.4	51.5	60.2	66.4	65.8	57.7	47.1	34.4	23.3	43.0
		MIN	11.0	13.6	22.3	32.7	42.0	50.7	57.1	57.1	49.4	39.5	28.4	17.0	35.1
097	MARQUETTE CO AP	MAX	19.7	24.2	33.1	45.8	61.5	70.3	75.2	72.6	63.2	50.9	35.4	24.1	48.0
		MEAN	11.5	14.8	23.7	36.4	50.3	59.3	64.4	62.3	53.5	42.5	28.9	17.2	38.7
		MIN	3.3	5.4	14.3	26.9	39.1	48.3	53.5	52.0	43.8	34.0	22.4	10.2	29.4
098	MIDLAND	MAX	29.5	32.9	43.8	57.5	70.8	79.7	83.8	81.1	73.3	60.9	46.3	34.3	57.8
		MEAN	22.9	25.3	34.8	46.9	59.0	68.3	72.7	70.5	62.7	51.5	39.5	28.4	48.5
naa	MILAN 4 ESE	MIN MAX	16.2	17.7 34.2	25.8 46.0	36.2 59.1	47.2	56.8 80.1	61.5	59.9 80.7	52.1 74.2	42.1 62.7	32.7 48.2	22.4 35.3	39.2 58.8
099	MIDAN 4 ESE	MEAN	22.9	25.4	35.9	47.3	58.5	67.3	70.9	68.6	61.9	50.7	39.4	28.0	48.1
		MIN	15.0	16.5	25.7	35.4	45.7	54.5	58.3	56.4	49.6	38.6	30.5	20.6	37.2
100	MILFORD GM PROVING GR	MAX	29.9	32.9	43.3	55.9	68.4	77.2	81.7	79.5	71.6	59.3	46.1	34.4	56.7
		MEAN	22.1	24.5	33.9	45.6	57.5	66.6	71.0	69.1	61.4	49.8	38.4	27.2	47.3
		MIN	14.3	16.0	24.5	35.2	46.5	56.0	60.3	58.6	51.2	40.2	30.7	20.0	37.8
102	MIO HYDRO PLANT	MAX	27.2	30.2	40.3	53.6	67.3	76.6	81.7	78.8	69.8	57.6	43.6	32.1	54.9
		MEAN	17.3 7.3	18.7	28.6 16.8	41.7	53.9 40.5	63.4 50.1	68.3 54.9	65.7 52.6	57.3 44.8	46.0 34.4	34.8 26.0	23.7 15.2	43.3 31.6
103	MONROE	MIN MAX	30.9	7.2	43.4	55.5	68.0	77.8	82.4	80.4	73.2	60.6	47.3	36.0	57.4
103	HONKOE	MEAN	24.2	26.1	35.2	46.2	58.7	68.4	73.1	71.0	63.4	51.3	40.0	29.8	49.0
		MIN	17.4	18.4	26.9	36.9	49.3	58.9	63.7	61.5	53.6	42.0	32.6	23.5	40.4
104	MONTAGUE 4 NW	MAX	29.3	32.0	41.9	54.4	66.5	74.8	79.1	77.2	69.7	58.5	45.1	34.0	55.2
		MEAN	23.0	24.9	33.3	43.9	54.8	63.6	68.5	67.2	60.1	49.7	38.6	28.2	46.3
		MIN	16.6	17.7	24.6	33.4	43.0	52.3	57.9	57.2	50.4	40.8	32.0	22.3	37.4
106	MOUNT CLEMENS ANG BASE	MAX	30.7	33.1	43.1	55.3	68.0	77.4	81.8	79.3	71.9	59.8	47.0	35.4	56.9
		MEAN	24.4	26.2	35.1	45.8	57.5	67.0	71.9	69.8	62.5	51.2	40.2	29.5	48.4
107	MT PLEASANT UNIV	MIN MAX	18.0 27.9	19.2	27.1 41.3	36.3 54.9	47.0 68.5	56.6 77.8	61.9 82.2	60.3 79.6	53.0 71.2	42.5	33.3	23.5	39.9 55.9
107	TI LUBBOANT ONLY	MEAN	20.7	22.8	32.0	44.4	56.6	66.2	70.6	68.4	60.1	48.8	37.1	26.5	46.2
		MIN	13.5	14.7	22.7	33.8	44.7	54.5	58.9	57.1	48.9	38.8		19.9	36.4
108	MUNISING	MAX	22.5	25.5	33.8	45.9	60.0	68.0	73.1	71.7	62.8	51.8	38.2	27.3	48.4
		MEAN	15.8	18.1	26.5	37.9	49.9	58.1	63.8	63.1	55.4	44.7	32.7	21.5	40.6
		MIN	9.1	10.7	19.2	29.8	39.7	48.2	54.4	54.4	47.9	37.6	27.1	15.7	32.8
109	MUSKEGON COUNTY AP	MAX	29.8	32.5	42.5	54.6	67.0	75.6	80.0	78.1	70.3	58.7	45.6	34.6	55.8
		MEAN		25.4	34.0	44.9	56.1	64.9	69.9	68.5	60.5	49.7	38.7	28.6	47.1
		MIN	1/.1	18.3	25.4	35.1	45.1	54.2	59.8	58.8	50.7	40.6	31.8	22.6	38.3

## United States Climate Normals 1971-2000 60 -7 40 -7 J F M A M J J A S O N D

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

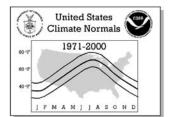
Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1971-2000

MAIN   16.0   18.8   27.1   39.9   53.2   60.9   65.9   64.9   56.6   64.9   33.6   27.7   42.0   13.0							TEME	FRATII	RE NO	2 IAMS	Degree	s Fahrer	nheit)		
MEAN   16.0   18.8   27.1   39.9   53.2   60.9   65.9   64.9   56.6   65.9   33.6   21.7   42.1	No. Station Name	Element	JAN	FEB	MAR	APR					` •		,	DEC	ANNUAL
MIN   8.0   9.8   17.6   29.2   40.3   48.2   53.5   53.2   45.7   6.4   62.3   24.6   33.2   53.1   13.0	110 NEWBERRY 3 S	MAX	23.9	27.8	36.5	50.6	66.0	73.6	78.3	76.5	67.5	55.4	40.9	28.8	52.2
131 OLD MISSION 3 SSM   MAX   27, 4   29, 1   38, 0   50, 8   64, 2   73, 6   78, 5   76, 4   68, 7   56, 6   63, 3   32, 5   53, 2   14   14   14   14   15   12, 3   19, 4   29, 8   40, 5   51, 6   64, 7   76, 6   65, 6   63, 3   32, 5   53, 2   14   14   14   14   14   14   14		MEAN	16.0	18.8	27.1	39.9	53.2	60.9	65.9	64.9	56.6	45.9	33.6	21.7	42.0
Mean   1.1   12.3   10.7   28.7   40.3   52.1   61.7   67.0   65.6   58.2   47.0   56.0   25.9   43.5   31.1   12.3   13.1   12.3   13.1   41.4   29.8   40.0   49.7   55.6   45.4   47.6   4												1			31.9
HIA   13.1   12.3   19.4   29.8   40.0   49.7   55.4   54.7   47.6   37.4   28.6   19.3   33.5     14 ONAMAY STATE PARK   MAX   MA	113 OLD MISSION 3 SSW					1			ı			1			I I
14 ONAMAY STATE PARK   MAX   27,9   31,7   41,4   54,7   69,4   77,8   82,3   79,7   71,4   59,7   44,5   32,8   56,1						1			ı			1			I I
MIN   10.5   10.7   19.0   30.6   41.5   50.5   55.6   54.3   47.3   38.4   29.3   18.2   33.5   15.5   1	114 ONAWAY STATE PARK														56.1
15 ONTONAGON 6 SE   MAX   23.8   29.6   39.2   52.7   67.1   74.9   79.1   77.6   68.2   63.7   39.8   28.0   53.1															45.0
MRAN   15.4   18.9   28.4   41.4   53.7   61.9   66.7   65.4   57.1   46.7   32.8   20.9   42.4	115 01770171 0017 6 07											1			33.8
MIN   6.9   8.2   17.5   30.1   40.3   48.9   54.2   53.2   45.9   36.6   25.8   13.7   31.6   16 OWOSSO WWTP   MAX   21.2   23.5   33.4   44.8   56.5   65.6   66.9   67.7   60.5   49.3   37.9   26.8   46.8   37.8   31.8   44.8   56.5   56.6   66.9   67.7   60.5   49.3   37.9   26.8   46.8   36.6   23.6   36.8   3	115 ONTONAGON 6 SE					1			1						l I
116 OWOSSO WWTP						1			ı			1			31.8
MIN   12,7   15,2   24,1   33,8   44,2   53,6   58,1   56,2   49,1   38,9   30,1   20,0   36,4   31,8   34,2   37,8   34,1   36,1   37,7   79,2   76,7   55,5   58,4   1,8   30,7   53,5   36	116 OWOSSO WWTP		28.7									59.6			56.4
118 PELLSTON RGNL AP   MAX   25,7   28,4   37,8   51,4   66,1   74,7   79,2   76,7   67,5   55,8   41,8   30,7   53,6   41,8   MEAN   8,5   7,6   17,4   29,6   40,3   49,3   54,6   63,6   46,0   34,9   23,8   42,6   42,8   43,8   42,8   43,8   42,8   43,8   4						1									46.4
MEAN N. 17.1 18.0 27.6 40.5 53.2 62.0 66.9 64.9 56.6 46.0 34.9 23.8 42.5 119 PETOSKEY MAX 26.2 27.5 36.6 47.8 59.6 69.4 74.9 73.6 65.6 55.6 42.3 31.6 51.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 1	110 DELLOCAN DONE AD											1			
MIN   MEAN   26.2   27.5   36.6   40.3   49.3   54.6   53.0   45.6   36.1   28.0   16.8   32.2   28.0   19.8   28.0   27.5   36.6   47.8   59.6   59.6   47.8   59.6   56.6   42.3   31.6   51.6   51.6   42.3   31.6   51.6   47.6   59.6   48.0   36.4   42.5   43.7   4	118 PELLSION RGNL AP					1			ı			1			I I
MEAN   14.0   12.1   21.0   32.5   34.2   51.4   61.3   67.1   65.8   58.6   68.0   30.6   26.4   43.7						1			ı			1			32.2
MIN   14,0   12,1   21,0   32,5   43,2   53,1   59,3   58,0   50,6   40,4   30,5   21,2   36,5   36,0   10,2   10,5   1	119 PETOSKEY	MAX		27.5	36.6	47.8	59.6	69.4	74.9	73.6	66.6	55.6	42.3	31.6	51.0
120 PONTIAC STATE HOSPITAL   MAX   29,8   33.7   44.6   57.6   69.9   78.5   82.3   80.1   72.7   60.1   46.3   34.1   57.5   75.9   75.0						1						1			43.7
MEAN   22.9   25.8   35.3   47.0   58.7   67.7   71.9   70.1   62.7   50.9   39.2   27.8   84.2	100 DOMESTAG GERRER HOGDER														
121 PORT HURON	120 PONTIAC STATE HOSPIT					1			ı			1			I I
MEAN   15.1   16.8   24.7   33.5   34.7   56.7   66.5   72.2   70.9   63.3   51.0   39.5   28.4   47.9   37.3   49.6   63.1   72.7   78.0   76.1   68.3   55.9   42.8   31.5   52.6   31.0   39.5   38.6   41.6   32.1   31.4   39.0						1			ı			1			39.1
MIN   15.1   16.8   24.7   35.3   46.7   56.3   62.5   61.3   53.6   41.6   32.1   21.4   39.0	121 PORT HURON	MAX	30.4	32.6	42.3	54.1	66.7	76.7	81.9	80.4	72.9	60.4	46.9	35.4	56.7
124 ROGERS CITY												1			47.9
MEAN   18.7   19.5   28.1   39.9   52.0   61.5   67.2   65.5   57.8   46.7   35.8   24.9   43.1	104 Pogppg grmv														39.0
MIN	124 ROGERS CITY					1			ı			1			
MEAN   14.3   17.1   26.6   39.9   51.9   59.6   64.3   62.8   53.7   43.0   31.8   20.7   40.5						1			ı			1			33.7
MIN	125 RUDYARD 4 N														51.2
126 SAGINAW CONSUMERS PWR C MAX   29.8   33.4   44.6   57.8   71.5   79.9   84.0   81.4   74.0   61.5   47.1   34.6   58.2   84.0   84.0   84.0   70.8   63.2   51.8   40.0   28.6   49.1   49.0   49.1   49.0   4						1									40.5
MEAN   MIN   16.9   18.7   26.9   36.9   48.0   57.5   62.0   60.2   52.4   42.0   32.8   22.5   39.7   39.7   39.8   39.5   49.1   39.8   39.5   3	106 01071111 00110711710														29.7
MIN	126 SAGINAW CONSUMERS PW					1			ı			1			
128 SAGINAW TRI STATE AP   MAX   27.9   30.7   41.3   55.0   68.4   77.5   81.9   78.9   70.9   58.8   44.8   33.0   55.8						1			1			1			39.7
MIN	128 SAGINAW TRI STATE AP	MAX		30.7	41.3	55.0	68.4	77.5	81.9	78.9	70.9	58.8	44.8	33.0	55.8
129 SAINT CHARLES						1						1			47.0
MEAN   21.0   22.8   33.0   45.5   57.7   66.4   70.7   68.1   60.5   48.9   37.4   26.9   46.6   46.6   45.5   46.8   45.5   46.8   45.5   54.1   58.2   56.1   48.2   37.4   28.9   19.6   36.0   46.8   45.5   46.8   59.7   69.3   75.2   74.3   65.6   53.7   40.9   30.4   50.2   50.1   46.8   59.7   69.3   75.2   74.3   65.6   53.7   40.9   30.4   50.2   50.1   46.8   59.7   69.3   75.2   74.3   65.6   53.7   40.9   30.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.2   50.1   40.4   50.8   50.2   50.1	100 GATNE GUARIEG														
MIN	129 SAINI CHARLES					1			ı			1			l I
MEAN MIN 12.2 11.9 20.3 31.9 42.8 52.9 59.6 59.7 51.6 41.6 31.5 20.7 36.4 47.7 36.2 25.6 43.3 31.9 42.8 52.9 59.6 59.7 51.6 41.6 31.5 20.7 36.4 41.6 31.5 20.8 31.6 41.6 20.8 41.6 51.1 40.4 30.8 20.8 35.3 45.4 41.6 41.6 41.6 41.6 41.6 41.6 41.6 41						1			ı			1			36.0
MIN   12.2   11.9   20.3   31.9   42.8   52.9   59.6   59.7   51.6   41.6   31.5   20.7   36.4	130 ST IGNACE MACKINAC B	R MAX	24.8	26.4	35.0	46.8	59.7	69.3	75.2	74.3	65.6	53.7	40.9	30.4	50.2
131 ST JAMES 2 S BEAVER IS MAX MEAN 19.4 19.8 28.0 39.5 51.1 60.2 66.2 65.8 58.2 47.7 36.3 26.2 43.2 MIN 13.1 12.2 20.2 30.9 40.8 50.0 56.7 57.2 50.1 40.4 30.8 20.8 35.3 132 ST JOHNS MAX 28.7 31.7 42.9 55.8 68.9 78.0 82.5 79.8 72.4 60.1 45.9 34.0 56.7 MIN 13.9 15.0 24.1 35.0 46.7 55.9 60.0 57.9 50.4 39.9 30.1 20.4 37.4 133 SANDUSKY MAX 28.7 31.2 41.1 53.6 67.6 76.8 81.4 79.1 71.6 59.1 45.5 33.9 55.8 MEAN 21.5 23.8 32.8 44.5 56.4 65.7 70.3 68.6 61.1 49.5 38.5 27.4 46.7 14.2 16.4 24.4 35.3 45.2 54.5 59.1 58.0 50.5 39.8 31.4 20.9 37.5 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 MEAN 13.2 15.6 24.9 38.4 51.3 58.6 63.9 63.3 54.8 44.4 32.4 20.2 40.1 13.6 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 13.7 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5						1						1			43.3
MEAN MIN 13.1 12.2 20.2 30.9 40.8 50.0 56.7 57.2 50.1 40.4 30.8 20.8 35.3 132 ST JOHNS MAX 28.7 31.7 42.9 55.8 68.9 78.0 82.5 79.8 72.4 60.1 45.9 34.0 56.7 MEAN 13.9 15.0 24.1 35.0 46.7 55.9 60.0 57.9 50.4 39.9 30.1 20.4 37.4 MIN 14.2 16.4 24.4 35.3 45.2 54.5 59.1 58.0 50.5 39.8 31.4 20.9 37.5 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 136 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 13.2 42.6 50.7 55.8 54.6 47.4 37.8 27.5 15.0 33.0 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5	121 CT TAMES 2 C DEAVED														
MIN 13.1 12.2 20.2 30.9 40.8 50.0 56.7 57.2 50.1 40.4 30.8 20.8 35.3 132 ST JOHNS MAX 28.7 31.7 42.9 55.8 68.9 78.0 82.5 79.8 72.4 60.1 45.9 34.0 56.7 MEAN 21.3 23.4 33.5 45.4 57.8 67.0 71.3 68.9 61.4 50.0 38.0 27.2 47.1 31.3 SANDUSKY MAX 28.7 31.2 41.1 53.6 67.6 76.8 81.4 79.1 71.6 59.1 45.5 33.9 55.8 MEAN 21.5 23.8 32.8 44.5 56.4 65.7 70.3 68.6 61.1 49.5 38.5 27.4 46.7 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 MIN 4.9 6.6 16.1 28.8 39.3 46.5 52.0 52.4 44.8 36.0 25.9 13.1 30.5 136 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 13.2 42.6 50.7 55.8 54.6 47.4 37.8 27.5 15.0 33.0 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5	131 SI UAMES 2 S BEAVER					l .						1			l I
MEAN MIN 13.9 15.0 24.1 35.0 46.7 55.9 60.0 57.9 50.4 39.9 30.1 20.4 37.4 133 SANDUSKY MAX 28.7 31.2 41.1 53.6 67.6 76.8 81.4 79.1 71.6 59.1 45.5 33.9 55.8 MEAN 21.5 23.8 32.8 44.5 56.4 65.7 70.3 68.6 61.1 49.5 38.5 27.4 46.7 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 MEAN 13.2 15.6 24.9 38.4 51.3 58.6 63.9 63.3 54.8 44.4 32.4 20.2 40.1 136 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 13.1 14.2 29.3 13.1 30.5 14.5 16.5 18.9 27.8 41.5 54.9 62.9 67.9 66.2 58.0 47.1 34.3 22.3 43.2 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5						1			1			1			35.3
MIN 13.9 15.0 24.1 35.0 46.7 55.9 60.0 57.9 50.4 39.9 30.1 20.4 37.4 133 SANDUSKY MAX 28.7 31.2 41.1 53.6 67.6 76.8 81.4 79.1 71.6 59.1 45.5 33.9 55.8 MEAN 21.5 23.8 32.8 44.5 56.4 65.7 70.3 68.6 61.1 49.5 38.5 27.4 46.7 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 MIN 4.9 6.6 16.1 28.8 39.3 46.5 52.0 52.4 44.8 36.0 25.9 13.1 30.5 136 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 MEAN 16.5 18.9 27.8 41.5 54.9 62.9 67.9 66.2 58.0 47.1 34.3 22.3 43.2 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5	132 ST JOHNS	MAX	28.7	31.7		55.8	68.9	78.0	82.5	79.8	72.4	60.1			56.7
133 SANDUSKY MAX MEAN 21.5 23.8 32.8 44.5 56.4 65.7 70.3 68.6 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 46.7 70.3 68.0 61.1 49.5 38.5 27.4 49.6 70.7 70.3 68.0 61.1 49.5 38.5 27.4 49.6 70.7 70.3 68.0 70.7 70.3 68.0 70.7 70.3 70.7 70.7						1						1			47.1
MEAN MIN 14.2 16.4 24.4 35.3 45.2 54.5 59.1 58.0 50.5 39.8 31.4 20.9 37.5 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 MEAN 13.2 15.6 24.9 38.4 51.3 58.6 63.9 63.3 54.8 44.4 32.4 20.2 40.1 49.6 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 51.4 20.9 13.1 30.5 14.8 14.9 6.6 16.1 14.5 18.9 27.8 14.5 54.9 62.9 67.9 66.2 58.0 47.1 34.3 22.3 43.2 13.7 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5	122 CANDIICKY														
MIN 14.2 16.4 24.4 35.3 45.2 54.5 59.1 58.0 50.5 39.8 31.4 20.9 37.5 134 SAULT STE MARIE AP MAX 21.5 24.5 33.6 48.0 63.2 70.7 75.7 74.1 64.8 52.8 38.9 27.2 49.6 13.2 15.6 24.9 38.4 51.3 58.6 63.9 63.3 54.8 44.4 32.4 20.2 40.1 13.2 15.6 24.9 38.4 51.3 58.6 63.9 63.3 54.8 44.4 32.4 20.2 40.1 13.6 SENEY WILDLIFE REFUGE MAX 25.5 29.1 38.3 51.7 67.2 75.1 80.0 77.7 68.5 56.3 41.0 29.6 53.3 14.0 29.0	133 SANDOSKI					1			1			1			46.7
MEAN MIN 4.9 6.6 16.1 28.8 39.3 46.5 52.0 52.4 44.8 36.0 25.9 13.1 30.5 136 SENEY WILDLIFE REFUGE MAX MEAN MIN 7.5 8.6 17.3 31.2 42.6 50.7 55.8 54.6 47.4 37.8 27.5 15.0 33.0 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5						1			1			1			37.5
MIN	134 SAULT STE MARIE AP	MAX				1						1			49.6
136 SENEY WILDLIFE REFUGE MAX MEAN 16.5 18.9 27.8 41.5 54.9 62.9 67.9 66.2 58.0 47.1 34.3 22.3 43.2 MIN 7.5 8.6 17.3 31.2 42.6 50.7 55.8 54.6 47.4 37.8 27.5 15.0 33.0 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5						1						1			40.1
MEAN 16.5 18.9 27.8 41.5 54.9 62.9 67.9 66.2 58.0 47.1 34.3 22.3 43.2 MIN 7.5 8.6 17.3 31.2 42.6 50.7 55.8 54.6 47.4 37.8 27.5 15.0 33.0 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5	136 SENEV WILDLIED DEDIC														
MIN 7.5 8.6 17.3 31.2 42.6 50.7 55.8 54.6 47.4 37.8 27.5 15.0 33.0 137 SOUTH HAVEN MAX 31.5 34.7 44.1 54.6 65.5 74.4 78.4 77.6 71.7 61.2 48.0 36.2 56.5	130 SENET MIDDLIFE KERUG					1			1			1			43.2
137 SOUTH HAVEN   MAX   31.5 34.7 44.1   54.6 65.5 74.4   78.4 77.6 71.7   61.2 48.0 36.2   56.5						1			1			1			33.0
MEANT 125 0 20 6 27 0 1/6 7 57 2 66 5 171 4 70 6 64 0 152 0 40 1 21 1 1 40 6	137 SOUTH HAVEN					1						1			56.5
		MEAN	25.8	28.6	37.0	46.7	57.2	66.5	71.4	70.6	64.0	53.8	42.1	31.1	49.6
	120 CTAMPATICH 2 CCT														42.6
	139 SIAMBAUGH 2 SSE					1			1			1			49.9 37.8
						1			1			1			25.7
140 STANDISH 5 SW   MAX   28.0 30.7 40.5   54.0 67.4 76.7   81.4 78.7 70.8   58.6 44.6 33.1   55.4	140 STANDISH 5 SW					1						1			55.4
						1						1			44.3
MIN   9.6 10.9 20.4   31.0 41.3 50.9   55.2 52.9 45.4   35.4 27.8 17.9   33.2		MIN	9.6	10.9	20.4	31.0	41.3	50.9	55.2	52.9	45.4	35.4	27.8	17.9	33.2



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

No. Station Name	Element	JAN	FEB	MAR	APR	TEMP MAY	JUN	JUL	AUG	(Degrees SEP	s Fahren OCT	heit) NOV	DEC	ANNUAL
141 STEPHENSON 8 WNW	MAX MEAN	24.5 12.8	29.1 17.0	39.5 28.2	53.6 41.5	67.5 53.8	76.2 62.8	80.4 67.3	78.1 65.4	69.3 56.9	57.3 45.7	41.5 32.3	28.6 19.0	53.8 41.9
	MIN	1.1	4.9	16.9	29.4	40.0	49.3	54.2	52.7	44.4	34.0	23.0	9.4	29.9
143 TAHQUAMENON FALLS STPK	MAX MEAN	21.9 13.5	24.1 14.1	34.1 23.2	47.4 36.4	62.4 49.6	71.5 58.0	76.6 63.2	74.9 61.8	65.9 54.0	54.0 43.4	39.1 31.3	27.7 19.9	50.0 39.0
	MIN	5.1	4.1	12.3	25.4	36.8	44.5	49.7	48.6	42.0	32.8	23.5	12.1	28.1
144 THREE RIVERS	MAX	30.1	34.1	45.5	57.9	70.2	79.6	83.4	80.9	73.9	61.8	47.1	35.3	58.3
	MEAN MIN	21.8	24.7 15.2	34.8 24.1	45.9 33.9	57.7 45.2	67.2 54.7	71.2 59.0	68.8 56.7	61.4 48.9	49.7 37.5	38.0 28.9	27.4 19.5	47.4 36.4
145 TRAVERSE CITY AP	MAX	27.3	30.0	39.7	53.2	67.2	76.5	81.2	78.6	70.0	58.0	43.8	32.2	54.8
	MEAN	20.9	21.9	30.7	42.7	54.6	64.3	69.6	67.8	59.9	48.8	37.2	26.4	45.4
146 TROUT LAKE	MIN MAX	14.4 25.0	13.7 29.0	21.6	32.1	41.9	52.1 74.2	57.9 78.9	57.0 76.5	49.7 67.0	39.6 55.0	30.6	20.6	35.9 52.7
	MEAN MIN	14.3	16.8	26.1 13.9	39.3	52.1 37.9	60.2	64.9	63.5	55.1 43.2	44.6	33.3	21.4	41.0
147 VANDERBILT 11 ENE	MAX	25.1	28.0	37.9	52.1	67.3	76.1	80.3	77.2	67.5	55.2	41.0	29.7	53.1
	MEAN MIN	14.9 4.7	15.6 3.2	25.6 13.3	39.3	52.1 36.8	61.0 45.9	65.4 50.4	63.0 48.8	54.5 41.4	43.8	32.8 24.6	21.5 13.2	40.8 28.4
150 WATERSMEET 5 W	MAX	19.1	24.6	35.0	48.7	63.9	72.7	77.1	74.7	65.5	52.8	36.1	24.0	49.5
	MEAN MIN	9.2	13.7	24.7 14.3	37.8 26.9	51.6 39.2	60.5 48.2	65.3 53.5	63.2 51.7	54.6 43.7	43.5	28.8	15.6 7.2	39.0 28.5
152 WEST BRANCH 3 SE	MAX	28.0	31.4	41.3	54.8	68.5	77.1	81.5	78.9	70.5	58.4	44.2	32.8	55.6
	MEAN	18.0	20.3	30.1	42.9	55.2	64.0	68.6	66.4	58.1	46.6	35.3	24.4	44.2
154 WHITEFISH POINT	MIN MAX	8.0	9.2	18.9 34.2	30.9	41.8 57.9	50.9	55.7 72.5	53.8 72.9	45.7 65.2	34.8 52.9	26.4 39.5	15.9 28.7	32.7 48.6
	MEAN	16.9	17.6	25.5	36.5	47.7	55.6	61.9	63.4	56.7	45.9	34.2	23.3	40.4
157 YPSILANTI E MICH UNIV	MIN MAX	10.6	9.4	16.8 47.0	28.2	37.4	44.9 81.0	51.3	53.8	48.1 75.2	38.9 62.6	28.9	17.9 36.0	32.2 59.7
157 YPSILANII E MICH UNIV	MAX MEAN	24.6	27.9	37.7	49.1	60.9	69.8	73.9	71.9	64.5	52.7	40.8	29.5	59.7
	MIN	17.6	20.0	28.3	38.3	49.5	58.6	63.1	61.4	53.8	42.7	33.3	23.0	40.8



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

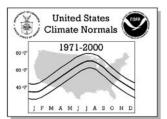
					DDEC	IDITATI	ON NO	200	/T - 4 - 1 !	l l \			
No. Station Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
001 ADRIAN 2 NNE	1.93	1.81	2.65	3.30	3.40	3.77	3.05	3.78	3.50	2.51	2.88	2.63	35.21
002 ALBERTA FORD FOR CEN 003 ALBION	1.81	1.28	2.17	2.14	3.34	3.49 3.76	3.93	3.90 3.48	3.66 3.56	3.11 2.79	2.73	1.82	33.38 36.08
004 ALLEGAN 5 NE	2.02	1.87	2.63	3.57	3.64	4.01	3.59	4.06	4.17	3.02	3.64	3.28	40.42
005 ALMA	1.87	1.45	2.34	2.94	2.95	3.18	2.70	3.75	3.75	2.72	2.65	2.17	32.47
006 ALPENA COLLINS AP	1.76	1.35	2.13	2.31	2.61	2.53	3.17	3.50	2.80	2.33	2.08	1.83	28.40
007 ALPENA WASTEWATER PL	1.70	1.34	1.86	2.13	2.83	2.58	3.17	3.43	3.10	2.43	2.02	1.84	28.43
008 ANN ARBOR UNIV OF MICH	2.24	2.04	2.78	3.36 1.64	2.97	3.38	3.16 2.79	3.71	3.38	2.50	2.99 1.81	2.84	35.35 24.87
010 BAD AXE	1.89	1.61	2.34	2.76	2.89	2.91	3.04	3.68	3.75	2.54	2.80	2.22	32.43
011 BALDWIN	2.33	1.63	2.25	2.92	2.97	3.43	2.76	4.01	3.90	3.17	3.08	2.29	34.74
012 BATTLE CREEK 5 NW	1.66	1.52	2.41	3.37	3.48	3.44	3.41	3.62	3.90	2.90	2.95	2.49	35.15
013 BEAVERTON 1 ESE 014 BEECHWOOD 7 WNW	1.52	.99 1.12	2.07	2.58	2.79 3.29	3.39	2.25 4.09	3.08 4.14	3.45 4.07	2.49 3.15	2.41 2.55	1.66	28.68 33.50
015 BENTON HARBOR AP	2.32	1.68	2.43	3.77	3.33	3.53	3.24	3.47	4.17	3.09	3.30	2.71	37.04
016 BERGLAND DAM	2.84	1.62	2.52	2.31	3.40	3.92	3.92	4.01	3.73	3.55	3.57	2.99	38.38
017 BIG BAY 2 SE	1.73	1.21	2.04	2.00	2.60	3.29	3.10	3.00	3.47	2.96	2.32	2.02	29.74
018 BIG RAPIDS WATERWORKS	2.15	1.56	2.38	2.95	3.20	3.19	2.68	4.29	3.88 4.43	2.97	2.99	2.35	34.59 39.55
019 BLOOMINGDALE 020 BOYNE FALLS	2.36	1.78	2.04	2.26	2.69	2.65	3.10	3.70	3.90	3.40	2.92	2.44	32.81
021 CADILLAC	1.87	1.37	2.05	2.67	2.85	2.99	3.12	3.81	3.99	3.16	2.70	1.98	32.56
022 CARO REGIONAL CENTER	1.75	1.23	2.30	2.95	2.89	3.45	2.73	3.28	4.13	2.56	2.58	2.03	31.88
023 CASS CITY 1 SSW	1.72	1.52	2.13	3.09	3.12	3.16	2.80	3.74	4.71	2.47	2.66	2.10	33.22
024 CHAMPION VAN RIPER PRK 025 CHARLEVOIX	1.82	1.32	2.32	2.42	3.10 2.73	3.35	3.80	3.74	3.88	3.29	2.44	1.82	33.30 32.67
026 CHARLOTTE	1.68	1.35	2.39	3.23	3.16	3.47	3.14	3.71	3.75	2.76	2.70	2.38	33.83
027 CHATHAM EXP FARM 2	1.61	1.08	1.70	1.52	2.54	2.93	3.47	3.30	4.02	3.72	2.92	2.01	30.82
028 CHEBOYGAN	1.75	1.20	1.86	2.48	2.60	2.58	3.14	3.03	3.61	2.87	2.39	2.05	29.56
029 CHELSEA	1.71	1.51	2.22	2.65	2.69	3.41	3.34	3.52	3.47	2.47	2.60	2.19	31.78
030 COLDWATER STATE SCHOOL 031 COPPER HARBOR FT WILKIN	1.82	1.70	2.46	3.12	3.79 2.81	3.72 2.86	3.80 2.70	3.94	3.44	2.75	2.60	2.52	35.66 31.05
032 CROSS VILLAGE 1 S	1.77	1.12	1.92	2.39	2.47	2.47	2.10	3.33	3.29	2.85	2.42	2.01	28.14
033 CRYSTAL FALLS 6 NE	1.24	.82	1.79	2.17	2.92	3.86	3.57	3.59	3.66	2.67	2.01	1.35	29.65
034 DEARBORN	2.00	1.88	2.64	3.28	2.91	3.60	3.09	2.86	3.50	2.55	2.76	2.51	33.58
035 DETOUR VILLAGE 037 DETROIT METRO AP	1.89	1.21	2.20	2.27 3.05	2.57	2.61 3.55	3.09	2.95 3.10	3.67 3.27	2.63 2.23	2.41	2.03	29.53 32.89
038 DIMONDALE 1 WSW	1.96	1.66	2.61	3.44	2.68	3.29	3.37	3.61	3.36	2.69	2.84	2.45	33.96
039 DOWAGIAC 1 W	2.65	2.03	2.67	3.48	3.72	3.67	3.63	3.90	4.19	3.51	3.45	3.16	40.06
040 DUNBAR FOREST EXP STN	1.95	1.31	2.00	2.20	2.57	3.51	2.92	3.49	3.47	2.95	2.90	2.05	31.32
041 EAST JORDAN 042 EAST LANSING 4 S	2.09 1.56	1.22	1.63	2.36 3.27	2.63	2.80	3.04	3.59 3.41	3.98	3.56 2.45	2.88	2.36	32.14 30.91
043 EAST TAWAS	1.98	1.36	2.14	2.65	2.82	3.22	2.84	3.50	3.59	2.51	2.48	2.06	31.15
044 EATON RAPIDS	1.81	1.51	2.63	3.30	3.18	3.22	2.99	3.86	3.73	2.70	2.80	2.38	34.11
045 EAU CLAIRE 4 NE	2.02	1.59	2.53	3.33	3.50	3.51	3.37	3.72	3.75	3.14	3.27	2.78	36.51
046 ESCANABA	1.44	.95 1.25	1.87	1.95	2.74	3.02	3.36 2.31	3.52	3.20	2.49	2.53	1.46	28.53 31.25
047 ESSEXVILLE 048 EVART	2.04	1.52	1.99 2.18	2.90	3.11 2.89	3.22	2.31		4.51 4.30	2.65 2.81	2.32	1.75 2.07	32.69
049 FAYETTE 4 SW	1.59	.97		2.27		2.70	2.86		3.10	2.62	2.29	1.76	28.57
050 FLINT BISHOP INTL AP	1.57		2.22	3.13		3.07	3.17		3.76	2.34	2.65	2.18	31.61
051 FLINT 7 W		1.11		3.00	2.73	2.79	3.20		3.86	2.29	2.60	1.90	30.11
052 FRANKFORT 2 NE 053 GAYLORD		1.98	2.34	2.58	2.65	3.22 2.72	3.04	3.45	4.13 3.85	3.26	2.98	2.80	35.20 36.59
054 GLADWIN		1.31		2.54	2.89	3.25	2.83	3.69	3.48	2.59	2.52	2.08	31.34
055 GRAND HAVEN FIRE DEPT	1	1.34	2.29	2.89	2.99	3.15	2.56	3.69	3.34	2.61	3.12	2.57	32.72
056 GRAND LEDGE 1 NW		1.61		3.25	2.85	3.69	2.87	3.69	3.39	2.65	2.96	2.38	33.58
057 GRAND MARAIS 2 E		1.19	1.47	1.34	2.53	2.92	2.95	2.90	3.49	3.01	2.37	2.25	28.73
058 GRAND RAPIDS INTL AP 059 GRAYLING		1.54	1.96	3.48 2.64	3.35	3.67	3.56	3.78	4.28	2.80	3.35	2.70	37.13 33.42
060 GREENVILLE 2 NNE	1	1.48	2.28	3.00	3.44	3.37	2.88	4.21	3.70	2.93	3.14	2.45	34.71
061 GROSSE POINTE FARMS	1.77		2.46	3.22	2.97	3.40	3.43	3.61	3.40	2.63	2.84	2.45	33.97
062 GULL LAKE BIOL STA		1.74			3.50	3.79	3.69	3.92	4.24	3.10	3.32	2.93	38.81
063 HALE LOUD DAM			1.75	2.31	2.55	3.02	3.13	3.63	3.31	2.38	2.25	1.69	28.93
064 HARBOR BEACH 1 SSE 065 HARRISON 1 NNW		2.01	2.42	2.78	3.02	2.76	2.90	3.59	4.05 3.49	2.69	3.04 2.38	2.71 2.29	34.62 30.93
066 HARRISVILLE 2 NNE	1	1.22		2.16	2.48	2.81	3.10	2.90	2.91	2.20	2.25	2.03	28.05
067 HART	2.56	1.73	2.34	2.87	3.03	3.29	2.84	4.09	3.85	3.53	3.33	2.65	36.11
068 HASTINGS		1.56			3.06	3.89	3.25	3.76	3.86		3.08	2.50	35.74
069 HERMAN		1.64 1.55			3.37 2.84	3.69	4.07	4.10 4.03	4.07	3.58	3.35 2.92	2.77	38.25
070 HESPERIA 4 WNW	2.20	1.55	2.41	3.03	4.04	3.44	2.36	4.03	3.56	3.30	4.74	2.53	34.01

## United States Climate Normals 1971-2000 60 -7 40 -7 J F M A M J J A S O N D

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

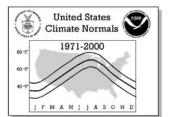
Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1971-2000

No. Station Name	JAN	FEB	MAR	APR	PREC MAY	IPITATI JUN	ON NOF JUL	RMALS AUG	(Total in SEP	Inches) OCT	NOV	DEC	ANNUAL
071 HILLSDALE	2.10	1.82	2.77	3.39	3.82	4.29	3.54	3.70	3.71	2.82	3.07	2.66	37.69
072 HOLLAND	2.26	1.38	2.10	3.14	3.43	3.74	3.52	3.62	4.00	2.92	3.24	2.90	36.25
073 HOUGHTON CO AP (HANCOCK	4.26	2.28	2.45	1.71	2.49	2.84	2.97	2.75	3.24	2.56	2.84	3.42	33.81
074 HOUGHTON LAKE 6 WSW	1.54	1.22	1.57	2.31	2.66	3.17	2.82	3.81	3.47	2.71	2.39	1.78	29.45
075 HOUGHTON LAKE ROSCOMMON 076 HOWELL WWTP	1.61	1.25 1.42	2.05	2.29	2.57 2.69	2.93 3.19	2.75	3.72 3.36	3.11 3.59	2.26	2.14 2.61	1.75	28.43
077 HUDSON 3 E	1.96	1.79	2.53	2.94	2.95	4.10	2.73	3.79	3.21	2.63	2.87	2.48	33.98
078 IONIA 2 SSW	1.97	1.72	2.69	3.20	3.28	3.61	2.98	4.22	3.86	2.95	2.88	2.53	35.89
079 IRON MTN-KINGSFORD WWTP	1.39	.89	1.73	2.19	3.10	3.48	3.62	3.78	3.65	2.65	2.03	1.49	30.00
080 IRONWOOD	2.07	1.22	2.08	2.11	2.97	4.16	4.00	3.72	3.80	3.38	3.09	2.05	34.65
081 JACKSON CO AP	1.41 2.22	1.23 1.76	2.04	2.74	2.90 3.54	3.26 3.68	3.25	3.48 3.85	3.44 4.10	2.32	2.54	2.06	30.67 37.41
082 KALAMAZOO STATE HOSPITA 083 KALKASKA	1.79	1.32	1.77	2.39	2.62	3.18	3.21	3.41	3.88	3.36	2.74	2.04	31.74
084 KENT CITY 2 SW	2.38	1.58	2.63	3.22	3.48	3.41	2.97	4.27	3.83	3.12	3.38	2.68	36.95
085 KENTON	1.44	.86	1.50	1.68	2.83	3.24	3.55	3.59	3.54	2.94	1.89	1.37	28.43
086 LAKE CITY EXP FARM	1.58	1.21	2.01	2.77	2.80	2.95	2.86	3.66	3.72	2.94	2.48	1.81	30.79
087 LANSING CAPITAL CITY AP	1.61	1.45	2.33	3.09	2.71	3.60	2.68	3.46	3.48	2.29	2.66	2.17	31.53
088 LAPEER WWTP 089 LOWELL 2 SE	1.53	1.12	1.95	2.86	2.78	3.12	3.13	3.46	3.75	2.63	2.68	1.97	30.98
090 LOWELL	2.66	1.86	2.13	3.30	3.32	3.56	3.05	4.03	4.08	2.68	3.09	2.94	36.99
091 LUDINGTON 4 SE	1.64	1.08	1.99	2.66	2.81	3.13	2.55	4.13	3.66	3.59	3.33	2.29	32.86
092 LUPTON 1 S	1.76	1.28	2.06	2.29	2.54	3.26	3.36	3.84	3.54	2.39	2.21	1.92	30.45
093 MANISTEE 3 SE	2.13	1.41	2.12	2.78	2.62	3.28	3.05	3.94	3.57	3.26	2.89	2.28	33.33
094 MANISTIQUE 095 MAPLE CITY	1.51	.94 1.80	1.82	2.23	2.43	3.05	3.13	3.19	3.34	2.87	2.56	1.66	28.73 34.74
096 MARQUETTE	2.04	1.35	2.14	2.35	2.66	2.74	2.64	3.37	3.42	3.30	2.60	1.95	30.03
097 MARQUETTE CO AP	2.60	1.85	3.13	2.79	3.07	3.21	3.01	3.55	3.74	3.66	3.27	2.43	36.31
098 MIDLAND	1.56	1.25	2.23	2.83	2.86	2.98	2.53	3.67	3.84	2.55	2.51	1.88	30.69
099 MILAN 4 ESE	1.80	1.15	1.53	2.16	3.21	3.59	3.14	3.84	3.36	2.57	2.62	1.45	30.42
100 MILFORD GM PROVING GR	1.52	1.55	2.13	2.78	2.83	3.12	2.52	3.07	3.00	2.10	2.47	2.19	29.28
101 MILLINGTON 3 SE 102 MIO HYDRO PLANT	1.83	1.44	2.35 1.73	2.77	2.93	3.06 2.62	3.12 2.96	3.21	3.91	2.56	2.72 1.92	2.18	32.08
103 MONROE	1.83	1.74	2.68	3.25	3.15	3.61	3.00	3.46	3.01	2.36	2.82	2.53	33.44
104 MONTAGUE 4 NW	1.73	1.06	2.33	3.14	2.72	2.81	2.72	4.14	3.44	3.28	3.15	1.66	32.18
105 MORENCI	1.98	1.93	3.02	3.57	3.28	4.36	3.41	3.70	3.43	2.75	3.13	2.82	37.38
106 MOUNT CLEMENS ANG BASE	1.89	1.82	2.33	2.95	2.86	3.12	3.46	3.19	3.25	2.19	2.63	2.55	32.24
107 MT PLEASANT UNIV 108 MUNISING	1.65 3.19	1.26 1.94	2.13	3.11 2.03	2.72 2.63	3.47	2.69 3.27	3.70 3.20	3.56 3.92	2.80	2.58	1.90	31.57 35.83
109 MUSKEGON COUNTY AP	2.22	1.58	2.36	2.03	2.03	2.58	2.32	3.77	3.52	2.80	3.23	2.64	32.88
110 NEWBERRY 3 S	2.25	1.17	1.93	1.90	2.51	3.14	3.14	3.48	3.52	3.18	2.49	2.16	30.87
111 NILES	2.34	1.97	2.76	3.53	3.98	3.90	3.45	3.84	3.92	3.46	3.45	3.19	39.79
112 NORTHPORT 2 W	2.06	1.32	2.20	2.45	2.24	2.94	3.16	2.85	3.96	2.96	2.65	2.26	31.05
113 OLD MISSION 3 SSW 114 ONAWAY STATE PARK	1.42	.78 1.29	1.50	2.27	2.33	2.94	2.51	3.48	3.84	2.88	2.05	1.53	27.53 30.12
114 ONAWAI SIAIE PARK 115 ONTONAGON 6 SE	3.02	1.47	2.10	2.44	3.00	3.08	3.46	3.34	3.41	3.13	2.79	3.06	33.56
116 OWOSSO WWTP	1.53	1.31	2.03	2.83	2.79	3.17	2.74	3.44	3.56	2.57	2.45	2.12	30.54
117 OXFORD 1 S	1.41	1.14	1.99	2.83	2.80	3.43	2.81	2.87	3.50	2.59	2.50	1.80	29.67
118 PELLSTON RGNL AP		1.64			2.70				3.90	3.21	2.96	2.46	32.74
119 PETOSKEY 120 PONTIAC STATE HOSPITAL		1.23			2.66		3.13		3.67			2.17	31.15
121 PORT HURON		1.49 1.60		2.71 2.98		3.16 3.29	2.74	3.07	3.45		2.62 2.81	2.22	30.03 31.39
122 PORT INLAND		1.34		2.56	2.67	3.50	2.94	3.29	3.69	2.98	2.94	1.92	32.33
123 ROCK 1 E	1.71	1.17	2.14	2.63	2.90	3.83	3.40	4.23	3.96	2.93	2.53	1.80	33.23
124 ROGERS CITY		1.22	1.86	2.18	2.55	2.67	2.94	3.68	2.96	2.55	1.99	1.99	28.43
125 RUDYARD 4 N	1.86		1.59	2.15	2.15	3.27	2.98		3.94	3.17		2.19	30.39
126 SAGINAW CONSUMERS PWR C 127 SAGINAW # 3		1.24	2.19	2.80	2.79 2.89	3.94	2.36	3.24	4.07	2.77	2.66 2.77	1.94 1.94	31.56 32.46
128 SAGINAW TRI STATE AP		1.57		2.82	2.89	3.06	2.50	3.38	3.95	2.49	2.65	2.11	31.61
129 SAINT CHARLES	1	1.39		2.82	2.80	3.28	2.75	3.79	3.14	2.73	2.75	1.97	31.47
130 ST IGNACE MACKINAC BR	1.68	1.01	1.60	2.00	2.44	2.51	2.72	2.58	3.09	2.89	2.39	1.62	26.53
131 ST JAMES 2 S BEAVER IS		1.25	2.15		2.73	2.57	2.64	3.17	3.70	3.11	2.55	2.20	30.88
132 ST JOHNS 133 SANDUSKY		1.40 1.28	2.19 1.96	3.24	3.09 2.50	3.35 2.82	2.98	3.78 2.98	3.82 3.87	2.89	2.61 2.51	1.96	32.98 29.25
134 SAULT STE MARIE AP		1.60	2.41	2.34	2.50	3.00	3.14	3.47	3.87	3.32	3.40	2.14	34.67
135 SEBEWAING	1.07	.99	1.60	2.37	2.62	2.98	2.59	3.27	3.52	2.30	2.22	1.57	27.10
136 SENEY WILDLIFE REFUGE	2.05	1.19	1.92	1.94	2.50	3.10	3.69	3.20	3.40	3.16	2.66	1.95	30.76
137 SOUTH HAVEN		1.59				3.15	3.48		4.08			2.75	35.18
138 SPALDING 1 SSE 139 STAMBAUGH 2 SSE	1.51	1.00	2.12 1.69		3.25 3.14	3.35	3.75	3.70 3.79	3.72	2.65	2.53	1.66	31.78
137 STATIDAUGII 2 SSE	1.11	.05	1.09	2.1/	2.14	3./4	3.90	3.13	3.70	2.11	2.00	1.43	30.37



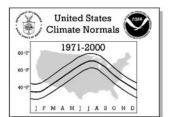
Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1971-2000

No. Station Name	JAN	FEB	MAR	APR	PREC MAY		JUL		(Total in SEP	Inches) OCT	NOV	DEC	ANNUAL
140 STANDISH 5 SW 141 STEPHENSON 8 WNW 142 STEUBEN 143 TAHQUAMENON FALLS STPK 144 THREE RIVERS 145 TRAVERSE CITY AP 147 VANDERBILT 11 ENE 148 VESTABURG 149 WASHINGTON 150 WATERSMEET 5 W 151 WELLSTON TIPPY DAM 152 WEST BRANCH 3 SE 153 WHITE CLOUD 4 SE 154 WHITEFISH POINT 155 WILLIAMSTON 3 NE 156 YALE 1 NNW	1.41 2.45 3.47 1.97 2.98 2.22 1.64 2.17 1.41 2.26 1.66 2.43 3.17 1.70 1.57	1.24 .95 1.52 1.82 1.63 1.79 1.43 1.75 1.06 1.51 1.22 1.55 1.80 1.59	1.91 2.17 2.19 2.61 1.98 2.07 2.16 2.70 2.04 2.11 1.98 2.35 2.02 2.47 2.00	2.32 2.58 2.18 3.32 2.72 2.35 2.85 3.48 2.07 2.64 2.42 3.25 2.06 3.20 2.83	2.54 2.79 3.67 2.30 2.86 2.83 2.98 3.19 2.93 3.03 3.19 2.64 2.88 2.63	3.45 3.36 3.18 3.75 3.32 2.44 3.21 2.86 3.53 3.23 3.04 3.14 3.05 3.45 3.07	3.62 2.95 3.25 3.99 3.14 3.32 2.49 3.46 3.19 3.10 2.96 3.21 3.18 2.77 3.11	3.64 3.60 3.83 3.39 3.61 3.60 2.85 3.59 3.78 3.85 4.03 3.34 3.24 2.85	3.55 3.73 3.77 3.66 3.58 3.41 3.40 3.22 3.69 3.86 3.51 3.71 3.27 3.56 3.59	2.65 3.28 3.48 3.00 2.94 2.88 2.82 2.00 2.87 3.45 2.49 2.58 3.16 2.48 2.42	2.89 3.05 2.96 2.67 2.40 2.55 2.70 2.22 2.96 2.39 3.58 2.93 3.00 2.65	1.79 2.21 3.02 2.61 2.66 2.23 2.57 1.48 2.38 2.42 3.14 2.11 2.08	30.45 31.12 33.32 35.80 37.00 33.47 31.22 30.96 32.74 30.34 34.21 30.41 35.47 33.76 32.45 30.09
157 YPSILANTI E MICH UNIV	1.77	1.65	2.46	3.08	3.20	3.29	2.93	3.35	3.49	2.35	2.79	2.44	32.80



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

							DECE	DEE DAY	C (Tata	1)				
No. Station Name	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
001 ADRIAN 2 NNE	HDD CDD	1288	1086	898	541 1	247 43	48 124	6 211	25 163	138 40	468 4	782 0	1140 0	6667 586
002 ALBERTA FORD FOR CEN	HDD	1694	1407	1244	805	424	160	72	103	302	639	1066	1508	9424
004 ALLEGAN 5 NE	CDD HDD	0 1345	0 1145	0 978	0 612	22 316	36 86	104 14	78 50	8 174	0 510	0 821	0 1179	248 7230
005 ALMA	CDD HDD	0 1373	0 1179	0 1009	0 609	32 287	90 74	157 13	138 37	25 168	2 507	0 845	0 1199	444 7300
	CDD	0	0	0	1	41	111	191	139	26	2	0	0	511
006 ALPENA COLLINS AP	HDD* CDD*	1448 0	1285 0	1133 0	729 3	394 13	150 54	46 115	82 82	267 2	587 1	897 0	1256 0	8274 290
007 ALPENA WASTEWATER PL	HDD CDD	1415 0	1258 0	1129 0	734 0	399 9	137 49	37 130	53 103	196 13	543 0	871 0	1218 0	7990 304
008 ANN ARBOR UNIV OF MICH	HDD CDD	1292	1081	896 0	522 1	227 53	39 139	4 238	17 193	107	424	762 0	1132	6503 691
009 ATLANTA 5 WNW	HDD	1509	1306	1132	708	357	130	38	76	230	578	921	1311	8296
010 BAD AXE	CDD HDD	0 1384	0 1212	0 1063	0 681	22 340	69 102	128 21	97 52	7 177	0 508	0 830	0 1195	323 7565
011 BALDWIN	CDD HDD	0 1404	0 1216	0 1057	0 655	20 338	78 122	148 45	112 85	16 221	2 552	0 873	0 1232	376 7800
	CDD	0	0	0	1	37	75	128	114	13	0	0	0	368
012 BATTLE CREEK 5 NW	HDD CDD	1300 0	1085 0	907 0	534 1	253 46	58 119	10 193	35 156	151 40	467 4	786 0	1156 0	6742 559
014 BEECHWOOD 7 WNW	HDD CDD	1646 0	1338 0	1180 0	741 0	382 23	154 40	70 89	99 70	290 6	639 0	1064 0	1497 0	9100 228
015 BENTON HARBOR AP	HDD	1278	1060	892	562	293	69	21	43	144	428	759	1126	6675
016 BERGLAND DAM	CDD HDD	0 1710	0 1442	0 1292	827	48 442	117 166	205 79	172 120	55 335	10 677	0 1082	0 1517	609 9689
017 BIG BAY 2 SE	CDD HDD	0 1528	0 1295	0 1167	781	15 439	34 173	81 62	57 92	5 251	0 581	0 942	0 1340	192 8651
018 BIG RAPIDS WATERWORKS	CDD HDD	0 1390	0 1184	0 1033	0 631	10 305	24 86	86 19	75 57	8 200	0 544	0 870	0 1228	203 7547
019 BLOOMINGDALE	CDD HDD	0 1303	0 1110	0 947	0 580	34 293	82 75	159 12	127 43	16 151	0 469	0 784	0 1137	418 6904
	CDD	0	0	0	0	42	108	171	154	31	2	0	0	508
020 BOYNE FALLS	HDD CDD	1409 0	1227 0	1065 0	655 0	332 33	106 81	25 136	63 117	198 18	514 3	855 0	1229 0	7678 388
021 CADILLAC	HDD CDD	1473 0	1293 0	1148 0	723 0	383 21	140 59	46 103	94 82	261 6	603 0	925 0	1294 0	8383 271
022 CARO REGIONAL CENTER	HDD	1342	1145	955	576	269	61	9	33	141	466	790	1169	6956
024 CHAMPION VAN RIPER PRK	CDD HDD	0 1664	0 1396	0 1253	1 819	39 444	103 190	195 96	150 128	28 328	3 669	0 1068	0 1493	519 9548
026 CHARLOTTE	CDD	0	0 1143	0 960	0	15	22 60	71	51 48	3	0	0	1170	162
026 CHARLOTTE	HDD CDD	1334 0	0	0	581 0	280 37	100	12 172	147	156 28	487 3	810 0	1170 0	7041 487
027 CHATHAM EXP FARM 2	HDD CDD	1535 0	1307 0	1190 0	783 0	416 13	161 39	72 82	92 75	258 7	589 0	966 0	1356 0	8725 216
028 CHEBOYGAN	HDD	1482	1317	1188	778	431	149	46	74 92	221 5	576 0	894	1263	8419 249
030 COLDWATER STATE SCHOOL	CDD HDD	1346	1121	0 938	572	5 268	33 53	114 10	33	152	481	0 815	1186	6975
031 COPPER HARBOR FT WILKIN	CDD HDD	0 1497	0 1311	0 1190	1 808	46 479	112 236	185 92	141 73	31 237	4 578	0 944	0 1311	520 8756
	CDD	0	0	0	0	2	10	81	73	7	0	0	0	173
032 CROSS VILLAGE 1 S	HDD CDD	1473 0	1325 0	1166 0	763 0	427 9	166 26	57 85	75 73	229 8	567 0	909 0	1260 0	8417 201
033 CRYSTAL FALLS 6 NE	HDD CDD	1726 0	1438 0	1260 0	803 0	429 17	166 31	77 81	117 58	332 3	682 0	1075 0	1527 0	9632 190
034 DEARBORN	HDD CDD	1251 0	1053 0	875 0	506 1	220 58	29 152	1 269	12 232	88 69	399 7	713 0	1077 0	6224 788
035 DETOUR VILLAGE	HDD CDD	1543 0	1365 0	1233	811	456 4	184	65 93	82 87	254 8	607 0	908	1293	8801 218
036 DETROIT CITY AP	HDD	1199	1013	843	481	190	26	1	8	67	359	676	1035	5898
037 DETROIT METRO AP	CDD HDD*	1270	1074	0 886	527	72 219	183	311	261 12	80 121	11 426	742	1099	920 6422
039 DOWAGIAC 1 W	CDD*	1309	1096	908	545	42 267	145 52	254	33	75 134	6 455	783	1142	736 6732
040 DUNBAR FOREST EXP STN	CDD HDD	0 1649	0 1450	0 1297	845	56 463	123 209	205 90	162 116	33 306	3 655	0 995	0 1416	584 9491
	CDD	0	0	0	0	5	16	58	54	3	0	0	0	136



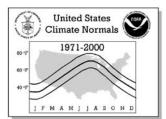
Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1971-2000

No. Station Name	Element	JAN	FEB	MAR	APR	MAY	DEGF JUN	JUL	<b>YS</b> (Tota AUG	l) SEP	OCT	NOV	DEC	ANNUAL
041 EAST JORDAN	HDD CDD	1378 0	1212	1067 0	671 0	350 30	120 64	30 120	69 101	197 9	511 1	846 0	1195 0	7646 325
042 EAST LANSING 4 S	HDD	1365	1164	979	593	290	60	10	37	157	496	822	1191	7164
043 EAST TAWAS	CDD HDD	0 1364	0 1190	0 1042	0 664	41 338	100 110	176 23	142 50	26 165	4 499	0 814	0 1179	489 7438
045 EAU CLAIRE 4 NE	CDD HDD	0 1267	0 1040	0 845	0 489	16 219	68 37	141 4	121 15	16 92	0 387	0 732	0 1110	362 6237
	CDD	0	0	0	2	70	168	265	217	67	8	0	0	797
046 ESCANABA	HDD CDD	1517 0	1321 0	1184 0	807 0	440 5	157 25	49 96	71 88	234 9	567 0	923 0	1314	8584 223
047 ESSEXVILLE	HDD CDD	1364 0	1176 0	1009 0	608 0	271 34	59 113	7 208	24 158	138 28	474 4	803 0	1173 0	7106 545
048 EVART	HDD CDD	1466 0	1262 0	1100 0	674 0	350 23	115 58	38 119	78 92	243 9	602 0	918 0	1277 0	8123 301
049 FAYETTE 4 SW	HDD	1462	1242	1109	740	401	150	42	51	195	517	866	1264	8039
050 FLINT BISHOP INTL AP	CDD HDD*	1341	1147	957	577	7 267	30 66	108	97 28	12	0 478	0 791	1172	7005
052 FRANKFORT 2 NE	CDD* HDD	0 1315	0 1141	1 1020	5 658	33 345	110 116	199 28	151 47	52 158	4 471	0 804	0 1159	555 7262
053 GAYLORD	CDD HDD	0 1477	0 1272	0 1120	0 707	24 357	68 118	138 41	130 74	21 232	2 571	0 929	0 1302	383 8200
	CDD	0	0	0	0	28	61	120	92	7	0	0	0	308
054 GLADWIN	HDD CDD	1448 0	1245 0	1075 0	666 0	326 27	95 77	25 149	54 109	213 15	565 0	889 0	1250 0	7851 377
055 GRAND HAVEN FIRE DEPT	HDD CDD	1267 0	1077 0	938 0	588 0	294 31	82 96	12 177	34 163	122 35	432 4	762 0	1108	6716 506
057 GRAND MARAIS 2 E	HDD	1446	1252	1145	775	462	208	109	96	241	576	922	1283	8515
058 GRAND RAPIDS INTL AP	CDD HDD*	0 1317	0 1135	0 956	571	9 255	19 58	74 10	73 24	8 159	0 471	0 793	0 1147	183 6896
059 GRAYLING	CDD* HDD	0 1520	0 1338	2 1188	6 748	38 401	124 140	217 50	165 102	56 278	5 622	0 947	0 1324	613 8658
	CDD	0	0	0	0	22	51	97	78	6	0	0	0	254
060 GREENVILLE 2 NNE	HDD CDD	1366 0	1152 0	980 0	585 1	290 47	69 99	21 178	46 145	166 28	490 3	833 0	1206 0	7204 501
061 GROSSE POINTE FARMS	HDD CDD	1232 0	1045 0	886 0	524 1	219 43	37 148	2 268	7 219	75 72	372 6	697 0	1064 0	6160 757
062 GULL LAKE BIOL STA	HDD CDD	1281 0	1074 0	877 0	498 2	213 69	36 166	4 266	17 218	96 69	391 8	736 0	1119 0	6342 798
063 HALE LOUD DAM	HDD	1470	1296	1114	706	376	114	27	70	222	567	902	1272	8136
064 HARBOR BEACH 1 SSE	CDD HDD	0 1365	0 1193	0 1063	712	15 389	50 143	113 38	91 62	10 178	0 510	0 823	0 1175	279 7651
066 HARRISVILLE 2 NNE	CDD HDD	0 1408	0 1245	0 1102	0 743	7 438	50 158	118 46	105 82	15 195	0 547	0 880	0 1230	295 8074
	CDD	0	0	0	0	5	34	103	97	9	0	0	0	248
067 HART	HDD CDD	1359 0	1185 0	1038 0	656 0	342 29	103 79	24 144	58 124	180 17	522 2	843 0	1186 0	7496 395
068 HASTINGS	HDD CDD	1332 0	1139 0	967 0	590 1	284 42	63 107	11 185	40 150	164 35	489 3	801 0	1166 0	7046 523
069 HERMAN	HDD	1649	1375	1233	804	422	183	97	132	325	666	1078	1487	9451
070 HESPERIA 4 WNW	CDD HDD	0 1374	0 1188	0 1041	0 651	22 346	37 110	82 31	61 67	5 210	0 538	0 854	0 1197	207 7607
071 HILLSDALE	CDD HDD	0 1376	0 1166	0 975	0 594	29 288	66 58	136 11	113 40	19 158	1 498	0 825	0 1200	364 7189
072 HOLLAND	CDD HDD	0 1260	0 1069	908	0 560	36 279	98 63	176 19	135 29	28 115	2 434	0 749	0 1104	475 6589
	CDD	0	0	0	2	53	118	216	181	37	4	0	0	611
073 HOUGHTON CO AP (HANCOCK	HDD CDD	1562 0	1345 0	1221 0	801 0	425 9	176 28	77 92	102 77	312 4	652 0	1022 0	1399 0	9094 210
074 HOUGHTON LAKE 6 WSW	HDD CDD	1494	1299 0	1151	732 0	393 18	150 51	56 90	121 72	297 3	633	935 0	1304	8565 234
075 HOUGHTON LAKE ROSCOMMON	HDD*	1468	1278	1115	685	348	131	56	82 85	254	577	901	1271	8166
078 IONIA 2 SSW	CDD* HDD	0 1370	0 1173	987	598	20 271	51 63	124 11	35	24 150	1 495	831	0 1193	318 7177
079 IRON MTN-KINGSFORD WWTP	CDD HDD	0 1639	0 1354	0 1163	0 718	45 357	114 116	195 37	155 69	33 255	2 616	0 1014	0 1446	544 8784
080 IRONWOOD	CDD HDD	0 1722	0 1410	0 1243	0 782	27 414	67 156	127 71	96 117	8 318	0 664	0 1083	0 1531	325 9511
	CDD	0	0	0	0	23	40	88	71	516	0	0	0	228
<del></del>														



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

-1														ı
No. Station Name	Elemen	t JAN	FEB	MAR	APR	MAY	DEGF JUN	JUL	<b>YS</b> (Total AUG	SEP	OCT	NOV	DEC	ANNUAL
081 JACKSON CO AP	HDD CDD	1329 0	1122	930	554 1	268 48	48 114	11 203	35 162	147 39	472 3	790 0	1167 0	6873 570
082 KALAMAZOO STATE HOSPI	TA HDD	1262	1034	858	484	211	38	4	17	95	391	734	1107	6235
083 KALKASKA	CDD HDD	0 1514	1340	0 1189	752	69 394	166 129	257 54	210 95	59 268	9 602	0 935	0 1298	773 8570
	CDD	0	0	0	0	20	50	83	71	4	0	0	0	228
085 KENTON	HDD CDD	1637 0	1352 0	1193 0	758 0	394 20	162 57	80 92	119 75	304 5	641 0	1017 0	1462 0	9119 249
086 LAKE CITY EXP FARM	HDD CDD	1491 0	1296 0	1145 0	712 0	377 19	130 53	43 98	94 82	265 5	610 0	937 0	1314 0	8414 257
087 LANSING CAPITAL CITY	AP HDD*	1341	1160	970	585	277	69	17	35	179	493	805	1167	7098
088 LAPEER WWTP	CDD* HDD	1371	1188	1013	6 628	34 300	113 78	195 17	151 47	53 173	5 512	0 827	1182	558 7336
091 LUDINGTON 4 SE	CDD HDD	1323	0 1107	0 983	0 606	29 327	92 102	175 19	129 50	24 167	3 488	0 818	0 1178	452 7168
002 THEFON 1 C	CDD	0	1212	1140	0 718	39 384	87	155 48	141 94	17 265	2 624	0 942	1221	441 8523
092 LUPTON 1 S	HDD CDD	1525 0	1312	1149 0	718	20	141 52	98	72	205 6	0	942	1321	248
093 MANISTEE 3 SE	HDD CDD	1285 0	1102 0	977 0	612 1	323 34	98 85	30 170	56 152	143 32	441 4	771 0	1132 0	6970 478
094 MANISTIQUE	HDD	1532	1322	1199	816	487	220	89	101	283	616	949	1331	8945
095 MAPLE CITY	CDD HDD	0 1340	0 1158	0 1036	0 663	1 352	19 106	66 25	66 49	6 167	0 483	0 822	0 1176	158 7377
096 MARQUETTE	CDD HDD	0 1456	0 1227	0 1099	1 740	31 427	80 174	155 70	131 75	19 234	2 556	0 919	0 1295	419 8272
090 MARQUEITE	CDD	0	0	0	0	8	29	111	99	13	0	0	0	260
097 MARQUETTE CO AP	HDD CDD	1659 0	1405 0	1280 0	859 0	468 12	200 30	92 72	134 50	348 3	700 0	1083	1484 0	9712 167
098 MIDLAND	HDD CDD	1307	1112	937	545 1	234 49	46 145	6 243	19 190	114 46	423	765 0	1137	6645 679
099 MILAN 4 ESE	HDD	1308	1110	904	534	248	47	6	33	125	449	771	1148	6683
100 MILFORD GM PROVING GR	CDD HDD	0 1330	0 1135	0 964	1 584	45 271	115 64	187 11	144 32	32 149	5 479	0 798	0 1172	529 6989
102 MIO HYDRO PLANT	CDD HDD	0 1479	0 1297	0 1130	701	36 364	112 117	196 31	158 78	42 239	6 589	0 907	0 1282	550 8214
103 MONROE	CDD HDD	0 1266	0 1089	0 924	0 564	21 243	67 42	133	99 15	7 107	0 432	0 751	0 1093	327 6529
103 MONKOE	CDD	0	0	0	1	45	143	252	199	58	7	0	0	705
104 MONTAGUE 4 NW	HDD CDD	1305	1124	984 0	634 0	339 21	107 64	28 136	52 121	167 18	477 1	794 0	1143	7154 361
106 MOUNT CLEMENS ANG BAS		1261	1088	927	576	265	60	13	23	124	435	746	1102	6620
107 MT PLEASANT UNIV	CDD HDD	0 1375	0 1183	0 1023	620	32 295	120 72	224 14	170 38	46 172	5 505	0 837	0 1195	597 7329
108 MUNISING	CDD HDD	0 1525	0 1314	0 1193	0 815	35 478	105 228	185 105	141 122	24 296	2 629	0 972	0 1348	492 9025
TOO MONIDING	CDD	0	0	0	0	8	21	66	62	6	0	0	0	163
109 MUSKEGON COUNTY AP	HDD* CDD*	1288	1124 0	968 0	602 4	296 24	78 86	15 181	27 145	168 44	476 3	784 0	1117 0	6943 487
110 NEWBERRY 3 S	HDD CDD	1522 0	1295 0	1177	753 0	387 20	161 38	67 96	84 81	260 8	591 0	942	1343	8582 243
113 OLD MISSION 3 SSW	HDD	1386	1240	1126	741	417	145	42	71	214	558	871	1212	8023
114 ONAWAY STATE PARK	CDD HDD	0 1419	0 1225	0 1079	0 671	16 321	45 97	103 24	88 52	8 182	0 498	0 842	0 1225	260 7635
115 ONTONAGON 6 SE	CDD HDD	0 1539	0 1292	0 1136	0 708	25 369	71 133	148 59	113 79	13 248	3 569	0 967	0 1370	373 8469
116 OWOSSO WWTP	CDD HDD	0	0	0 979	608	20 295	41 71	110 15	90	10 162	0 491	0 815	0	271 7192
	CDD	0	0	0	0	31	89	167	132	26	3	0	0	448
118 PELLSTON RGNL AP	HDD CDD	1484	1317 0	1159 0	735 0	383 17	141 51	50 108	90 85	260 6	591 0	903 0	1279 0	8392 267
119 PETOSKEY	HDD CDD	1391	1265 0	1122	745 0	429 8	158 46	42 106	69 93	202	529 1	858 0	1197 0	8007 264
120 PONTIAC STATE HOSPITA	L HDD	1307	1098	920	543	246	49	6	21	118	443	776	1153	6680
121 PORT HURON	CDD HDD	0 1311	0 1129	0 976	1 608	51 285	128 64	217 6	176 19	48 105	5 441	0 766	0 1135	626 6845
	CDD	0	0	0	0	28	109	229	200	53	7	0	0	626
124 ROGERS CITY	HDD CDD	1436	1274 0	1145 0	753 0	414 9	155 51	43 110	75 92	227 10	568 0	876 0	1243 0	8209 272
·														



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

No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	DEGF JUN	JUL	<b>/S</b> (Tota AUG	l) SEP	OCT	NOV	DEC	ANNUAL
125	RUDYARD 4 N	HDD CDD	1573 0	1341 0	1192 0	753 0	417 12	195 32	94 70	129 59	344 5	685 0	997 0	1375 0	9095 178
126	SAGINAW CONSUMERS PWR C	-	1291	1091	908	531	223	42	5	18	104	417	751	1131	6512
128	SAGINAW TRI STATE AP	CDD HDD	0 1352	0 1156	0 979	1 587	60 272	153 68	254 10	196 40	51 155	7 487	0 812	0 1181	722 7099
129	SAINT CHARLES	CDD HDD	0 1366	0 1182	0 992	1 587	42 269	120 62	200 18	155 44	26 176	4 502	0 828	0 1183	548 7209
		CDD	0	0	0	1	42	104	193	139	40	3	0	0	522
130	ST IGNACE MACKINAC BR	HDD CDD	1441 0	1284 0	1157 0	770 0	432 4	151 34	42 116	49 110	202 9	540 1	865 0	1223	8156 274
131	ST JAMES 2 S BEAVER IS	HDD CDD	1413 0	1268 0	1149 0	767 0	437 6	176 30	62 97	75 99	216 10	538 0	862 0	1204 0	8167 242
132	ST JOHNS	HDD CDD	1355	1166	976 0	588 1	266 41	56 114	11 204	36 155	143 35	468 4	811	1172	7048 554
133	SANDUSKY	HDD	1351	1155	1000	615	296	81	11	35	144	484	796	1165	7133
134	SAULT STE MARIE AP	CDD HDD*	0 1606	0 1399	0 1253	798	29 434	101 212	174 91	145 107	26 320	642	0 979	1383	477 9224
136	SENEY WILDLIFE REFUGE	CDD* HDD	0 1504	0 1292	0 1152	1 708	6 340	20 123	56 40	50 68	12 221	0 556	0 923	0 1323	145 8250
		CDD	0	0	0	0	26	60	131	104	9	0	0	0	330
137	SOUTH HAVEN	HDD CDD	1216 0	1019 0	869 0	550 0	280 37	71 113	11 207	23 196	87 55	356 7	689 0	1052	6223 615
139	STAMBAUGH 2 SSE	HDD CDD	1767 0	1481 0	1294 0	819 0	451 13	189 24	102 67	150 43	378 1	718 0	1113 0	1566 0	10028 148
140	STANDISH 5 SW	HDD	1432	1238	1072	675	347	104	27	65	222	559	865	1224	7830
141	STEPHENSON 8 WNW	CDD HDD	0 1618	0 1344	0 1140	706	16 368	68 125	128 45	89 74	15 250	600	0 983	0 1426	316 8679
143	TAHQUAMENON FALLS STPK	CDD HDD	0 1596	0 1425	0 1295	0 858	18 485	58 232	117 114	86 150	5 334	0 670	0 1011	0 1399	284 9569
	_	CDD	0	0	0	0	7	22	58 7	49	2	0	0	0	138
144	THREE RIVERS	HDD CDD	1341 0	1131 0	936 0	575 1	270 44	54 118	200	34 151	142 34	479 3	0	1167 0	6946 551
145	TRAVERSE CITY AP	HDD CDD	1369 0	1209 0	1065 0	670 0	350 26	111 90	22 162	50 136	171 16	504 2	834 0	1195 0	7550 432
146	TROUT LAKE	HDD CDD	1572 0	1352	1208	772 0	418 17	176 31	77 73	104 58	300 4	632 0	953 0	1352 0	8916 183
147	VANDERBILT 11 ENE	HDD	1554	1384	1222	771	419	161	79	127	321	659	966	1349	9012
150	WATERSMEET 5 W	CDD HDD	0 1732	0 1438	0 1251	0 816	18 433	41 188	89 87	65 120	4 317	0 667	0 1088	0 1531	217 9668
152	WEST BRANCH 3 SE	CDD HDD	0 1458	0 1253	0 1081	0 666	15 330	52 102	97 27	64 65	4 217	0 572	0 892	0 1261	232 7924
		CDD	0	0	0	0	24	72	137	106	10	0	0 925	0	349
154	WHITEFISH POINT	HDD CDD	1492 0	0	1224 0	854 0	538 0	290 6	146 48	118 68	258 7	592 0	0	0	9060 129
157	YPSILANTI E MICH UNIV	HDD CDD	1252 0	1040	849 0	479 3	204 77	27 171	1 276	10 223	85 69	393 9	726 0	1101	6167 828

# United States Climate Normals 80 T 1971-2000 1971-3000 1971-3000

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

	-10													
								MALS S						
No.	Station Name Eler	ment JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
001	ADRIAN 2 NNE HIGHEST N	MEAN   33.2	36.0	43.1	52.1	64.8	71.9	76.2	73.8	66.5	58.4	44.7	36.9	76.2
001		DIAN 23.4		36.5	47.1	56.8	68.1	71.7	69.7	62.0	50.6	39.4	29.3	47.8
	LOWEST N			28.9	41.1	52.1	62.4	67.5	64.8	56.8	44.1	32.4	17.1	12.6
	HIGHEST MEAN			1973	1977	1998	1971	1999	1995	1971	1971	1975	1982	1999
	LOWEST MEAN			1984	1975	1997	1985	1992	1992	1993	1988	1995	1989	1977
	MIN OBS TIME ADJUST	MENT 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	MAX OBS TIME ADJUST	MENT 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
002	ALBERTA FORD HIGHEST N	MEAN 20.4	27.6	32.7	44.3	61.1	66.3	71.0	69.0	61.5	50.8	36.7	26.7	71.0
	MEI	DIAN   10.0	14.3	24.9	37.6	52.3	61.1	66.2	64.6	54.9	44.8	29.7	16.9	39.6
	LOWEST N	MEAN -0.1	6.2	16.6	30.8	44.8	55.0	59.2	59.2	49.0	39.3	21.3	6.4	-0.1
	HIGHEST MEAN	YEAR   1990	1998	1973	1987	1977	1995	1983	1983	1998	1973	1999	1994	1983
	LOWEST MEAN Y	I .		1996	1975	1997	1982	1992	1977	1974	1988	1995	1989	1977
	MIN OBS TIME ADJUST	I .		0.0	-0.6	-0.9	-0.7	-0.7	-0.8	-0.5	-0.6	0.2	0.9	
	MAX OBS TIME ADJUST			0.4	0.4	0.2	0.2	0.0	0.0	0.0	-0.1	0.0	0.2	
004	ALLEGAN 5 NE HIGHEST N			43.0	49.9	62.6	70.2	73.3	74.1	64.9	56.1	43.9	35.3	74.1
		DIAN 21.4		33.7	44.5	55.7	65.3	69.6	67.2	60.5	48.9	38.0	27.9	46.1
	LOWEST N			25.6	39.1	48.6	60.3	66.7	62.7	55.0 1998	42.9	31.5	16.9	10.8
	HIGHEST MEAN Y			1973 1978	1985	1977 1997	1971 1982	1988 1992	1995 1992	1998	1971 1987	1999 1995	1982 1989	1995 1977
	MIN OBS TIME ADJUST			1.6	2.2	1.4	1.1	0.7	1.1	1.2	1.0	0.8	0.5	19//
	MAX OBS TIME ADJUST			0.4	0.5	0.4	0.3	0.7	0.0	-0.1	0.0	0.0	0.0	
005	ALMA OBS TIME ADJUSTI			42.3	50.3	64.9	71.3	75.3	72.7	64.3	56.1	43.8	33.7	75.3
003		DIAN 21.0		33.1	45.4	56.6	66.2	70.3	68.0	60.5	49.1	37.2	27.6	45.9
	LOWEST N	I .		25.6	39.7	49.9	60.3	65.6	63.4	54.7	43.6	30.2	17.4	10.8
	HIGHEST MEAN			2000	1977	1977	1971	1987	1988	1971	1971	1999	1982	1987
	LOWEST MEAN	I .		1978	1975	1997	1982	1992	1992	1993	1980	1995	1989	1977
	MIN OBS TIME ADJUST	I .		1.0	0.0	-0.7	-0.5	-0.5	-0.3	-0.5	0.4	0.9	0.6	
	MAX OBS TIME ADJUST	MENT 0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
006	ALPENA COLLIN HIGHEST N	MEAN 26.1	29.7	36.8	44.6	58.1	65.1	71.8	68.0	59.9	52.9	40.5	31.6	71.8
	MEI	DIAN   17.8	18.1	28.6	40.4	52.5	61.7	66.8	64.4	56.5	45.7	34.8	25.3	42.5
	LOWEST N	MEAN 7.6	8.0	20.5	34.1	46.0	55.9	60.6	60.7	51.1	40.7	28.8	11.6	7.6
	HIGHEST MEAN	YEAR   1990	1998	2000	1991	1998	1976	1983	1980	1998	1971	1999	1994	1983
	LOWEST MEAN Y			1972	1972	1997	1982	1992	1977	1993	1981	1995	1989	1994
	MIN OBS TIME ADJUST			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	MAX OBS TIME ADJUST			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
007	ALPENA WASTEW HIGHEST N	I .		37.4	45.2	58.2	67.5	73.0	70.4	63.4	54.6	41.8	32.0	73.0
		DIAN 19.6		28.5	40.4	51.8	61.6	67.9	66.4	59.0	47.2	36.5	27.2	43.6
	LOWEST N	I .		21.9	35.2	46.1	57.1	60.9	62.8	54.3	42.7	29.6	15.4	9.8
	HIGHEST MEAN Y	I .		2000 1972	1986 1972	1998 1997	1991 1972	1983 1992	1983 1992	1998 1993	1971 1988	1975 1995	1998 1989	1983 1979
	MIN OBS TIME ADJUST	1		1.0	0.0	-0.8	-0.5	-0.5	-0.3	-0.4	0.4	0.9	0.6	19/9
	MAX OBS TIME ADJUST	I .		0.4	0.4	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.1	
008	ANN ARBOR UNI HIGHEST N			44.9	52.9	65.5	73.1	76.2	76.2	68.3	61.0	45.4	36.6	76.2
		DIAN 23.8		36.4	47.7	58.9	68.4	72.5	70.8	63.3	51.9	40.1	29.2	48.9
	LOWEST N			28.4	40.9	51.7	64.4	68.4	66.3	57.6	45.4	32.5	17.6	12.1
	HIGHEST MEAN			1973	1985	1998	1971	1988	1995	1998	1971	1975	1982	1988
	LOWEST MEAN Y	YEAR 197	1978	1984	1975	1997	1985	1992	1992	1975	1988	1976	1989	1977
	MIN OBS TIME ADJUST		-1.3	-0.9	-1.0	-0.8	-0.7	-0.5	-0.7	-0.9	-1.1	-1.1	-0.8	
	MAX OBS TIME ADJUST	MENT   -1.0	-1.5	-1.1	-1.4	-1.2	-1.1	-0.8	-1.2	-1.1	-1.1	-0.8	-0.8	
009	ATLANTA 5 WNW HIGHEST N	I .		40.5	46.6	61.0	69.5	73.0	70.2	61.3	54.7	41.6	32.1	73.0
		DIAN   16.8		28.9	41.6	54.1	62.4	68.0	65.5	57.8	46.2	35.3	23.3	42.8
	LOWEST N	I .		20.7	35.5	46.3	57.7	61.3	61.7	52.6	41.1	27.9	9.6	5.4
	HIGHEST MEAN	I .		2000	1986	1975	1995	1983	1973	1998	1971	1999	1982	1983
	LOWEST MEAN	I .		1972	1972	1997	2000	1992	1997	1993	1992	1995	1976	1994
	MIN OBS TIME ADJUST	I .		0.0	-0.5	-1.1	-0.6	-0.6	-0.7	-0.9	-0.6	0.2	0.3	
010	MAX OBS TIME ADJUST			0.4	0.4	0.2	0.2	0.1	0.0	-0.1	0.0	0.0	0.1	
010	BAD AXE HIGHEST N			39.5	48.0	61.2	69.0	73.6	71.5	63.9	56.7	44.1	34.7	73.6
		DIAN 20.0		30.8	42.3	54.6 47.1	64.5 59.1	69.2	66.6 62.6	59.6 55.4	48.1 43.9	37.9 30.3	27.5 14.9	44.8
	LOWEST N HIGHEST MEAN Y			23.5	1985	1991	1984	1987	1995	1998	1971	1975	1982	10.8 1987
	LOWEST MEAN Y			1978	1975	1991	1984	1992	1993	1993	1971	1975	1982	1977
	MIN OBS TIME ADJUST			1.8	1.3	-0.1	-0.1	-0.1	0.7	0.6	1.1	0.9	0.5	17//
	MAX OBS TIME ADJUST			0.5	0.5	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	
011	BALDWIN HIGHEST N			40.9	49.4	63.8	68.7	72.1	73.1	62.7	53.4	42.2	33.3	73.1
***		DIAN 20.3		30.4	43.2	55.1	64.3	67.9	65.5	58.0	47.8	35.8	26.5	44.4
	LOWEST N	I .		24.3	36.9	48.2	57.8	62.8	61.2	51.9	42.2	28.1	14.7	9.8
	HIGHEST MEAN			2000	1986	1982	1995	1999	1995	1998	1971	1999	1982	1995
	LOWEST MEAN	I .		1978	1975	1997	1972	1971	1977	1975	1976	1976	1976	1979
	MIN OBS TIME ADJUST	I .		1.0	0.0	-0.7	-0.5	-0.5	-0.3	-0.5	0.5	1.0	0.6	
1	MAX OBS TIME ADJUST	I .		0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	

# United States Climate Normals 1971-2000 1971-2000

#### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	NORN Jun	MALS S' JUL	TATISTI AUG	CS SEP	OCT	NOV	DEC	ANNUAL
012	BATTLE CREEK HIGH	HEST MEAN	32.0	35.9	43.7	53.0	65.3	72.2	75.4	75.7	66.1	57.9	44.7	36.1	75.7
	7.07	MEDIAN	23.1	25.4	36.2	46.9	58.0	67.2	70.8	68.6	61.6	50.5	39.5	28.3	48.0
	HIGHEST N	WEST MEAN MEAN YEAR	11.9	15.6 1998	28.1 1973	41.0 1985	51.0 1977	63.1 1971	66.7 1999	64.3 1995	54.8 1998	1971	31.8 1999	17.3 1982	11.9 1995
		MEAN YEAR	1977	1978	1984	1975	1997	1992	1992	1992	1993	1988	1976	1989	1977
	MIN OBS TIME AI		-0.9	-1.1	-0.8	-0.9	-0.8	-0.6	-0.5	-0.6	-0.8	-1.0	-1.1	-0.7	
014	MAX OBS TIME AI BEECHWOOD 7 W HIGH	DJUSTMENT HEST MEAN	-0.6 23.0	-0.9 31.2	-0.5 34.7	-0.7 47.7	-0.7 61.6	-0.6 65.9	69.5	-0.8 68.5	-0.6 61.4	-0.7 51.7	-0.8 37.8	-0.5 25.7	69.5
014	BEECHWOOD / W HIGH	MEDIAN	11.6	16.4	27.2	40.0	54.5	60.9	65.8	64.5	55.7	44.3	29.9	17.7	40.7
	LOV	WEST MEAN	2.3	8.2	19.9	33.6	46.9	54.4	59.7	58.9	49.8	38.5	22.0	6.3	2.3
	HIGHEST N		1990	1998	2000	1987	1977	1995	1983	1995	1998	1971	1999	1997	1983
	LOWEST N MIN OBS TIME AI	MEAN YEAR	1977 -1.5	1979 -1.4	1984 -0.9	1975 -0.8	1997 -1.0	1982 -0.7	1992 -0.5	1977 -0.9	1974 -1.0	1980	1995 -1.2	1989 -1.3	1977
	MAX OBS TIME AI		-1.9	-1.4	-1.1	-1.2	-1.2	-1.0	-0.8	-1.1	-1.9	-1.1	-1.2	-1.7	
015	BENTON HARBOR HIGH	HEST MEAN	31.8	36.4	44.7	52.9	64.6	70.9	76.5	76.5	67.9	58.7	45.4	37.7	76.5
	7.07	MEDIAN	23.8	27.4	36.3	45.1	56.3	66.7	71.2	69.2	62.0	51.8	40.2	29.0	48.0
	LOV HIGHEST N	WEST MEAN	13.0	15.9 1998	28.5 1973	40.0 1977	50.3 1991	60.3 1971	1999	63.3 1995	56.0 1978	43.8 1971	33.5 1975	17.0 1982	13.0 1995
		MEAN YEAR	1977	1978	1984	1982	1997	1992	1992	1992	1993	1988	1995	1989	1977
	MIN OBS TIME AI	DJUSTMENT	-1.2	-1.3	-0.9	-1.0	-0.8	-0.7	-0.5	-0.7	-0.9	-1.3	-1.4	-0.9	
016	MAX OBS TIME AI		-1.6	-2.1	-1.6	-2.2	-2.0	-1.6	-1.1	-1.7	-1.8	-1.7	-2.0	-1.4	60.0
016	BERGLAND DAM HIGH	HEST MEAN MEDIAN	20.0	29.2 13.1	32.5 23.3	43.4 36.8	57.5 50.6	65.7 60.8	69.8	68.0 63.3	59.1 53.8	50.0	36.3 29.4	24.1 16.7	69.8
	LOV	WEST MEAN	-0.8	3.8	15.1	30.1	44.3	55.2	58.7	57.4	47.9	37.9	20.8	5.7	-0.8
	HIGHEST N	MEAN YEAR	1990	1998	1973	1986	1977	1995	1983	1983	1998	1971	1999	1997	1983
		MEAN YEAR	1977	1979	1996	1996	1997	1982	1992	1977	1974	1987	1995	1989	1977
	MIN OBS TIME AI MAX OBS TIME AI		1.4	1.0	0.0	-0.6 0.4	-0.9 0.2	-0.6 0.2	-0.7 0.0	-0.8 0.0	-0.5 0.0	-0.6 -0.1	0.2	0.9	
017		HEST MEAN	24.6	30.0	35.7	44.7	57.1	65.0	70.3	68.7	61.0	52.9	40.8	29.3	70.3
		MEDIAN	15.5	17.9	27.4	39.2	51.8	59.9	65.7	65.2	57.1	45.9	33.7	21.9	41.8
		WEST MEAN	5.6	8.1	19.8	31.8	44.3	54.8	61.0	59.0	52.4	41.5	25.8	12.5	5.6
	HIGHEST N	MEAN YEAR MEAN YEAR	1990 1977	1998 1979	2000 1972	1986 1972	1977 1997	1995 1982	1983 1992	1995 1977	1998 1974	1971	1999 1995	1994 1983	1983 1977
	MIN OBS TIME AI		-0.4	-1.1	-0.8	-0.8	-1.0	-0.7	-0.8	-1.0	-1.2	-1.3	-1.2	-1.0	1011
	MAX OBS TIME AI	DJUSTMENT	0.3	0.1	-0.1	-0.3	-0.9	-0.4	-0.7	-0.5	-1.1	-0.7	-0.3	-0.2	
018	BIG RAPIDS WA HIGH	HEST MEAN	28.7	33.1	40.3	49.1	63.2	69.8	73.8	72.8	64.1	55.9	42.4	32.8	73.8
	T.O.T	MEDIAN WEST MEAN	19.9	21.6 13.7	31.3 24.9	44.1 38.9	55.5 48.7	65.0 59.8	69.7 64.5	67.1 62.6	59.0 54.1	47.7	36.4 28.9	26.5 15.0	45.2 11.1
	HIGHEST N		1990	1998	2000	1977	1982	1971	1983	1995	1998	1971	1975	1982	1983
		MEAN YEAR	1977	1979	1984	1982	1997	1982	1992	1992	1993	1988	1995	1989	1977
	MIN OBS TIME AI		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
019	MAX OBS TIME AI BLOOMINGDALE HIGH	HEST MEAN	0.0	34.2	0.0	52.1	0.0	71.4	0.0	75.8	65.2	58.3	44.9	0.0	75.8
		MEDIAN	23.5	24.8	34.7	45.2	56.4	66.0	70.2	68.7	61.0	49.8	39.1	29.0	47.2
		WEST MEAN	12.8	12.8	26.3	40.6	50.2	61.4	66.0	63.6	55.9	44.2	32.7	18.8	12.8
	HIGHEST N	MEAN YEAR MEAN YEAR	1990 1977	1998	2000 1978	1985	1991	1971 1982	1999	1995 1992	1971 1975	1971 1988	1975 1976	1982	1995 1978
	MIN OBS TIME AI		1.0	1.6	1.7	1.3	0.0	0.0	-0.1	0.7	0.6	1.1	1.0	0.6	1976
	MAX OBS TIME AI		0.2	0.4	0.4	0.5	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	
020	BOYNE FALLS HIGH	HEST MEAN	28.3	33.4	40.9	48.4	63.2	69.5	73.1	72.3	63.7	56.5	43.2	33.3	73.1
	T.O.T	MEDIAN WEST MEAN	19.6 9.8	19.7 11.2	31.0 23.8	43.4 36.5	55.0 48.3	64.4 58.0	68.4	66.7 62.4	59.4 54.2	48.4	36.9 31.0	26.2 14.6	44.7 9.8
	HIGHEST N		1990	1998	2000	1986	1998	1995	1983	1995	1998	1971	1999	1994	1983
	LOWEST N	MEAN YEAR	1994	1979	1972	1975	1997	1982	1992	1977	1974	1980	1976	1989	1994
	MIN OBS TIME AI		-1.0	-1.5	-0.9	-0.9	-1.1	-0.6	-0.5	-0.8	-1.0	-1.2	-1.2	-1.0	
021	MAX OBS TIME AI CADILLAC HIGH	HEST MEAN	-1.4 25.6	-2.1 30.7	-1.6 38.3	-1.8 46.0	-2.2 60.4	-1.5 67.2	-1.2 71.3	-1.9 71.2	-1.8 60.7	-1.7 54.1	-1.7 39.7	-1.3 31.6	71.3
021	C. D. LLLING III GI	MEDIAN	17.3	17.9	28.3	41.2	52.5	62.7	67.1	64.5	56.4	45.5	34.5	24.9	42.4
		WEST MEAN	9.1	9.3	21.1	35.2	46.0	56.1	61.3	60.5	52.5	40.3	27.2	11.8	9.1
	HIGHEST N		1990	1998	2000	1986	1977	1995	1999	1995	1998	1971	1999	1982	1999
	LOWEST N MIN OBS TIME AI	MEAN YEAR DJUSTMENT	1994	1978 1.7	1971 1.0	1972	1997 -0.7	1982 -0.5	1992	1992 -0.3	1993 -0.5	1988	1995 0.9	1989	1994
	MAX OBS TIME AI		0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
022		HEST MEAN	31.2	33.8	42.2	51.5	63.6	70.8	75.4	74.6	66.1	58.0	45.5	35.8	75.4
		MEDIAN	21.8	23.3	34.4	45.7	57.1	67.0	70.8	68.2	61.3	50.3	39.0	28.2	47.1
	LOV HIGHEST N	WEST MEAN MEAN YEAR	11.3 1990	13.5 1998	27.0 2000	38.7 1985	49.7 1998	62.1 1987	66.2 1987	64.3 1995	56.6 1998	44.8 1971	31.8 1975	15.2 1982	11.3 1987
		MEAN YEAR	1977	1979	1978	1975	1997	1982	1992	1992	1975	1988	1976	1989	1977
	MIN OBS TIME AI		-1.0	-1.4	-0.9	-1.0	-0.9	-0.7	-0.5	-0.8	-1.0	-1.2	-1.2	-0.8	
	MAX OBS TIME AI	DJUSTMENT	-1.4	-2.0	-1.6	-2.1	-2.1	-1.5	-1.2	-1.8	-1.8	-1.7	-1.1	-1.1	

# United States Climate Normals 1971-2000 60 -F 19 F M A M J J A S O N D

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

								NODA	44100	TATIOTI	00				
No	Station Name	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	TATISTI AUG	SEP	OCT	NOV	DEC	ANNUAL
															_
024	CHAMPION VAN	HIGHEST MEAN	22.6	27.1	33.6	45.4	60.1	64.3	69.4	67.7	58.5	51.2	35.2	23.9	69.4
		MEDIAN	10.9	13.9	24.8	37.9	51.5	59.7	64.1	62.8	54.4	43.6	29.9	17.7	38.8
	IIICI	LOWEST MEAN HEST MEAN YEAR	1.9	5.9 1998	18.2 1973	30.5 1987	42.7 1977	53.5 1976	59.0 1983	58.3 1983	49.7 1978	38.8	19.4 1999	7.5 1997	1.9 1983
		EST MEAN YEAR	1994	1979	1973	1975	1977	1982	1992	1903	1976	1980	1995	2000	1994
		ME ADJUSTMENT	-1.6	-1.5	-1.0	-0.9	-1.0	-0.7	-0.7	-0.9	-1.1	-1.3	-1.3	-1.3	1994
		ME ADJUSTMENT	-2.4	-2.2	-1.7	-1.9	-2.0	-1.6	-1.3	-1.7	-1.4	-1.7	-1.8	-1.7	
026	CHARLOTTE	HIGHEST MEAN	32.3	33.5	42.7	51.5	63.8	70.7	74.1	74.1	65.3	57.6	43.6	35.6	74.1
		MEDIAN	21.5	23.2	35.0	45.7	57.0	66.5	70.3	68.1	60.8	49.5	38.5	28.2	46.9
		LOWEST MEAN	10.4	11.8	26.4	40.5	49.3	62.3	66.4	63.1	56.7	42.5	29.3	16.3	10.4
		IEST MEAN YEAR	1990	1998	1973	1985	1991	1971	1988	1995	1971	1971	1975	1982	1988
		VEST MEAN YEAR	1977	1978	1978	1975	1997	1977	1992	1976	1993	1976	1976	2000	1977
		ME ADJUSTMENT	1.1	1.7	1.0	0.0	-0.7	-0.5	-0.5	-0.3	-0.4	0.5	1.0	0.6	
027	CHATHAM EXP F	ME ADJUSTMENT HIGHEST MEAN	25.3	0.4	0.4	0.5 45.0	0.4	0.3	70.3	0.0	-0.1 61.6	0.0	0.0	0.0	70.3
027	CHAINAM EAP F	MEDIAN	15.3	17.5	26.0	38.6	52.5	60.3	65.6	64.7	56.6	45.7	32.6	22.2	41.5
		LOWEST MEAN	6.2	8.4	20.7	32.8	44.6	55.2	59.2	60.4	51.0	41.5	26.1	11.3	6.2
	HIGH	IEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1999	1995	1998	1971	1999	1994	1999
	LOW	EST MEAN YEAR	1977	1979	1972	1975	1997	1982	1992	1977	1993	1980	1976	1989	1977
		ME ADJUSTMENT	-1.4	-1.5	-0.9	-0.9	-1.0	-0.7	-0.6	-0.9	-1.0	-1.2	-1.3	-1.1	
	MAX OBS TI	ME ADJUSTMENT	-1.7	-2.2	-1.7	-1.9	-2.0	-1.5	-1.2	-1.7	-1.8	-1.7	-1.8	-1.5	
028	CHEBOYGAN	HIGHEST MEAN	26.3	30.8	35.7	43.9	58.2	66.0	72.0	69.7	61.1	53.0	40.2	31.1	72.0
		MEDIAN	17.0	17.1	27.1	39.8	51.1	60.9	67.6	65.7	58.0	46.4	35.4	25.5	42.1
		LOWEST MEAN	6.0	8.4	20.8	32.7	45.0	56.4	60.1	61.0	54.4	41.8	29.2	13.3	6.0
		IEST MEAN YEAR	1990	1998	2000	1998	1998	1991	1983	1995	1998	1971	1975	1994	1983
		WE ADJUSTMENT	1994	1994 1.8	1989 1.0	1972	1997 -0.8	1982 -0.5	1992	1982 -0.3	1975 -0.4	1980	1995 0.9	1989 0.7	1994
		ME ADJUSTMENT ME ADJUSTMENT	0.2	0.5	0.4	0.0	0.4	0.3	0.1	0.1	-0.4	0.4	0.9	0.7	
030	COLDWATER STA	HIGHEST MEAN	32.3	34.2	42.3	52.6	65.0	71.5	74.6	74.4	65.7	57.5	43.7	33.9	74.6
	0022111211 0111	MEDIAN	22.0	24.5	35.2	45.5	57.5	67.3	70.6	68.4	61.2	50.2	38.0	27.7	46.9
		LOWEST MEAN	9.9	13.0	27.0	40.3	50.5	62.6	66.8	64.9	56.4	43.1	30.5	15.9	9.9
	HIGH	IEST MEAN YEAR	1990	1998	2000	1985	1991	1971	1999	1995	1978	1971	1975	1982	1999
	LOW	EST MEAN YEAR	1977	1978	1984	1975	1997	1982	2000	1992	1975	1988	1976	2000	1977
	MIN OBS TI	ME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		ME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
031	COPPER HARBOR	HIGHEST MEAN	25.1	30.4	35.4	43.9	54.5	62.3	69.2	70.0	62.2	53.1	39.7	30.6	70.0
		MEDIAN	16.9	17.7	26.3	38.2	50.4	57.7	64.4	65.2	57.0	45.9	33.5	23.3	41.1
	IIICI	LOWEST MEAN IEST MEAN YEAR	7.5	7.8 1998	19.4 2000	31.5 1987	44.0 1988	52.8 1987	58.2 1988	61.1 1995	53.0 1998	42.3 1971	27.2 1999	12.7 1997	7.5 1995
	_	EST MEAN YEAR	1982	1979	1975	1975	1900	1982	1992	1995	1993	1980	1995	1985	1982
		ME ADJUSTMENT	-1.6	-1.5	-1.1	-0.8	-1.0	-0.7	-0.6	-0.9	-1.0	-1.2	-1.2	-1.3	1902
		ME ADJUSTMENT	-1.9	-1.5	-0.8	-1.0	-1.2	-1.0	-0.8	-1.1	-0.8	-0.9	-1.1	-1.7	
032	CROSS VILLAGE	HIGHEST MEAN	26.1	29.4	35.4	45.0	58.0	65.0	71.4	70.2	61.7	54.6	39.6	31.4	71.4
		MEDIAN	16.6	16.7	27.7	40.2	52.0	59.9	65.8	64.8	57.3	46.3	34.7	25.5	42.1
		LOWEST MEAN	7.3	7.4	19.9	32.7	44.8	55.7	59.6	61.6	53.2	41.8	29.6	14.1	7.3
	HIGH	IEST MEAN YEAR	1990	1998	1973	1987	1998	1995	1983	1995	1971	1971	1999	1994	1983
		IEST MEAN YEAR	1994	1979	1972	1996	1997	1982	1992	1982	1974	1981	1976	1989	1994
		ME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.8	-0.5	-0.5	-0.3	-0.4	0.4	0.9	0.7	
022		ME ADJUSTMENT	0.2	0.5	0.4	0.4	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.2	70 4
033	CRYSTAL FALLS	HIGHEST MEAN MEDIAN	19.5	27.0 12.5	34.0 24.9	44.6 38.0	59.9 52.3	65.1 60.5	70.4	68.2 63.1	59.9 54.4	51.4 42.6	36.9 29.3	24.4 16.5	70.4 39.1
		MEDIAN LOWEST MEAN	0.0	3.4	17.2	32.0	44.2	54.4	59.1	58.9	48.6	37.3	29.3	5.6	0.0
	HIGH	IEST MEAN YEAR	1990	1998	1973	1986	1977	1995	1983	1995	1998	1971	1999	1997	1983
		JEST MEAN YEAR	1977	1979	1984	1975	1997	1982	1992	1977	1974	1976	1995	1983	1977
		ME ADJUSTMENT	1.3	1.0	0.0	-0.5	-0.9	-0.7	-0.6	-0.8	-0.5	-0.6	0.1	0.4	
	MAX OBS TI	ME ADJUSTMENT	0.5	0.5	0.5	0.4	0.2	0.2	0.1	0.0	-0.1	-0.1	0.0	0.2	
034	DEARBORN	HIGHEST MEAN	35.0	36.1	44.0	53.7	67.2	73.4	77.4	76.5	68.7	60.6	47.8	39.0	77.4
		MEDIAN	24.5	26.7	37.2	48.6	59.5	69.0	73.6	72.1	64.7	52.6	42.1	30.7	49.7
		LOWEST MEAN	13.4	17.1	29.9	42.4	51.7	65.6	69.5	67.5	59.2	47.3	33.4	19.1	13.4
		HEST MEAN YEAR	1990	1998	1973	1985	1991	1991	1988	1988	1978	1971	1975	1982	1988
		WEST MEAN YEAR	1977	1978 -0.3	1978 -0.1	1975	1997 -0.8	1992 -0.7	2000	1992 -0.7	1993 -0.9	1988	1996	1989	1977
		ME ADJUSTMENT ME ADJUSTMENT	0.4	0.3	0.4	-0.7 0.4	0.3	0.2	0.1	0.0	-0.9	-0.6	-0.6 0.0	0.1	
035	MAX UBS 11 DETOUR VILLAG	HIGHEST MEAN	24.1	28.7	33.8	43.4	57.3	65.2	71.8	70.9	61.9	51.5	39.9	31.3	71.8
"	22100K VILLAG	MEDIAN	15.3	15.4	25.4	37.5	50.6	59.3	65.9	65.3	56.1	45.4	35.2	24.5	40.9
		LOWEST MEAN	1.4	4.3	17.2	31.8	44.2	55.2	59.1	61.6	52.3	39.8	28.5	10.2	1.4
	HIGH	IEST MEAN YEAR	1990	1998	2000	1999	1998	1991	1983	1983	1996	1971	1999	1994	1983
		EST MEAN YEAR	1994	1979	1972	1975	1997	1982	1992	1982	1974	1980	1995	1989	1994
	MIN OBS TI	ME ADJUSTMENT	1.0	1.8	1.1	0.0	-0.7	-0.5	-0.5	-0.3	-0.4	0.4	0.9	0.7	
	MAX OBS TI	ME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	0.2	0.1	-0.1	0.0	0.0	0.1	
			•									•			

# United States Climate Normals 80 T 1971-2000 1971-3000 1971-3000

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

							NORN	/ALS S	TATISTI	CS				
No.	Station Name Elemen	nt JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
036	DETROIT CITY HIGHEST MEA	N 35.1	37.7	45.1	54.8	67.7	74.5	78.5	78.5	69.9	62.0	50.7	40.2	78.5
	MEDIA		28.1	37.7	48.4	60.1	70.4	75.3	73.0	65.4	53.6	42.9	32.6	51.2
	LOWEST MEA		17.9	30.7	44.4	53.9	63.4	70.1	68.6	60.4	47.6	36.1	19.3	16.3
	HIGHEST MEAN YEA		1998	1977	1977	1982	1973	1999	1995	1978	1971	1975	1982	1995
	LOWEST MEAN YEA MIN OBS TIME ADJUSTMEN		1979	1984	1975	1997 0.0	1985	1992	1992	1993	1988	1995	1989	1977
	MAX OBS TIME ADJUSTMEN		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
037	DETROIT METRO HIGHEST MEA	N 33.6	36.7	44.0	53.2	66.5	72.4	77.1	77.2	68.2	59.2	47.5	38.2	77.2
	MEDIA		26.0	37.2	48.3	59.9	69.4	73.6	71.4	63.7	52.0	41.2	30.5	49.8
	LOWEST MEA HIGHEST MEAN YEA		16.9 1998	29.8 2000	41.7 1977	52.0 1991	64.2 1991	68.8 1988	66.7 1995	59.8 1978	46.0 1971	34.2 1975	18.0 1982	13.5 1995
	LOWEST MEAN YEA	ı	1978	1984	1977	1991	1991	1992	1993	1975	1988	1975	1982	1977
	MIN OBS TIME ADJUSTMEN		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1377
	MAX OBS TIME ADJUSTMEN		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
039	DOWAGIAC 1 W HIGHEST MEA		35.7	43.1	53.6	66.3	71.8	75.6	75.6	65.5	58.1	44.3	37.5	75.6
	MEDIA LOWEST MEA		25.2 12.7	36.3 27.8	46.3	57.9 52.0	67.6 62.7	71.6	68.6 64.7	61.9 56.5	50.7	39.4 31.4	28.9 18.2	47.8 10.1
	HIGHEST MEAN YEA		1998	1973	1977	1991	1991	1999	1995	1998	1971	1999	1982	1995
	LOWEST MEAN YEA		1978	1984	1975	1997	1992	1992	1992	1975	1987	1976	2000	1977
	MIN OBS TIME ADJUSTMEN		0.9	0.0	-0.7	-0.8	-0.6	-0.5	-0.7	-0.9	-0.6	0.4	0.2	
040	MAX OBS TIME ADJUSTMEN		0.4	0.4	0.4	0.3	0.2	0.1	0.0	-0.1	0.0	0.0	0.0	60.2
040	DUNBAR FOREST HIGHEST MEA MEDIA		25.5 12.0	31.7 23.9	43.3	57.4 50.7	62.9 58.5	68.3	67.4 63.1	60.1 54.7	51.0	38.2 31.7	26.6 21.1	68.3 38.9
	LOWEST MEA		3.1	15.6	30.6	43.6	53.4	58.3	58.3	51.5	38.4	25.3	6.2	2.2
	HIGHEST MEAN YEA	R 1990	1998	2000	1987	1998	1995	1983	1995	1998	1971	1999	1994	1983
	LOWEST MEAN YEA		1979	1972	1972	1983	1982	1992	1982	1974	1981	1976	1989	1982
	MIN OBS TIME ADJUSTMEN MAX OBS TIME ADJUSTMEN	ı	0.9	0.0	-0.4 0.4	-0.9 0.2	-0.7 0.2	-0.6 0.1	-0.7 0.0	-0.9 -0.1	-0.6	0.1	0.3	
041	EAST JORDAN HIGHEST MEA		33.3	40.4	49.0	62.9	67.8	71.9	71.6	63.1	56.6	41.6	32.8	71.9
	MEDIA		21.0	31.0	42.7	54.7	63.0	68.1	65.7	58.9	48.0	36.5	27.6	44.5
	LOWEST MEA		10.8	23.6	35.8	47.9	57.0	62.1	61.6	55.1	43.3	31.1	15.4	10.8
	HIGHEST MEAN YEA LOWEST MEAN YEA		1998 1979	2000 1972	1977 1975	1998 1983	1995 1982	1983 1992	1995 1982	1998 1993	1971	1999 1976	1994 1989	1983 1979
	MIN OBS TIME ADJUSTMEN		-1.5	-0.9	-0.9	-1.2	-0.7	-0.6	-0.9	-1.0	-1.3	-1.3	-1.1	19/9
	MAX OBS TIME ADJUSTMEN		-2.5	-2.0	-2.4	-3.3	-2.0	-1.7	-2.1	-2.8	-2.6	-2.1	-1.7	
042	EAST LANSING HIGHEST MEA		34.1	41.2	50.9	64.4	70.0	74.3	73.7	65.3	57.7	43.5	35.0	74.3
	MEDIA		22.0	33.9	45.3	56.7	66.8	70.1	68.5	60.6	49.0	37.8	27.3	46.3
	LOWEST MEA HIGHEST MEAN YEA	ı	10.9 1998	24.1 2000	39.6 1985	49.0 1991	62.0 1991	66.5 1988	64.0 1995	56.6 1971	42.9 1971	29.1 1975	16.5 1982	8.8 1988
	LOWEST MEAN YEA		1978	1978	1975	1997	1980	1992	1992	1975	1976	1976	1989	1977
	MIN OBS TIME ADJUSTMEN	T 1.0	1.7	1.0	0.0	-0.7	-0.5	-0.5	-0.3	-0.4	0.4	1.0	0.6	
	MAX OBS TIME ADJUSTMEN		0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
043	EAST TAWAS HIGHEST MEA MEDIA		31.4	39.8 31.7	47.5	60.9 54.5	67.8 63.9	72.9	72.2 67.3	64.0 60.2	54.9	43.6 37.9	34.9 28.0	72.9 45.4
	LOWEST MEA		11.9	24.5	36.7	48.5	58.1	63.4	63.1	56.1	44.6	32.0	15.9	11.9
	HIGHEST MEAN YEA	R 1990	1998	2000	1986	1998	1995	1999	1995	1998	1971	1975	1982	1999
	LOWEST MEAN YEA		1978	1972	1972	1997	1982	1992	1971	1975	1980	1995	1989	1978
	MIN OBS TIME ADJUSTMEN MAX OBS TIME ADJUSTMEN		-0.4	-0.5 0.2	-0.8	-1.0 0.0	-0.7 0.0	-0.6 -0.1	-0.8 -0.1	-1.1 -0.4	-1.1	-0.7 0.0	-0.4 0.1	
045	EAU CLAIRE 4 HIGHEST MEA		37.7	45.5	54.8	67.6	74.6	78.4	77.3	68.2	60.1	46.6	38.0	78.4
	MEDIA		27.4	38.2	47.9	59.8	69.3	73.1	71.3	63.9	53.4	41.0	30.3	49.8
	LOWEST MEA	l l	17.4	29.9	43.8	53.5	64.1	69.3	67.3	58.2	47.0	32.9	18.7	12.8
	HIGHEST MEAN YEA		1998	1973	1985	1977	1971	1999	1995	1978	1971	1999	1982	1999
	LOWEST MEAN YEA MIN OBS TIME ADJUSTMEN		1979 -1.1	1984 -0.8	1982 -0.9	1997 -0.8	1982 -0.6	1992 -0.5	1992 -0.7	1975 -0.8	1988	1976 -1.1	2000 -0.8	1977
	MAX OBS TIME ADJUSTMEN	l l	-0.9	-0.5	-0.7	-0.7	-0.6	-0.4	-0.8	-0.6	-0.7	-0.8	-0.5	
046	ESCANABA HIGHEST MEA		29.9	34.5	42.6	57.9	64.6	71.4	69.9	62.9	52.8	39.9	30.8	71.4
	MEDIA		17.2	26.8	38.4	50.4	60.4	66.9	65.8	57.0	46.9	34.7	23.9	42.0
	LOWEST MEA HIGHEST MEAN YEA		9.2 1998	19.4 2000	32.9 1987	44.7 1998	56.7 1991	61.0 1983	62.2 1983	53.1 1998	42.6 1971	27.0 1999	11.5 1997	6.9 1983
	LOWEST MEAN YEA		1979	1989	1972	1997	1982	1992	1992	1974	1980	1995	1989	1994
	MIN OBS TIME ADJUSTMEN	т 0.4	0.9	0.0	-0.5	-1.0	-0.6	-0.6	-0.8	-0.9	-0.6	0.2	0.3	
	MAX OBS TIME ADJUSTMEN		0.5	0.4	0.4	0.2	0.2	0.1	0.0	-0.1	0.0	0.0	0.2	
047	ESSEXVILLE HIGHEST MEA		32.3	41.5	49.7	64.0	70.9	75.7	74.7	66.5	57.5	44.1	35.3	75.7
	MEDIA LOWEST MEA		21.8 12.5	32.6 25.4	44.4 39.1	57.6 50.2	67.1 61.9	71.4	69.0 65.3	61.3 56.8	49.8	39.0 31.4	28.5 16.8	46.7 11.2
	HIGHEST MEAN YEA		1998	2000	1985	1977	1991	1987	1995	1998	1971	1975	1982	1987
	LOWEST MEAN YEA	R 1977	1979	1984	1975	1997	1982	1992	1992	1975	1980	1995	1989	1977
	MIN OBS TIME ADJUSTMEN		0.9	0.0	-0.6	-0.9	-0.6	-0.6	-0.7	-0.9	-0.6	-0.7	0.1	
	MAX OBS TIME ADJUSTMEN	T 0.2	0.5	0.4	0.4	0.3	0.2	0.1	0.0	-0.1	0.0	-0.1	0.0	

### United States Climate Normals 1971-2000 60 F 60 F 1 F M A M J J A S O N D

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No	Station Name	Element	JAN	FEB	MAR	APR	MAY	NORI JUN	MALS S	TATISTI AUG	CS SEP	ОСТ	NOV	DEC	ANNUAL
	EVART	HIGHEST MEAN	27.2	30.5	38.7	47.3	61.2	67.3	71.8	71.3	62.8	52.3	40.6	32.1	71.8
		MEDIAN	17.4	18.6	29.8	42.5	54.4	63.6	67.6	64.9	57.2	46.1	34.7	25.6	43.2
	HIG	LOWEST MEAN SHEST MEAN YEAR	8.0 1990	9.8 1998	22.7 2000	34.9 1986	47.5 1998	58.0 1987	63.4 1983	61.3 1995	51.3 1998	40.8 1971	27.6 1999	12.4 1982	8.0 1983
		WEST MEAN YEAR	1977	1978	1971	1975	1997	1982	1971	1992	1975	1988	1976	1976	1977
		TIME ADJUSTMENT TIME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.7 0.4	-0.5 0.3	-0.5 0.1	-0.3 0.0	-0.5 -0.1	0.4	0.9	0.6	
049	FAYETTE 4 SW	HIGHEST MEAN	25.8	32.0	37.2	44.6	57.9	66.1	71.5	70.3	63.6	56.1	42.6	31.4	71.5
		MEDIAN LOWEST MEAN	17.1 7.6	20.0	28.9 22.2	40.6	51.6 44.7	60.8 56.8	67.6 61.2	66.7 62.8	59.2 54.8	48.0 44.1	36.8 29.6	25.3 13.4	43.4 7.6
	HIG	SHEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1983	1983	1998	1971	1999	1994	1983
		WEST MEAN YEAR	1994	1994	1996	1996	1997	1982	1992	1982	1993	1988	1995	1989	1994
		TIME ADJUSTMENT TIME ADJUSTMENT	-1.1 -1.0	-1.4	-0.9 -1.1	-0.8 -1.2	-1.0 -1.2	-0.6 -1.0	-0.5 -0.8	-0.9 -1.1	-0.9 -1.1	-1.1 -1.0	-1.2 -1.1	-1.1 -1.0	
050	FLINT BISHOP	HIGHEST MEAN	31.2	34.5	41.4	51.3	64.3	69.9	75.2	74.3	65.3	56.2	45.7	35.6	75.2
		MEDIAN LOWEST MEAN	21.1	23.3	33.9 25.6	44.8 39.3	56.9 48.8	66.6 61.0	70.2	68.6 64.8	60.4 55.7	49.5	38.6 31.7	27.4 15.4	46.7 9.4
	HIG	HEST MEAN YEAR	1990	1998	2000	1985	1982	1987	1987	1995	1998	1971	1975	1982	1987
		OWEST MEAN YEAR	1977	1979	1978	1975	1997	1980	1992	1992	1993	1980	1976	1989	1977
		TIME ADJUSTMENT TIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
052	FRANKFORT 2 N	HIGHEST MEAN	30.7	34.9	39.9	47.5	60.9	68.5	73.3	73.6	64.0	57.7	43.6	34.1	73.6
		MEDIAN LOWEST MEAN	22.1 14.0	22.7 15.6	31.7 26.2	43.4 38.2	54.4 47.6	63.2 57.8	68.5 63.9	67.4 64.2	60.4 56.5	49.4 44.5	38.8 31.8	28.7 18.9	45.9 14.0
	HIG	SHEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1983	1988	1998	1971	1999	1982	1988
		OWEST MEAN YEAR	1994 -0.9	1979 -1.2	1984 -0.8	1996 -0.8	1997 -1.0	1982 -0.6	1996 -0.5	1982 -0.7	1975 -0.8	1988 -1.0	1976 -1.1	1989 -0.9	1994
		TIME ADJUSTMENT TIME ADJUSTMENT	-0.9	-0.8	-0.6	-0.6	-0.7	-0.5	-0.5	-0.7	-0.8	-0.7	-0.7	-0.9	
053	GAYLORD	HIGHEST MEAN	25.8	29.9	38.1	47.0	61.7	67.7	72.2	69.7	60.7	55.0	40.5	31.7	72.2
		MEDIAN LOWEST MEAN	17.0	18.6 10.9	28.8	41.8 35.3	54.2 46.0	63.0 57.4	67.8	65.4 61.9	57.9 52.7	46.3	34.6 27.1	23.6	42.8 7.2
	HIG	GHEST MEAN YEAR	1990	1998	2000	1977	1977	1995	1983	1980	1998	1971	1999	1982	1983
		WEST MEAN YEAR	1994	1994 -1.4	1984 -0.9	1975 -0.8	1997 -1.1	1982 -0.6	1992 -0.5	1982 -0.8	1993 -1.0	1988 -1.2	1995 -1.2	1989 -1.0	1994
		TIME ADJUSTMENT	-1.0	-2.1	-0.9	-0.8	-2.2	-0.6	-1.2	-0.8	-1.8	-1.2	-1.2	-1.3	
054	GLADWIN	HIGHEST MEAN	26.9	31.1	40.0	47.4	61.9	69.2	73.0	71.6	63.1	54.1	41.5	32.2	73.0
		MEDIAN LOWEST MEAN	18.2 9.5	19.9 9.7	30.7 23.2	42.8	55.6 47.6	64.5 59.2	68.9 64.5	66.4 62.7	58.6 53.0	46.9 41.3	35.4 29.4	26.1 14.4	44.4 9.5
		GHEST MEAN YEAR	1990	1998	2000	1986	1991	1991	1988	1995	1998	1971	1999	1982	1988
		WEST MEAN YEAR	1994	1979 1.7	1978 1.0	1972	1997 -0.7	1972 -0.5	1992 -0.5	1992 -0.3	1974 -0.5	1972 0.4	1976 0.9	1989	1994
		TIME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
055	GRAND HAVEN F	HIGHEST MEAN MEDIAN	32.5	37.1 25.4	41.5 35.0	50.1 45.2	62.9 55.8	70.0 65.8	74.6	76.2 69.0	66.8 62.5	59.4 51.2	45.8 39.9	36.0 29.6	76.2 47.6
		LOWEST MEAN	14.1	16.8	27.9	40.5	50.5	59.8	67.1	65.3	57.9	46.2	33.6	20.7	14.1
		HEST MEAN YEAR	1990	1998	2000	1985	1991	1987	1999	1995	1998	1971	1999	1982	1995
		OWEST MEAN YEAR	1977 -0.9	1979 -1.2	1984 -0.8	1982 -0.9	1997 -0.8	1982 -0.6	1992	1992 -0.7	1975 -0.8	1988 -1.0	1995 -1.0	1983 -0.7	1977
		TIME ADJUSTMENT	-0.6	-0.8	-0.5	-0.7	-0.7	-0.5	-0.4	-0.8	-0.7	-0.7	-0.7	-0.5	
057	GRAND MARAIS	HIGHEST MEAN MEDIAN	26.8 18.0	30.6 19.5	36.5 28.2	45.7 39.2	59.0 50.0	64.2 58.4	68.4 64.0	68.8 64.2	62.0 57.2	54.6 46.1	39.3 34.9	30.6 24.2	68.8 42.1
		LOWEST MEAN	8.3	10.5	21.5	32.3	43.4	54.5	57.2	59.8	52.8	41.4	26.7	14.4	8.3
		CHEST MEAN YEAR	1990	1998	1973	1987	1977	1995	1987	1995	1998	1971	1999	1994	1995
		WEST MEAN YEAR	1994 -1.5	1994 -1.6	1972 -1.0	1996 -0.9	1997 -1.0	1982 -0.7	1992 -0.6	1982 -0.9	1993 -1.1	1981 -1.3	1995 -1.3	1989 -1.3	1994
	MAX OBS T	TIME ADJUSTMENT	-2.2	-2.7	-2.1	-2.3	-2.7	-2.0	-1.6	-2.0	-2.0	-2.3	-2.1	-1.9	
058	GRAND RAPIDS	HIGHEST MEAN MEDIAN	32.1	34.1 24.0	43.0 34.5	52.5 46.7	66.0 57.8	71.2 67.2	74.8	74.8 68.7	66.0 61.7	58.0 50.1	44.6 38.4	35.3 28.2	74.8 47.5
		LOWEST MEAN	12.3	14.1	28.2	40.9	50.3	62.1	67.2	65.0	56.0	44.4	31.0	17.5	12.3
		SHEST MEAN YEAR DWEST MEAN YEAR	1990 1977	1998 1979	1973 1978	1977 1975	1977 1997	1987 1982	1988 1992	1995 1992	1998 1974	1971 1988	1975 1976	1982 1989	1988 1977
		TIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1911
05.2		TIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	E1 =
059	GRAYLING	HIGHEST MEAN MEDIAN	25.0 15.7	29.4 16.5	36.5 26.6	45.9 39.8	60.2 52.1	67.3 61.9	71.7	69.6 63.5	60.7 55.9	54.3 44.8	39.1 34.0	31.1 23.8	71.7 41.7
		LOWEST MEAN	5.9	7.6	18.7	32.9	44.7	57.6	60.9	60.2	51.7	40.0	26.3	10.5	5.9
		GHEST MEAN YEAR OWEST MEAN YEAR	1990 1994	1998 1979	2000 1972	1986 1975	1977 1997	1995 1972	1983 1992	1995 1992	1971 1993	1971 1972	1999 1995	1982 1989	1983 1994
	MIN OBS T	TIME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.8	-0.5	-0.5	-0.3	-0.5	0.4	0.9	0.6	
	MAX OBS T	TIME ADJUSTMENT	0.2	0.5	0.5	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.1	

# United States Climate Normals 1971-2000 1971-2000

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No.   Station Name	$\overline{}$								NODA	AVI C C.	TATISTI	CS.				
BOOK   CHEENVILLE 2   HIGHEST MEAN   11.6   33.1   42.8   11.0   61.0   70.6   74.5   75.1   66.7   55.6   44.7   47.0   77.0   67.0   75.0	No.	Station Name	e Element	JAN	FEB	MAR	APR	MAY					OCT	NOV	DEC	ANNUAL
MEDIAN   10.6   22.7   31.2   45.2   52.8   45.2   56.7   56.7   56.7   56.7   56.7   56.7   56.8   56.2   43.3   37.4   27.0   46.5   46.8   46.8   46.8   56.5   56.8   56.2   43.3   37.4   27.0   46.5   46.8   46.8   46.8   46.8   56.5   56.5   56.2   43.3   37.4   27.0   46.5   46.8																
LICHIST MARIA PIZZA   1906   1971   1976   1975   1996   1997   1996   1997   1996   1997   1996   1997   1996   1997   1997   1998   1997   1998   1997   1998   1999   1997   1999	060	GREENVILLE								1						
HICHEST MEAN YEAR   990   1998   1998   1995   1999   1997   1999   1997   1999   1998   1999   1997   1999   1998   1999   1997   1999   1998   1999   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1998   1999   1999   1998   1999   1999   1998   1999   19										l .						
MIN OSS TIME ADDITERMENT -1.0 -1.4 -0.9 -1.0 -0.9 -0.6 -0.5 -0.7 -1.0 -1.3 -1.3 -0.9    MAX OSS TIME ADDITERMENT -1.0 -1.4 -0.9 -1.4 -1.2 -1.7 -1.6 -1.7 -1.7 -1.1    OSI GROSSE FOINTE RIGHEST MEAN   34.5   34.9   43.6   54.6   54.6   47.1   54.8   56.0    MEDIAN   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0    MEDIAN   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0    MEDIAN   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0    MEDIAN   2.0																
061 GROSSE FORM ALTERNAL PART																
GROSSE POINTE   HORIST MEAN   34,5   34,6   33,6   63,1   72,1   78,1   76,6   65,0   53,4   22,   31,6   78,1   14,7   14,7   15,5   56,2   73,3   74,7   14,7		MIN C	DBS TIME ADJUSTMENT	-1.0	-1.4	-0.9	-1.0	-0.9	-0.6	-0.5	-0.7	-1.0	-1.3	-1.3	-0.8	
NEDIAM   25.8   26.4   37.4   47.1   59.5   69.2   33.3   71.6   65.0   53.3   42.2   31.6   49.8																
LOKEST MEAN   14.7   17.7   29.2   20.6   52.8   64.2   69.3   68.2   69.4   47.7   34.7   19.8   14.7	061	GROSSE POI		l			1			1						
HIGHEST MEAN YEAR 1990 1998 2000 1995 1991 1997 1998 1998 1998 1998 1997 1992 1999 1998 1998 1997 1999 1999 1999 1999				l			1			1						
MIN OBS THEA DUSTNESS   1977   1978   1984   1975   1997   1992   1992   1992   1975   1981   1976   1989   1977   1978   1981   1977   1978   1979   1978   1978   1978   1978   1978   1979   1978				l			1			1						
MAIN OSS TIME ADJUSTNESSY 1.8 2.4 2.4 2.2 2.9 2.9 2.7 2.2 1.5 1.9 2.7 2.2 1.3 7.4 1.4 0.8 1.8 1.8 2.4 2.2 2.5 2.8 6.2 1.0 1.9 2.7 2.2 1.3 7.4 1.4 1.4 0.8 1.8 1.8 2.4 2.4 2.2 2.5 2.8 6.8 1.0 1.9 2.7 1.3 7.4 1.4 1.4 1.4 0.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1				l			1			1						
SEC GULL LAKE BLO   HIGHEST MEAN   24.6   36.5   44.7   54.3   67.0   74.1   77.4   77.2   68.6   60.6   64.7   37.5   77.4		MIN C		l			1			1						
MILITAN   24,3   25,5   36,9   48,2   60,0   69,6   73,5   71,2   64,5   52,9   40,8   29.8   49,5   64,6   66,0   56,5   72,2   33,6   99,2   199,		MAX C	DBS TIME ADJUSTMENT	-1.8	-2.4	-2.2	-2.9	-2.7	-2.2	-1.6	-1.9	-2.7	-2.7	-2.3	-1.3	
LOWEST MEAN   1.0,   1.4,   2.8,   8,   2.2,   5.2,   8,   6.4,   7,   6.8,   6.0,   6.5,   5.8,   1.7,   2.3,   6.5,   1.9,	062	GULL LAKE	BIO HIGHEST MEAN	32.6	36.3	44.7	54.3	67.0	74.1	77.4	77.2	68.6	60.6	46.7	37.5	77.4
HIGHEST MEAN YEAR   1990   1998   2000   1995   1997   1998   1997   1998   1997   1998   1998   1997   1998   1999   1999   1998   1999   1998   1999   1																
MIN OBS TIME ADJUSTMENT   1-72   1-73   1-75   1-										l .						
MIN OBS TIME ADJUSTMENT   -1.9   -2.4   -2.0   -2.7   -2.5   -1.9   -1.4   -1.8   -2.4   -2.4   -2.4   -2.3   -1.5   -2.6   -2.7   -2.5   -1.9   -1.4   -1.8   -2.4   -2.4   -2.4   -2.3   -2.5   -1.9   -2.4   -2.4   -2.4   -2.4   -2.4   -2.3   -2.5   -1.9   -2.4   -2.4   -2.4   -2.4   -2.4   -2.3   -1.5   -2.6   -2.5   -2																
MAX ORS TIME ADJUSTMENT   -1.9   -2.4   -2.0   -2.7   -2.5   -1.9   -1.4   -1.8   -2.4   -2.4   -2.3   -1.5		MTN C														19//
ALE LOUD DAM HIGHEST MEAN   ABEDIAN   MEDIAN   T.2   17.5   28.9   41.8   53.8   63.1   67.6   67.5   52.5   41.4   41.0   32.3   71.4																
MEDITAN   17.2   17.5   28.9   41.8   53.8   63.1   67.6   65.2   58.6   47.0   35.5   25.8   43.2   7.7   8.1   1.2   17.5   28.9   19.8	063															71.4
HIGHEST MEAN YEAR   1990   1998   1971   1996   1998   1991   1998   1995   1998   1991   1999   1992   1993   1996   1996   1996   1996   1996   1996   1996   1996   1996   1997   1996   1998   1997   1998   1				l			ı			67.6			47.0			
LOWEST MEAN YEAR   -0.5 -0.4 -0.5 -0.7 -1.2 -0.7 -0.6 -0.5 -0.7 -1.2 -0.7 -0.6   -0.5 -0.8   -0.5   -0.4   -0.5   -0.5   -0.7 -1.2   -0.7 -0.6   -0.5   -0.8   -0.5   -0.4   -0.5   -0.7   -0.2   -0.7 -0.6   -0.1   -0.4   -0.2 -0.1   0.1   -0.4   -0.5   -0.6   -0.7   -0.2   -0.7   -0.6   -0.7   -0.1   -0.4   -0.2 -0.1   0.1   -0.4   -0.5   -0.8   -0.5   -0.5   -0.8   -0.5   -0.				l			1			1						
MIN OBS TIME ADJUSTMENT				l			l			l						
MAX OBS TIME ADJUSTMENT   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.4   0.3   0.0   0.0   0.1   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.4   0.3   0.1   0.3   0.0   0.0   0.1   0.1   0.4   0.3   0.1   0.3   0.3   0.1   0.3   0.3   0.0   0.0   0.1   0.1   0.3   0.				l			1			1						1977
064 HARBOR BEACH HIGHEST MEAN   29.5 31.8 39.1   46.1 58.5 66.4   72.4 71.3 63.8 54.2 43.8 34.2 72.4				ı			ı			1		-				
MEDIAN   1.0   2.0   2.1   2.1   3.1   3.3   40.9   52.3   62.5   67.5   66.7   59.6   49.0   37.7   28.2   44.3	064															72 4
LOWEST MEAN NARE   19.00   12.4   24.1   35.3   46.0   55.9   62.1   62.5   54.8   43.4   30.6   15.7   10.0   10.0   19.5   19.8   1	001	HARDOR BEA								l .						
LOWEST MEAN YEAR   1977   1979   1978   1972   1979   1982   1975   1975   1978   1979   1978   1979   1978   1979   1979   1970   19																
MIN OBS TIME ADJUSTMENT   1.0   0.9   1.1   0.0   0.7   7.6   0.5   0.3   0.4   0.5   0.2   0.5			HIGHEST MEAN YEAR	1990	1998	2000	1985	1991	1999	1987	1995	1998	1971	1975	1982	1987
MAX OBS TIME ADJUSTMENT   0.2   0.5   0.4   0.5   0.4   0.3   0.1   0.0   0.0   0.0   0.0   0.0   0.0			LOWEST MEAN YEAR	1977	1979	1978	1972	1997	1982	1992	1982	1975	1972	1976	1989	1977
066 HARRISVILLE 2 HIGHEST MEAN   29.2 30.5 37.1 44.8 56.8 64.9 71.4 71.3 62.9 54.3 41.1 32.7 71.4										1						
MEDIAN   20.0   18.8   29.7   40.0   50.7   61.2   66.6   65.2   58.9   47.9   35.6   26.8   43.4	0.55															B1 4
LOWEST MEAN YEAR   1900   1998   23.00   34.2   44.9   54.9   62.5   61.4   54.5   42.6   28.6   15.3   9.9   9.9   1991   1991   1991   1991   1992   1992   1992   1995   1998   1971   1999   1999   1995   1998   1971   1999   1998   1999   1995   1998   1999   199	066	HARRISVILL		l			1			1						
HIGHEST MEAN YEAR   1990				l			1			1						
LOWEST MEAN YEAR   1977   1979   1972   1972   1972   1972   1972   1972   1972   1972   1972   1972   1972   1975   1978   1976   19				l			1			1						
MAX OBS TIME ADJUSTMENT   0.2   0.5   0.4   0.4   0.3   0.1   0.0   0.0   0.0   0.0   0.1				ı									_			
067 HART		MIN C	DBS TIME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.8	-0.5	-0.5	-0.3	-0.4	0.4	0.9	0.6	
MEDIAN   12.3   21.8   31.1   43.1   53.8   64.6   69.2   67.1   59.9   48.4   36.8   28.2   45.2		MAX C	DBS TIME ADJUSTMENT	0.2											0.1	
LOWEST MEAN YEAR 1990 1998 2000 1998 1997 1992 1992 1993 1988 1997 1982 1995 1998 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1998 1995 1999 1998 1995 1998 1997 1999 1994 1998 1995 1998 1995 1998 1995 1998 1997 1999 1994 1998 1995 1998 1995 1998 1997 1995 1998 1997 1995 1998 1997 1999 1994 1998 1997 1999 1994 1998 1995 1998 1995 1998 1997 1999 1994 1998 1995 1998 1997 1995 1998 1995 1998 1997 1997 1995 1998 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1995 1998 1997 1997 1997 1998 1998 1997 1997	067	HART														
HIGHEST MEAN YEAR   1990   1998   2000   1985   1977   1995   1983   1995   1971   1971   1999   1982   1995   1980   1995   1980   1996   1997   1979   1978   1982   1997   1982   1992   1993   1988   1976   1989   1979   1978   1980   1980   1997   1982   1992   1993   1988   1976   1989   1979   1980   1																
LOWEST MEAN YEAR   1977   1979   1978   1982   1997   1982   1992   1993   1988   1976   1989   1979   1978   1980   1979   1978   1982   1997   1982   1992   1993   1988   1976   1989   1979   1980   1989   1978   1980   1979   1980   1989   1980   1989   1980   1989   1980   1989   1980   1989   1980   19			- · · · · · · · · · · · · · · · · · · ·													
MIN OBS TIME ADJUSTMENT   1.1   1.7   1.0   0.0   -0.7   -0.5   -0.5   -0.3   -0.5   0.4   0.9   0.6    MAX OBS TIME ADJUSTMENT   0.2   0.5   0.4   0.5   0.4   0.3   0.1   0.0   -0.1   0.0   0.0   0.0   0.0    MEDITAN   21.7   23.0   34.1   45.4   56.7   66.7   70.7   68.1   61.0   49.3   38.9   28.3   46.9    LOWEST MEAN YEAR   1990   1998   2000   1985   1991   1971   1999   1995   1998   1971   1999   1995    MIN OBS TIME ADJUSTMENT   1.0   1.6   1.7   1.3   0.0   0.0   -0.1   0.6   0.6   1.1   0.9   0.6    MEDITAN   1.0   1.6   1.7   1.3   0.0   0.0   -0.1   0.6   0.6   1.1   0.9   0.6    MAX OBS TIME ADJUSTMENT   1.0   1.6   1.7   1.3   0.0   0.0   -0.1   0.6   0.6   1.1   0.9   0.6    MEDITAN   1.1   1.7   1.6   2.5   4   37.4   53.2   60.6   64.5   62.9   54.8   43.3   28.8   17.9   39.2    MEDITAN   1.2   1.4   6.5   1.7   3.0   0.7   67.3   69.5   68.2   60.9   49.9   37.3   26.8   69.5    MEDITAN   1.0   1.0   1.0   1.0   1.0   1.0   64.5   64.5   62.9   54.8   43.3   28.8   17.9   39.2    MEDITAN   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   0.0   0.0    MEDITAN   1.1   1.7   1.																
MAX OBS TIME ADJUSTMENT		MIN C								l .						15,75
MEDIAN   LOWEST MEAN   11.3   12.1   26.1   38.8   49.6   61.7   66.3   63.6   55.4   43.8   31.0   17.1   11.3										1						
LOWEST MEAN   11.3   12.1   26.1   38.8   49.6   61.7   66.3   63.6   55.4   43.8   31.0   17.1   11.3   11.3   11.3   12.1   26.1   1990   1998   2000   1985   1991   1971   1999   1995   1998   1971   1999   1995   1998   1971   1999   1995   1998   1971   1999   1995   1998   1977   1978   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1978   1977   1978	068	HASTINGS		l			1			1						
HIGHEST MEAN YEAR LOWEST MEAN YEAR LOWEST MEAN YEAR LOWEST MEAN YEAR MEDIAN MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR LOWEST MEAN YEAR MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN LOWEST MEAN YEAR MEDIAN MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN MAX OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN MAX OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN MAX OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN MIN OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN LOWEST MEAN YEAR MEDIAN MAX OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN LOWEST MEAN YEAR MEDIAN LOWEST MEAN YEAR MEDIAN LOWEST MEAN YEAR MEDIAN MAX OBS TIME ADJUSTMENT LOWEST MEAN YEAR MEDIAN LOWEST MEAN YEAR LOWEST MEAN Y				ı			ı			1						
LOWEST MEAN YEAR   1977   1978   1978   1975   1997   1982   1992   1992   1975   1976   1976   1989   1977   1978   1978   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1977   1978   1977   1978   1977   1978   1978   1977   1978   1977   1978   1977   1978   1977   1978   1977   1978   1978   1977   1978   1977   1978   1977   1978   1977   1978   1978   1977   1978   1977   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1977   1978   1978   1978   1977   1978   19				ı			ı									
MIN OBS TIME ADJUSTMENT				ı			ı			1						l I
MAX OBS TIME ADJUSTMENT 0.2 0.5 0.4 0.5 0.4 0.3 0.1 0.0 -0.1 0.0 0.0 0.0 0.0 069 HERMAN HIGHEST MEAN 22.2 29.6 33.7 46.9 60.7 67.3 69.5 68.2 60.9 49.9 37.3 26.8 69.5 MEDIAN 12.1 14.6 25.4 37.4 53.2 60.6 64.5 62.9 54.8 43.3 28.8 17.9 39.2 LOWEST MEAN YEAR 1990 1998 2000 1987 1977 1995 1983 1995 1998 1971 1999 1994 1983 LOWEST MEAN YEAR 1977 1979 1972 1975 1997 1982 1992 1977 1974 1976 1995 1983 1977 MIN OBS TIME ADJUSTMENT -1.6 -1.4 -0.9 -0.9 -1.0 -0.6 -0.6 -0.9 -1.1 -1.2 -1.3 -1.3 MAX OBS TIME ADJUSTMENT -1.9 -1.4 -1.1 -1.3 -1.2 -1.0 -0.8 -1.1 -1.5 -1.1 -1.2 -1.7 070 HESPERIA 4 WN HIGHEST MEAN 29.2 33.6 40.2 48.5 62.7 68.3 73.1 73.4 63.6 56.5 44.0 34.2 73.4 MEDIAN 20.3 21.0 30.7 43.0 54.4 63.6 68.4 66.1 58.7 47.3 36.9 28.2 45.0 LOWEST MEAN YEAR 1990 1998 1973 1986 1977 1995 1988 1995 1991 1991 1975 1982 1995 1988 1995 1991 1977 1979 1978 1982 1997 1982 1996 1992 1993 1988 1995 1989 1977 MIN OBS TIME ADJUSTMENT 1.1 1.7 1.0 0.0 -0.7 -0.5 -0.5 -0.3 -0.5 0.4 0.9 0.6		MTN C		ı			ı			1						1911
069 HERMAN				ı			ı			1						
MEDIAN   12.1   14.6   25.4   37.4   53.2   60.6   64.5   62.9   54.8   43.3   28.8   17.9   39.2	069									1						69.5
HIGHEST MEAN YEAR LOWEST MEAN YEAR LOWEST MEAN YEAR LOWEST MEAN YEAR MIN OBS TIME ADJUSTMENT HIGHEST MEAN YEAR MEDIAN LOWEST MEAN YEAR LOWEST MEAN Y			MEDIAN	12.1	14.6	25.4	37.4		60.6	64.5	62.9	54.8	43.3	28.8	17.9	39.2
LOWEST MEAN YEAR MIN OBS TIME ADJUSTMENT -1.6 -1.4 -0.9 -0.9 -1.0 -0.6 -0.6 -0.6 -0.9 -1.1 -1.2 -1.3 -1.3 -1.3 -1.2 -1.0 -0.8 -1.1 -1.5 -1.1 -1.2 -1.7 -1.7 -1.0 -1.4 -1.1 -1.3 -1.2 -1.0 -0.8 -1.1 -1.5 -1.1 -1.2 -1.7 -1.2 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3										l .						
MIN OBS TIME ADJUSTMENT										l .						
MAX OBS TIME ADJUSTMENT		MITST C								l .						1977
070 HESPERIA 4 WN HIGHEST MEAN MEDIAN MEDIAN 29.2 33.6 40.2 48.5 62.7 68.3 73.1 73.4 63.6 56.5 44.0 34.2 73.4 43.0 54.4 63.6 68.4 66.1 58.7 47.3 36.9 28.2 45.0 62.7 61.6 54.0 40.0 30.7 16.7 12.0 13.0 24.8 1995 1988 1995 1971 1975 1982 1995 1988 1995 1981 1973 1986 1977 1995 1988 1995 1981 1971 1975 1982 1995 1981 MIN OBS TIME ADJUSTMENT 1.1 1.7 1.0 0.0 -0.7 -0.5 -0.5 -0.3 -0.5 0.4 0.9 0.6																
MEDIAN 20.3 21.0 30.7 43.0 54.4 63.6 68.4 66.1 58.7 47.3 36.9 28.2 45.0 LOWEST MEAN 12.0 13.0 24.8 38.1 47.4 57.9 62.7 61.6 54.0 40.0 30.7 16.7 12.0 HIGHEST MEAN YEAR 1990 1998 1973 1986 1977 1995 1988 1995 1971 1971 1975 1982 1995 LOWEST MEAN YEAR 1977 1979 1978 1982 1997 1982 1996 1992 1993 1988 1995 1989 1977 MIN OBS TIME ADJUSTMENT 1.1 1.7 1.0 0.0 -0.7 -0.5 -0.5 -0.3 -0.5 0.4 0.9 0.6	070															73.4
LOWEST MEAN   12.0   13.0   24.8   38.1   47.4   57.9   62.7   61.6   54.0   40.0   30.7   16.7   12.0   16.7   12.0   16.7   16				1			ı			1			1			
LOWEST MEAN YEAR   1977   1979   1978   1982   1997   1982   1996   1992   1993   1988   1995   1989   1977   MIN OBS TIME ADJUSTMENT   1.1   1.7   1.0   0.0   -0.7   -0.5   -0.5   -0.3   -0.5   0.4   0.9   0.6			LOWEST MEAN	1			1			1			1			
MIN OBS TIME ADJUSTMENT   1.1 1.7 1.0   0.0 -0.7 -0.5   -0.5 -0.3 -0.5   0.4 0.9 0.6				ı		1973	1986			1			1971	1975		1995
				ı			ı			1						1977
MAX OBS TIME ADJUSTMENT   U.Z U.5 U.4   U.5 U.4 U.3   U.1 U.0 -0.1   U.0 U.0   U.0				1			ı			1						
		MAX C	DES TIME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	J U.1	0.0	-0.1	1 0.0	0.0	0.0	

# United States Climate Normals 1971-2000 60 7 60 7 15 M A M J J A S O N D

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

								NORI	/ALS S	TATISTI	CS				
No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
071	HILLSDALE	HIGHEST MEAN	31.3	34.0	41.2	51.1	64.2	70.2	74.4	74.5	64.8	56.9	43.1	35.0	74.5
		MEDIAN	20.3	23.1	34.1	45.3	56.1	66.9	70.2	67.7	60.4	48.7	37.3	27.1	46.3
		LOWEST MEAN	10.4	11.4	23.5	39.9	50.6	62.0	67.0	63.7	56.5	43.6	31.1	14.2	10.4
		HEST MEAN YEAR	1990	1998	2000	1977	1991	1971	1999	1995	1998	1971	1975	1982	1995
		WEST MEAN YEAR	1977	1978	1984	1975	1984 -0.6	1992	1992	1992 -0.3	1993 -0.4	1987	1995	2000	1977
		IME ADJUSTMENT IME ADJUSTMENT	1.1	1.8	1.1	0.0	0.4	-0.5 0.3	0.1	0.0	-0.4	0.4	0.4	0.6	
072	HOLLAND	HIGHEST MEAN	34.1	36.3	43.6	53.1	65.3	72.3	77.1	75.7	66.5	57.4	45.3	37.3	77.1
		MEDIAN	24.6	25.9	35.7	46.7	57.2	67.4	71.8	69.7	62.8	51.4	40.0	30.3	48.3
		LOWEST MEAN	14.6	14.9	27.2	41.0	48.9	60.9	65.7	65.4	58.1	46.2	33.7	20.8	14.6
		HEST MEAN YEAR	1990	1998	2000	1985	1991	1991	1999	1988	1998	1971	1999	1982	1999
		WEST MEAN YEAR IME ADJUSTMENT	1977	1978 -1.0	1978 -0.7	1975	1997 -0.9	1972 -0.7	1971	1971 -0.8	1975 -1.1	1988 -1.3	1976 -1.1	1989 -0.8	1977
		IME ADJUSTMENT	-0.1	0.1	0.0	-0.4	-0.9	-0.7	-0.3	-0.3	-0.8	-0.6	-0.2	-0.8	
073	HOUGHTON CO A	HIGHEST MEAN	23.5	30.3	33.6	46.4	57.8	66.1	70.3	69.0	59.1	50.3	37.7	27.6	70.3
		MEDIAN	14.4	15.6	25.4	37.7	52.5	59.7	65.7	64.5	54.9	43.9	31.0	20.3	40.5
		LOWEST MEAN	5.0	6.6	17.9	32.3	45.0	55.0	59.5	58.9	48.7	39.1	24.3	11.0	5.0
		HEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1988	1983	1994	1971	1999	1994	1988
		WEST MEAN YEAR IME ADJUSTMENT	1977	1979	1972	1975	1983	1982	1992	1977 0.0	1974	1980	1995	1976	1977
		IME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
074	HOUGHTON LAKE	HIGHEST MEAN	26.1	31.1	36.8	45.4	59.9	67.1	69.7	70.3	59.9	52.4	39.3	30.4	70.3
		MEDIAN	17.0	17.5	27.9	40.7	52.7	61.9	66.1	63.3	55.7	44.6	34.2	24.5	41.9
		LOWEST MEAN	7.4	8.0	20.8	35.0	45.9	55.8	60.9	59.0	51.2	38.2	27.7	12.4	7.4
		HEST MEAN YEAR	1990	1998	2000	1985	1998	1995	1983	1995	1998	1971	1975	1982	1995
		WEST MEAN YEAR IME ADJUSTMENT	1994	1979 1.6	1984 1.8	1975	1997 -0.1	1972 -0.1	1992	1982 0.7	1974 0.6	1972 1.1	1995 0.9	1989 0.6	1994
		IME ADJUSTMENT	0.9	0.5	0.5	0.5	0.4	0.3	0.1	0.7	0.0	0.0	0.9	0.8	
075	HOUGHTON LAKE	HIGHEST MEAN	25.9	30.2	38.5	46.6	60.3	67.6	70.2	71.1	61.0	54.6	40.9	30.8	71.1
		MEDIAN	17.1	19.2	29.4	41.9	53.7	62.5	66.8	64.4	56.9	45.8	35.0	25.0	43.1
		LOWEST MEAN	9.0	11.0	22.7	36.3	46.6	56.1	61.7	60.8	52.0	41.1	28.4	12.6	9.0
		HEST MEAN YEAR	1990	1998	1973	1987	1998	1995	1983	1995	1994	1971	1975	1982	1995
		WEST MEAN YEAR IME ADJUSTMENT	1994	1979	1972	1972	1997	1982	1992	1982	1993	1980	1976 0.0	1989	1994
		IME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
078	IONIA 2 SSW	HIGHEST MEAN	32.0	32.6	41.8	49.9	64.2	72.1	75.4	74.5	65.2	56.9	43.2	34.4	75.4
		MEDIAN	20.4	22.1	33.8	44.6	58.0	66.7	70.9	69.0	61.2	48.8	37.6	27.7	46.4
		LOWEST MEAN	11.0	12.5	25.4	39.9	49.9	61.8	67.1	64.2	56.8	42.4	29.8	16.9	11.0
	_	HEST MEAN YEAR	1990	1998	1973	1985	1977	1971	1988	1995	1971	1971	1975	1982	1988
		WEST MEAN YEAR IME ADJUSTMENT	1977	1979 1.7	1984 1.0	1975	1997 -0.7	1985 -0.5	1992	1992 -0.3	1975 -0.4	1988	1976 1.0	2000	1977
		IME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
079	IRON MTN-KING	HIGHEST MEAN	21.5	29.4	35.8	47.1	62.7	69.0	72.8	70.2	62.0	52.3	38.6	27.3	72.8
		MEDIAN	11.9	16.7	27.3	40.5	54.1	63.3	68.1	65.8	56.7	45.0	31.2	19.3	41.7
		LOWEST MEAN	3.0	6.8	20.8	35.4	46.8	56.9	62.2	62.0	51.4	40.5	23.8	7.7	3.0
		HEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1983	1983	1998	1971	1999	1997	1983
		WEST MEAN YEAR IME ADJUSTMENT	1994	1979	1989	1972	1997 -1.0	1982 -0.7	1992	1986 -0.8	1974 -1.0	1988	1995	1989	1994
		IME ADJUSTMENT	0.2	0.5	0.4	0.4	0.2	0.2	0.1	0.0	-0.2	-0.1	0.0	0.1	
080	IRONWOOD	HIGHEST MEAN	18.8	29.6	33.8	46.2	62.0	65.4	70.9	68.2	60.5	50.8	37.1	23.9	70.9
		MEDIAN	8.9	14.1	25.0	38.9	52.9	61.6	65.5	63.9	54.9	43.7	29.0	15.6	38.9
		LOWEST MEAN	-1.5	4.8	16.1	31.4	44.3	55.4	58.6	56.2	48.9	38.1	19.0	5.0	-1.5
		HEST MEAN YEAR WEST MEAN YEAR	1990	1998	1973	1987	1977	1971	1983	1983	1998	1971	1999	1997	1983
		NEST MEAN YEAR IME ADJUSTMENT	1977	1989 -0.4	1996 -0.6	1996 -0.7	1997 -1.0	1982 -0.7	1992	1977 -1.0	1974 -1.0	1980 -1.2	1995 -0.8	1989 0.4	1977
		IME ADJUSTMENT	0.7	0.4	0.3	0.2	-0.2	0.0	-0.1	-0.2	-0.1	-0.3	-0.1	0.4	
081	JACKSON CO AP	HIGHEST MEAN	32.3	35.7	42.4	53.4	66.3	70.5	74.9	75.5	67.5	55.8	44.8	36.0	75.5
		MEDIAN	22.5	23.7	35.7	46.9	57.5	67.7	71.4	69.3	61.2	50.1	39.2	28.2	47.5
		LOWEST MEAN	9.4	11.4	27.0	39.5	50.1	62.7	66.7	64.7	56.0	43.9	31.0	15.7	9.4
		HEST MEAN YEAR	1990	1998	2000	1985	1977	1987	1999	1995	1978	1971	1975	1982	1995
		WEST MEAN YEAR IME ADJUSTMENT	1977	1978 0.0	1984	1975	1997 0.0	1972 0.0	1992	1992	1975	1988	1976 0.0	2000	1977
		IME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
082	KALAMAZOO STA	HIGHEST MEAN	33.8	37.7	44.9	55.0	67.6	73.2	77.3	77.0	68.4	60.2	46.7	38.0	77.3
		MEDIAN	24.5	26.8	37.2	48.7	60.0	69.6	73.2	70.8	63.9	53.2	41.0	30.8	49.8
		LOWEST MEAN	12.8	16.7	29.6	42.0	53.8	64.0	69.3	66.7	58.1	46.1	33.0	18.6	12.8
		HEST MEAN YEAR	1990	1998	1973	1985	1977	1971	1999	1995	1998	1971	1999	1982	1999
		WEST MEAN YEAR	1977	1978	1984	1975	1997	1980 -0.7	1992	1992	1975	1987	1995	1989	1977
		IME ADJUSTMENT IME ADJUSTMENT	-1.2 -1.9	-1.3 -2.4	-0.9 -2.0	-1.0 -2.7	-0.9 -2.5	-0.7	-0.5 -1.4	-0.7 -1.8	-1.0 $-2.4$	-1.3 -2.4	-1.4 $-2.3$	-0.9 -1.5	
	11111 000 11		1,	۷, 1	2.0	1 2.,	2.5	2.0	1	1.0	۵.1	1 "."	2.5	1.5	

# United States Climate Normals 1971-2000 60 7 1971-3000

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

$\overline{}$							NODI	AAI C C	TATISTI	Ce				
No	Station Name Elem	ent JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
_	KALKASKA HIGHEST ME		29.9	38.3	45.4	60.3	67.9	70.1	70.0	59.8	52.9	40.4	30.5	70.1
003	MEDI		15.8	26.6	40.5	52.5	62.5	65.8	64.0	56.6	45.7	33.9	24.4	41.7
	LOWEST ME		6.6	20.2	34.5	45.2	57.4	60.3	60.5	52.2	40.8	27.6	12.8	6.3
	HIGHEST MEAN YE		1998	2000	1991	1977	1995	1983	1995	1998	1971	1999	1982	1983
	LOWEST MEAN YE		1979	1972	1975	1997	1982	1992	1992	1975	1980	1976	1989	1977
	MIN OBS TIME ADJUSTME MAX OBS TIME ADJUSTME		1.7	1.0	0.0	-0.8 0.4	-0.5 0.3	-0.5 0.1	-0.3 0.0	-0.4 0.0	0.4	0.9	0.6	
085	KENTON HIGHEST ME		31.0	35.6	47.3	61.2	66.6	70.8	68.1	59.1	52.8	39.5	26.4	70.8
	MEDI	<b>I</b>	16.0	26.5	39.4	52.5	61.6	65.5	64.2	55.7	44.0	31.3	18.5	40.4
	LOWEST ME	II	6.4	19.5	33.3	46.5	56.0	58.7	57.1	49.8	36.9	22.7	7.3	-0.5
	HIGHEST MEAN YE		1998	1973	1987	1977	1976	1983	1984	1978	1971	1999	1997	1983
	LOWEST MEAN YE MIN OBS TIME ADJUSTME	I .	1989 -1.5	1996 -1.0	1996	1997 -1.0	1982 -0.7	1992	1977 -1.0	1993 -1.2	1980 -1.4	1995 -1.5	1989 -1.5	1977
	MAX OBS TIME ADJUSTME	<b>I</b>	-2.5	-2.2	-2.7	-3.0	-2.1	-1.9	-2.3	-2.7	-2.7	-2.3	-1.9	
086	LAKE CITY EXP HIGHEST ME		30.0	38.4	45.7	60.2	67.1	70.7	70.0	61.5	53.7	40.2	30.1	70.7
	MEDI		17.3	28.1	41.1	52.9	62.2	66.6	64.2	56.3	45.0	33.9	24.3	42.2
	LOWEST ME		8.9	21.6	36.1	45.9	56.0	61.6	60.5	52.0	40.2	26.7	12.3	8.3
	HIGHEST MEAN YE LOWEST MEAN YE		1998 1978	2000 1984	1991	1998 1997	1995 1982	1987 1992	1995 1992	1998 1993	1971 1980	1975 1995	1982 1976	1987 1994
	MIN OBS TIME ADJUSTME		1.7	1.1	0.0	-0.7	-0.5	-0.5	-0.3	-0.5	0.4	0.9	0.6	1994
	MAX OBS TIME ADJUSTME		0.5	0.5	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.1	
087	LANSING CAPIT HIGHEST ME		33.7	41.0	50.9	64.1	70.4	74.3	74.2	64.6	57.8	44.8	34.8	74.3
	MEDI	II	23.7	34.0	45.4	57.2	66.5	70.3	68.2	60.6	49.3	38.5	28.1	46.6
	LOWEST ME HIGHEST MEAN YE	II	11.2 1998	25.5 2000	1985	48.3 1977	61.2 1987	65.8 1988	63.6 1995	55.6 1978	43.9 1971	31.4 1975	15.6 1982	11.0 1988
	LOWEST MEAN YE	<b>I</b>	1978	1978	1975	1997	1972	1992	1992	1975	1988	1976	1989	1977
	MIN OBS TIME ADJUSTME	ENT 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	MAX OBS TIME ADJUSTME		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
088	LAPEER WWTP HIGHEST ME		33.3	40.6	48.6	62.8	69.3	76.5	73.7	65.0	57.0	43.6	34.6	76.5
	MEDI LOWEST ME		21.3	32.9 24.9	43.8	56.7 48.3	66.0 60.5	69.8	67.6 63.4	60.2 55.2	48.5	37.7 29.6	28.2	45.6 9.9
	HIGHEST MEAN YE		1998	2000	1985	1998	1988	1988	1988	1998	1971	1975	1982	1988
	LOWEST MEAN YE		1978	1978	1975	1997	1977	1992	1977	1975	1977	1976	1989	1977
	MIN OBS TIME ADJUSTME		1.6	1.8	1.3	-0.1	-0.1	-0.1	0.7	0.6	1.1	0.9	0.5	
0.01	MAX OBS TIME ADJUSTME		0.5	0.5	0.5	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	74.2
091	LUDINGTON 4 S HIGHEST MED	<b>I</b>	34.0 24.1	41.5 33.0	49.9	63.8 54.4	69.3 64.3	73.3	74.3 68.4	64.4 60.1	57.7 49.5	43.0	33.6 27.9	74.3 46.4
	LOWEST ME	II	15.8	24.7	39.3	47.4	58.0	64.9	63.9	56.2	44.7	31.2	17.9	14.3
	HIGHEST MEAN YE	EAR 1990	1998	1973	1998	1998	1991	1983	1988	1998	1971	1975	1982	1988
	LOWEST MEAN YE	II	1979	1971	1982	1997	1982	1996	1997	1993	1976	1995	1989	1977
	MIN OBS TIME ADJUSTME MAX OBS TIME ADJUSTME		-1.3 -1.4	-0.9 -1.0	-0.9 -1.2	-0.9 -1.3	-0.6 -0.9	-0.5 -0.8	-0.8 -1.4	-0.9 -1.1	-1.2 -1.1	-1.2 -1.2	-0.8 -0.8	
092	LUPTON 1 S HIGHEST ME		31.5	38.7	46.2	61.1	66.8	70.5	69.3	61.4	52.9	39.3	30.5	70.5
	MEDI		16.0	28.1	41.4	52.8	62.4	66.3	64.5	56.3	44.6	33.8	24.1	41.9
	LOWEST ME		8.3	20.8	34.9	46.5	57.0	61.9	60.0	51.9	39.7	26.0	10.4	5.8
	HIGHEST MEAN YE		1998	2000	1986	1998	1995	1987	1995	1998	1971	1999	1982	1987
	LOWEST MEAN YE MIN OBS TIME ADJUSTME		1979 1.7	1972 1.0	1972	1997 -0.9	1982 -0.5	1992	1977 -0.3	1975 -0.5	1976	1976 0.9	1976 0.6	1977
	MAX OBS TIME ADJUSTME		0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.1	
093	MANISTEE 3 SE HIGHEST ME	EAN 30.7	35.4	41.3	52.2	63.4	69.4	73.7	74.8	65.9	59.7	44.9	36.2	74.8
	MEDI	I	24.8	33.7	44.8	54.7	64.5	69.5	68.0	61.4	50.1	40.0	28.9	47.2
	LOWEST ME HIGHEST MEAN YE	I	17.2 1998	27.6 2000	37.8 1986	49.0 1977	59.7	61.2 1987	60.1 1988	55.7 1971	46.6 1971	31.5 1975	19.4 1982	14.8 1988
	LOWEST MEAN YE LOWEST MEAN YE		1998	1996	1986	1977	1971 1972	1987	1988	1971	1971	1975	1982	1988
	MIN OBS TIME ADJUSTME		-1.4	-0.9	-0.9	-0.9	-0.6	-0.5	-0.8	-1.0	-1.3	-1.3	-1.1	
	MAX OBS TIME ADJUSTME		-2.1	-1.6	-2.0	-2.1	-1.4	-1.2	-1.9	-1.9	-1.7	-1.8	-1.4	
094	MANISTIQUE HIGHEST ME		29.6	33.7	42.5	56.1	63.0	69.5	69.4	60.8	50.9	39.6	30.6	69.5
	MEDI LOWEST ME		16.7 8.5	26.1 19.6	38.5	49.9 44.5	58.4 53.2	64.2 57.9	64.0 60.0	56.0 50.3	44.8	33.7 26.8	23.1	40.6 5.8
	HIGHEST MEAN YE		1998	1973	1986	1998	1987	1983	1995	1998	1973	1999	1994	1983
	LOWEST MEAN YE		1994	1989	1975	1997	1982	1992	1971	1974	1988	1995	1989	1994
	MIN OBS TIME ADJUSTME		0.9	0.0	-0.5	-1.0	-0.6	-0.6	-0.8	-0.9	-0.6	0.2	0.3	
005	MAX OBS TIME ADJUSTME		0.5	0.4	0.4	0.2	0.2	0.1	0.0	-0.1	0.0	0.0	0.2	7/1
095	MAPLE CITY HIGHEST ME MEDI		34.8 21.5	40.4 31.0	49.7	62.6 54.1	69.3 63.9	74.1	72.9 67.4	63.5 60.4	57.2 49.3	43.3	34.3 28.1	74.1 45.8
	LOWEST ME		15.3	25.1	36.9	46.8	58.4	64.1	63.9	55.7	45.0	31.4	18.1	13.3
	HIGHEST MEAN YE	EAR 1990	1998	2000	1990	1998	1995	1983	1995	1978	1971	1975	1982	1983
	LOWEST MEAN YE		1979	1972	1975	1997	1982	1992	1992	1975	1988	1995	1989	1994
	MIN OBS TIME ADJUSTME MAX OBS TIME ADJUSTME		-1.5 -2.6	-0.9 -2.0	-0.9 -2.3	-1.2 -3.0	-0.6 -1.9	-0.5 -1.5	-0.8 -2.1	-1.0 -2.5	-1.3 -2.3	-1.3 -2.2	-1.1 -1.6	
	MAA ODS IIME ADJUSTME	714T   -T'8	-2.0	-2.0	l -∠.3	-3.0	-1.9	1 -1.2	-2.1	-4.5	l <sup>-∠.3</sup>	-2.2	-1.0	

# United States Climate Normals 1971-2000 60 F 19 F M A M J J A S O N D

#### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

	NORMALS STATISTICS														
No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	ANNUAL
096	MARQUETTE	HIGHEST MEAN	26.7	32.7	38.0	46.8	58.6	64.7	71.5	70.3	64.0	53.3	41.6	30.4	71.5
		MEDIAN LOWEST MEAN	17.2 7.9	20.0	29.7 22.6	40.0	51.7 45.6	60.0 55.2	66.1	66.3 61.2	57.7 52.5	46.8	34.7 27.2	23.7	42.8 7.9
	нта	HEST MEAN YEAR	1990	1998	2000	1987	1977	1999	1999	1983	1998	1971	1999	1997	1999
		OWEST MEAN YEAR	1994	1979	1972	1996	1973	1982	1992	1977	1974	1988	1995	1976	1994
	MIN OBS T	TIME ADJUSTMENT	-0.6	-0.7	-0.5	-0.4	-0.4	-0.3	-0.3	-0.4	-0.3	-0.4	-0.5	-0.5	
007		TIME ADJUSTMENT	-0.3	-0.2	-0.1	-0.1	0.0	-0.1	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	CO F
097	MARQUETTE CO	HIGHEST MEAN MEDIAN	21.3	28.4 14.1	32.9 23.8	43.8	58.3 50.7	65.6 59.3	69.5	67.4 62.5	58.3 53.2	50.1 42.0	37.2 28.6	26.8 18.0	69.5 38.7
		LOWEST MEAN	1.8	5.4	16.7	29.7	43.4	53.3	57.7	57.5	47.3	37.2	21.7	7.0	1.8
	HIG	GHEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1983	1995	1998	1971	1999	1994	1983
		OWEST MEAN YEAR	1977	1979	1984	1972	1983	1982	1992	1977	1974	1976	1995	1976	1977
		FIME ADJUSTMENT FIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
098	MIDLAND	HIGHEST MEAN	32.7	33.5	43.7	51.3	65.3	72.6	76.6	75.4	67.9	58.8	46.1	36.7	76.6
		MEDIAN	22.7	24.1	35.1	46.9	58.8	68.5	72.6	70.1	62.7	51.6	40.0	29.1	48.3
		LOWEST MEAN	13.5	15.1	27.7	41.5	51.2	63.6	67.3	65.6	57.6	45.9	32.2	18.4	13.5
		GHEST MEAN YEAR OWEST MEAN YEAR	1990 1977	1998 1979	2000 1984	1985 1975	1977 1997	1971 1982	1987 1992	1995 1992	1998 1993	1971 1980	1975 1995	1982 1989	1987 1977
		TIME ADJUSTMENT	-1.0	-1.4	-0.9	-0.9	-0.9	-0.6	-0.5	-0.8	-1.0	-1.2	-1.3	-0.8	1911
		TIME ADJUSTMENT	-1.4	-2.0	-1.6	-2.0	-2.1	-1.5	-1.2	-1.8	-1.8	-1.7	-1.8	-1.1	
099	MILAN 4 ESE	HIGHEST MEAN	33.2	35.5	43.3	53.3	64.9	71.1	73.8	75.1	65.4	58.3	44.4	36.2	75.1
		MEDIAN LOWEST MEAN	23.2	24.8	36.3 27.1	46.7	57.9 51.3	67.7 63.1	71.0	68.3 65.2	62.2 56.9	50.9 44.8	39.4 31.7	28.0 16.5	47.8 10.0
	нта	HEST MEAN YEAR	1990	13.0 1998	1973	1985	1991	1971	1999	1995	1978	1971	1975	1982	1995
		OWEST MEAN YEAR	1977	1978	1984	1975	1997	1972	1992	1992	1975	1976	1976	1989	1977
	MIN OBS T	TIME ADJUSTMENT	-1.0	-1.3	-0.9	-1.0	-0.8	-0.7	-0.5	-0.7	-0.9	-1.1	-1.1	-0.8	
100		TIME ADJUSTMENT	-1.0	-1.5	-1.1	-1.4	-1.3	-1.1	-0.8	-1.2	-1.1	-1.1	-0.8	-0.8	E4 2
100	MILFORD GM PR	HIGHEST MEAN MEDIAN	31.5	34.1 24.5	43.9 33.7	51.3 45.5	64.5 56.8	71.2 66.7	74.3	74.0 68.7	66.0 61.3	58.0 49.8	45.1 39.1	35.8 28.6	74.3 47.0
		LOWEST MEAN	10.8	13.6	25.6	38.1	49.8	61.6	66.4	64.3	55.2	42.3	31.4	13.7	10.8
	HIG	GHEST MEAN YEAR	1989	1998	1973	1985	1982	1984	1999	1995	1971	1971	1975	1984	1999
		OWEST MEAN YEAR	1977	1979	1984	1975	1997	1985	2000	1992	1975	1972	1976	2000	1977
		FIME ADJUSTMENT FIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
102	MIO HYDRO PLA	HIGHEST MEAN	25.5	30.4	39.0	47.2	61.2	67.9	73.3	70.3	62.4	54.5	41.2	32.6	73.3
		MEDIAN	17.5	17.0	29.8	42.3	53.7	63.6	68.0	65.4	57.2	45.6	35.1	25.5	43.2
		LOWEST MEAN	7.5	7.3	22.1	36.3	46.7	57.2	62.4	61.2	53.1	40.7	28.0	12.2	7.3
		GHEST MEAN YEAR	1990	1998 1979	2000 1972	1986 1972	1998 1997	1987 1982	1983 1992	1995 1982	1998 1993	1971 1980	1999 1976	1982 1989	1983 1979
		OWEST MEAN YEAR FIME ADJUSTMENT	1994	1.7	1.0	0.0	-0.9	-0.5	-0.5	-0.3	-0.5	0.4	0.9	0.6	1979
		TIME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.1	
103	MONROE	HIGHEST MEAN	33.8	35.7	42.6	52.3	65.2	71.9	77.5	75.7	68.4	60.5	46.6	37.4	77.5
		MEDIAN LOWEST MEAN	24.7	24.8	35.6	46.3	57.9 52.1	68.7	73.0	70.7	63.5	51.8	40.6	31.0	48.6
	нта	HEST MEAN YEAR	12.5	15.5 1998	27.3	39.1 1985		63.8 1991	69.1 1999	66.6 1995	58.6 1971	45.7 1971	33.7 1975	18.0 1982	12.5 1999
		OWEST MEAN YEAR			1984		1997				1975		1996		1977
		TIME ADJUSTMENT	1.0	1.7	1.8	1.3	0.0	0.0	-0.1	0.6	0.6	1.1	1.0	0.6	
104		TIME ADJUSTMENT	0.2	0.4	0.5	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	72.0
104	MONTAGUE 4 NW	HIGHEST MEAN MEDIAN	30.3	34.6 23.6	42.1 33.5	48.8	61.3 53.7	67.8 63.5	72.7 69.0	73.2 67.1	63.7 60.1	58.0 49.6	42.8 38.7	36.0 29.0	73.2 46.2
		LOWEST MEAN	14.0	15.4	26.4	37.9	48.2	58.4	63.3	62.6	55.8	44.5	32.6	19.3	14.0
	HIG	GHEST MEAN YEAR	1990	1998	1973	1985	1982	1987	1983	1995	1971	1971	1975	1982	1995
		OWEST MEAN YEAR	1977	1978	1978	1975	1997	1982	1996	1992	1975	1988	1995	1989	1977
		FIME ADJUSTMENT FIME ADJUSTMENT	-0.9 -0.6	-1.2 -0.8	-0.8 -0.5	-0.9 -0.7	-0.8 -0.7	-0.6 -0.5	-0.5 -0.4	-0.7 -0.8	-0.8 -0.7	-1.0 -0.7	-1.1 -0.7	-0.7 -0.5	
106	MAX OBS 1	HIGHEST MEAN	34.1	35.9	41.9	50.8	63.7	71.2	77.8	76.1	67.6	59.1	46.1	36.9	77.8
		MEDIAN	24.3	25.8	35.3	46.3	57.4	67.5	71.5	69.3	62.5	51.1	40.0	30.6	48.3
		LOWEST MEAN	13.2	15.7	28.5	39.7	51.6	61.8	68.0	66.5	58.0	45.7	32.8	18.5	13.2
		GHEST MEAN YEAR	1990	1998	1973	1985	1991	1997	1999	1995	1998	1971	1975	1982	1999
		OWEST MEAN YEAR	1977	1978	1978 0.0	1975	1983	1980	2000	1992	1975 0.0	1988	1976 0.0	1989	1977
		TIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
107	MT PLEASANT U	HIGHEST MEAN	31.1	32.0	40.8	48.9	63.2	70.5	75.3	73.3	65.4	56.1	43.9	34.1	75.3
1		MEDIAN	20.5	21.1	32.2	44.4	56.1	66.4	70.2	68.1	60.5	49.0	37.4	27.7	45.8
	***	LOWEST MEAN	10.8	12.6	25.7	38.9	49.6	61.1	64.9	63.4	55.1	43.5	30.1	17.6	10.8
		GHEST MEAN YEAR OWEST MEAN YEAR	1990 1977	1998 1979	2000 1972	1986 1975	1977 1997	1987 1982	1987 1992	1995 1992	1998 1975	1971 1976	1975 1995	1982 2000	1987 1977
		TIME ADJUSTMENT	0.9	1.6	1.7	1.3	0.0	0.0	-0.1	0.7	0.6	1.1	0.8	0.5	10,7,
1		TIME ADJUSTMENT	0.2	0.5	0.5	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
			1						·			I			I

# United States Climate Normals 1971-2000 1971-2000 1971-2000

### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No. Station N	ame Element	JAN	FEB	MAR	APR	MAY	NORI JUN	MALS S	TATISTI AUG	CS SEP	ОСТ	NOV	DEC	ANNUAL
108 MUNISIN		24.7	30.2	34.5	43.6	57.2	64.3	69.8	67.8	59.7	52.2	39.6	29.4	69.8
100 MONIBIN	MEDIAN	15.9	17.0	26.9	37.7	50.4	58.1	63.8	63.1	55.3	44.7	32.3	22.0	40.5
	LOWEST MEAN	7.3	8.9	17.6	31.2	43.2	51.9	58.2	57.5	49.3	40.3	26.7	12.2	7.3
	HIGHEST MEAN YEAR LOWEST MEAN YEAR	1990 1994	1998 1979	1973 1972	1987 1975	1977 1997	1995 1982	1983 1992	1995 1977	1998 1974	1971 1987	1999 1976	1994 1989	1983 1994
MI	IN OBS TIME ADJUSTMENT	0.6	0.9	0.0	-0.5	-1.0	-0.7	-0.6	-0.8	-0.9	-0.6	0.2	0.3	1994
	AX OBS TIME ADJUSTMENT	0.4	0.5	0.4	0.4	0.2	0.2	0.1	0.0	-0.1	-0.1	0.0	0.2	
109 MUSKEGO	ON COUN HIGHEST MEAN MEDIAN	31.7	35.0 24.2	41.4 33.4	50.2	62.8 55.6	69.8 64.7	74.0	74.1 68.2	64.1 60.7	57.4 49.3	45.7 38.7	35.6 29.9	74.1 46.8
	LOWEST MEAN	14.3	14.6	27.5	40.0	48.9	59.4	65.2	63.8	56.4	44.2	32.1	20.2	14.3
	HIGHEST MEAN YEAR	1990	1998	1973	1985	1977	1995	1983	1995	1971	1971	1975	1982	1995
мэ	LOWEST MEAN YEAR OBS TIME ADJUSTMENT	1977	1979 0.0	1984	1982	1997 0.0	1982	1996	1992	1975 0.0	1988	1995 0.0	1989	1977
1	AX OBS TIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
110 NEWBERF		25.6	29.7	35.4	46.7	59.7	66.9	71.4	69.6	61.3	53.1	39.8	30.5	71.4
	MEDIAN LOWEST MEAN	14.8	17.2 10.2	27.6 20.7	39.9	53.3 45.5	60.3 55.7	66.3 59.0	65.0 60.3	56.6 51.4	46.2	33.0 26.6	22.8	41.9 5.2
	HIGHEST MEAN YEAR	1990	1998	1973	1987	1977	1995	1983	1983	1998	1971	1999	1994	1983
	LOWEST MEAN YEAR	1994	1994	1972	1996	1997	1982	1992	1982	1974	1980	1995	1989	1994
	IN OBS TIME ADJUSTMENT AX OBS TIME ADJUSTMENT	-1.4	-1.5 -2.6	-0.9 -2.0	-0.8 -2.2	-1.1 -2.8	-0.7 -1.9	-0.6 -1.6	-0.9 -2.0	-1.0 -2.4	-1.3 -2.3	-1.3 -2.1	-1.2 -1.8	
113 OLD MIS		28.3	30.9	37.7	45.2	59.6	67.1	71.4	70.8	61.6	54.3	41.8	32.6	71.4
	MEDIAN	19.7	19.5	28.8	40.0	51.1	62.2	67.1	65.4	58.1	46.5	35.9	26.9	43.6
	LOWEST MEAN HIGHEST MEAN YEAR	12.3	9.8 1998	22.6	34.8 1986	44.7 1977	56.3 1995	60.7 1983	61.7 1995	53.9 1998	41.8 1971	29.6 1975	16.9 1994	9.8 1983
	LOWEST MEAN YEAR	1990	1979	1972	1975	1977	1995	1992	1995	1993	1971	1975	1989	1979
М	N OBS TIME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.8	-0.5	-0.5	-0.3	-0.4	0.4	0.9	0.7	
	AX OBS TIME ADJUSTMENT	0.2	0.4	0.4	0.4	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.2	74.0
114 ONAWAY	STATE HIGHEST MEAN MEDIAN	28.3	31.0	39.2	48.2	61.4 55.8	68.7 64.2	74.2	70.7 67.2	63.2 59.4	57.3 49.0	43.3	26.8	74.2 44.5
	LOWEST MEAN	8.6	10.2	23.4	36.6	48.2	58.8	62.6	62.9	55.4	43.4	31.1	14.2	8.6
	HIGHEST MEAN YEAR	1990	1998	2000	1986	1998	1991	1983	1983	1998	1971	1999	1994	1983
М	LOWEST MEAN YEAR OBS TIME ADJUSTMENT	1994	1979 -1.5	1972 -0.9	1975	1997 -1.1	1972 -0.7	1992	1977 -0.8	1974 -1.0	1980 -1.3	1976 -1.3	1989 -1.1	1994
	AX OBS TIME ADJUSTMENT	-1.8	-2.6	-2.0	-2.3	-2.9	-1.9	-1.6	-2.1	-2.4	-2.3	-2.1	-1.7	
115 ONTONAC		24.3	32.4	37.9	48.0	61.9	66.0	71.3	70.5	61.9	52.8	40.5	28.0	71.3
	MEDIAN LOWEST MEAN	15.1	18.2 8.4	27.3 20.5	40.8	54.4 46.7	61.8 56.1	66.5	65.8 60.6	57.1 51.2	46.6 41.6	33.5 26.1	20.7 11.5	42.3 5.5
	HIGHEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1983	1995	1998	1973	1999	1994	1983
	LOWEST MEAN YEAR	1977	1979	1996	1996	1997	1982	1992	1977	1974	1976	1976	1989	1977
1	IN OBS TIME ADJUSTMENT	-1.5	-1.3 -0.8	-0.9 -0.6	-0.8 -0.7	-0.9 -0.6	-0.6 -0.5	-0.6 -0.4	-0.8 -0.6	-1.0 -0.8	-1.1 -0.7	-1.1 -0.8	-1.2 -1.2	
116 OWOSSO	WWTP HIGHEST MEAN	31.4	33.7	41.3	49.6	63.0	68.9	74.0	74.1	65.7	57.1	44.3	35.4	74.1
	MEDIAN LOWEST MEAN	20.5	22.1 12.2	34.0 25.9	44.6	56.4 48.8	66.1 61.1	70.0	67.5 63.0	60.9 55.5	49.4	38.4	27.9 16.9	46.2 10.0
	HIGHEST MEAN YEAR	1990	1998	2000	1985		1971	1987	1995	1998	1971	1975	1982	1995
	LOWEST MEAN YEAR			1978		1997				1975	-	1976		1977
	IN OBS TIME ADJUSTMENT	0.8	1.5	1.6	2.1	1.5	1.0	0.7	1.2	1.3	1.0	0.8	0.4	
118 PELLSTO	AX OBS TIME ADJUSTMENT ON RGNL HIGHEST MEAN	26.3	0.5	0.5	0.5 46.2	0.4	0.3	72.0	0.0	-0.1 61.0	0.0 53.7	0.0	-0.1 32.2	72.0
	MEDIAN	17.0	16.6	28.2	40.8	53.8	62.3	66.6	64.5	56.6	45.8	35.2	25.1	42.3
	LOWEST MEAN HIGHEST MEAN YEAR	5.4 1990	8.1	19.8 2000	34.3	46.4	56.0 1995	60.6 1983	61.0	51.9	41.6	29.4 1999	11.2	5.4
	LOWEST MEAN YEAR	1990	1998 1979	2000 1972	1987 1972	1998 1983	1995	1983	1995 1982	1998 1974	1971 1981	1999	1994 1989	1983 1994
1	N OBS TIME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MA 119 PETOSKE	X OBS TIME ADJUSTMENT Y HIGHEST MEAN	0.0	0.0	0.0	0.0	0.0	0.0	70.9	0.0	0.0	0.0 56.1	0.0	0.0	71.0
TIP PEIOSKE	Y HIGHESI MEAN MEDIAN	20.0	19.0	29.1	40.2	59.5	61.2	67.0	65.5	58.5	47.9	36.4	27.4	43.4
	LOWEST MEAN	10.4	10.0	22.3	34.3	45.0	55.7	60.3	61.3	55.2	42.4	30.9	15.4	10.0
	HIGHEST MEAN YEAR LOWEST MEAN YEAR	1990 1994	1998 1979	1973 1972	1986 1975	1998 1997	1995 1982	1983 1992	1995 1982	1971 1975	1971 1981	1999 1976	1994 1989	1995 1979
M	IN OBS TIME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.8	-0.5	-0.5	-0.3	-0.4	0.4	0.9	0.7	1212
MA	AX OBS TIME ADJUSTMENT	0.2	0.4	0.4	0.4	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.2	
120 PONTIAC		32.4	35.1	43.1	52.3	64.8	71.1	75.9	75.1 69.6	67.1	57.8	45.7	36.1	75.9
	MEDIAN LOWEST MEAN	22.9 12.3	25.1 15.6	35.5 27.3	47.1 39.9	58.6 50.8	68.0 62.9	71.6	69.6 65.6	62.8 56.4	51.7 44.7	39.6 32.4	28.9 17.1	48.1 12.3
	HIGHEST MEAN YEAR	1990	1998	2000	1985	1991	1971	1999	1995	1978	1971	1975	1982	1999
3.43	LOWEST MEAN YEAR	1	1978 -1.3	1984	1975	1997	1972 -0.7	1992	1992	1975	1988		1989 -0.8	1977
1	IN OBS TIME ADJUSTMENT AX OBS TIME ADJUSTMENT	-1.1 -1.5	-1.3 $-2.1$	-1.0 -1.7	-1.0 -2.2	-0.9 -2.0	-0.7 -1.7	-0.5 -1.2	-0.7 -1.7	-1.0 -1.8	-1.3 -1.7	-1.2 -1.3		
		1			1						1			ı

# United States Climate Normals 1971-2000 60 7 1971-3000

#### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

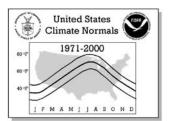
No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	NORI Jun	MALS S <sup>.</sup> JUL	TATISTI AUG	CS SEP	ОСТ	NOV	DEC	ANNUAL
121	PORT HURON	HIGHEST MEAN	30.5	34.7	42.5	49.9	63.6	69.9	76.3	75.7	67.9	57.4	45.9	35.7	76.3
		MEDIAN LOWEST MEAN	23.0	23.6 15.9	33.8 26.1	44.6 39.4	56.2 49.5	67.4 60.5	72.2	70.3 67.1	63.3 58.7	51.3	40.2	29.2 15.9	47.6 12.2
	HIG	HEST MEAN YEAR	1990	1998	2000	1985	1998	1987	1999	1995	1998	1971	1975	1982	1999
		WEST MEAN YEAR	1977	1979	1996	1975	1997	1972	1992	1992	1975	1976	1976	1989	1977
		IME ADJUSTMENT	1.1	0.9	1.1	0.0	-0.7	-0.6	-0.5	-0.3	-0.5	0.5	0.2	0.5	
124	MAX OBS T	IME ADJUSTMENT HIGHEST MEAN	27.6	0.5	0.4 36.5	0.5 45.6	0.4 57.9	0.3	72.5	0.0 70.2	-0.1 62.4	0.0	0.0	0.0	72.5
127	ROGERS CIII	MEDIAN	18.9	18.3	28.4	40.1	52.2	61.5	66.9	65.8	57.6	46.3	35.4	25.9	42.7
		LOWEST MEAN	8.7	6.6	21.5	34.6	45.9	56.2	60.7	60.3	53.5	41.1	30.2	15.2	6.6
		HEST MEAN YEAR	1990	1998	2000	1999	1998	1991	1999	1995	1998	1971	1975	1994	1999
		WEST MEAN YEAR IME ADJUSTMENT	1977	1979 1.7	1972 1.7	1975	1997 0.0	1982	1992	1982 0.7	1975 0.6	1981	1976 0.8	1989 0.6	1979
		IME ADJUSTMENT	0.9	0.4	0.4	0.5	0.0	0.0	0.1	0.7	-0.1	0.0	0.0	0.0	
125	RUDYARD 4 N	HIGHEST MEAN	23.9	28.1	34.9	48.4	58.6	67.3	70.6	68.2	59.2	49.6	37.9	31.5	70.6
		MEDIAN	13.2	15.7	26.9	39.9	52.4	59.6	64.5	62.7	53.4	42.9	31.3	21.9	40.3
	шта	LOWEST MEAN	4.1	7.1 1998	20.3	33.4 1986	45.1 1998	54.9 1995	57.4 1983	58.7 1998	48.1 1994	36.8	25.1 1999	8.4 1994	4.1
		HEST MEAN YEAR WEST MEAN YEAR	1990 1994	1979	1972	1996	1996	1995	1992	1977	1974	1971	1999	1989	1983 1994
		IME ADJUSTMENT	-1.3	-1.4	-0.9	-0.7	-1.0	-0.7	-0.6	-0.8	-0.9	-1.1	-1.1	-1.1	2001
		IME ADJUSTMENT	-1.1	-1.5	-1.1	-1.1	-1.2	-1.0	-0.8	-1.0	-1.1	-1.0	-1.0	-1.0	
126	SAGINAW CONSU	HIGHEST MEAN	33.3	35.8	44.6	52.7	66.3	73.4	77.2	76.5	68.1	59.4	46.3	36.7	77.2
		MEDIAN LOWEST MEAN	22.9	24.8 15.9	36.1 28.7	47.1	59.4 52.9	68.9 63.6	72.7	70.3 66.3	63.3 57.7	52.0 46.8	39.9 33.6	29.7 19.0	48.9 13.4
	HIG	HEST MEAN YEAR	1990	1998	2000	1985	1998	1987	1987	1995	1998	1971	1999	1982	1987
	LO	WEST MEAN YEAR	1977	1979	1978	1975	1997	1982	1992	1992	1975	1980	1976	1989	1977
		IME ADJUSTMENT	-1.1	-1.4	-0.9	-1.0	-0.9	-0.7	-0.5	-0.8	-1.0	-1.3	-1.3	-0.8	
120	MAX OBS T	IME ADJUSTMENT HIGHEST MEAN	-1.8 30.9	-2.4 33.4	-2.0 41.5	-2.5 52.7	-2.6 64.6	-1.9 72.3	-1.5 75.8	-2.0 73.6	-2.4 66.0	-2.3 58.1	-1.8 45.9	-1.4 34.5	75.8
120	SAGINAW IRI S	MEDIAN	21.3	23.5	33.5	45.6	57.2	66.7	71.3	68.6	60.5	49.4	38.3	28.3	46.7
		LOWEST MEAN	12.1	12.1	25.2	41.3	50.2	60.6	66.2	64.6	56.7	43.7	31.6	16.3	12.1
		HEST MEAN YEAR	1990	1998	2000	1985	1977	1971	1988	1995	1998	1971	1975	1982	1988
		WEST MEAN YEAR	1994	1979	1978	1982	1997	1982	1992	1992	1993	1972	1995	1989	1994
		IME ADJUSTMENT IME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
129	SAINT CHARLES	HIGHEST MEAN	30.4	32.8	41.2	51.0	65.5	71.6	75.1	73.2	65.4	56.9	44.2	35.2	75.1
		MEDIAN	20.3	21.9	33.6	45.6	57.5	66.3	70.7	68.2	60.5	49.1	37.7	27.8	46.5
		LOWEST MEAN	11.8	12.7	26.3	40.5	50.6	60.7	64.5	62.1	54.6	43.4	29.9	15.2	11.8
		HEST MEAN YEAR WEST MEAN YEAR	1990 1994	1998 1979	2000 1984	1985 1975	1977 1997	1971 1982	1977 1992	1995 1992	1978 1993	1971 1988	1975 1995	1982 1989	1977 1994
		IME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.7	-0.5	-0.5	-0.3	-0.5	0.4	0.9	0.6	1994
		IME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
130	ST IGNACE MAC	HIGHEST MEAN	26.5	30.2	35.5	45.7	56.8	65.6	72.4	71.3	62.1	55.9	41.7	32.9	72.4
		MEDIAN LOWEST MEAN	18.3	18.4	27.5	39.4	51.1	61.1	67.3	66.9	58.4	47.2	36.5	26.6	42.9
	HTG	HEST MEAN YEAR	6.9 1990	8.9 1998	21.1 1973	34.1	45.4 1998	57.2 1991	1983	63.0 1983	55.1 1999	42.6 1971	30.5 1999	14.3 1994	6.9 1983
		WEST MEAN YEAR	1994	1979			1997				1974	1988		1989	1994
	MIN OBS T	IME ADJUSTMENT	-0.3	-0.5	-0.3	-0.2	-0.1	-0.2	-0.1	-0.2	-0.1	-0.2	-0.3	-0.3	
1 2 1		IME ADJUSTMENT	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	71 4
131	ST JAMES 2 S	HIGHEST MEAN MEDIAN	27.7 19.6	30.9 18.7	35.1 27.9	45.0 39.1	57.4 51.4	65.0 60.2	71.4	70.6 65.7	62.4 58.2	53.4	42.3 36.6	33.1 26.7	71.4 42.8
		LOWEST MEAN	8.5	9.9	20.7	33.8	45.0	55.3	59.7	60.3	54.2	43.5	30.6	15.7	8.5
	HIG	HEST MEAN YEAR	1990	1998	1973	1987	1998	1991	1983	1995	1998	1971	1999	1994	1983
		WEST MEAN YEAR	ı	1979	1972	1972	1983	1982	1992	1977	1975	1972		1989	1994
		IME ADJUSTMENT IME ADJUSTMENT	-1.0 -0.9	-1.4 $-1.4$	-0.9 -1.0	-0.8	-1.1 -1.3	-0.6 -1.0	-0.5 -0.8	-0.8 -1.1	-0.9 -1.1	-1.1	-1.1 -1.1	-1.0 -0.9	
132	ST JOHNS	HIGHEST MEAN	31.7	33.4	41.6	51.5	64.4	71.6	77.1	74.9	66.8	58.7	44.9	35.8	77.1
		MEDIAN	21.1	22.3	33.6	45.1	57.4	67.5	71.2	68.4	61.2	49.8	38.3	28.4	46.9
		LOWEST MEAN	11.1		26.3	39.2	49.7	62.0	66.0	63.7	56.8	45.1	31.2	17.0	11.1
		HEST MEAN YEAR	1990	1998	2000	1985	1998	1971	1988	1995	1998	1971	1975	1982	1988
		WEST MEAN YEAR IME ADJUSTMENT	1977	1979 1.7	1984 1.0	1975	1997 -0.7	1982 -0.5	1992	1992 -0.3	1975 -0.4	1972	1995 0.9	2000	1977
		IME ADJUSTMENT	0.2	0.5	0.4	0.5	0.4	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	
133	SANDUSKY	HIGHEST MEAN	31.0	32.6	40.8	49.3	62.6	70.0	74.1	74.0	65.9	56.4	44.9	35.3	74.1
		MEDIAN	20.6	23.6	33.0	44.2	56.0	65.9	70.1	68.4	61.6	50.1	39.0	28.1	46.4
	пто	LOWEST MEAN HEST MEAN YEAR	12.5 1990	13.8 1998	25.4 2000	37.9 1985	49.1 1991	60.0 1971	1988	64.4 1995	55.7 1998	44.5 1971	32.9 1975	15.8 1982	12.5 1988
		WEST MEAN YEAR	1990	1998	1984	1985	1991	1971	2000	1995	1998	1971	1975	2000	1988
i			ı			1			1			I			
	MIN OBS T	IME ADJUSTMENT	1.0	0.9	1.1	0.0	-0.7	-0.6	-0.5	-0.3	-0.4	0.5	0.2	0.5	

# United States Climate Normals 1971-2000 1971-2000 1971-2000

#### **CLIMATOGRAPHY OF THE UNITED STATES NO. 81**

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

No Statio	on Nama	Element	JAN	FEB	MAR	APR	MAY	NORI JUN	MALS S	TATISTI AUG	CS SEP	ОСТ	NOV	DEC	ANNUAL
No. Statio	T STE MAR	Element HIGHEST MEAN	23.5	29.1	35.0	45.9	57.6	63.4	69.2	68.5	60.3	50.9	38.2	29.3	69.2
IST BAOL	I DIE PAR	MEDIAN	13.3	14.4	25.5	38.4	51.6	58.9	63.5	63.0	54.6	44.7	32.4	21.4	39.3
	HTGH	LOWEST MEAN HEST MEAN YEAR	0.8 1990	5.2 1998	19.0 1973	31.7 1987	44.7 1998	51.5 1995	57.4 1983	57.3 1998	50.3 1998	37.7 1971	25.7 1999	7.3 1994	0.8 1983
		WEST MEAN YEAR	1994	1979	1972	1982	1997	1982	1992	1977	1981	1980	1995	1989	1994
		ME ADJUSTMENT ME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
136 SENE	Y WILDLIF	HIGHEST MEAN	27.2	32.0	36.7	47.5	61.6	67.4	73.3	70.9	62.1	54.3	41.1	29.9	73.3
		MEDIAN	15.7	17.6	28.6	41.6	54.7	62.7	68.0	66.2	57.8	47.1	34.6	23.9	43.0
	HIGH	LOWEST MEAN HEST MEAN YEAR	6.9 1990	10.6 1998	19.4 2000	35.1 1986	47.3 1977	57.2 1987	60.8 1983	61.3 1983	53.8 1998	41.6 1971	27.1 1999	11.8 1997	6.9 1983
	LOW	VEST MEAN YEAR	1994	1994	1989	1982	1997	1982	1992	1977	1974	1981	1995	1989	1994
		ME ADJUSTMENT ME ADJUSTMENT	-1.4 -1.7	-1.6 -2.0	-0.9 -1.7	-0.8 -2.1	-1.1 -3.1	-0.7 -1.8	-0.6 -1.5	-0.9 -1.9	-1.1 -2.6	-1.4 -2.4	-1.4 -1.7	-1.2 -1.5	
137 SOUT		HIGHEST MEAN	34.6	38.1	45.5	52.1	64.4	70.6	75.4	76.9	68.4	60.6	47.5	38.4	76.9
		MEDIAN LOWEST MEAN	25.7 14.7	27.6 18.2	36.7 29.8	46.3	55.8 51.6	66.5 60.7	71.6	70.4 65.9	64.3	53.9 48.2	42.4 34.5	32.0	49.3 14.7
	HIGH	IEST MEAN YEAR	1990	1998	1973	1977	1977	1971	1999	1995	1978	1971	1975	1982	1995
		VEST MEAN YEAR	1977	1978	1978	1982	1984	1982	1979	1992	1975	1976	1976	2000	1977
		ME ADJUSTMENT ME ADJUSTMENT	-1.2 -1.6	-1.3 -2.1	-0.9 -1.6	-1.0 -2.2	-0.8 -2.0	-0.6 -1.6	-0.5 -1.1	-0.7 -1.7	-0.9 -1.8	-1.3 -1.7	-1.3 -2.0	-0.9 -1.3	
139 STAM	BAUGH 2 S	HIGHEST MEAN	18.9	27.5	32.7	43.4	59.6	64.8	68.9	66.4	57.1	50.7	35.8	24.5	68.9
		MEDIAN LOWEST MEAN	7.9	12.2	23.7 15.2	37.2 31.2	50.8 43.1	59.1 53.4	64.1 56.8	61.6 56.7	52.3 47.6	41.5 35.1	28.4 19.8	15.6	37.7 -1.1
		IEST MEAN YEAR	1990	1998	1973	1977	1977	1995	1983	1995	1998	1971	1999	1997	1983
		VEST MEAN YEAR	1994	1979 1.9	1984 1.2	1975	1997 -0.7	1982 -0.5	1992	1992 -0.3	1993	1987 0.4	1995 0.9	1983	1994
		ME ADJUSTMENT	0.3	0.5	0.5	0.5	0.4	0.3	0.1	0.0	0.0	0.0	-0.1	0.1	
140 STAN	DISH 5 SW	HIGHEST MEAN	29.5	30.3	39.8	46.7	60.4	68.1	72.1	70.0	63.3	53.3	42.1	33.9	72.1
		MEDIAN LOWEST MEAN	18.5	19.8 8.7	30.4 23.5	42.2 37.3	54.6 47.2	63.8 59.1	68.2	65.7 61.6	58.1 52.6	46.9 41.7	36.6 29.7	27.3 15.0	44.0 8.7
		IEST MEAN YEAR	1990	1998	2000	1986	1991	1971	1988	1995	1971	1971	1999	1982	1988
		VEST MEAN YEAR	1994	1979 1.6	1978 1.7	1975	1997 -0.1	1982	1992 -0.1	1992	1975 0.6	1987 1.1	1995	1989	1979
	MAX OBS TI	ME ADJUSTMENT	0.2	0.5	0.5	0.5	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	
141 STEP:	HENSON 8	HIGHEST MEAN MEDIAN	21.4	29.8 16.8	37.2 28.3	47.4	60.2 53.0	67.7 62.5	72.0	69.9 65.6	60.0 57.2	53.5 45.4	39.1 32.5	26.8	72.0 41.8
		LOWEST MEAN	4.3	7.5	20.8	36.0	46.2	56.5	61.8	61.4	52.1	40.9	24.7	7.3	4.3
		IEST MEAN YEAR IEST MEAN YEAR	1990 1977	1998 1979	2000 1996	1986 1975	1977 1997	1995 1982	1983 1992	1983 1997	1978 1993	1971 1987	1999 1995	1997 1985	1983 1977
		ME ADJUSTMENT	0.4	1.0	0.0	-0.6	-1.0	-0.7	-0.6	-0.8	-1.0	-0.6	0.2	0.3	1511
142 5710	MAX OBS TI UAMENON F	ME ADJUSTMENT	0.2	0.5	0.4	0.4	0.2	0.2	0.1	0.0	-0.1 57.9	-0.1	0.0	0.2	60.0
143 TAHQ	UAMENON F	HIGHEST MEAN MEDIAN	24.6	29.7 12.7	23.9	42.2 36.8	49.2	57.7	68.0	67.4 61.9	54.5	54.4 43.3	37.1 31.8	20.8	68.0 38.9
	117.01	LOWEST MEAN	1.4	1.9	16.3	30.5	42.8	51.9	56.5	57.1	50.4	37.6	24.8	8.2	1.4
		IEST MEAN YEAR IEST MEAN YEAR	1990 1994	1998 1979	2000 1972	1987 1996	1977 1997	1995 1982	1983 1992	1995 1982	1998 1993	1973 1981	1999 1995	1994 1989	1983 1994
	MIN OBS TI	ME ADJUSTMENT	1.1	1.8	1.1	0.1	-0.7	-0.6	-0.5	-0.3	-0.4	0.4	0.8	0.7	
144 THRE		ME ADJUSTMENT HIGHEST MEAN	0.4	0.5	0.4 42.6	0.5	0.4 65.2	0.3	0.1 75.9	0.0 75.0	0.0	0.0 57.6	0.0	0.2	75.9
		MEDIAN	22.6	23.7	35.3	45.7	57.2	67.3	71.0	69.0	61.9	49.6	38.3	28.1	47.1
	HTGH	LOWEST MEAN HEST MEAN YEAR	8.9 1990	11.3 1998	26.0 2000	40.0 1985	51.1 1991	62.7 1971	67.7 1999	64.5 1995	56.5 1978	44.0 1971	30.3 1999	16.8 1982	8.9 1999
		WEST MEAN YEAR	1977	1978	1984	1975	1997	1992	1992	1992	1975	1976	1976	1983	1977
		ME ADJUSTMENT ME ADJUSTMENT	1.1	1.7 0.4	1.8 0.5	1.3	0.0	0.0	-0.1 0.1	0.6	0.6 -0.1	1.1	1.0	0.6	
145 TRAV	ERSE CITY	HIGHEST MEAN	29.8	32.0	39.1	47.8	61.0	69.9	73.4	73.2	64.7	57.7	42.8	33.1	73.4
		MEDIAN	20.6	20.7	30.6	42.7	54.2	64.5	70.0	67.8	59.5	48.2	37.2	28.1	45.3
	HIGH	LOWEST MEAN HEST MEAN YEAR	11.9 1990	9.2 1998	23.5	37.3 1986	46.3 1977	58.3 1991	63.4 1987	63.7 1995	56.2 1998	44.0 1971	31.8 1999	16.2 1994	9.2 1987
		WEST MEAN YEAR	1994	1979	1984	1972	1983	1982	1992	1979	1993	1988	1995	1989	1979
		ME ADJUSTMENT ME ADJUSTMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
146 TROU		HIGHEST MEAN	24.8	29.8	34.8	44.6	58.9	65.2	69.1	67.3	59.6	52.1	38.4	31.4	69.1
		MEDIAN LOWEST MEAN	14.2	15.9 7.3	26.4 18.6	39.6 33.6	52.9 45.0	59.8 55.0	65.0 58.0	63.6 59.1	55.5 50.4	44.5 39.3	33.3 26.6	23.5	40.5
	HIGH	HEST MEAN YEAR	1990	1998	2000	1987	1977	1995	1999	1991	1996	1971	1975	1994	1999
		VEST MEAN YEAR	1994	1979	1984	1975	1997	1982	1992	1982	1974	1980	1995	1989	1994
		ME ADJUSTMENT ME ADJUSTMENT	-1.0 -0.9	-1.4 -1.5	-0.9 -1.0	-0.8 -1.1	-1.0 -1.2	-0.7 -1.0	-0.5 -0.8	-0.8 -1.0	-0.9 -1.1	-1.1 -1.0	-1.1 -1.1	-1.0 -0.9	
			ı			·			·			ı			1



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

	NORMALS STATISTICS														
No.	Station Name	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
147	VANDERBILT 11	HIGHEST MEAN	25.0	28.5	35.6	45.5	59.6	66.9	71.0	68.4	58.2	50.6	38.7	30.1	71.0
		MEDIAN LOWEST MEAN	14.7	14.5	25.8 18.4	39.2	52.2 45.5	60.8 55.4	65.2	62.7 59.1	55.2 49.3	43.4 39.0	32.6 26.7	23.4	40.8
		HEST MEAN YEAR	1990	1998	2000	1986	1977	1995	1983	1995	1985	1971	1999	1982	1983
		VEST MEAN YEAR	1994	1979 1.7	1972 1.1	1972	1997 -0.8	1982 -0.5	1992 -0.5	1976 -0.3	1975 -0.5	1976 0.4	1976 0.9	1989	1979
		IME ADJUSTMENT	0.2	0.5	0.5	0.5	0.4	0.3	0.1	0.0	-0.3	0.0	0.0	0.1	
150	WATERSMEET 5	HIGHEST MEAN MEDIAN	21.5	28.2 12.6	33.4 24.4	44.6 38.0	60.1 51.8	67.1 60.6	70.7 65.0	69.4 63.4	58.5 54.9	52.3 43.8	35.9 28.7	24.9 16.6	70.7 39.4
		LOWEST MEAN	-2.3	4.7	17.0	30.3	43.6	51.0	59.4	58.1	48.2	36.7	20.9	5.3	-2.3
		HEST MEAN YEAR	1990	1998	1973	1987	1977	1995	1983	1995	1978	1973	1977	1994	1983
		VEST MEAN YEAR IME ADJUSTMENT	1977	1979 1.0	1984	1982 -0.5	1997 -0.9	1982 -0.7	1998 -0.6	1982 -0.8	1974 -0.5	1980 -0.6	1995 0.2	1985	1977
150		IME ADJUSTMENT	0.5	0.5	0.4	0.4	0.2	0.2	0.1	0.0	0.0	-0.1	0.0	0.2	F0 0
152	WEST BRANCH 3	HIGHEST MEAN MEDIAN	26.0 17.4	30.2 18.9	39.0 30.5	47.7	62.8 54.2	68.4 63.9	72.8	71.4 66.2	62.8 58.0	55.4 46.5	42.7 35.7	32.5 25.7	72.8 44.0
		LOWEST MEAN	8.9	10.8	24.5	37.8	47.7	58.7	62.7	61.3	53.0	42.0	28.5	13.1	8.9
		HEST MEAN YEAR NEST MEAN YEAR	1990 1994	1998 1994	2000 1972	1986 1972	1998 1997	1971 1982	1983 1992	1995 1992	1971 1993	1971 1980	1975 1995	1982 1989	1983 1994
	MIN OBS T	IME ADJUSTMENT	1.0	1.7	1.0	0.0	-0.7	-0.5	-0.5	-0.3	-0.5	0.4	0.9	0.6	
154	MAX OBS TI WHITEFISH POI	IME ADJUSTMENT HIGHEST MEAN	25.3	0.5	0.4	0.5	0.4	0.3	0.1 67.1	0.0	-0.1 62.4	0.0 52.9	0.0	0.1	68.4
131	WIIIIII IOII IOI	MEDIAN	16.1	15.9	25.2	36.1	47.7	55.2	61.5	63.4	56.5	45.6	34.3	24.3	40.3
	нта	LOWEST MEAN HEST MEAN YEAR	5.5 1990	8.2 1998	19.4 1973	31.8 1998	42.2 1998	51.6 1995	55.3 1999	58.0 1998	52.7 1998	41.8 1971	28.3 1999	12.7 1994	5.5 1998
		WEST MEAN YEAR	1994	1979	1972	1996	1997	1982	1992	1977	1993	1976	1995	1989	1994
		IME ADJUSTMENT IME ADJUSTMENT	-1.4 -1.7	-1.5 -2.2	-1.0 -1.7	-0.8 -1.8	-1.0 -2.0	-0.7 -1.6	-0.5 -1.2	-0.8 -1.6	-1.0 -1.3	-1.2 -1.6	-1.2 -1.6	-1.1 -1.5	
157	YPSILANTI E M	HIGHEST MEAN	34.7	37.3	45.8	54.7	67.8	74.1	77.7	76.6	69.1	60.3	47.2	37.6	77.7
		MEDIAN LOWEST MEAN	24.9	26.7 17.3	37.8 29.4	48.7	60.3 53.0	70.2 65.4	74.1 69.6	71.9 68.2	64.3 59.5	52.8 47.0	40.8	30.3	50.0 13.1
	HIGH	HEST MEAN YEAR	1990	1998	2000	1985	1998	1987	1988	1995	1998	1971	1975	1982	1988
		VEST MEAN YEAR	1977	1979	1984	1975	1997	1985	2000	1992	1975	1988	1976	1989	1977
		IME ADJUSTMENT IME ADJUSTMENT	-1.1 -1.5	-1.3 -2.1	-1.0 -1.7	-1.0 -2.2	-0.8 -1.9	-0.7 -1.6	-0.5 -1.2	-0.7 -1.7	-0.9 -1.7	-1.3 -1.7	-1.2 -1.3	-0.8 -1.2	