



**NOAA TECHNICAL MEMORANDUM  
NWS WR-242**

---

**CLIMATE OF POCATELLO, IDAHO**

**Joe Heim  
National Weather Service Office  
Pocatello, ID**

**October 1996**

---

**U.S. DEPARTMENT  
OF COMMERCE**

National Oceanic and  
Atmospheric Administration

National Weather  
Service



**NOAA TECHNICAL MEMORANDA**  
**National Weather Service, Western Region Subseries**

The National Weather Service (NWS) Western Region (WR) Subseries provides an informal medium for the documentation and quick dissemination of results not appropriate, or not yet ready, for formal publication. The series is used to report on work in progress, to describe technical procedures and practices, or to relate progress to a limited audience. These Technical Memoranda will report on investigations devoted primarily to regional and local problems of interest mainly to personnel, and hence will not be widely distributed.

Papers 1 to 25 are in the former series, ESSA Technical Memoranda, Western Region Technical Memoranda (WRTM); papers 24 to 59 are in the former series, ESSA Technical Memoranda, Weather Bureau Technical Memoranda (WBTM). Beginning with 60, the papers are part of the series, NOAA Technical Memoranda NWS. Out-of-print memoranda are not listed.

Papers 2 to 22, except for 5 (revised edition), are available from the National Weather Service Western Region, Scientific Services Division, 125 South State Street - Rm 1210, Salt Lake City, Utah 84138-1102. Paper 5 (revised edition), and all others beginning with 25 are available from the National Technical Information Service, U.S. Department of Commerce, Sills Building, 5285 Port Royal Road, Springfield, Virginia 22161. Prices vary for all paper copies; microfiche are \$3.50. Order by accession number shown in parentheses at end of each entry.

**ESSA Technical Memoranda (WRTM)**

- 2 Climatological Precipitation Probabilities. Compiled by Lucianne Miller, December 1965.
- 3 Western Region Pre- and Post-FP-3 Program, December 1, 1965, to February 20, 1966. Edward D. Diemer, March 1966.
- 5 Station Descriptions of Local Effects on Synoptic Weather Patterns. Philip Williams, Jr., April 1966 (Revised November 1967, October 1969). (PB-17800)
- 8 Interpreting the RAREP. Herbert P. Benner, May 1966 (Revised January 1967).
- 11 Some Electrical Processes in the Atmosphere. J. Latham, June 1966.
- 17 A Digitalized Summary of Radar Echoes within 100 Miles of Sacramento, California. J. A. Youngberg and L. B. Ovaras, December 1966.
- 21 An Objective Aid for Forecasting the End of East Winds in the Columbia Gorge, July through October. D. John Coparanis, April 1967.
- 22 Derivation of Radar Horizons in Mountainous Terrain. Roger G. Pappas, April 1967.

**ESSA Technical Memoranda, Weather Bureau Technical Memoranda (WBTM)**

- 25 Verification of Operation Probability of Precipitation Forecasts, April 1966-March 1967. W. W. Dickey, October 1967. (PB-176240)
- 26 A Study of Winds in the Lake Mead Recreation Area. R. P. Augulis, January 1968. (PB-177830)
- 28 Weather Extremes. R. J. Schmidli, April 1968 (Revised March 1986). (PB86 17762/AS). (Revised October 1991 - PB92-115062/AS)
- 29 Small-Scale Analysis and Prediction. Philip Williams, Jr., May 1968. (PB178425)
- 30 Numerical Weather Prediction and Synoptic Meteorology. CPT Thomas D. Murphy, USAF, May 1968. (AD 673365)
- 31 Precipitation Detection Probabilities by Salt Lake ARTC Radars. Robert K. Belesky, July 1968. (PB 179084)
- 32 Probability Forecasting--A Problem Analysis with Reference to the Portland Fire Weather District. Harold S. Ayer, July 1968. (PB 179289)
- 36 Temperature Trends in Sacramento--Another Heat Island. Anthony D. Lentini, February 1969. (PB 183055)
- 37 Disposal of Logging Residues Without Damage to Air Quality. Owen P. Cramer, March 1969. (PB 183057)
- 39 Upper-Air Lows Over Northwestern United States. A.L. Jacobson, April 1969. PB 184286)
- 40 The Man-Machine Mix in Applied Weather Forecasting in the 1970s. L.W. Snellman, August 1969. (PB 185068)
- 43 Forecasting Maximum Temperatures at Helena, Montana. David E. Olsen, October 1969. (PB 185762)
- 44 Estimated Return Periods for Short-Duration Precipitation in Arizona. Paul C. Kangieser, October 1969. (PB 187763)
- 46 Applications of the Net Radiometer to Short-Range Fog and Stratus Forecasting at Eugene, Oregon. L. Yee and E. Bates, December 1969. (PB 190476)
- 47 Statistical Analysis as a Flood Routing Tool. Robert J.C. Burnash, December 1969. (PB 188744)
- 48 Tsunami. Richard P. Augulis, February 1970. (PB 190157)
- 49 Predicting Precipitation Type. Robert J.C. Burnash and Floyd E. Hug, March 1970. (PB 190962)
- 50 Statistical Report on Aeroallergens (Pollens and Molds) Fort Huachuca, Arizona, 1969. Wayne S. Johnson, April 1970. (PB 191743)
- 51 Western Region Sea State and Surf Forecaster's Manual. Gordon C. Shields and Gerald B. Burdwell, July 1970. (PB 193102)
- 52 Sacramento Weather Radar Climatology. R.G. Pappas and C. M. Veliquette, July 1970. (PB 193347)
- 54 A Refinement of the Vorticity Field to Delineate Areas of Significant Precipitation. Barry B. Aronovitch, August 1970.
- 55 Application of the SSARR Model to a Basin without Discharge Record. Vail Schermerhorn and Donald W. Kuehl, August 1970. (PB 194394)
- 56 Areal Coverage of Precipitation in Northwestern Utah. Philip Williams, Jr., and Werner J. Heck, September 1970. (PB 194389)
- 57 Preliminary Report on Agricultural Field Burning vs. Atmospheric Visibility in the Willamette Valley of Oregon. Earl M. Bates and David O. Chilcote, September 1970. (PB 194710)
- 58 Air Pollution by Jet Aircraft at Seattle-Tacoma Airport. Wallace R. Donaldson, October 1970. (COM 71 00017)
- 59 Application of PE Model Forecast Parameters to Local-Area Forecasting. Leonard W. Snellman, October 1970. (COM 71 00016)
- 60 An Aid for Forecasting the Minimum Temperature at Medford, Oregon, Arthur W. Fritz, October 1970. (COM 71 00120)
- 63 700-mb Warm Air Advection as a Forecasting Tool for Montana and Northern Idaho. Norris E. Woerner, February 1971. (COM 71 00349)
- 64 Wind and Weather Regimes at Great Falls, Montana. Warren B. Price, March 1971.
- 65 Climate of Sacramento, California. Richard Honton and Tony Martini (Retired), August 1966. (Fifth Revision) (PB89 207781/AS)
- 66 A Preliminary Report on Correlation of ARTCC Radar Echoes and Precipitation. Wilbur K. Hall, June 1971. (COM 71 00829)
- 69 National Weather Service Support to Soaring Activities. Ellis Burton, August 1971. (COM 71 00956)
- 71 Western Region Synoptic Analysis-Problems and Methods. Philip Williams, Jr., February 1972. (COM 72 10433)
- 74 Thunderstorms and Hail Days Probabilities in Nevada. Clarence M. Sakamoto, April 1972. (COM 72 10554)
- 75 A Study of the Low Level Jet Stream of the San Joaquin Valley. Ronald A. Willis and Philip Williams, Jr., May 1972. (COM 72 10707)
- 76 Monthly Climatological Charts of the Behavior of Fog and Low Stratus at Los Angeles International Airport. Donald M. Gales, July 1972. (COM 72 11140)
- 77 A Study of Radar Echo Distribution in Arizona During July and August. John E. Hales, Jr., July 1972. (COM 72 11136)
- 78 Forecasting Precipitation at Bakersfield, California, Using Pressure Gradient Vectors. Earl T. Riddiough, July 1972. (COM 72 11146)
- 79 Climate of Stockton, California. Robert C. Nelson, July 1972. (COM 72 10920)
- 80 Estimation of Number of Days Above or Below Selected Temperatures. Clarence M. S. October 1972. (COM 72 10021)
- 81 An Aid for Forecasting Summer Maximum Temperatures at Seattle, Washington. E. Johnson, November 1972. (COM 73 10150)
- 82 Flash Flood Forecasting and Warning Program in the Western Region. Philip Williams, Jr., Chester L. Glenn, and Roland L. Raetz, December 1972, (Revised March 1978). (COM 73 10251)
- 83 A comparison of Manual and Semiautomatic Methods of Digitizing Analog Wind Records. Glenn E. Rasch, March 1973. (COM 73 10669)
- 86 Conditional Probabilities for Sequences of Wet Days at Phoenix, Arizona. Paul C. Kangieser, June 1973. (COM 73 11264)
- 87 A Refinement of the Use of K-Values in Forecasting Thunderstorms in Washington and Oregon. Robert Y.G. Lee, June 1973. (COM 73 11276)
- 89 Objective Forecast Precipitation Over the Western Region of the United States. Julia N. Paegle and Larry P. Kierulff, September 1973. (COM 73 11946/3AS)
- 91 Arizona "Eddy" Tornadoes. Robert S. Ingram, October 1973. (COM 73 10465)
- 92 Smoke Management in the Willamette Valley. Earl M. Bates, May 1974. (COM 74 11277/AS)
- 93 An Operational Evaluation of 500-mb Type Regression Equations. Alexander E. MacDonald, June 1974. (COM 74 11407/AS)
- 94 Conditional Probability of Visibility Less than One-Half Mile in Radiation Fog at Fresno, California John D. Thomas, August 1974. (COM 74 11555/AS)
- 95 Climate of Flagstaff, Arizona. Paul W. Sorenson, and updated by Reginald W. Preston, January 1987. (PB87 143160/AS)
- 96 Map type Precipitation Probabilities for the Western Region. Glenn E. Rasch and Alexander E. MacDonald, February 1975. (COM 75 10428/AS)
- 97 Eastern Pacific Cut-Off Low of April 21-28, 1974. William J. Alder and George R. Miller, January 1976. (PB 250 711/AS)
- 98 Study on a Significant Precipitation Episode in Western United States. Ira S. Brenner, April 1976. (COM 75 10719/AS)
- 99 A Study of Flash Flood Susceptibility-A Basin in Southern Arizona. Gerald Williams, August 1975. (COM 75 11360/AS)
- 102 A Set of Rules for Forecasting Temperatures in Napa and Sonoma Counties. Wesley L. Tuft, October 1975. (PB 246 902/AS)
- 103 Application of the National Weather Service Flash-Flood Program in the Western Region. Gerald Williams, January 1976. (PB 253 053/AS)
- 104 Objective Aids for Forecasting Minimum Temperatures at Reno, Nevada, During the Summer Months. Christopher D. Hill, January 1976. (PB 252 866/AS)
- 105 Forecasting the Mono Wind. Charles P. Ruscha, Jr., February 1976. (PB 254 650)
- 106 Use of MOS Forecast Parameters in Temperature Forecasting. John C. Plankinton, Jr., March 1976. (PB 254 649)
- 107 Map Types as Aids in Using MOS PoPs in Western United States. Ira S. Brenner, August 1976. (PB 259 594)
- 108 Other Kinds of Wind Shear. Christopher D. Hill, August 1976. (PB 260 437/AS)
- 109 Forecasting North Winds in the Upper Sacramento Valley and Adjoining Forests. Christopher E. Fontana, September 1976. (PB 273 677/AS)
- 110 Cool Inflow as a Weakening Influence on Eastern Pacific Tropical Cyclones. William J. November 1976. (PB 264 655/AS)
- 112 The MAN/MOS Program. Alexander E. MacDonald, February 1977. (PB 265 941/AS)
- 113 Winter Season Minimum Temperature Formula for Bakersfield, California, Using Multiple Regression. Michael J. Oard, February 1977. (PB 273 694/AS)
- 114 Tropical Cyclone Kathleen. James R. Fors, February 1977. (PB 273 676/AS)
- 116 A Study of Wind Gusts on Lake Mead. Bradley Colman, April 1977. (PB 288 847)
- 117 The Relative Frequency of Cumulonimbus Clouds at the Nevada Test Site as a Function of K-Value. R.F. Quiring, April 1977. (PB 272 831)
- 118 Moisture Distribution Modification by Upward Vertical Motion. Ira S. Brenner, April 1977. (PB 268 740)
- 119 Relative Frequency of Occurrence of Warm Season Echo Activity as a Function of Stability Indices Computed from the Yucca Flat, Nevada, Rawinsonde. Darryl Randerson, June 1977. (PB 271 290/AS)
- 121 Climatological Prediction of Cumulonimbus Clouds in the Vicinity of the Yucca Flat Weather Station. R.F. Quiring, June 1977. (PB 271 704/AS)
- 122 A Method for Transforming Temperature Distribution to Normality. Morris S. Webb, Jr., June 1977. (PB 271 742/AS)
- 124 Statistical Guidance for Prediction of Eastern North Pacific Tropical Cyclone Motion - Part I. Charles J. Neumann and Preston W. Leftwich, August 1977. (PB 272 661)
- 125 Statistical Guidance on the Prediction of Eastern North Pacific Tropical Cyclone Motion - Part II. Preston W. Leftwich and Charles J. Neumann, August 1977. (PB 273 155/AS)
- 126 Climate of San Francisco. E. Jan Null, February 1978. (Revised by George T. Pericht, April 1988 and January 1995). (PB88 208624/AS)
- 127 Development of a Probability Equation for Winter-Type Precipitation Patterns in Great Falls, Montana. Kenneth B. Mielke, February 1978. (PB 281 387/AS)
- 128 Hand Calculator Program to Compute Parcel Thermal Dynamics. Dan Gudge, April 1978. (PB 283 080/AS)
- 129 Fire whirls. David W. Goens, May 1978. (PB 283 866/AS)
- 130 Flash-Flood Procedure. Ralph C. Hatch and Gerald Williams, May 1978. (PB 286 014/AS)
- 131 Automated Fire-Weather Forecasts. Mark A. Moliner and David E. Olsen, September 1978. (PB 289 916/AS)
- 132 Estimates of the Effects of Terrain Blocking on the Los Angeles WSR-74C Weather Radar. R.G. Pappas, R.Y. Lee, B.W. Finke, October 1978. (PB 289767/AS)
- 133 Spectral Techniques in Ocean Wave Forecasting. John A. Jannuzzi, October 1978. (PB291317/AS)
- 134 Solar Radiation. John A. Jannuzzi, November 1978. (PB291195/AS)
- 135 Application of a Spectrum Analyzer in Forecasting Ocean Swell in Southern California Coastal Waters. Lawrence P. Kierulff, January 1979. (PB292716/AS)
- 136 Basic Hydrologic Principles. Thomas L. Dietrich, January 1979. (PB292247/AS)
- 137 LFM 24-Hour Prediction of Eastern Pacific Cyclones Refined by Satellite Images. John R. Zimmerman and Charles P. Ruscha, Jr., January 1979. (PB294324/AS)
- 138 A Simple Analysis/Diagnosis System for Real Time Evaluation of Vertical Motion. Scott Heff James R. Fors, February 1979. (PB294216/AS)
- 139 Aids for Forecasting Minimum Temperature in the Wenatchee Frost District. Robert S. F. April 1979. (PB298339/AS)
- 140 Influence of Cloudiness on Summertime Temperatures in the Eastern Washington Fire Weather district. James Holcomb, April 1979. (PB298674/AS)
- 141 Comparison of LFM and MFM Precipitation Guidance for Nevada During Doreen. Christopher Hill April 1979. (PB298613/AS)
- 142 The Usefulness of Data from Mountaintop Fire Lookout Stations in Determining Atmospheric Stability. Jonathan W. Corey, April 1979. (PB298899/AS)
- 143 The Depth of the Marine Layer at San Diego as Related to Subsequent Cool Season Precipitation Episodes in Arizona. Ira S. Brenner, May 1979. (PB298817/AS)

**NOAA TECHNICAL MEMORANDUM  
NWS WR-242**

**CLIMATE OF POCA TELLO, IDAHO**

**Joe Heim  
National Weather Service Office  
Pocatello, Idaho**

**October 1996**

UNITED STATES  
DEPARTMENT OF COMMERCE  
Mickey Kantor, Secretary

National Oceanic and  
Atmospheric Administration  
D. James Baker, Under Secretary  
and Administrator

National Weather Service  
Elbert W. Friday, Jr., Assistant  
Administrator for Weather Services



This publication has been reviewed  
and is approved for publication by  
Scientific Services Division,  
Western Region



Delain A. Edman, Chief  
Scientific Services Division  
Salt Lake City, Utah

## TABLE OF CONTENTS

---

|       |  |    |
|-------|--|----|
| I.    | INTRODUCTION .....                         | 1  |
| II.   | HISTORY OF OBSERVATIONS IN POCATELLO ..... | 2  |
| III.  | PERIOD OF RECORD .....                     | 3  |
| IV.   | MAP OF AREA .....                          | 4  |
| V.    | TEMPERATURE DATA .....                     | 5  |
| VI.   | FROST AND FREEZE DATA .....                | 40 |
| VII.  | PRECIPITATION DATA .....                   | 41 |
| VIII. | MISCELLANEOUS CLIMATE DATA .....           | 66 |

# CLIMATE OF POCATELLO, IDAHO

Joe Heim  
NWSO Pocatello, ID

## I. INTRODUCTION

Pocatello is located at the mouth of the Portneuf Canyon along the southeastern edge of the Snake River plain. The elevation of the city is approximately 4500 feet above mean sea level. Generally mountainous terrain borders the city on the east and south. The mountains rise abruptly to over 9000 feet elevation within 15 miles to the east, and to over 7500 feet elevation 10 miles south. The broad Snake River valley extends to the west and north with intensive agriculture practiced in the immediate area. A desert composed mostly of lava rock along with sagebrush and sand is located approximately 25 to 30 miles to the north and west of the city.

Pocatello's climate is characterized by variety. The area's semi-arid climate is the result of the Cascade and Sierra mountains to the west and the Bitterroot and Rocky mountains to the north which effectively block Pacific moisture. Summer monsoonal moisture intrusions are infrequent and significantly modified by the arid Great Basin of Utah and Nevada. The Rocky and Bitterroot mountains form the headwaters of the Snake River and receive copious amounts of winter snow. The success of local agriculture is dependent on irrigation, both from deep wells and a system of canals supplied by storage reservoirs on the Snake River.

During winter, brisk southwesterly winds often persist for days or weeks. These winds may moderate cold winter conditions, producing unusually mild temperatures compared to surrounding areas. There are

usually a number of days each winter when temperatures remain below freezing. Sub-zero temperatures usually occur only a few days each winter. During especially cold outbreaks, snowfall may accumulate to a depth of a foot or more. Cloudy and unsettled weather is common during the winter with measurable precipitation occurring on about one-third of the days.

Spring months are normally wet and windy. Winds of 20 to 30 mph may persist for days at a time. Weather conditions fluctuate quickly during the spring. Afternoon temperatures in the 30's and 40's with precipitation in the form of rain or snow may occur after a period of sunny skies and afternoon temperatures in the 60's or 70's. Thunderstorms are not uncommon, and are usually accompanied by rain showers and occasionally snow. Low elevation snowpack usually melts quickly during the spring, but high elevation snowpack can persist into late June.

Summer may begin suddenly with a rapid change to warm and dry weather. Home heating is usually not required after the first week in June, but chilly nights can persist into early July. Showers and/or thunderstorms are common from late spring through summer. These storms often produce very localized precipitation. Thunderstorms are seldom severe, and tornados occur infrequently in the area. Brief heavy rain, lightning, small hail, and gusty winds may cause very localized damage at times. Long periods of excessively hot weather in July and August are uncommon. Afternoon temperatures often rise into the 90's, however low humidity usually results in

overnight temperatures in the 50's or even cooler. The average growing season in Pocatello is around 120 days, extending from late May to late September.

Autumn ushers in cooler weather with daytime highs generally in the 70's in early fall dipping into the mid 40's by mid November with generally dry conditions. Autumn storms are usually very fast moving, and seldom persist for more than a few days. Sunny, warm days with cool nights are delightful for outdoor activities. Continuous home heating is seldom needed until mid-October. The first cold wave with highs below 20 and lows around 0 or lower may arrive anytime between late November and Christmas.

## **II. HISTORY OF OBSERVATIONS IN POCATELLO**

The National Weather Service began its operation in Pocatello on July 1, 1899, when it was moved from Idaho Falls. The original reporting station was established by the U.S. Department of Agriculture, Weather Bureau in 1892. The reasons stated for the move included *"better mail, message and transportation services offered in the railroad town of Pocatello"*.

The first location of the Weather Bureau office in Pocatello was on the second floor of the Phoenix Building at East Center and Railroad Streets in the Downtown area. On June 30, 1901, it was moved to the second floor of the Cook Building at 343 West Center. On April 1, 1916, the office was moved to its final downtown location on the third floor of the newly constructed Federal Post Office Building at Lewis and Arthur Streets.

Growth of new buildings in the downtown area caused minor observational problems as new structures obstructed wind vanes

and anemometers. Station records dated November 1, 1914 report there was a *"slight obstruction to the northeast on account of the new Kane Building"* which probably contributed to the moving of the facility in 1916. Further downtown growth continued and a January 21, 1921 report stated *"Wind directions from the west were obstructed by the erection of the Bannock Hotel, to the height of seven stories, about 250 feet from the anemometer"*. Despite continuing minor interferences to observations (which were probably common to many facilities in growing cities across the country at that time), the office remained at the downtown Post Office location until September 1, 1938, when the growth of aviation beckoned it to the airport six miles west of the city on the Snake River Plain.

The first airport office was at McDougall Field where it remained until May 17, 1949, when it was moved 2.5 miles farther westward to Phillips Field when McDougall field was abandoned. The Weather Service office moved into a new separate building approximately 1/4 mile southwest of the airport terminal building on March 22, 1995.

## **III. PERIOD OF RECORD**

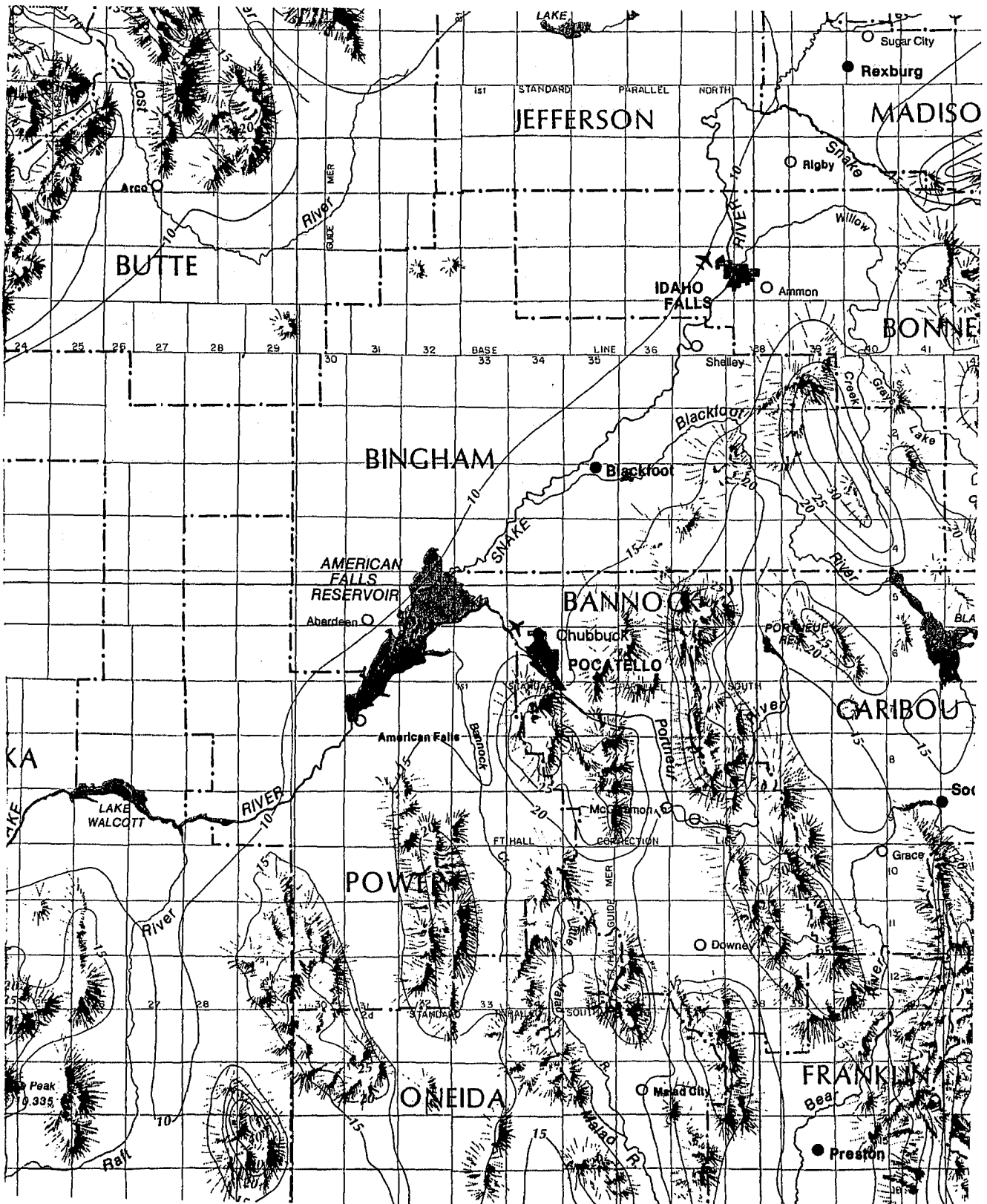
The period of record for all daily and monthly statistics is July 1, 1899 through December 31, 1995. The time for all daily records are from Midnight Mountain Standard Time (MST) to Midnight MST. Daily snowfall statistics before January 1, 1943 are from 6PM MST the previous day to 6PM MST the current day. Annual statistics include the period of record from January 1, 1900 through December 31, 1995. All averages and normals were derived from the Climatological Standard Normals 1961-1990. All periods of record use the above defaults unless otherwise indicated.

### LOCATIONS OF OFFICIAL POCATELLO OBSERVING SITES

| From       | To         | Description  |
|------------|------------|--|
| 7-1-1899   | 6-30-1901  | Phoenix block, 2nd floor, E. Center and Railroad St. 42 52' N, 112 29' W. Elevation 4463 ft.   |
| 6-30-1901  | 4-1-1916   | Cook block, 2nd floor, 343 W. Center St. 2500 ft. west of the previous location. 42 52' N, 112 29' W. Elevation 4463 ft.   |
| 4-1-1916   | 2-28-1949  | Federal Post Office, 3rd floor, Lewis and Arthur St. 1200 ft. south of previous location. 42 52' N, 112 29' W. Elevation 4468 ft. Temperature and precipitation reading only after 9-1-1938. |
| 9-1-1938   | 5-17-1949  | Pocatello Municipal Airport, McDougall Field. 42 55' N, 112 32' W. Elevation 4462 ft.  |
| 5-17-1949  | 12-18-1951 | Pocatello Municipal Airport, Phillips Field. 2.5 miles west of previous location. 42 55' N, 112 36' W. Elevation 4444 ft.  |
| 12-18-1951 | 3-22-1995  | Pocatello Municipal Airport. Name of airport changed from Phillips Field 5-8-56. Elevation corrected to 4454 ft 9-15-63.   |
| 3-22-1995  | Present    | National Weather Service. 1320 Beechcraft St. Approximately 1000 ft. southwest of previous location. Elevation 4451 ft.  |



# MAP OF AREA



# TEMPERATURE STATISTICS

## DAILY NORMAL TEMPERATURES

| Day | January |     | February |     | March |     | April |     | May  |     | June |     |
|-----|---------|-----|----------|-----|-------|-----|-------|-----|------|-----|------|-----|
|     | High    | Low | High     | Low | High  | Low | High  | Low | High | Low | High | Low |
| 1   | 31      | 13  | 35       | 17  | 42    | 23  | 52    | 29  | 63   | 36  | 73   | 44  |
| 2   | 31      | 13  | 35       | 17  | 42    | 23  | 53    | 29  | 63   | 36  | 73   | 44  |
| 3   | 31      | 13  | 35       | 17  | 43    | 23  | 53    | 30  | 63   | 36  | 73   | 44  |
| 4   | 31      | 13  | 36       | 18  | 43    | 23  | 53    | 30  | 64   | 37  | 74   | 45  |
| 5   | 31      | 13  | 36       | 18  | 43    | 24  | 54    | 30  | 64   | 37  | 74   | 45  |
| 6   | 31      | 13  | 36       | 18  | 43    | 24  | 54    | 30  | 64   | 37  | 74   | 45  |
| 7   | 31      | 13  | 36       | 18  | 44    | 24  | 55    | 30  | 65   | 37  | 75   | 45  |
| 8   | 31      | 14  | 37       | 18  | 44    | 24  | 55    | 30  | 65   | 38  | 75   | 45  |
| 9   | 31      | 14  | 37       | 19  | 44    | 24  | 55    | 31  | 65   | 38  | 75   | 46  |
| 10  | 31      | 14  | 37       | 19  | 45    | 25  | 56    | 31  | 66   | 38  | 76   | 46  |
| 11  | 31      | 14  | 37       | 19  | 45    | 25  | 56    | 31  | 66   | 38  | 76   | 46  |
| 12  | 32      | 14  | 38       | 19  | 45    | 25  | 56    | 31  | 66   | 39  | 77   | 46  |
| 13  | 32      | 14  | 38       | 19  | 46    | 25  | 57    | 32  | 67   | 39  | 77   | 47  |
| 14  | 32      | 14  | 38       | 20  | 46    | 25  | 57    | 32  | 67   | 39  | 77   | 47  |
| 15  | 32      | 14  | 39       | 20  | 46    | 26  | 57    | 32  | 67   | 39  | 78   | 47  |
| 16  | 32      | 14  | 39       | 20  | 47    | 26  | 58    | 32  | 67   | 40  | 78   | 47  |
| 17  | 32      | 14  | 39       | 20  | 47    | 26  | 58    | 33  | 68   | 40  | 78   | 48  |
| 18  | 32      | 14  | 39       | 21  | 47    | 26  | 58    | 33  | 68   | 40  | 79   | 48  |
| 19  | 32      | 14  | 40       | 21  | 48    | 27  | 59    | 33  | 68   | 40  | 79   | 48  |
| 20  | 32      | 15  | 40       | 21  | 48    | 27  | 59    | 33  | 69   | 41  | 80   | 48  |
| 21  | 33      | 15  | 40       | 21  | 48    | 27  | 60    | 34  | 69   | 41  | 80   | 49  |
| 22  | 33      | 15  | 40       | 21  | 49    | 27  | 60    | 34  | 69   | 41  | 80   | 49  |
| 23  | 33      | 15  | 41       | 22  | 49    | 27  | 60    | 34  | 70   | 41  | 81   | 49  |
| 24  | 33      | 15  | 41       | 22  | 49    | 28  | 61    | 34  | 70   | 42  | 81   | 49  |
| 25  | 33      | 15  | 41       | 22  | 50    | 28  | 61    | 34  | 70   | 42  | 82   | 50  |
| 26  | 33      | 16  | 41       | 22  | 50    | 28  | 61    | 35  | 71   | 42  | 82   | 50  |
| 27  | 34      | 16  | 42       | 22  | 50    | 28  | 61    | 35  | 71   | 42  | 83   | 50  |
| 28  | 34      | 16  | 42       | 23  | 51    | 28  | 62    | 35  | 71   | 43  | 83   | 50  |
| 29  | 34      | 16  | 42       | 23  | 51    | 29  | 62    | 35  | 72   | 43  | 83   | 51  |
| 30  | 34      | 16  |          |     | 51    | 29  | 62    | 36  | 72   | 43  | 84   | 51  |
| 31  | 35      | 17  |          |     | 52    | 29  |       |     | 72   | 43  |      |     |

**DAILY NORMAL TEMPERATURES (CONT.)**

| Day | July |     | August |     | September |     | October |     | November |     | December |     |
|-----|------|-----|--------|-----|-----------|-----|---------|-----|----------|-----|----------|-----|
|     | High | Low | High   | Low | High      | Low | High    | Low | High     | Low | High     | Low |
| 1   | 84   | 51  | 89     | 53  | 81        | 47  | 69      | 38  | 53       | 30  | 38       | 20  |
| 2   | 85   | 51  | 89     | 53  | 81        | 47  | 69      | 37  | 53       | 30  | 37       | 20  |
| 3   | 85   | 51  | 89     | 53  | 80        | 47  | 69      | 37  | 52       | 30  | 37       | 20  |
| 4   | 85   | 52  | 89     | 53  | 80        | 46  | 68      | 37  | 52       | 29  | 37       | 19  |
| 5   | 86   | 52  | 89     | 53  | 79        | 46  | 68      | 36  | 51       | 29  | 36       | 19  |
| 6   | 86   | 52  | 89     | 53  | 79        | 46  | 67      | 36  | 50       | 29  | 36       | 18  |
| 7   | 86   | 52  | 89     | 53  | 78        | 46  | 67      | 36  | 50       | 29  | 36       | 18  |
| 8   | 87   | 52  | 89     | 52  | 78        | 45  | 67      | 35  | 49       | 28  | 35       | 18  |
| 9   | 87   | 53  | 88     | 52  | 78        | 45  | 66      | 35  | 48       | 28  | 35       | 17  |
| 10  | 88   | 53  | 88     | 52  | 77        | 45  | 66      | 35  | 48       | 28  | 35       | 17  |
| 11  | 88   | 53  | 88     | 52  | 77        | 44  | 65      | 35  | 47       | 28  | 34       | 17  |
| 12  | 88   | 53  | 88     | 52  | 76        | 44  | 65      | 34  | 47       | 28  | 34       | 16  |
| 13  | 88   | 53  | 88     | 52  | 76        | 44  | 64      | 34  | 46       | 27  | 34       | 16  |
| 14  | 88   | 53  | 87     | 52  | 76        | 43  | 64      | 34  | 46       | 27  | 34       | 16  |
| 15  | 89   | 53  | 87     | 51  | 75        | 43  | 63      | 34  | 45       | 27  | 34       | 15  |
| 16  | 89   | 53  | 87     | 51  | 75        | 43  | 63      | 33  | 45       | 26  | 33       | 15  |
| 17  | 89   | 53  | 86     | 51  | 74        | 42  | 62      | 33  | 44       | 26  | 33       | 15  |
| 18  | 89   | 54  | 86     | 51  | 74        | 42  | 62      | 33  | 44       | 26  | 33       | 15  |
| 19  | 89   | 54  | 86     | 51  | 74        | 42  | 61      | 33  | 43       | 25  | 33       | 15  |
| 20  | 89   | 54  | 86     | 50  | 73        | 41  | 61      | 32  | 43       | 25  | 33       | 14  |
| 21  | 89   | 54  | 85     | 50  | 73        | 41  | 60      | 32  | 42       | 24  | 32       | 14  |
| 22  | 89   | 54  | 85     | 50  | 72        | 41  | 60      | 32  | 42       | 24  | 32       | 14  |
| 23  | 90   | 54  | 85     | 50  | 72        | 41  | 59      | 32  | 41       | 24  | 32       | 14  |
| 24  | 90   | 54  | 84     | 49  | 72        | 40  | 59      | 31  | 41       | 23  | 32       | 14  |
| 25  | 90   | 54  | 84     | 49  | 71        | 40  | 58      | 31  | 40       | 23  | 32       | 14  |
| 26  | 90   | 54  | 84     | 49  | 71        | 40  | 57      | 31  | 40       | 23  | 32       | 14  |
| 27  | 90   | 54  | 83     | 49  | 71        | 39  | 57      | 31  | 39       | 22  | 32       | 14  |
| 28  | 90   | 53  | 83     | 48  | 70        | 39  | 56      | 31  | 39       | 22  | 31       | 14  |
| 29  | 90   | 53  | 82     | 48  | 70        | 38  | 56      | 30  | 38       | 21  | 31       | 13  |
| 30  | 90   | 53  | 82     | 48  | 70        | 38  | 55      | 30  | 38       | 21  | 31       | 13  |
| 31  | 89   | 53  | 81     | 48  |           |     | 54      | 30  |          |     | 31       | 13  |

## JANUARY DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 55       | 1918  | 2       | 1975  | 39       | 1934  | -20     | 1942  |
| 2    | 55       | 1918  | 8       | 1942  | 37       | 1928  | -16     | 1974  |
| 3    | 57       | 1918  | 6       | 1910  | 38       | 1916  | -15     | 1952  |
| 4    | 51       | 1994+ | 2       | 1973  | 40       | 1930+ | -22     | 1942  |
| 5    | 57       | 1927  | 8       | 1913  | 38       | 1938  | -19     | 1979  |
| 6    | 54       | 1948  | 3       | 1937  | 43       | 1965  | -24     | 1979  |
| 7    | 55       | 1948  | 1       | 1982+ | 43       | 1948  | -28     | 1979  |
| 8    | 55       | 1902  | 1       | 1937  | 37       | 1990+ | -20     | 1979  |
| 9    | 55       | 1990  | 5       | 1974  | 39       | 1995+ | -23     | 1937  |
| 10   | 54       | 1953  | 9       | 1976  | 42       | 1995  | -14     | 1987  |
| 11   | 51       | 1959  | -3      | 1963  | 34       | 1938  | -17     | 1963  |
| 12   | 55       | 1953  | 3       | 1963  | 34       | 1938  | -22     | 1963  |
| 13   | 52       | 1953  | 7       | 1985  | 42       | 1969  | -19     | 1964  |
| 14   | 52       | 1938  | 7       | 1964  | 37       | 1974  | -16     | 1964  |
| 15   | 53       | 1938  | 12      | 1930+ | 44       | 1974  | -9      | 1964+ |
| 16   | 57       | 1974  | 9       | 1917  | 46       | 1974  | -13     | 1917  |
| 17   | 54       | 1961  | 3       | 1983  | 40       | 1921  | -23     | 1984  |
| 18   | 49       | 1920  | 0       | 1984  | 37       | 1970+ | -28     | 1984  |
| 19   | 55       | 1920  | -2      | 1922  | 39       | 1909  | -23     | 1984  |
| 20   | 53       | 1953  | 3       | 1937  | 40       | 1969+ | -19     | 1984+ |
| 21   | 50       | 1994+ | 0       | 1937  | 38       | 1970+ | -25     | 1962  |
| 22   | 50       | 1934  | 0       | 1962  | 39       | 1970  | -30     | 1962  |
| 23   | 55       | 1994+ | 2       | 1962  | 41       | 1970  | -27     | 1962  |
| 24   | 54       | 1905  | 4       | 1949  | 38       | 1959  | -19     | 1949  |
| 25   | 54       | 1953  | 1       | 1949  | 37       | 1920  | -31     | 1949  |
| 26   | 53       | 1920  | 7       | 1949  | 39       | 1920  | -21     | 1949  |
| 27   | 52       | 1942  | 10      | 1937+ | 36       | 1921  | -13     | 1902  |
| 28   | 52       | 1967  | 7       | 1902  | 36       | 1967+ | -20     | 1979  |
| 29   | 51       | 1992  | 7       | 1979+ | 38       | 1965  | -22     | 1949  |
| 30   | 53       | 1920  | 3       | 1979  | 39       | 1965+ | -20     | 1979  |
| 31   | 56       | 1992  | -1      | 1985  | 36       | 1961+ | -28     | 1985  |

+ Last of several occurrences

## FEBRUARY DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 54       | 1992  | -2      | 1985  | 39       | 1995  | -33     | 1985  |
| 2    | 59       | 1934  | 10      | 1985+ | 39       | 1947  | -20     | 1956  |
| 3    | 59       | 1953  | 3       | 1989  | 43       | 1963  | -23     | 1979  |
| 4    | 62       | 1963  | -2      | 1989  | 39       | 1925+ | -31     | 1985  |
| 5    | 61       | 1963  | 4       | 1989  | 42       | 1907  | -20     | 1982  |
| 6    | 60       | 1963  | -2      | 1989  | 38       | 1926  | -21     | 1989  |
| 7    | 57       | 1963  | 3       | 1933  | 39       | 1953  | -20     | 1933  |
| 8    | 57       | 1963  | 6       | 1933  | 37       | 1951+ | -16     | 1933  |
| 9    | 56       | 1951  | -5      | 1933  | 37       | 1962  | -28     | 1933  |
| 10   | 59       | 1951  | 6       | 1933  | 43       | 1961  | -17     | 1933  |
| 11   | 57       | 1961  | 10      | 1905  | 43       | 1938  | -15     | 1982  |
| 12   | 56       | 1934  | 8       | 1905  | 38       | 1921  | -20     | 1905  |
| 13   | 56       | 1934  | 12      | 1903  | 37       | 1979+ | -17     | 1949  |
| 14   | 57       | 1924  | 14      | 1903  | 39       | 1930  | -7      | 1903  |
| 15   | 57       | 1991  | 10      | 1932  | 37       | 1904  | -12     | 1903  |
| 16   | 56       | 1994+ | 17      | 1992  | 42       | 1970  | -7      | 1993  |
| 17   | 59       | 1948  | 8       | 1942  | 40       | 1958  | -20     | 1942  |
| 18   | 61       | 1930  | 10      | 1942  | 39       | 1980+ | -23     | 1942  |
| 19   | 62       | 1958  | 17      | 1942  | 43       | 1907  | -18     | 1942  |
| 20   | 60       | 1995+ | 21      | 1937  | 38       | 1992+ | -11     | 1984+ |
| 21   | 62       | 1982  | 27      | 1939+ | 43       | 1982  | -1      | 1984  |
| 22   | 62       | 1958  | 25      | 1913  | 39       | 1907  | -6      | 1952  |
| 23   | 58       | 1995  | 22      | 1922  | 40       | 1957  | -5      | 1955  |
| 24   | 63       | 1995  | 26      | 1942  | 44       | 1985  | -1      | 1952  |
| 25   | 62       | 1986  | 20      | 1960  | 41       | 1940  | -4      | 1952  |
| 26   | 62       | 1950  | 13      | 1960  | 40       | 1957  | -11     | 1960  |
| 27   | 62       | 1992  | 15      | 1962  | 44       | 1908  | -13     | 1993  |
| 28   | 64       | 1992  | 13      | 1993  | 44       | 1970  | -17     | 1993  |
| 29   | 65       | 1992  | 13      | 1960  | 32       | 1944+ | -20     | 1960  |

+ Last of several occurrences

### MARCH DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 63       | 1992  | 20      | 1922  | 44       | 1974+ | -9      | 1993  |
| 2    | 62       | 1994  | 21      | 1922  | 41       | 1934  | -8      | 1960  |
| 3    | 65       | 1994  | 23      | 1917  | 39       | 1917  | 0       | 1985  |
| 4    | 64       | 1987  | 23      | 1976  | 41       | 1992  | -12     | 1985  |
| 5    | 61       | 1950  | 22      | 1955  | 49       | 1925  | -3      | 1984  |
| 6    | 61       | 1986  | 28      | 1991+ | 41       | 1987  | 0       | 1945  |
| 7    | 60       | 1970+ | 24      | 1964  | 43       | 1904  | -1      | 1964  |
| 8    | 58       | 1972+ | 27      | 1969  | 44       | 1954  | 6       | 1922  |
| 9    | 67       | 1972  | 27      | 1969  | 48       | 1995  | 4       | 1985  |
| 10   | 64       | 1900  | 27      | 1917  | 44       | 1995+ | 5       | 1948  |
| 11   | 65       | 1934  | 19      | 1906  | 42       | 1905  | 8       | 1932  |
| 12   | 69       | 1934  | 26      | 1917  | 42       | 1905+ | 2       | 1922  |
| 13   | 69       | 1934  | 28      | 1969+ | 42       | 1935+ | 4       | 1962  |
| 14   | 70       | 1934  | 31      | 1906  | 44       | 1908  | 3       | 1956  |
| 15   | 75       | 1994  | 21      | 1906  | 50       | 1908  | 5       | 1906  |
| 16   | 66       | 1947  | 13      | 1906  | 49       | 1908  | -12     | 1906  |
| 17   | 67       | 1916  | 19      | 1906  | 42       | 1921  | -12     | 1906  |
| 18   | 70       | 1910  | 22      | 1906  | 47       | 1907  | -3      | 1971  |
| 19   | 71       | 1934  | 25      | 1906  | 45       | 1916  | -2      | 1906  |
| 20   | 70       | 1928  | 25      | 1913  | 49       | 1934  | 4       | 1955  |
| 21   | 70       | 1910  | 32      | 1924  | 48       | 1910  | 8       | 1952  |
| 22   | 70       | 1972  | 28      | 1952  | 44       | 1928  | 3       | 1952  |
| 23   | 68       | 1940  | 26      | 1964  | 45       | 1908  | 14      | 1965  |
| 24   | 70       | 1956  | 29      | 1965  | 45       | 1948  | 9       | 1965  |
| 25   | 69       | 1956  | 28      | 1913  | 42       | 1918+ | 7       | 1965+ |
| 26   | 69       | 1960  | 29      | 1931  | 42       | 1940  | 2       | 1913  |
| 27   | 73       | 1986  | 23      | 1975  | 45       | 1934  | 11      | 1975  |
| 28   | 75       | 1986  | 28      | 1975  | 46       | 1934+ | 6       | 1975  |
| 29   | 73       | 1978  | 31      | 1977  | 44       | 1986+ | 9       | 1987  |
| 30   | 72       | 1986  | 30      | 1905  | 43       | 1913  | 16      | 1954  |
| 31   | 68       | 1965  | 29      | 1936  | 43       | 1939  | 15      | 1948  |

+ Last of several occurrences

### APRIL DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 73       | 1900  | 27      | 1936  | 46       | 1907  | 13      | 1936  |
| 2    | 75       | 1990+ | 31      | 1986+ | 45       | 1961+ | 13      | 1936  |
| 3    | 76       | 1992  | 32      | 1920+ | 46       | 1929  | 12      | 1945  |
| 4    | 72       | 1991  | 31      | 1921  | 45       | 1925  | 20      | 1983  |
| 5    | 78       | 1959  | 31      | 1921  | 45       | 1991  | 12      | 1936  |
| 6    | 77       | 1930  | 33      | 1929  | 48       | 1960+ | 14      | 1939  |
| 7    | 77       | 1930  | 34      | 1901  | 48       | 1930  | 11      | 1921  |
| 8    | 78       | 1977  | 32      | 1900  | 49       | 1934  | 17      | 1928  |
| 9    | 75       | 1960  | 32      | 1922  | 50       | 1918  | 19      | 1959  |
| 10   | 73       | 1985+ | 39      | 1991+ | 52       | 1907  | 19      | 1988  |
| 11   | 78       | 1934  | 34      | 1903  | 52       | 1931  | 18      | 1953  |
| 12   | 81       | 1988  | 33      | 1911  | 50       | 1908  | 19      | 1922  |
| 13   | 80       | 1904  | 36      | 1972+ | 50       | 1908  | 19      | 1968  |
| 14   | 79       | 1962  | 33      | 1921  | 50       | 1935  | 20      | 1911  |
| 15   | 78       | 1990  | 33      | 1917  | 50       | 1989  | 21      | 1995  |
| 16   | 80       | 1990  | 36      | 1941  | 50       | 1943  | 20      | 1995+ |
| 17   | 83       | 1994  | 40      | 1941  | 50       | 1961  | 19      | 1964  |
| 18   | 84       | 1994  | 40      | 1966+ | 52       | 1936  | 17      | 1968  |
| 19   | 83       | 1962  | 35      | 1912  | 50       | 1936  | 19      | 1982  |
| 20   | 83       | 1994  | 38      | 1970  | 55       | 1900  | 17      | 1982+ |
| 21   | 86       | 1994  | 36      | 1963  | 56       | 1983  | 18      | 1982  |
| 22   | 83       | 1934  | 42      | 1960+ | 53       | 1906  | 23      | 1982+ |
| 23   | 82       | 1977  | 31      | 1964  | 55       | 1934  | 19      | 1968  |
| 24   | 85       | 1977  | 36      | 1964  | 57       | 1919  | 18      | 1950  |
| 25   | 86       | 1946  | 38      | 1964  | 48       | 1959  | 23      | 1907  |
| 26   | 85       | 1992+ | 35      | 1976  | 52       | 1977+ | 23      | 1945  |
| 27   | 85       | 1987  | 38      | 1970  | 55       | 1927  | 24      | 1917+ |
| 28   | 83       | 1987+ | 35      | 1937  | 53       | 1949  | 22      | 1984  |
| 29   | 86       | 1992  | 37      | 1967  | 51       | 1981  | 21      | 1994  |
| 30   | 78       | 1926  | 33      | 1967  | 53       | 1959  | 18      | 1909+ |

+ Last of several occurrences

## MAY DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 85       | 1985  | 42      | 1967  | 53       | 1974  | 20      | 1972  |
| 2    | 88       | 1947  | 39      | 1964  | 50       | 1947  | 26      | 1988+ |
| 3    | 88       | 1947  | 43      | 1964  | 55       | 1924  | 27      | 1944  |
| 4    | 85       | 1947  | 36      | 1975  | 56       | 1936  | 26      | 1919  |
| 5    | 86       | 1992+ | 43      | 1975  | 52       | 1934  | 21      | 1982  |
| 6    | 85       | 1947  | 44      | 1975  | 52       | 1934+ | 26      | 1968  |
| 7    | 88       | 1947  | 43      | 1986  | 57       | 1989+ | 25      | 1968  |
| 8    | 84       | 1987+ | 43      | 1965+ | 54       | 1934+ | 29      | 1968  |
| 9    | 85       | 1954  | 41      | 1908  | 53       | 1984  | 27      | 1981  |
| 10   | 87       | 1940  | 44      | 1991  | 56       | 1904  | 27      | 1916  |
| 11   | 90       | 1960  | 40      | 1942  | 61       | 1940  | 23      | 1946  |
| 12   | 87       | 1960  | 45      | 1961  | 52       | 1960+ | 24      | 1916  |
| 13   | 89       | 1984  | 47      | 1916  | 54       | 1903  | 24      | 1943  |
| 14   | 86       | 1984+ | 43      | 1955  | 61       | 1936  | 25      | 1916  |
| 15   | 87       | 1934  | 45      | 1955  | 56       | 1944  | 27      | 1916  |
| 16   | 90       | 1927  | 44      | 1943  | 58       | 1934  | 25      | 1974  |
| 17   | 87       | 1992+ | 44      | 1903  | 58       | 1948  | 30      | 1955  |
| 18   | 87       | 1954  | 45      | 1941  | 56       | 1932  | 30      | 1971+ |
| 19   | 93       | 1954  | 46      | 1959  | 55       | 1956  | 30      | 1991+ |
| 20   | 89       | 1958  | 43      | 1902  | 58       | 1954  | 29      | 1939  |
| 21   | 86       | 1919  | 48      | 1960+ | 64       | 1958  | 28      | 1959  |
| 22   | 88       | 1934  | 46      | 1916  | 56       | 1958+ | 33      | 1973+ |
| 23   | 88       | 1934  | 50      | 1916  | 64       | 1926  | 23      | 1966  |
| 24   | 87       | 1934  | 45      | 1980  | 63       | 1934  | 30      | 1960  |
| 25   | 88       | 1969  | 43      | 1980  | 61       | 1923  | 27      | 1975  |
| 26   | 89       | 1936  | 44      | 1908  | 64       | 1919  | 29      | 1975  |
| 27   | 90       | 1958  | 50      | 1927  | 58       | 1928  | 30      | 1965  |
| 28   | 94       | 1919  | 43      | 1927  | 57       | 1919  | 32      | 1991+ |
| 29   | 91       | 1939  | 46      | 1906  | 59       | 1926  | 29      | 1982  |
| 30   | 88       | 1910  | 46      | 1988  | 58       | 1933  | 28      | 1979  |
| 31   | 93       | 1910  | 44      | 1908  | 58       | 1931  | 27      | 1978  |

+ Last of several occurrences



## JUNE DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 91       | 1977  | 47      | 1902  | 60       | 1910  | 29      | 1920  |
| 2    | 89       | 1986  | 46      | 1943  | 58       | 1914+ | 32      | 1984+ |
| 3    | 91       | 1988  | 48      | 1944  | 58       | 1960  | 32      | 1973  |
| 4    | 95       | 1988  | 49      | 1908  | 60       | 1924+ | 35      | 1943  |
| 5    | 96       | 1977  | 40      | 1914  | 58       | 1909  | 32      | 1914  |
| 6    | 97       | 1977  | 50      | 1995  | 62       | 1958+ | 33      | 1995+ |
| 7    | 93       | 1985+ | 45      | 1924  | 57       | 1930  | 28      | 1995  |
| 8    | 90       | 1902  | 49      | 1941  | 59       | 1913  | 31      | 1979  |
| 9    | 95       | 1918  | 60      | 1984  | 62       | 1918  | 34      | 1982  |
| 10   | 97       | 1918  | 49      | 1984  | 62       | 1918  | 37      | 1938  |
| 11   | 98       | 1918  | 53      | 1976  | 62       | 1921  | 35      | 1916  |
| 12   | 99       | 1918  | 51      | 1907  | 61       | 1918  | 33      | 1917  |
| 13   | 95       | 1974+ | 52      | 1976  | 66       | 1921  | 32      | 1993  |
| 14   | 98       | 1974  | 56      | 1945+ | 66       | 1936  | 33      | 1976  |
| 15   | 99       | 1974  | 52      | 1912  | 65       | 1918  | 32      | 1981  |
| 16   | 97       | 1974+ | 53      | 1992  | 68       | 1933  | 33      | 1945  |
| 17   | 102      | 1940  | 51      | 1939  | 63       | 1918+ | 34      | 1994  |
| 18   | 100      | 1940  | 57      | 1975  | 62       | 1943+ | 35      | 1965  |
| 19   | 103      | 1940  | 63      | 1975+ | 66       | 1918  | 34      | 1973  |
| 20   | 99       | 1994  | 57      | 1916  | 69       | 1988  | 35      | 1989  |
| 21   | 97       | 1988+ | 51      | 1916  | 65       | 1937  | 30      | 1989  |
| 22   | 99       | 1954  | 54      | 1907  | 69       | 1937  | 37      | 1914  |
| 23   | 99       | 1974  | 65      | 1907+ | 71       | 1988  | 37      | 1951  |
| 24   | 99       | 1988  | 54      | 1969  | 68       | 1902  | 37      | 1993  |
| 25   | 103      | 1988  | 58      | 1985+ | 62       | 1960+ | 31      | 1966  |
| 26   | 99       | 1926  | 60      | 1942  | 71       | 1931  | 35      | 1976  |
| 27   | 99       | 1926  | 60      | 1945  | 69       | 1936  | 36      | 1949  |
| 28   | 98       | 1966  | 57      | 1970+ | 72       | 1926  | 37      | 1965  |
| 29   | 100+     | 1990+ | 54      | 1968+ | 67       | 1926  | 37      | 1947  |
| 30   | 96       | 1990+ | 56      | 1911  | 63       | 1929  | 30      | 1968  |

+ Last of several occurrences

## JULY DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 98       | 1990+ | 64      | 1955  | 64       | 1960  | 36      | 1945  |
| 2    | 99       | 1986  | 61      | 1903  | 68       | 1909  | 37      | 1973  |
| 3    | 96       | 1989+ | 51      | 1902  | 69       | 1934  | 36      | 1921  |
| 4    | 98       | 1922  | 62      | 1982+ | 68       | 1924  | 39      | 1983  |
| 5    | 100      | 1981  | 63      | 1902  | 67       | 1937  | 41      | 1986+ |
| 6    | 99       | 1976  | 67      | 1994  | 72       | 1933  | 35      | 1986  |
| 7    | 98       | 1901  | 69      | 1981  | 64       | 1933+ | 39      | 1993  |
| 8    | 99       | 1975  | 68      | 1911  | 69       | 1916  | 34      | 1981  |
| 9    | 102      | 1939  | 73      | 1915  | 69       | 1930  | 38      | 1993  |
| 10   | 101      | 1973  | 68      | 1987  | 69       | 1931+ | 45      | 1983  |
| 11   | 98       | 1976+ | 71      | 1987  | 72       | 1919  | 40      | 1983  |
| 12   | 101      | 1940  | 71      | 1943  | 73       | 1901  | 40      | 1987  |
| 13   | 102      | 1991  | 68      | 1918  | 73       | 1916  | 37      | 1965  |
| 14   | 104      | 1925  | 74      | 1915  | 70       | 1916  | 41      | 1965  |
| 15   | 101      | 1935  | 58      | 1907  | 73       | 1928  | 41      | 1981  |
| 16   | 99       | 1926  | 73      | 1993  | 76       | 1951  | 38      | 1983  |
| 17   | 100      | 1925  | 72      | 1915+ | 69       | 1961+ | 42      | 1993+ |
| 18   | 101      | 1951  | 65      | 1987  | 71       | 1940  | 40      | 1993  |
| 19   | 100      | 1960  | 70      | 1941  | 70       | 1927  | 39      | 1987  |
| 20   | 101      | 1960  | 66      | 1972  | 71       | 1951  | 44      | 1988  |
| 21   | 105      | 1931  | 69      | 1972  | 72       | 1931  | 39      | 1983  |
| 22   | 101      | 1942  | 67      | 1993  | 74       | 1931  | 41      | 1954  |
| 23   | 102      | 1976  | 60      | 1993  | 73       | 1946  | 41      | 1954  |
| 24   | 100      | 1931  | 71      | 1993  | 72       | 1919  | 45      | 1965  |
| 25   | 99       | 1994+ | 72      | 1965  | 69       | 1931  | 44      | 1964  |
| 26   | 102      | 1994+ | 66      | 1993  | 69       | 1903  | 44      | 1974  |
| 27   | 101      | 1931  | 65      | 1909  | 73       | 1926  | 42      | 1993+ |
| 28   | 103      | 1934  | 68      | 1948  | 71       | 1943+ | 43      | 1993+ |
| 29   | 101      | 1994+ | 70      | 1950  | 69       | 1902  | 46      | 1959  |
| 30   | 102      | 1901  | 62      | 1975  | 70       | 1930  | 44      | 1904  |
| 31   | 102      | 1901  | 68      | 1915  | 70       | 1901  | 38      | 1995  |

+ Last of several occurrences

### AUGUST DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 99       | 1992  | 69      | 1912  | 71       | 1901  | 43      | 1995+ |
| 2    | 104      | 1969  | 72      | 1922  | 71       | 1949  | 43      | 1991  |
| 3    | 99       | 1961  | 73      | 1980  | 70       | 1902  | 43      | 1981+ |
| 4    | 102      | 1994  | 72      | 1899  | 70       | 1949+ | 40      | 1980  |
| 5    | 99       | 1994  | 68      | 1962  | 71       | 1961  | 39      | 1980  |
| 6    | 100      | 1990+ | 74      | 1955  | 70       | 1949  | 43      | 1950  |
| 7    | 103      | 1990  | 71      | 1926  | 69       | 1914  | 43      | 1950  |
| 8    | 104      | 1990  | 71      | 1995  | 69       | 1901  | 41      | 1939  |
| 9    | 100      | 1928  | 75      | 1913  | 68       | 1994  | 35      | 1995  |
| 10   | 99       | 1928  | 67      | 1926+ | 68       | 1908  | 41      | 1985  |
| 11   | 98       | 1940  | 67      | 1985  | 72       | 1928  | 39      | 1947  |
| 12   | 101      | 1940  | 67      | 1966  | 66       | 1931  | 42      | 1985  |
| 13   | 98       | 1937  | 62      | 1927  | 70       | 1940  | 41      | 1918  |
| 14   | 101      | 1992  | 65      | 1968  | 70       | 1937  | 38      | 1985  |
| 15   | 98       | 1933  | 63      | 1976+ | 74       | 1929  | 35      | 1974  |
| 16   | 97       | 1966  | 62      | 1960  | 69       | 1936  | 39      | 1899  |
| 17   | 96       | 1967  | 55      | 1968  | 70       | 1919  | 40      | 1985  |
| 18   | 98       | 1986+ | 61      | 1916  | 66       | 1919  | 37      | 1978  |
| 19   | 99       | 1992  | 59      | 1968  | 67       | 1929  | 35      | 1995  |
| 20   | 95       | 1982+ | 59      | 1968  | 72       | 1903  | 35      | 1964  |
| 21   | 97       | 1982  | 57      | 1968  | 67       | 1946  | 37      | 1974+ |
| 22   | 98       | 1991  | 60      | 1968+ | 73       | 1937  | 33      | 1899  |
| 23   | 97       | 1967  | 64      | 1960+ | 66       | 1929  | 36      | 1988+ |
| 24   | 99       | 1919  | 59      | 1989  | 69       | 1945  | 37      | 1992  |
| 25   | 99       | 1926  | 64      | 1933  | 66       | 1930  | 28      | 1910  |
| 26   | 98       | 1981  | 59      | 1907  | 70       | 1970  | 31      | 1992  |
| 27   | 94       | 1986+ | 59      | 1907  | 67       | 1982  | 34      | 1993  |
| 28   | 98       | 1924  | 60      | 1920  | 68       | 1922  | 39      | 1993+ |
| 29   | 97       | 1990  | 65      | 1964+ | 67       | 1905  | 35      | 1975  |
| 30   | 98       | 1954  | 57      | 1943  | 67       | 1913  | 33      | 1965  |
| 31   | 97       | 1955  | 67      | 1973  | 67       | 1906  | 32      | 1993+ |

+ Last of several occurrences

## SEPTEMBER DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|------|----------|-------|---------|-------|
| 1    | 95       | 1995+ | 52      | 1973 | 67       | 1899  | 38      | 1989  |
| 2    | 96       | 1947  | 62      | 1961 | 69       | 1916  | 36      | 1974  |
| 3    | 96       | 1950  | 52      | 1971 | 63       | 1978+ | 31      | 1964  |
| 4    | 95       | 1950  | 53      | 1912 | 62       | 1906  | 31      | 1965  |
| 5    | 98       | 1976  | 48      | 1970 | 64       | 1933  | 32      | 1994  |
| 6    | 97       | 1955  | 59      | 1929 | 63       | 1950  | 33      | 1954  |
| 7    | 97       | 1979  | 56      | 1941 | 66       | 1906  | 31      | 1992  |
| 8    | 95       | 1994  | 52      | 1973 | 60       | 1937+ | 32      | 1899  |
| 9    | 91       | 1988  | 56      | 1912 | 60       | 1924  | 28      | 1976  |
| 10   | 92       | 1959  | 56      | 1916 | 60       | 1981+ | 31      | 1983+ |
| 11   | 91       | 1963  | 50      | 1903 | 62       | 1935+ | 31      | 1989  |
| 12   | 94       | 1953  | 47      | 1903 | 63       | 1959  | 30      | 1988+ |
| 13   | 95       | 1948  | 51      | 1903 | 61       | 1959  | 26      | 1949  |
| 14   | 97       | 1990  | 51      | 1966 | 60       | 1935  | 26      | 1961  |
| 15   | 92       | 1995  | 51      | 1982 | 60       | 1908  | 28      | 1903  |
| 16   | 93       | 1995  | 42      | 1965 | 58       | 1947  | 28      | 1965  |
| 17   | 91       | 1981  | 42      | 1965 | 65       | 1920  | 26      | 1965  |
| 18   | 92       | 1979  | 47      | 1978 | 61       | 1913  | 23      | 1965  |
| 19   | 90       | 1984+ | 51      | 1986 | 59       | 1937  | 21      | 1965  |
| 20   | 89       | 1922  | 50      | 1968 | 61       | 1920  | 19      | 1983  |
| 21   | 88       | 1966  | 42      | 1968 | 58       | 1923  | 22      | 1983  |
| 22   | 92       | 1966  | 45      | 1931 | 56       | 1935  | 23      | 1995  |
| 23   | 89       | 1987+ | 44      | 1913 | 60       | 1906  | 28      | 1956  |
| 24   | 89       | 1994  | 43      | 1926 | 57       | 1938  | 26      | 1926  |
| 25   | 89       | 1989  | 42      | 1934 | 58       | 1909  | 18      | 1926  |
| 26   | 87       | 1978+ | 47      | 1908 | 58       | 1989  | 25      | 1926  |
| 27   | 88       | 1978+ | 46      | 1923 | 56       | 1957  | 21      | 1900  |
| 28   | 90       | 1994  | 49      | 1959 | 57       | 1931  | 25      | 1945  |
| 29   | 89       | 1989  | 44      | 1905 | 59       | 1930  | 19      | 1985  |
| 30   | 90       | 1957  | 40      | 1971 | 57       | 1932  | 19      | 1985  |

+ Last of several occurrences

**OCTOBER DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES**

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 91       | 1992  | 37      | 1971  | 58       | 1937  | 18      | 1950  |
| 2    | 86       | 1992  | 42      | 1908  | 61       | 1937  | 26      | 1950  |
| 3    | 87       | 1963  | 45      | 1916  | 58       | 1948  | 26      | 1941  |
| 4    | 84       | 1993+ | 48      | 1957+ | 57       | 1963  | 24      | 1973+ |
| 5    | 84       | 1993  | 41      | 1912  | 56       | 1947  | 22      | 1991  |
| 6    | 84       | 1942  | 43      | 1913  | 57       | 1920  | 21      | 1974+ |
| 7    | 88       | 1979  | 45      | 1913  | 52       | 1935  | 21      | 1974  |
| 8    | 84       | 1910  | 37      | 1985  | 54       | 1928  | 21      | 1990  |
| 9    | 85       | 1942  | 38      | 1913+ | 55       | 1910  | 23      | 1982  |
| 10   | 86       | 1910  | 42      | 1911  | 49       | 1910  | 21      | 1980  |
| 11   | 84       | 1991+ | 37      | 1928  | 53       | 1935+ | 20      | 1987  |
| 12   | 81       | 1950  | 38      | 1969  | 62       | 1962  | 18      | 1986  |
| 13   | 82       | 1979  | 37      | 1966  | 62       | 1962  | 16      | 1969  |
| 14   | 84       | 1958  | 42      | 1899  | 55       | 1918  | 17      | 1969  |
| 15   | 79       | 1991+ | 36      | 1899  | 50       | 1906  | 16      | 1966  |
| 16   | 82       | 1926  | 37      | 1980  | 52       | 1988  | 20      | 1966  |
| 17   | 81       | 1958  | 39      | 1938  | 52       | 1926  | 18      | 1948  |
| 18   | 82       | 1955  | 37      | 1905  | 48       | 1900  | 15      | 1917  |
| 19   | 80       | 1927  | 32      | 1949  | 53       | 1933  | 19      | 1982  |
| 20   | 80       | 1921  | 30      | 1949  | 49       | 1966  | 17      | 1982  |
| 21   | 79       | 1915  | 38      | 1908  | 52       | 1902  | 21      | 1932  |
| 22   | 78       | 1915  | 36      | 1961  | 50       | 1989  | 17      | 1949  |
| 23   | 77       | 1927  | 33      | 1975  | 48       | 1959  | 18      | 1949  |
| 24   | 78       | 1933  | 34      | 1956  | 52       | 1977  | 17      | 1932  |
| 25   | 75       | 1990+ | 40      | 1919  | 49       | 1933  | 20      | 1964  |
| 26   | 75       | 1944  | 34      | 1919  | 54       | 1927  | 19      | 1948  |
| 27   | 75       | 1990+ | 34      | 1919  | 49       | 1925  | 18      | 1963  |
| 28   | 76       | 1937  | 26      | 1971  | 51       | 1933  | 16      | 1991+ |
| 29   | 76       | 1937  | 31      | 1971  | 49       | 1933  | 10      | 1971  |
| 30   | 73       | 1937  | 30      | 1971  | 48       | 1987  | 11      | 1991  |
| 31   | 71       | 1988  | 31      | 1971  | 46       | 1915  | 16      | 1993  |

+ Last of several occurrences

## NOVEMBER DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 71       | 1965  | 30      | 1951  | 46       | 1987  | 8       | 1991  |
| 2    | 71       | 1924  | 22      | 1991  | 47       | 1924  | -4      | 1991  |
| 3    | 71       | 1931  | 23      | 1935  | 48       | 1928  | -6      | 1991  |
| 4    | 69       | 1909  | 25      | 1935  | 45       | 1958+ | 0       | 1973  |
| 5    | 71       | 1975  | 33      | 1935  | 47       | 1928  | 8       | 1959  |
| 6    | 70       | 1931  | 30      | 1947  | 45       | 1928  | 7       | 1967  |
| 7    | 71       | 1931  | 33      | 1916  | 43       | 1980+ | 10      | 1948  |
| 8    | 65       | 1995+ | 27      | 1945  | 43       | 1902  | 10      | 1948  |
| 9    | 68       | 1973+ | 24      | 1950  | 49       | 1902  | 10      | 1993+ |
| 10   | 67       | 1934  | 28      | 1950  | 47       | 1902  | 8       | 1985+ |
| 11   | 70       | 1954  | 18      | 1911  | 45       | 1911  | 2       | 1916  |
| 12   | 66       | 1934  | 14      | 1916  | 43       | 1921  | -1      | 1916  |
| 13   | 66       | 1990  | 19      | 1916  | 52       | 1906  | 0       | 1916  |
| 14   | 66       | 1934  | 23      | 1938  | 53       | 1941+ | -2      | 1978  |
| 15   | 68       | 1941  | 11      | 1955  | 44       | 1934  | -10     | 1955  |
| 16   | 62       | 1981  | 9       | 1955  | 40       | 1920  | -13     | 1955  |
| 17   | 62       | 1908  | 21      | 1958  | 43       | 1920  | 0       | 1955  |
| 18   | 63       | 1995+ | 23      | 1906  | 43       | 1920  | 5       | 1951  |
| 19   | 62       | 1943  | 21      | 1994  | 43       | 1946  | 3       | 1956  |
| 20   | 58       | 1943  | 25      | 1944+ | 43       | 1927  | 0       | 1941  |
| 21   | 61       | 1936  | 18      | 1931  | 47       | 1974  | 5       | 1941  |
| 22   | 62       | 1904  | 16      | 1931  | 44       | 1933  | -1      | 1931  |
| 23   | 63       | 1904  | 14      | 1985  | 46       | 1909  | -5      | 1985  |
| 24   | 64       | 1995  | 19      | 1993  | 49       | 1995  | -16     | 1992  |
| 25   | 63       | 1949  | 9       | 1993  | 48       | 1960  | -12     | 1992  |
| 26   | 62       | 1933  | 10      | 1993  | 43       | 1962  | -14     | 1993  |
| 27   | 62       | 1949  | 18      | 1993  | 46       | 1949  | -12     | 1993  |
| 28   | 62       | 1932  | 13      | 1979  | 44       | 1899  | -8      | 1979  |
| 29   | 63       | 1932  | 20      | 1979  | 44       | 1995  | -12     | 1979  |
| 30   | 59       | 1932  | 19      | 1979  | 41       | 1926  | -8      | 1979  |

+ Last of several occurrences

## DECEMBER DAILY MAXIMUM AND MINIMUM TEMPERATURE EXTREMES

| Date | High Max | Year  | Low Max | Year  | High Min | Year  | Low Min | Year  |
|------|----------|-------|---------|-------|----------|-------|---------|-------|
| 1    | 64       | 1995  | 25      | 1979+ | 44       | 1926  | -2      | 1991  |
| 2    | 58       | 1926  | 27      | 1984+ | 45       | 1927  | 6       | 1906  |
| 3    | 58       | 1987+ | 16      | 1909  | 44       | 1926  | -17     | 1992  |
| 4    | 57       | 1946  | 9       | 1992  | 37       | 1918+ | -22     | 1992  |
| 5    | 57       | 1939  | -1      | 1972  | 43       | 1918  | -25     | 1972  |
| 6    | 57       | 1981  | 20      | 1972  | 45       | 1918  | -12     | 1972  |
| 7    | 57       | 1939  | 15      | 1978  | 41       | 1915  | -5      | 1972  |
| 8    | 58       | 1939  | 2       | 1919  | 39       | 1902  | -14     | 1972  |
| 9    | 60       | 1939  | -3      | 1972  | 44       | 1939  | -24     | 1972  |
| 10   | 63       | 1939  | -4      | 1972  | 44       | 1929  | -28     | 1972  |
| 11   | 62       | 1939  | -1      | 1972  | 51       | 1906  | -26     | 1972  |
| 12   | 58       | 1933  | 1       | 1932  | 41       | 1995+ | -20     | 1932  |
| 13   | 59       | 1921  | 6       | 1919  | 43       | 1929  | -15     | 1932  |
| 14   | 59       | 1929  | 8       | 1919  | 44       | 1977  | -15     | 1972  |
| 15   | 61       | 1929  | 9       | 1972  | 42       | 1929  | -16     | 1972  |
| 16   | 62       | 1939  | 18      | 1914  | 44       | 1939  | -10     | 1931  |
| 17   | 57       | 1939  | 9       | 1964  | 36       | 1917  | -15     | 1964  |
| 18   | 54       | 1958  | 0       | 1924  | 42       | 1917  | -14     | 1924  |
| 19   | 57       | 1917  | -2      | 1924  | 39       | 1941  | -19     | 1924  |
| 20   | 56       | 1941  | -3      | 1990  | 39       | 1981  | -18     | 1924  |
| 21   | 54       | 1955  | -9      | 1990  | 39       | 1982+ | -25     | 1990  |
| 22   | 58       | 1964  | -9      | 1990  | 43       | 1955  | -25     | 1990+ |
| 23   | 59       | 1964  | -8      | 1983  | 41       | 1917  | -29     | 1990  |
| 24   | 52       | 1936  | 4       | 1990  | 40       | 1902  | -21     | 1990  |
| 25   | 55       | 1906  | 6       | 1924  | 41       | 1933  | -16     | 1924  |
| 26   | 57       | 1980  | 13      | 1941+ | 43       | 1933  | -12     | 1924  |
| 27   | 59       | 1980  | 12      | 1988  | 42       | 1928  | -11     | 1904  |
| 28   | 54       | 1945  | 9       | 1983  | 45       | 1917  | -15     | 1954  |
| 29   | 56       | 1917  | 2       | 1978  | 43       | 1917  | -17     | 1990  |
| 30   | 57       | 1917  | 1       | 1978  | 42       | 1904  | -17     | 1990  |
| 31   | 52       | 1917  | -1      | 1978  | 39       | 1942  | -17     | 1978  |

+ Last of several occurrences

**HIGHEST, LOWEST AND NORMAL DAILY MAXIMUM TEMPERATURES  
BY MONTH WITH DATE AND YEAR OF OCCURRENCE**

| Month         | Highest |      |       | Lowest |      |        | Normal |
|---------------|---------|------|-------|--------|------|--------|--------|
|               | Temp.   | Date | Year  | Temp   | Date | Year   |        |
| January       | 57      | 16   | 1974+ | -3     | 11   | 1963   | 32.2   |
| February      | 65      | 29   | 1992  | -5     | 9    | 1933   | 38.4   |
| March         | 75      | 15   | 1994+ | 13     | 16   | 1906   | 46.7   |
| April         | 86      | 21   | 1994+ | 27     | 1    | 1936   | 57.5   |
| May           | 94      | 28   | 1919  | 36     | 4    | 1975   | 67.5   |
| June          | 103     | 19   | 1940  | 45     | 7    | 1924   | 78.0   |
| July          | 105#    | 21#  | 1931# | 51     | 3    | 1902   | 88.1   |
| August        | 104     | 8    | 1990+ | 55     | 17   | 1968   | 86.3   |
| September     | 98      | 5    | 1976  | 40     | 30   | 1971   | 75.1   |
| October       | 91      | 1    | 1992  | 26     | 28   | 1971   | 62.5   |
| November      | 71      | 5    | 1975  | 9      | 25   | 1993   | 45.2   |
| December      | 64      | 1    | 1995  | -9%    | 22%  | 1990+% | 33.7   |
| Annual Normal |         |      |       | 59.3   |      |        |        |

+ Last of several occurrences

# All Time Highest

% All Time Lowest



**HIGHEST, LOWEST AND NORMAL DAILY MINIMUM TEMPERATURES  
BY MONTH WITH DATE AND YEAR OF OCCURRENCE**

| Month         | Highest |      |       | Lowest |      |       | Normal |
|---------------|---------|------|-------|--------|------|-------|--------|
|               | Temp    | Date | Year  | Temp   | Date | Year  |        |
| January       | 46      | 16   | 1974  | -31    | 25   | 1949  | 14.4   |
| February      | 44      | 24   | 1985+ | -33%   | 1%   | 1985% | 19.8   |
| March         | 50      | 15   | 1908  | -12    | 4    | 1985+ | 25.9   |
| April         | 56      | 21   | 1980  | 11     | 7    | 1921  | 32.3   |
| May           | 64      | 21   | 1958+ | 20     | 1    | 1972  | 39.6   |
| June          | 72      | 28   | 1926  | 29     | 1    | 1920  | 47.3   |
| July          | 76#     | 16#  | 1951# | 34     | 8    | 1981  | 53.0   |
| August        | 74      | 15   | 1929  | 28     | 25   | 1910  | 50.9   |
| September     | 69      | 2    | 1916  | 18     | 25   | 1926  | 42.8   |
| October       | 62      | 13   | 1962+ | 10     | 29   | 1971  | 33.5   |
| November      | 53      | 14   | 1941+ | -16    | 24   | 1992  | 26.0   |
| December      | 51      | 11   | 1906  | -29    | 23   | 1990  | 15.8   |
| Annual Normal |         |      |       | 33.4   |      |       |        |

+ Last of several occurrences

# All Time Highest

% All Time Lowest

**HIGHEST, LOWEST AND NORMAL MONTHLY AVERAGE MAXIMUM  
TEMPERATURE WITH YEAR OF OCCURRENCE**

| Month     | Highest |      | Lowest |      | Normal |
|-----------|---------|------|--------|------|--------|
|           | Temp.   | Year | Temp.  | Year |        |
| January   | 43.2    | 1953 | 15.8   | 1949 | 32.2   |
| February  | 49.9    | 1992 | 26.4   | 1903 | 38.4   |
| March     | 59.2    | 1934 | 36.9   | 1964 | 46.7   |
| April     | 68.6    | 1987 | 48.8   | 1970 | 57.5   |
| May       | 78.0    | 1934 | 58.9   | 1908 | 67.5   |
| June      | 87.1    | 1988 | 68.4   | 1904 | 78.0   |
| July      | 93.2    | 1989 | 76.3   | 1993 | 88.1   |
| August    | 92.1    | 1967 | 77.5   | 1968 | 86.3   |
| September | 84.5    | 1990 | 65.7   | 1912 | 75.1   |
| October   | 72.1    | 1988 | 53.4   | 1946 | 62.5   |
| November  | 56.0    | 1904 | 35.0   | 1985 | 45.2   |
| December  | 46.1    | 1917 | 21.4   | 1985 | 33.7   |
| Annual    | 64.8    | 1934 | 55.4   | 1985 | 59.3   |

**HIGHEST, LOWEST AND NORMAL MONTHLY AVERAGE MINIMUM  
TEMPERATURE WITH YEAR OF OCCURRENCE**

| Month     | Highest |      | Lowest |      | Normal |
|-----------|---------|------|--------|------|--------|
|           | Temp.   | Year | Temp.  | Year |        |
| January   | 29.2    | 1953 | -6.3   | 1949 | 14.4   |
| February  | 31.7    | 1934 | 5.2    | 1964 | 19.8   |
| March     | 35.7    | 1934 | 16.6   | 1985 | 25.9   |
| April     | 41.0    | 1930 | 28.4   | 1982 | 32.3   |
| May       | 48.5    | 1934 | 35.9   | 1953 | 39.6   |
| June      | 57.0    | 1918 | 43.8   | 1993 | 47.3   |
| July      | 62.8    | 1936 | 45.9   | 1993 | 53.0   |
| August    | 58.7    | 1919 | 47.0   | 1993 | 50.9   |
| September | 49.5    | 1917 | 36.5   | 1965 | 42.8   |
| October   | 41.8    | 1934 | 28.4   | 1966 | 33.5   |
| November  | 36.5    | 1927 | 13.8   | 1993 | 26.0   |
| December  | 34.0    | 1917 | 1.4    | 1985 | 15.8   |
| Annual    | 41.4    | 1934 | 28.9   | 1985 | 33.4   |

## HIGHEST, LOWEST AND NORMAL MONTHLY MEAN TEMPERATURES

| January     |      |        |      | February    |            |        |      |
|-------------|------|--------|------|-------------|------------|--------|------|
| Highest     | Year | Lowest | Year | Highest     | Year       | Lowest | Year |
| 36.2        | 1953 | 4.8    | 1949 | 40.0        | 1934       | 16.9   | 1964 |
| 34.1        | 1934 | 10.7   | 1979 | 39.2        | 1907       | 17.3   | 1903 |
| 33.2        | 1909 | 11.0   | 1937 | 38.6        | 1963       | 17.6   | 1933 |
| 32.3        | 1994 | 12.9   | 1985 | 38.0        | 1992       | 18.4   | 1942 |
| 32.0        | 1900 | 15.4   | 1930 | 37.2        | 1930, 1970 | 18.5   | 1985 |
| Normal Mean |      | 23.3   |      | Normal Mean |            | 29.1   |      |

| March       |      |        |      | April       |            |        |            |
|-------------|------|--------|------|-------------|------------|--------|------------|
| Highest     | Year | Lowest | Year | Highest     | Year       | Lowest | Year       |
| 47.4        | 1934 | 26.6   | 1917 | 54.4        | 1934       | 39.0   | 1970       |
| 45.8        | 1910 | 27.5   | 1985 | 53.1        | 1930       | 39.9   | 1975       |
| 44.2        | 1986 | 27.8   | 1964 | 52.4        | 1915, 1943 | 40.4   | 1922       |
| 44.1        | 1992 | 28.9   | 1952 | 51.9        | 1910, 1926 | 40.6   | 1917, 1920 |
| 43.5        | 1900 | 29.2   | 1969 | 51.5        | 1987       | 40.7   | 1967       |
| Normal Mean |      | 36.3   |      | Normal Mean |            | 44.9   |            |

| May         |      |        |            | June        |      |        |            |
|-------------|------|--------|------------|-------------|------|--------|------------|
| Highest     | Year | Lowest | Year       | Highest     | Year | Lowest | Year       |
| 63.2        | 1934 | 48.8   | 1953       | 71.0        | 1918 | 57.3   | 1945       |
| 61.5        | 1958 | 48.9   | 1908       | 69.9        | 1900 | 57.4   | 1908       |
| 60.6        | 1928 | 49.4   | 1916, 1942 | 69.6        | 1988 | 57.5   | 1907       |
| 60.2        | 1992 | 50.5   | 1965       | 69.3        | 1933 | 57.6   | 1944, 1993 |
| 59.6        | 1940 | 50.6   | 1909       | 69.1        | 1961 | 58.4   | 1915       |
| Normal Mean |      | 53.6   |            | Normal Mean |      | 62.7   |            |

**HIGHEST, LOWEST AND NORMAL MONTHLY MEAN TEMPERATURES (CONT.)**

| July        |            |        |            | August      |      |        |            |
|-------------|------------|--------|------------|-------------|------|--------|------------|
| Highest     | Year       | Lowest | Year       | Highest     | Year | Lowest | Year       |
| 76.6        | 1936       | 61.2   | 1993       | 74.2        | 1929 | 63.0   | 1968       |
| 76.4        | 1901, 1933 | 65.9   | 1976       | 73.5        | 1958 | 64.2   | 1899       |
| 75.8        | 1931       | 67.0   | 1902, 1983 | 73.3        | 1919 | 65.2   | 1980       |
| 75.2        | 1934       | 67.1   | 1986       | 73.2        | 1934 | 65.8   | 1912, 1965 |
| 75.0        | 1919       | 67.3   | 1913       | 73.1        | 1961 | 65.9   | 1976       |
| Normal Mean |            | 70.6   |            | Normal Mean |      | 68.7   |            |

| September   |            |        |      | October     |      |        |      |
|-------------|------------|--------|------|-------------|------|--------|------|
| Highest     | Year       | Lowest | Year | Highest     | Year | Lowest | Year |
| 65.7        | 1990       | 51.8   | 1965 | 55.6        | 1933 | 41.8   | 1919 |
| 65.4        | 1938       | 52.4   | 1912 | 55.3        | 1988 | 42.6   | 1949 |
| 64.7        | 1979       | 52.7   | 1971 | 54.9        | 1963 | 42.7   | 1969 |
| 64.4        | 1935       | 53.5   | 1961 | 54.5        | 1934 | 42.8   | 1971 |
| 64.0        | 1922, 1937 | 53.7   | 1970 | 53.5        | 1907 | 43.0   | 1970 |
| Normal Mean |            | 59.0   |      | Normal Mean |      | 48.0   |      |

| November    |                          |        |      | December    |            |        |      |
|-------------|--------------------------|--------|------|-------------|------------|--------|------|
| Highest     | Year                     | Lowest | Year | Highest     | Year       | Lowest | Year |
| 42.8        | 1926, 1927               | 26.7   | 1985 | 35.6        | 1929       | 11.4   | 1985 |
| 42.4        | 1921, 1949               | 27.5   | 1952 | 35.2        | 1906       | 14.8   | 1990 |
| 42.2        | 1899, 1934<br>1953, 1995 | 27.6   | 1993 | 34.5        | 1958       | 17.2   | 1930 |
| 42.1        | 1904                     | 28.4   | 1979 | 32.9        | 1946, 1977 | 18.3   | 1972 |
| 41.6        | 1917                     | 28.8   | 1992 | 32.5        | 1975       | 18.8   | 1932 |
| Normal Mean |                          | 35.6   |      | Normal Mean |            | 24.8   |      |

### HIGHEST, LOWEST AND NORMAL SEASONAL AVERAGE TEMPERATURES

| Winter<br>(December, January and February) |           |        |           | Spring<br>(March, April and May) |                          |        |                    |
|--|-----------|--------|-----------|----------------------------------|--------------------------|--------|--------------------|
| Highest                                    | Year      | Lowest | Year      | Highest                          | Year                     | Lowest | Year               |
| 37.6                                       | 1933-1934 | 17.0   | 1984-1985 | 55.0                             | 1934                     | 39.3   | 1917               |
| 33.0                                       | 1906-1907 | 17.5   | 1948-1949 | 51.9                             | 1992                     | 41.0   | 1955               |
| 32.9                                       | 1937-1938 | 19.2   | 1963-1964 | 51.2                             | 1910                     | 41.4   | 1964               |
| 32.5                                       | 1977-1978 | 19.3   | 1983-1984 | 49.9                             | 1926                     | 41.9   | 1922               |
| 32.1                                       | 1952-1953 | 19.5   | 1978-1979 | 49.5                             | 1987                     | 42.1   | 1975               |
| 32.0                                       | 1917-1918 | 19.7   | 1954-1955 | 49.4                             | 1925, 1940               | 42.6   | 1971               |
| 31.9                                       | 1969-1970 | 20.0   | 1988-1989 | 49.2                             | 1949, 1994               | 42.9   | 1942, 1970         |
| 31.4                                       | 1958-1959 | 20.2   | 1992-1993 | 48.7                             | 1900                     | 43.1   | 1912               |
| 31.1                                       | 1953-1954 | 20.3   | 1928-1929 | 48.5                             | 1915, 1928<br>1939, 1947 | 43.3   | 1906, 1920<br>1965 |
| 31.0                                       | 1994-1995 | 21.1   | 1932-1933 | 48.4                             | 1930                     | 43.5   | 1933, 1953         |
| Normal Mean                                |           | 25.7   |           | Normal Mean                      |                          | 44.9   |                    |

| Summer<br>(June, July and August) |            |        |            | Fall<br>(September, October and November) |            |        |            |
|-----------------------------------|------------|--------|------------|---|------------|--------|------------|
| Highest                           | Year       | Lowest | Year       | Highest                                   | Year       | Lowest | Year       |
| 72.3                              | 1931       | 61.1   | 1993       | 52.9                                      | 1937       | 42.1   | 1985       |
| 72.2                              | 1919       | 64.3   | 1907, 1980 | 52.6                                      | 1963       | 42.7   | 1971       |
| 72.0                              | 1961       | 64.9   | 1995       | 52.5                                      | 1933       | 44.2   | 1993       |
| 71.9                              | 1936       | 65.0   | 1965       | 52.1                                      | 1934       | 44.4   | 1961       |
| 71.8                              | 1933       | 65.1   | 1944       | 52.0                                      | 1953       | 44.8   | 1970       |
| 71.6                              | 1940       | 65.2   | 1968       | 51.7                                      | 1917       | 45.1   | 1982       |
| 71.0                              | 1926       | 65.5   | 1912       | 51.6                                      | 1904       | 45.2   | 1941       |
| 70.6                              | 1934       | 65.7   | 1908       | 51.2                                      | 1927       | 45.3   | 1968       |
| 70.5                              | 1988       | 65.9   | 1950       | 50.8                                      | 1901, 1910 | 45.5   | 1911, 1912 |
| 70.3                              | 1922, 1929 | 66.2   | 1902, 1915 | 50.7                                      | 1921       | 45.6   | 1984       |
| Normal Mean                       |            | 67.3   |            | Normal Mean                               |            | 47.5   |            |

**HIGHEST, LOWEST AND NORMAL ANNUAL AVERAGE TEMPERATURES**

| Highest                    | Year             | Lowest | Year |
|----------------------------|------------------|--------|------|
| 53.1                       | 1934             | 42.2   | 1985 |
| 50.0                       | 1926             | 43.2   | 1993 |
| 49.7                       | 1940             | 43.8   | 1984 |
| 49.3                       | 1900, 1921       | 44.2   | 1964 |
| 49.2                       | 1901, 1910, 1958 | 44.5   | 1971 |
| 49.1                       | 1936             | 44.8   | 1955 |
| 49.0                       | 1953             | 44.9   | 1944 |
| 48.8                       | 1904, 1933       | 45.3   | 1968 |
| 48.5                       | 1992             | 45.5   | 1942 |
| 48.4                       | 1994             | 45.6   | 1972 |
| Normal Average Temperature |                  | 47.2   |      |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM TEMPERATURE OF 100 DEGREES OR HIGHER**

| Number of Days | Period               | Year |
|----------------|----------------------|------|
| 3              | July 13 to July 15   | 1925 |
|                | June 17 to June 19   | 1940 |
|                | August 6 to August 8 | 1990 |
| 2              | July 30 to July 31   | 1901 |
|                | July 23 to July 24   | 1931 |
|                | July 28 to July 29   | 1934 |
|                | July 19 to July 20   | 1960 |

Note: Only periods of 2 or more days are tabulated

**GREATEST NUMBER OF DAYS BY YEAR WITH MAXIMUM  
TEMPERATURE OF 100 DEGREES OR GREATER**

| Number of Days | Year                   |
|----------------|------------------------|
| 5              | 1940                   |
| 4              | 1925, 1931, 1990, 1994 |
| 3              | 1901                   |

Note: Only 3 or more occurrences are tabulated

**GREATEST NUMBER OF DAYS BY MONTH WITH MAXIMUM  
TEMPERATURE OF 100 DEGREES OR GREATER**

| Number of Days | Month and Year                       |
|----------------|--------------------------------------|
| 4              | July 1925, 1931                      |
| 3              | July 1901, 1940, 1994<br>August 1990 |

Note: Only 3 or more occurrences are tabulated

**AVERAGE NUMBER OF DAYS PER MONTH WITH MAXIMUM  
TEMPERATURE OF 100 DEGREES OR GREATER**

| Month  | Number of Days |
|--------|----------------|
| June   | 0.1            |
| July   | 0.4            |
| August | 0.1            |
| Annual | 0.6            |

For example: June averages one occurrence of 100 degrees or greater every 10 years.



**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM  
TEMPERATURE 95 DEGREES OR HIGHER**

| Number of Days | Period  | Year                 |
|----------------|---|----------------------|
| 12             | July 17 to July 28  | 1931                 |
| 10             | July 1 to July 10   | 1985                 |
| 9              | July 14 to July 22  | 1960                 |
| 8              | July 16 to July 23  | 1959                 |
| 7              | July 8 to July 14<br>June 19 to June 25<br>July 25 to July 31 | 1939<br>1988<br>1994 |

**GREATEST AND LEAST NUMBER OF DAYS IN A YEAR WITH MAXIMUM  
TEMPERATURE OF 95 DEGREES OR HIGHER**

| Greatest | Year       | Least | Year   |
|----------|------------|-------|--|
| 28       | 1940       | 0     | 1907, 1911, 1912<br>1913, 1914, 1993                             |
| 23       | 1974       | 1     | 1904, 1930, 1952   |
| 21       | 1961, 1988 | 2     | 1902, 1903, 1908<br>1915, 1916, 1923<br>1938, 1948               |
| 20       | 1990, 1994 | 3     | 1909, 1910, 1921<br>1924, 1927, 1941<br>1957, 1962, 1965<br>1980 |
| 17       | 1931, 1991 | 4     | 1932, 1944, 1945<br>1987   |

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MAXIMUM  
TEMPERATURE OF 95 DEGREES OR HIGHER**

| Number of Days | Month and Year                       |
|----------------|--------------------------------------|
| 13             | July 1931                            |
| 12             | July 1901, 1959, 1960,<br>1964, 1985 |
| 11             | July 1974, 1994<br>August 1940       |
| 10             | July 1940, 1974,<br>1988, 1989       |

Note: Only 10 or more days are tabulated

**AVERAGE NUMBER OF DAYS PER MONTH WITH MAXIMUM  
TEMPERATURE OF 95 DEGREES OR HIGHER**

| Month     | Number of Days |
|-----------|----------------|
| June      | 1.4            |
| July      | 5.0            |
| August    | 3.6            |
| September | 0.1            |
| Annual    | 10.2           |

Note: Annual average different than the sum of monthly averages due to rounding  
For example: September averages one occurrence of 95 degrees or greater every 10 years.

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM  
TEMPERATURE 90 DEGREES OR HIGHER**

| Number of Days | Period                | Year |
|----------------|-----------------------|------|
| 20             | July 20 to August 8   | 1994 |
| 18             | July 10 to July 27    | 1959 |
| 17             | July 15 to July 31    | 1901 |
| 16             | August 3 to August 18 | 1981 |
| 15             | July 18 to August 1   | 1974 |
| 14             | July 18 to July 31    | 1989 |
| 13             | July 26 to August 7   | 1992 |

**GREATEST AND LEAST NUMBER OF DAYS IN A YEAR WITH MAXIMUM  
TEMPERATURE OF 90 DEGREES OR HIGHER**

| Greatest | Year | Least | Year             |
|----------|------|-------|------------------|
| 55       | 1988 | 6     | 1912, 1993       |
| 54       | 1994 | 7     | 1907             |
| 52       | 1940 | 10    | 1913             |
| 50       | 1990 | 13    | 1911             |
| 49       | 1967 | 14    | 1903, 1914, 1927 |

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MAXIMUM  
TEMPERATURE OF 90 DEGREES OR HIGHER**

| Number of Days | Month and Year           |
|----------------|--------------------------|
| 26             | August 1967              |
| 25             | August 1981              |
| 24             | July 1901                |
| 23             | July 1989<br>August 1994 |
| 22             | July 1953, 1961, 1966    |

**AVERAGE NUMBER OF DAYS PER MONTH WITH MAXIMUM  
TEMPERATURE OF 90 DEGREES OR HIGHER**

| Month     | Number of Days |
|-----------|----------------|
| June      | 4.2            |
| July      | 14.4           |
| August    | 12.3           |
| September | 1.9            |
| October   | *              |
| Annual    | 32.8           |

\* Less than 0.05 but greater than zero

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Number of Days | Period   | Year                 |
|----------------|--|----------------------|
| 39             | January 2 to February 9  | 1949                 |
| 30             | December 29 to January 27  | 1936-1937            |
| 23             | January 4 to January 26<br>December 8 to December 30                               | 1929<br>1985         |
| 22             | January 3 to January 22  | 1922                 |
| 20             | December 11 to December 30<br>January 25 to February 13<br>January 3 to January 22 | 1914<br>1923<br>1955 |

**GREATEST AND LEAST NUMBER OF DAYS IN A YEAR WITH MAXIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Greatest | Year | Least | Year  |
|----------|------|-------|-------|
| 96       | 1985 | 10    | 1934  |
| 67       | 1922 | 15    | 1925  |
| 66       | 1984 | 16    | 1900  |
| 65       | 1930 | 18    | 1958+ |
| 62       | 1993 | 19    | 1938  |

+ Last of several occurrences

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MAXIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Number of Days | Month and Year                      |
|----------------|-------------------------------------|
| 30             | January 1945, 1985                  |
| 27             | January 1929, 1975                  |
| 26             | January 1922                        |
| 25             | December 1930, 1985<br>January 1955 |
| 24             | January 1977                        |

**AVERAGE NUMBER OF DAYS PER MONTH WITH MAXIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Month    | Number of Days | Month    | Number of Days |
|----------|----------------|----------|----------------|
| January  | 15.0           | October  | 0.2            |
| February | 7.5            | November | 4.0            |
| March    | 2.0            | December | 12.7           |
| April    | *              | Annual   | 41.4           |

\* Less than 0.05 but greater than zero

For example: October averages two occurrences of 32 degrees or lower every 10 years.

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM  
TEMPERATURE OF ZERO DEGREES OR LOWER**

| Number of Days | Period  | Year         |
|----------------|---|--------------|
| 4              | December 20 to December 23                              | 1990         |
| 3              | December 9 to December 11<br>December 21 to December 23 | 1972<br>1983 |
| 2              | December 18 to December 19<br>January 31 to February 1  | 1924<br>1985 |

Note: Only periods of 2 or more days are tabulated

**GREATEST NUMBER OF DAYS IN A YEAR WITH MAXIMUM  
TEMPERATURE OF ZERO DEGREES OR LOWER**

| Number of Days | Year         |
|----------------|--------------|
| 4              | 1972<br>1990 |
| 3              | 1983         |
| 2              | 1924<br>1985 |

Note: Only years with 2 or more days are tabulated

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MAXIMUM  
TEMPERATURE OF ZERO DEGREES OR LOWER**

| Number of Days | Month and Year      |
|----------------|---------------------|
| 4              | December 1972, 1990 |
| 3              | December 1983       |
| 2              | December 1924       |

Note: Only months with 2 or more days are tabulated

**AVERAGE NUMBER OF DAYS PER MONTH WITH MAXIMUM  
TEMPERATURES OF ZERO DEGREES OR LOWER**

| Month    | Number of Days |
|----------|----------------|
| December | 0.1            |
| January  | 0.1            |
| February | *              |
| Annual   | 0.2            |

\* Less than 0.05 but greater than zero

For example: December averages one occurrence of 0 degrees or lower every 10 years.

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MINIMUM  
TEMPERATURE OF 65 DEGREES OR GREATER**

| Number of Days | Period   | Year                                 |
|----------------|--|--------------------------------------|
| 8              | July 21 to July 28   | 1931                                 |
| 5              | July 15 to July 19<br>July 25 to July 29   | 1925<br>1937                         |
| 4              | July 10 to July 13<br>July 9 to July 12<br>July 14 to July 17<br>July 28 to July 31<br>August 7 to August 10 | 1901<br>1921<br>1928<br>1934<br>1936 |

Note: Only 4 or more days are tabulated

**GREATEST NUMBER OF DAYS IN A YEAR WITH MINIMUM  
TEMPERATURE OF 65 DEGREES OR HIGHER**

| Number of Days | Year       |
|----------------|------------|
| 21             | 1936       |
| 18             | 1931       |
| 17             | 1929, 1937 |
| 14             | 1901       |
| 12             | 1934       |

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MINIMUM  
TEMPERATURE OF 65 DEGREES OR GREATER**

| Number of Days | Month and Year                             |
|----------------|--|
| 12             | July 1931, 1936                            |
| 9              | July 1929, 1937                            |
| 8              | July 1901                                  |
| 7              | July 1921, 1925, 1934<br>August 1929       |
| 6              | July 1926, 1933<br>August 1901, 1936, 1937 |

**AVERAGE NUMBER OF DAYS PER MONTH WITH MINIMUM  
TEMPERATURE OF 65 DEGREES OR GREATER**

| Month     | Number of Days |
|-----------|----------------|
| June      | 0.1            |
| July      | 0.6            |
| August    | 0.4            |
| September | *              |
| Annual    | 1.1            |

\* Less than 0.05 but greater than zero

For example: June averages one occurrence of 65 degrees or greater every 10 years

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MINIMUM  
TEMPERATURE OF 60 DEGREES OR GREATER**

| Number of Days | Period                 | Year |
|----------------|------------------------|------|
| 13             | July 13 to July 25     | 1936 |
| 10             | July 21 to July 30     | 1931 |
| 8              | July 18 to July 25     | 1927 |
| 7              | August 7 to August 13  | 1909 |
|                | July 17 to July 23     | 1910 |
|                | July 26 to August 1    | 1910 |
|                | August 23 to August 29 | 1922 |
|                | July 12 to July 18     | 1928 |
|                | July 5 to July 11      | 1930 |
|                | July 30 to August 5    | 1930 |
|                | July 24 to July 30     | 1933 |
|                | August 6 to August 12  | 1936 |

Note: Only 7 Days or greater are tabulated



**GREATEST AND LEAST NUMBER OF DAYS IN A YEAR WITH MINIMUM TEMPERATURE OF 60 DEGREES OR GREATER**

| Greatest | Year       | Least | Year             |
|----------|------------|-------|------------------|
| 44       | 1936       | 0     | 1993             |
| 39       | 1931       | 1     | 1944, 1980       |
| 35       | 1929, 1933 | 2     | 1962, 1990       |
| 34       | 1901       | 3     | 1992             |
| 32       | 1921       | 4     | 1965, 1986, 1995 |

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MINIMUM TEMPERATURE OF 60 DEGREES OR GREATER**

| Number of Days | Month and Year                       |
|----------------|--------------------------------------|
| 22             | July 1936                            |
| 20             | July 1933                            |
| 18             | July 1901, 1930                      |
| 17             | July 1910<br>August 1922             |
| 16             | July 1931, 1934, 1937<br>August 1930 |

**AVERAGE NUMBER OF DAYS PER MONTH WITH MINIMUM TEMPERATURE OF 60 DEGREES OR GREATER**

| Month     | Number of Days |
|-----------|----------------|
| June      | 0.8            |
| July      | 4.2            |
| August    | 2.9            |
| September | 0.3            |
| Annual    | 8.2            |

For example: June averages eight occurrences of 60 degrees or greater every 10 years.

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MINIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Number of Days | Period                     | Years     |
|----------------|----------------------------|-----------|
| 137            | November 14 to March 30    | 1984-1985 |
| 110            | November 9 to March 10     | 1954-1955 |
| 101            | December 21 to March 31    | 1941-1942 |
| 100            | November 25 to March 3     | 1959-1960 |
| 94             | November 23 to February 24 | 1988-1989 |

**GREATEST AND LEAST NUMBER OF DAYS IN A YEAR WITH MINIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Greatest | Year  | Least | Year  |
|----------|-------|-------|-------|
| 193      | 1966  | 84    | 1934  |
| 189      | 1985+ | 115   | 1915  |
| 187      | 1968  | 119   | 1924+ |
| 182      | 1944  | 121   | 1921  |
| 179      | 1964  | 124   | 1926  |

+ Last of several occurrences

**AVERAGE NUMBER OF DAYS PER MONTH WITH MINIMUM  
TEMPERATURE OF 32 DEGREES OR LOWER**

| Month    | Number of Days | Month     | Number of Days |
|----------|----------------|-----------|----------------|
| January  | 28.1           | August    | 0.1            |
| February | 25.1           | September | 3.3            |
| March    | 24.5           | October   | 14.7           |
| April    | 15.6           | November  | 23.4           |
| May      | 4.2            | December  | 28.5           |
| June     | 0.3            | Annual    | 167.9          |

For example: June averages three occurrences of 32 degrees or lower every 10 years.

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH MINIMUM  
TEMPERATURE OF ZERO DEGREES OR LOWER**

| Number of Days | Period   | Year                         |
|----------------|--|------------------------------|
| 20             | December 10 to December 29   | 1985                         |
| 12             | December 4 to December 15  | 1972                         |
| 11             | January 1 to January 11  | 1974                         |
| 9              | January 11 to January 19<br>January 23 to January 31   | 1917<br>1949                 |
| 8              | December 23 to December 30<br>December 8 to December 15<br>January 5 to January 12<br>January 30 to February 6 | 1930<br>1932<br>1977<br>1985 |

**GREATEST AND LEAST NUMBER OF DAYS IN A YEAR WITH MINIMUM  
TEMPERATURE OF ZERO DEGREES OR LOWER**

| Greatest | Year | Least | Year  |
|----------|------|-------|-------|
| 42       | 1985 | 0     | 1953+ |
| 28       | 1949 | 1     | 1976+ |
| 26       | 1982 | 2     | 1994+ |
| 24       | 1993 | 3     | 1981+ |
| 22       | 1964 | 4     | 1927+ |

+ Last of several occurrences

**GREATEST NUMBER OF DAYS IN ONE MONTH WITH MINIMUM  
TEMPERATURE OF ZERO DEGREES OR LOWER**

| Number of Days | Month and Year                      |
|----------------|-------------------------------------|
| 25             | January 1949                        |
| 20             | December 1985                       |
| 14             | January 1979                        |
| 13             | December 1972, 1990<br>January 1987 |
| 12             | January 1930                        |

**AVERAGE NUMBER OF DAYS PER MONTH WITH MINIMUM  
TEMPERATURES OF ZERO DEGREES OR LOWER**

| Month    | Number of Days |
|----------|----------------|
| January  | 5.6            |
| February | 2.2            |
| March    | 0.3            |
| November | 0.9            |
| December | 3.9            |
| Annual   | 12.8           |

For example: March averages three occurrence of 0 degrees or lower every 10 years.

## **FROST AND FREEZE DATA**

Period of Record: 1951-1994

### **SPRING DATA**

|                    | Earliest Last Date | Average Last Date | Latest Last Date |
|--------------------|--------------------|-------------------|------------------|
| 24 degrees or less | March 14, 1993     | April 11          | May 23, 1966     |
| 28 degrees or less | April 11, 1991     | May 1             | May 31, 1978     |
| 32 degrees or less | April 17, 1980+    | May 18            | June 30, 1968    |

+ Last of several occurrences

### **FALL DATA**

|                    | Earliest First Date | Average First Date | Latest First Date |
|--------------------|---------------------|--------------------|-------------------|
| 32 degrees or less | August 25, 1992     | September 18       | October 16, 1963  |
| 28 degrees or less | September 9, 1976   | October 4          | October 30, 1988  |
| 24 degrees or less | September 18, 1971+ | October 15         | November 18, 1988 |

+ Last of several occurrences

### **FROST FREE PERIOD**

|                    | Greatest Number of Days          | Average Number of Days | Least Number of Days             |
|--------------------|----------------------------------|------------------------|----------------------------------|
| 32 degrees or less | Apr 25 - Oct 16 1963<br>174 Days | 123 Days               | Jun 21 - Sep 4 1989<br>75 Days   |
| 28 degrees or less | Apr 16 - Oct 27 1979<br>194 Days | 156 Days               | May 31 - Sep 20 1978<br>112 Days |
| 24 degrees or less | Mar 14 - Oct 26 1993<br>226 Days | 187 Days               | May 23 - Oct 10 1966<br>140 Days |

+ Last of several occurrences

## **PRECIPITATION DATA**

### **GREATEST, LEAST AND NORMAL ANNUAL PRECIPITATION**

| Greatest             | Year | Least | Year       |
|----------------------|------|-------|------------|
| 22.43                | 1909 | 5.34  | 1966       |
| 20.33                | 1983 | 6.43  | 1939       |
| 18.48                | 1911 | 7.25  | 1959       |
| 18.35                | 1914 | 7.56  | 1901       |
| 18.17                | 1906 | 8.28  | 1951       |
| 17.88                | 1993 | 8.45  | 1934       |
| 17.46                | 1912 | 8.55  | 1952       |
| 17.43                | 1907 | 8.57  | 1934       |
| 17.17                | 1925 | 8.59  | 1956       |
| 16.83                | 1971 | 8.80  | 1931, 1979 |
| Normal Precipitation |      | 12.14 |            |

### **GREATEST, LEAST AND NORMAL MONTHLY PRECIPITATION**

| January              |      |       |      | February             |            |       |            |
|----------------------|------|-------|------|----------------------|------------|-------|------------|
| Greatest             | Year | Least | Year | Greatest             | Year       | Least | Year       |
| 4.28                 | 1911 | .14   | 1920 | 2.86                 | 1909       | .12   | 1970       |
| 3.24                 | 1980 | .19   | 1919 | 2.63                 | 1986       | .18   | 1903, 1967 |
| 3.13                 | 1909 | .20   | 1945 | 2.15                 | 1917       | .21   | 1988       |
| 2.92                 | 1956 | .21   | 1992 | 2.07                 | 1902       | .24   | 1924, 1990 |
| 2.58                 | 1914 | .24   | 1961 | 2.06                 | 1919, 1984 | .26   | 1947       |
| Normal Precipitation |      | 1.04  |      | Normal Precipitation |            | 0.92  |            |

**GREATEST, LEAST AND NORMAL MONTHLY PRECIPITATION (CONT.)**

| March                |      |       |            | April                |      |       |      |
|----------------------|------|-------|------------|----------------------|------|-------|------|
| Greatest             | Year | Least | Year       | Greatest             | Year | Least | Year |
| 4.34                 | 1907 | .10   | 1965       | 3.31                 | 1900 | .06   | 1977 |
| 4.00                 | 1904 | .11   | 1994       | 3.30                 | 1963 | .19   | 1959 |
| 3.57                 | 1906 | .20   | 1956       | 3.23                 | 1921 | .28   | 1934 |
| 3.11                 | 1938 | .30   | 1942       | 2.94                 | 1935 | .29   | 1985 |
| 2.95                 | 1983 | .37   | 1934, 1959 | 2.82                 | 1976 | .31   | 1966 |
| Normal Precipitation |      | 1.26  |            | Normal Precipitation |      | 1.20  |      |

| May                  |      |       |      | June                 |      |       |            |
|----------------------|------|-------|------|----------------------|------|-------|------------|
| Greatest             | Year | Least | Year | Greatest             | Year | Least | Year       |
| 3.96                 | 1908 | T     | 1934 | 3.39                 | 1944 | .02   | 1935, 1974 |
| 3.31                 | 1915 | .05   | 1940 | 3.30                 | 1967 | .03   | 1956       |
| 3.29                 | 1980 | .19   | 1969 | 3.23                 | 1914 | .08   | 1910       |
| 3.24                 | 1981 | .25   | 1992 | 3.13                 | 1911 | .09   | 1931       |
| 3.12                 | 1906 | .31   | 1924 | 2.95                 | 1993 | .10   | 1900, 1994 |
| Normal Precipitation |      | 1.35  |      | Normal Precipitation |      | 1.02  |            |

| July                 |      |       |                    | August               |      |       |                    |
|----------------------|------|-------|--------------------|----------------------|------|-------|--------------------|
| Greatest             | Year | Least | Year               | Greatest             | Year | Least | Year               |
| 3.33                 | 1925 | T     | 1901, 1963<br>1988 | 3.98                 | 1968 | .00   | 1944               |
| 2.44                 | 1936 | .01   | 1900, 1948         | 3.59                 | 1930 | T     | 1958               |
| 2.28                 | 1984 | .02   | 1959               | 3.07                 | 1909 | .01   | 1911, 1952<br>1956 |
| 2.23                 | 1913 | .03   | 1978               | 2.53                 | 1920 | .02   | 1966, 1975         |
| 1.93                 | 1987 | .04   | 1953               | 2.20                 | 1922 | .03   | 1924               |
| Normal Precipitation |      | 0.65  |                    | Normal Precipitation |      | 0.67  |                    |

**GREATEST, LEAST AND NORMAL MONTHLY PRECIPITATION (CONT.)**

| September            |      |       |                    | October              |      |       |            |
|----------------------|------|-------|--------------------|----------------------|------|-------|------------|
| Greatest             | Year | Least | Year               | Greatest             | Year | Least | Year       |
| 3.80                 | 1940 | .00   | 1987               | 3.25                 | 1912 | .00   | 1952, 1988 |
| 3.43                 | 1982 | T     | 1899, 1932<br>1964 | 3.17                 | 1938 | T     | 1917, 1958 |
| 2.72                 | 1926 | .01   | 1916               | 3.03                 | 1923 | .02   | 1965       |
| 2.68                 | 1925 | .02   | 1938, 1951<br>1957 | 2.65                 | 1899 | .06   | 1978       |
| 2.64                 | 1914 | .03   | 1975               | 2.62                 | 1920 | .09   | 1932       |
| Normal Precipitation |      | 0.85  |                    | Normal Precipitation |      | 0.91  |            |

| November             |      |       |                    | December             |      |       |                    |
|----------------------|------|-------|--------------------|----------------------|------|-------|--------------------|
| Greatest             | Year | Least | Year               | Greatest             | Year | Least | Year               |
| 2.84                 | 1983 | .01   | 1976               | 3.39                 | 1983 | .07   | 1989               |
| 2.80                 | 1909 | .02   | 1904, 1939<br>1959 | 2.95                 | 1964 | .20   | 1912, 1976<br>1986 |
| 2.44                 | 1948 | .09   | 1936               | 2.59                 | 1907 | .22   | 1918, 1991         |
| 2.37                 | 1985 | .21   | 1907               | 2.31                 | 1916 | .37   | 1943, 1980         |
| 2.27                 | 1988 | .23   | 1914               | 2.22                 | 1981 | .38   | 1908, 1953         |
| Normal Precipitation |      | 1.16  |                    | Normal Precipitation |      | 1.02  |                    |

**GREATEST AND LEAST PRECIPITATION IN ONE MONTH**

| Greatest |                | Least  |                |
|----------|----------------|--------|----------------|
| Amount   | Month and Year | Amount | Month and Year |
| 4.34     | March 1907     | .00    | October 1988+  |
| 4.28     | January 1911   | T      | July 1988+     |
| 4.00     | March 1904     | .01    | November 1976+ |
| 3.98     | August 1968    | .02    | October 1975+  |
| 3.96     | May 1908       | .03    | July 1978+     |

+ Last of several occurrences



**GREATEST, LEAST AND NORMAL WATER YEAR PRECIPITATION  
(1901-1994)**

| Greatest |      | Least  |      |
|----------|------|--------|------|
| Amount   | Year | Amount | Year |
| 20.51    | 1909 | 6.02   | 1966 |
| 19.85    | 1993 | 6.36   | 1988 |
| 19.38    | 1914 | 6.43   | 1939 |
| 18.97    | 1982 | 6.96   | 1934 |
| 18.83    | 1925 | 7.26   | 1956 |
| Normal   |      | 12.14  |      |

Note: Water Year begins October 1 of the previous year and ends September 30.

**GREATEST, LEAST AND NORMAL SEASONAL PRECIPITATION**

| Winter<br>(December, January and February) |                        |       |           | Spring<br>(March, April and May) |      |       |      |
|--|------------------------|-------|-----------|----------------------------------|------|-------|------|
| Greatest                                   | Year                   | Least | Year      | Greatest                         | Year | Least | Year |
| 6.98                                       | 1910-1911              | .84   | 1989-1990 | 7.85                             | 1906 | .65   | 1934 |
| 6.37                                       | 1908-1909              | 1.08  | 1991-1992 | 7.83                             | 1991 | .93   | 1969 |
| 6.16                                       | 1992-1993              | 1.27  | 1976-1977 | 6.62                             | 1921 | 1.38  | 1939 |
| 5.94                                       | 1983-1984              | 1.46  | 1945-1946 | 6.49                             | 1907 | 1.44  | 1992 |
| 5.45                                       | 1921-1922              | 1.56  | 1980-1981 | 6.41                             | 1963 | 1.66  | 1966 |
| 5.28                                       | 1916-1917<br>1941-1942 | 1.59  | 1943-1944 | 6.20                             | 1981 | 1.67  | 1959 |
| 5.24                                       | 1935-1936              | 1.60  | 1912-1913 | 6.15                             | 1915 | 1.73  | 1956 |
| 5.03                                       | 1915-1916              | 1.64  | 1953-1954 | 6.09                             | 1957 | 1.75  | 1979 |
| 4.93                                       | 1939-1940              | 1.84  | 1923-1924 | 5.97                             | 1938 | 1.87  | 1940 |
| 4.87                                       | 1985-1986              | 1.94  | 1986-1987 | 5.83                             | 1927 | 2.05  | 1931 |
| Normal                                     |                        | 3.07  |           | Normal                           |      | 3.81  |      |

**GREATEST, LEAST AND NORMAL SEASONAL PRECIPITATION (CONT.)**

| Summer<br>(June, July and August) |            |       |      | Fall<br>(September, October and November) |            |       |            |
|-----------------------------------|------------|-------|------|---|------------|-------|------------|
| Greatest                          | Year       | Least | Year | Greatest                                  | Year       | Least | Year       |
| 6.55                              | 1925       | .12   | 1956 | 6.44                                      | 1909       | .34   | 1932       |
| 5.92                              | 1968, 1993 | .29   | 1910 | 6.16                                      | 1971       | .69   | 1987       |
| 5.39                              | 1936       | .31   | 1974 | 6.15                                      | 1940       | .82   | 1936       |
| 5.18                              | 1930       | .33   | 1966 | 5.69                                      | 1983       | .84   | 1933       |
| 5.07                              | 1914       | .34   | 1901 | 5.59                                      | 1982       | .88   | 1952       |
| 4.81                              | 1912       | .38   | 1935 | 5.35                                      | 1973       | .99   | 1955       |
| 4.55                              | 1913       | .43   | 1900 | 5.12                                      | 1912       | 1.19  | 1951       |
| 4.50                              | 1944       | .57   | 1988 | 4.89                                      | 1914       | 1.30  | 1939       |
| 4.37                              | 1909, 1995 | .59   | 1986 | 4.83                                      | 1920       | 1.32  | 1904, 1922 |
| 4.32                              | 1984       | .66   | 1978 | 4.68                                      | 1926, 1961 | 1.35  | 1964       |
| Normal                            |            | 2.34  |      | Normal                                    |            | 2.92  |            |



**GREATEST DAILY PRECIPITATION (CONT.)**

| Day | May    |       | June   |      | July   |      | August |       |
|-----|--------|-------|--------|------|--------|------|--------|-------|
|     | Amount | Year  | Amount | Year | Amount | Year | Amount | Year  |
| 1   | .61    | 1964  | .52    | 1908 | .97    | 1925 | .72    | 1930  |
| 2   | .57    | 1991  | .53    | 1993 | .36    | 1980 | 1.29   | 1920  |
| 3   | .51    | 1993  | .53    | 1989 | .19    | 1938 | .85    | 1907  |
| 4   | .41    | 1975  | .72    | 1968 | .97    | 1925 | .26    | 1930  |
| 5   | .56    | 1993  | .99    | 1906 | .34    | 1925 | .90    | 1962  |
| 6   | .37    | 1986  | .48    | 1993 | .78    | 1924 | .11    | 1943  |
| 7   | .59    | 1975  | .42    | 1987 | .37    | 1927 | .34    | 1926  |
| 8   | .91    | 1922  | 1.09   | 1912 | .80    | 1933 | .81    | 1982  |
| 9   | .75    | 1967  | .99    | 1909 | .66    | 1983 | 1.83   | 1930  |
| 10  | .44    | 1966  | .72    | 1984 | .52    | 1914 | .46    | 1938  |
| 11  | .96    | 1947  | .56    | 1947 | .43    | 1941 | .76    | 1942  |
| 12  | .34    | 1907  | .84    | 1969 | .46    | 1969 | .36    | 1941+ |
| 13  | .74    | 1928  | .81    | 1958 | .67    | 1914 | .66    | 1968  |
| 14  | .47    | 1906  | .69    | 1973 | .48    | 1921 | .86    | 1972  |
| 15  | .46    | 1930+ | .56    | 1964 | .23    | 1908 | .74    | 1916  |
| 16  | 1.25   | 1909  | 1.25   | 1929 | .16    | 1940 | .34    | 1953  |
| 17  | .53    | 1903  | .50    | 1905 | .31    | 1987 | .96    | 1968  |
| 18  | 1.39   | 1913  | .66    | 1946 | .20    | 1976 | .31    | 1965  |
| 19  | .74    | 1915  | .28    | 1930 | .98    | 1965 | .26    | 1922  |
| 20  | 1.07   | 1920  | .90    | 1911 | .97    | 1944 | .62    | 1993  |
| 21  | 1.29   | 1970  | 1.05   | 1948 | .83    | 1987 | .78    | 1993  |
| 22  | .48    | 1933  | .81    | 1948 | .78    | 1973 | .73    | 1975  |
| 23  | .50    | 1920  | .35    | 1953 | .60    | 1913 | .60    | 1987  |
| 24  | .31    | 1963  | .62    | 1952 | .34    | 1923 | .37    | 1929  |
| 25  | .34    | 1914  | .61    | 1985 | .20    | 1916 | .27    | 1955  |
| 26  | .58    | 1906  | .70    | 1926 | .71    | 1913 | .95    | 1975  |
| 27  | .72    | 1908  | .51    | 1952 | .94    | 1984 | .58    | 1920  |
| 28  | 1.16   | 1946  | .65    | 1913 | .37    | 1984 | .69    | 1982  |
| 29  | .43    | 1917  | .70    | 1911 | .57    | 1975 | .48    | 1971  |
| 30  | .47    | 1990  | .41    | 1911 | .70    | 1905 | .82    | 1909  |
| 31  | .55    | 1944  |        |      | 1.40   | 1936 | .90    | 1909  |

**GREATEST DAILY PRECIPITATION (CONT)**

| Day | September |       | October |       | November |      | December |       |
|-----|-----------|-------|---------|-------|----------|------|----------|-------|
|     | Amount    | Year  | Amount  | Year  | Amount   | Year | Amount   | Year  |
| 1   | .91       | 1973  | 1.05    | 1971  | .32      | 1991 | .91      | 1982  |
| 2   | .82       | 1919  | 1.68    | 1976  | .61      | 1913 | .49      | 1925  |
| 3   | .61       | 1971  | .75     | 1914  | .34      | 1933 | .81      | 1941  |
| 4   | .69       | 1946  | .90     | 1912  | .67      | 1938 | .57      | 1901  |
| 5   | .57       | 1909  | .77     | 1912  | .31      | 1953 | .35      | 1916  |
| 6   | .23       | 1971  | .42     | 1918  | .55      | 1963 | .45      | 1971  |
| 7   | .66       | 1925  | .42     | 1923  | .80      | 1969 | .75      | 1919  |
| 8   | .76       | 1973  | .68     | 1973  | .76      | 1903 | .68      | 1985  |
| 9   | .55       | 1927  | .64     | 1924  | .47      | 1909 | .28      | 1970  |
| 10  | .27       | 1978  | .69     | 1911  | .85      | 1927 | .39      | 1937+ |
| 11  | .42       | 1980  | .80     | 1916  | .61      | 1978 | .56      | 1958  |
| 12  | 1.46      | 1942  | .47     | 1899  | .33      | 1978 | .43      | 1926  |
| 13  | .49       | 1980  | .46     | 1922  | .60      | 1958 | 1.01     | 1933  |
| 14  | .32       | 1959  | .44     | 1938  | .66      | 1971 | .32      | 1983  |
| 15  | 1.11      | 1982  | 1.31    | 1980  | .32      | 1948 | .27      | 1981  |
| 16  | .19       | 1908  | .76     | 1938  | .64      | 1930 | .38      | 1899  |
| 17  | .86       | 1947  | .38     | 1937  | .82      | 1941 | .54      | 1930  |
| 18  | 1.05      | 1961  | .51     | 1971  | .61      | 1942 | .15      | 1978  |
| 19  | .45       | 1982  | .89     | 1920  | .36      | 1909 | .27      | 1932  |
| 20  | .46       | 1914  | .48     | 1972  | .61      | 1905 | .53      | 1952  |
| 21  | .67       | 1945  | 1.28    | 1921  | .44      | 1900 | .49      | 1900  |
| 22  | .35       | 1930  | .65     | 1931  | .34      | 1977 | .59      | 1944  |
| 23  | .40       | 1934+ | .90     | 1923  | .64      | 1988 | .74      | 1964  |
| 24  | .53       | 1901  | .25     | 1954  | .47      | 1981 | .37      | 1916  |
| 25  | .63       | 1982  | .21     | 1907+ | .53      | 1909 | .59      | 1988  |
| 26  | 1.31      | 1915  | 1.01    | 1940  | .60      | 1920 | 1.05     | 1907  |
| 27  | 1.00      | 1927  | .77     | 1912  | .39      | 1926 | .40      | 1940  |
| 28  | .45       | 1909  | .40     | 1927  | .23      | 1985 | .32      | 1915  |
| 29  | .45       | 1905  | .34     | 1927  | .38      | 1942 | .63      | 1992  |
| 30  | 2.27      | 1926  | .60     | 1930  | .22      | 1978 | .47      | 1965  |
| 31  |           |       | .46     | 1938  |          |      | .48      | 1913  |

### GREATEST 24 HOUR PRECIPITATION BY MONTH

| January |          |       | February |         |       | March  |         |      |
|---------|----------|-------|----------|---------|-------|--------|---------|------|
| Amount  | Date(s)  | Year  | Amount   | Date(s) | Year  | Amount | Date(s) | Year |
| 1.46    | 24-25    | 1911  | 1.07     | 8       | 1909  | 1.61   | 5-6     | 1907 |
| 0.97    | 26-27    | 1970  | 0.67     | 13-14   | 1983  | 1.27   | 4-5     | 1990 |
| 0.95    | 9-10     | 1980+ | 0.60     | 9-10    | 1984  | 1.23   | 20-21   | 1995 |
| 0.78    | 31-Feb 1 | 1963  | 0.59     | 11-12   | 1961  | 0.90   | 30-31   | 1983 |
| 0.69    | 10-11    | 1993  | 0.54     | 19      | 1986+ | 0.89   | 4-5     | 1991 |

+ Last of several occurrences

| April  |         |      | May    |         |      | June   |         |      |
|--------|---------|------|--------|---------|------|--------|---------|------|
| Amount | Date(s) | Year | Amount | Date(s) | Year | Amount | Date(s) | Year |
| 1.25   | 25-26   | 1976 | 1.67   | 20-21   | 1970 | 1.65   | 21-22   | 1948 |
| 1.14   | 26-27   | 1963 | 1.64   | 8-9     | 1913 | 1.25   | 6       | 1929 |
| 0.94   | 5-6     | 1957 | 1.32   | 20-21   | 1981 | 1.18   | 5-6     | 1993 |
| 0.91   | 25-26   | 1971 | 1.30   | 8-9     | 1991 | 1.08   | 9-10    | 1960 |
| 0.90   | 9-10    | 1974 | 1.21   | 28-29   | 1946 | 1.03   | 18-19   | 1995 |

| July   |          |       | August |         |      | September |         |      |
|--------|----------|-------|--------|---------|------|-----------|---------|------|
| Amount | Date(s)  | Year  | Amount | Date(s) | Year | Amount    | Date(s) | Year |
| 1.75   | 31-Aug 1 | 1936  | 1.90   | 8-9     | 1930 | 2.60      | 29-30   | 1926 |
| 0.98   | 19       | 1965+ | 1.16   | 13-14   | 1972 | 1.51      | 11-12   | 1942 |
| 0.97   | 20       | 1944  | 0.96   | 17      | 1968 | 1.13      | 15-16   | 1982 |
| 0.95   | 27-28    | 1984  | 0.90   | 5       | 1962 | 1.06      | 12-13   | 1914 |
| 0.92   | 19-20    | 1973  | 0.86   | 2-3     | 1971 | 1.05      | 18      | 1961 |

+ Last of Several occurrences

**GREATEST 24 HOUR PRECIPITATION BY MONTH (CONT.)**

| October |          |       | November |         |       | December |         |      |
|---------|----------|-------|----------|---------|-------|----------|---------|------|
| Amount  | Date(s)  | Year  | Amount   | Date(s) | Year  | Amount   | Date(s) | Year |
| 1.82    | 2-3      | 1976  | 0.93     | 9-10    | 1927  | 1.15     | 12-13   | 1933 |
| 1.31    | 15       | 1980  | 0.82     | 14-15   | 1971+ | 0.94     | 3-4     | 1983 |
| 1.30    | 20-21    | 1961  | 0.80     | 7       | 1969  | 0.91     | 1       | 1982 |
| 1.08    | 30-Nov 1 | 1971  | 0.77     | 16-17   | 1983  | 0.88     | 2-3     | 1941 |
| 1.02    | 25-26    | 1975+ | 0.72     | 24-25   | 1985  | 0.84     | 22-23   | 1964 |

+ Last of several occurrences

**GREATEST, FEWEST AND AVERAGE NUMBER OF DAYS WITH  
0.01 INCHES OR MORE PRECIPITATION BY MONTH (1951-1995)**

| Month     | Greatest |       | Fewest |       | Average |
|-----------|----------|-------|--------|-------|---------|
|           | Days     | Year  | Days   | Year  |         |
| January   | 18       | 1979  | 5      | 1992  | 12.0    |
| February  | 19       | 1961  | 4      | 1970  | 10.4    |
| March     | 18       | 1983  | 2      | 1965  | 10.0    |
| April     | 16       | 1965+ | 2      | 1977  | 8.3     |
| May       | 17       | 1981  | 2      | 1969+ | 9.3     |
| June      | 16       | 1967  | 1      | 1974  | 6.7     |
| July      | 9        | 1993+ | 0      | 1988  | 4.1     |
| August    | 12       | 1968  | 0      | 1958  | 4.6     |
| September | 12       | 1982+ | 0      | 1987  | 4.6     |
| October   | 10       | 1993+ | 0      | 1988  | 5.4     |
| November  | 19       | 1983  | 1      | 1976  | 9.3     |
| December  | 23       | 1983  | 1      | 1976  | 10.8    |
| Annual    | 132      | 1982  | 71     | 1952  | 95.5    |

+ Last of several occurrences

**GREATEST, FEWEST AND AVERAGE NUMBER OF DAYS WITH  
0.10 INCHES OR MORE PRECIPITATION BY MONTH (1951-1995)**

| Month     | Greatest |       | Fewest |       | Average |
|-----------|----------|-------|--------|-------|---------|
|           | Days     | Year  | Days   | Year  |         |
| January   | 10       | 1993  | 0      | 1992+ | 3.7     |
| February  | 8        | 1993+ | 0      | 1988+ | 2.9     |
| March     | 11       | 1983  | 0      | 1994+ | 3.8     |
| April     | 10       | 1986+ | 0      | 1994+ | 3.8     |
| May       | 11       | 1980  | 1      | 1979+ | 3.9     |
| June      | 11       | 1967  | 0      | 1994+ | 2.6     |
| July      | 5        | 1975  | 0      | 1991+ | 1.4     |
| August    | 9        | 1968  | 0      | 1985+ | 1.8     |
| September | 7        | 1982  | 0      | 1992+ | 2.0     |
| October   | 8        | 1956  | 0      | 1988+ | 2.7     |
| November  | 11       | 1983  | 0      | 1987+ | 3.6     |
| December  | 10       | 1983  | 0      | 1991+ | 3.3     |
| Annual    | 66       | 1983  | 15     | 1966  | 35.7    |

+ Last of several occurrences



**GREATEST NUMBER OF DAYS WITH 0.50 INCHES AND 1.00 OR MORE  
OF PRECIPITATION BY MONTH (1951-1994)**

| Month     | 0.50 Inches or greater |       |         | 1.00 Inches or greater |                          |         |
|-----------|------------------------|-------|---------|------------------------|--------------------------|---------|
|           | Days                   | Year  | Average | Days                   | Year                     | Average |
| January   | 3                      | 1980  | 0.2     | No occurrences         |                          |         |
| February  | 1                      | 1986+ | 0.1     | No occurrences         |                          |         |
| March     | 2                      | 1983  | 0.2     | No occurrences         |                          |         |
| April     | 2                      | 1976  | 0.4     | No occurrences         |                          |         |
| May       | 3                      | 1991  | 0.6     | 1                      | 1970, 1974               | *       |
| June      | 2                      | 1992+ | 0.5     | No occurrences         |                          |         |
| July      | 2                      | 1984+ | 0.3     | No occurrences         |                          |         |
| August    | 2                      | 1982+ | 0.3     | No occurrences         |                          |         |
| September | 2                      | 1982+ | 0.2     | 1                      | 1961, 1982<br>1983       | 0.1     |
| October   | 2                      | 1975+ | 0.3     | 1                      | 1961, 1971<br>1976, 1980 | 0.1     |
| November  | 2                      | 1988  | 0.2     | No occurrences         |                          |         |
| December  | 1                      | 1992+ | 0.2     | No occurrences         |                          |         |
| Annual    | 11                     | 1983  | 3.4     | 2                      | 1961                     | 0.2     |

+ Last of several occurrences

\* less than 0.05 but greater than zero

For example: January averages two occurrences of 0.50 inches or greater every 10 years.

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH NO PRECIPITATION**

| Number of Days | Period                      | Year |
|----------------|-----------------------------|------|
| 61             | September 12 to November 11 | 1952 |
| 47             | August 26 to October 11     | 1987 |
| 37             | September 4 to October 10   | 1899 |
| 35             | August 7 to September 10    | 1988 |
| 34             | September 28 to October 31  | 1988 |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH NO MEASURABLE PRECIPITATION (TRACE OR LESS)**

| Number of Days | Period  | Year         |
|----------------|---|--------------|
| 62             | September 12 to November 12                   | 1952         |
| 61             | August 29 to October 28                       | 1964         |
| 59             | May 31 to July 28                             | 1919         |
| 52             | October 4 to November 24                      | 1976         |
| 48             | June 14 to July 31<br>August 26 to October 12 | 1901<br>1987 |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH PRECIPITATION (INCLUDING TRACE AMOUNTS)**

| Number of Days | Period                     | Year      |
|----------------|----------------------------|-----------|
| 30             | February 5 to March 6      | 1993      |
| 27             | November 25 to December 21 | 1992      |
| 25             | January 4 to January 28    | 1974      |
| 24             | January 20 to February 12  | 1985      |
| 22             | December 23 to January 13  | 1939-1940 |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH  
MEASURABLE PRECIPITATION (.01 INCH OR MORE)**

| Number of Days | Period   | Year   |
|----------------|--|--|
| 14             | February 6 to February 19<br>January 6 to January 19   | 1961<br>1971   |
| 12             | December 25 to January 5   | 1981-1982  |
| 11             | January 13 to January 23<br>December 16 to December 26<br>February 13 to February 23<br>February 15 to February 25<br>February 17 to February 27                                     | 1909<br>1968<br>1986<br>1993<br>1994                 |
| 10             | April 27 to May 6  | 1995   |
| 9              | November 8 to November 16<br>March 17 to March 25<br>February 17 to February 25<br>March 30 to April 7<br>February 4 to February 12<br>January 22 to January 30<br>June 2 to June 10 | 1903<br>1907<br>1917<br>1937<br>1939<br>1958<br>1995 |

### GREATEST, LEAST AND MEAN SEASONAL SNOWFALL

| Greatest      | Season    | Least | Season    |
|---------------|-----------|-------|-----------|
| 93.3          | 1992-1993 | 14.8  | 1933-1934 |
| 85.6          | 1983-1984 | 18.1  | 1991-1992 |
| 80.1          | 1916-1917 | 18.2  | 1940-1941 |
| 79.7          | 1928-1929 | 18.3  | 1914-1915 |
| 75.3          | 1920-1921 | 18.5  | 1925-1926 |
| 69.1          | 1931-1932 | 20.6  | 1960-1961 |
| 66.4          | 1981-1982 | 21.5  | 1964-1965 |
| 64.7          | 1915-1916 | 21.9  | 1976-1977 |
| 64.4          | 1921-1922 | 22.6  | 1942-1943 |
| 61.7          | 1961-1962 | 24.1  | 1950-1951 |
| Mean Snowfall |           | 42.9  |           |

Note: Snowfall season runs from July 1 through June 30

### GREATEST, LEAST AND MEAN MONTHLY SNOWFALL

| January       |      |       |            | February      |      |       |      |
|---------------|------|-------|------------|---------------|------|-------|------|
| Greatest      | Year | Least | Year       | Greatest      | Year | Least | Year |
| 29.6          | 1993 | 0.3   | 1919       | 23.4          | 1922 | 0.5   | 1970 |
| 28.1          | 1950 | 0.6   | 1900       | 23.0          | 1909 | 0.6   | 1977 |
| 27.4          | 1932 | 0.9   | 1948       | 21.3          | 1993 | 0.7   | 1963 |
| 25.3          | 1929 | 1.0   | 1945       | 20.1          | 1984 | 0.9   | 1992 |
| 23.1          | 1916 | 1.9   | 1961, 1970 | 18.5          | 1917 | 1.1   | 1988 |
| Mean Snowfall |      | 9.8   |            | Mean Snowfall |      | 6.4   |      |

**GREATEST, LEAST AND MEAN MONTHLY SNOWFALL (CONT.)**

| March         |            |       |            | April         |      |       |            |
|---------------|------------|-------|------------|---------------|------|-------|------------|
| Greatest      | Year       | Least | Year       | Greatest      | Year | Least | Year       |
| 26.5          | 1906       | 0.0   | 1910       | 22.5          | 1921 | 0.0   | 1915, 1930 |
| 17.4          | 1916       | T     | 1928       | 16.5          | 1929 | T     | 1990+      |
| 16.6          | 1985       | 0.6   | 1934, 1992 | 15.5          | 1976 | 0.1   | 1934+      |
| 15.4          | 1962       | 0.7   | 1994+      | 14.8          | 1927 | 0.2   | 1913       |
| 15.1          | 1917, 1938 | 0.9   | 1965       | 13.9          | 1967 | 0.3   | 1989+      |
| Mean Snowfall |            | 5.9   |            | Mean Snowfall |      | 4.4   |            |

+ Last of several occurrences

| May           |      |       |       | June          |            |       |       |
|---------------|------|-------|-------|---------------|------------|-------|-------|
| Greatest      | Year | Least | Year  | Greatest      | Year       | Least | Year  |
| 12.8          | 1903 | 0.0   | 1992+ | 1.0           | 1914, 1924 | 0     | 1994+ |
| 5.8           | 1902 | T     | 1980+ | 0.2           | 1981       |       |       |
| 5.5           | 1983 | 0.2   | 1993+ |               |            |       |       |
| 4.9           | 1975 | 0.3   | 1979+ |               |            |       |       |
| 2.6           | 1988 | 0.4   | 1965+ |               |            |       |       |
| Mean Snowfall |      | 0.6   |       | Mean Snowfall |            | T     |       |

+ Last of several occurrences

| July          |      |       |      | August         |      |       |      |
|---------------|------|-------|------|----------------|------|-------|------|
| Greatest      | Year | Least | Year | Greatest       | Year | Least | Year |
| T             | 1921 |       |      | None on Record |      |       |      |
| Mean Snowfall |      | 0.0   |      | Mean Snowfall  |      | 0.0   |      |



## GREATEST DAILY SNOWFALL

| Day | January |      | February |      | March  |       | April  |      |
|-----|---------|------|----------|------|--------|-------|--------|------|
|     | Amount  | Year | Amount   | Year | Amount | Year  | Amount | Year |
| 1   | 4.0     | 1907 | 3.8      | 1910 | 3.8    | 1976  | 3.9    | 1956 |
| 2   | 6.0     | 1923 | 5.4      | 1907 | 8.2    | 1985  | 8.9    | 1955 |
| 3   | 4.1     | 1971 | 5.0      | 1916 | 4.5    | 1945  | 3.4    | 1983 |
| 4   | 5.5     | 1982 | 4.2      | 1946 | 5.0    | 1990  | 1.5    | 1936 |
| 5   | 7.1     | 1940 | 3.0      | 1929 | 5.7    | 1947  | 14.0   | 1921 |
| 6   | 3.9     | 1940 | 4.7      | 1937 | 3.9    | 1991  | 4.9    | 1957 |
| 7   | 4.2     | 1971 | 4.3      | 1937 | 2.5    | 1922  | 1.7    | 1937 |
| 8   | 3.8     | 1957 | 10.0     | 1909 | 6.6    | 1901  | 6.0    | 1900 |
| 9   | 5.5     | 1936 | 5.0      | 1909 | 2.8    | 1962  | 10.0   | 1929 |
| 10  | 4.5     | 1904 | 5.7      | 1984 | 2.5    | 1952  | 7.0    | 1974 |
| 11  | 7.0     | 1916 | 7.0      | 1922 | 5.5    | 1973  | 7.5    | 1927 |
| 12  | 4.2     | 1970 | 7.0      | 1919 | 4.6    | 1906  | 3.5    | 1927 |
| 13  | 5.0     | 1932 | 4.2      | 1900 | 8.0    | 1906  | 2.0    | 1912 |
| 14  | 6.2     | 1906 | 3.5      | 1984 | 5.0    | 1923  | 2.2    | 1970 |
| 15  | 3.5     | 1939 | 5.6      | 1940 | 2.5    | 1917  | 7.0    | 1917 |
| 16  | 4.2     | 1910 | 5.7      | 1984 | 2.5    | 1970  | 2.0    | 1991 |
| 17  | 7.8     | 1950 | 2.5      | 1994 | 4.6    | 1971  | 7.0    | 1920 |
| 18  | 5.2     | 1935 | 4.0      | 1917 | 3.9    | 1968  | 3.0    | 1991 |
| 19  | 5.1     | 1962 | 3.0      | 1976 | 3.8    | 1989  | 4.0    | 1912 |
| 20  | 6.0     | 1962 | 4.1      | 1985 | 4.0    | 1938  | 4.4    | 1911 |
| 21  | 2.5     | 1982 | 3.5      | 1919 | 6.0    | 1924  | 3.6    | 1909 |
| 22  | 4.5     | 1929 | 6.0      | 1917 | 2.0    | 1973  | 3.0    | 1964 |
| 23  | 3.0     | 1917 | 5.0      | 1920 | 12.6   | 1919  | 6.8    | 1964 |
| 24  | 4.5     | 1954 | 2.5      | 1960 | 2.6    | 1907  | 5.2    | 1961 |
| 25  | 5.0     | 1956 | 6.1      | 1955 | 4.1    | 1948  | 3.5    | 1976 |
| 26  | 4.4     | 1956 | 3.0      | 1919 | 2.0    | 1913+ | 7.4    | 1976 |
| 27  | 5.0     | 1968 | 6.4      | 1916 | 3.5    | 1905  | 4.6    | 1976 |
| 28  | 7.5     | 1916 | 4.0      | 1906 | 3.3    | 1982  | 4.0    | 1937 |
| 29  | 6.5     | 1929 | 4.7      | 1976 | 1.2    | 1936  | 1.5    | 1967 |
| 30  | 4.4     | 1950 |          |      | 4.5    | 1905  | 6.2    | 1967 |
| 31  | 6.0     | 1902 |          |      | 7.4    | 1936  |        |      |

+ Last of several occurrences

**GREATEST DAILY SNOWFALL (CONT.)**

| Day | May    |       | June   |       | July   |      | August |      |
|-----|--------|-------|--------|-------|--------|------|--------|------|
|     | Amount | Year  | Amount | Year  | Amount | Year | Amount | Year |
| 1   | 2.6    | 1988  | T      | 1971+ |        |      |        |      |
| 2   | 0.7    | 1942  | T      | 1943  | T      | 1921 |        |      |
| 3   | 0.5    | 1991  |        |       |        |      |        |      |
| 4   | 4.6    | 1975  |        |       |        |      |        |      |
| 5   | 1.5    | 1938  | 1.0    | 1914  |        |      |        |      |
| 6   | 0.4    | 1986  |        |       |        |      |        |      |
| 7   | 1.0    | 1981  | 1.0    | 1924  |        |      |        |      |
| 8   | 1.6    | 1990  |        |       |        |      |        |      |
| 9   | 0.3    | 1948  |        |       |        |      |        |      |
| 10  | 0.7    | 1991  | T      | 1954  |        |      |        |      |
| 11  | 5.2    | 1983  |        |       |        |      |        |      |
| 12  | 0.5    | 1989  | T      | 1917  |        |      |        |      |
| 13  | 0.2    | 1942  | T      | 1976  |        |      |        |      |
| 14  | 0.2    | 1916  | 0.2    | 1981  |        |      |        |      |
| 15  | 0.2    | 1983+ | T      | 1955+ |        |      |        |      |
| 16  | 1.1    | 1977  |        |       |        |      |        |      |
| 17  | 5.0    | 1903  |        |       |        |      |        |      |
| 18  | 7.2    | 1903  | T      | 1949  |        |      |        |      |
| 19  | 0.1    | 1975  | T      | 1975  |        |      |        |      |
| 20  | 0.2    | 1975  |        |       |        |      |        |      |
| 21  | 0.2    | 1953  | T      | 1916  |        |      |        |      |
| 22  | T      | 1966+ |        |       |        |      |        |      |
| 23  | T      | 1944  |        |       |        |      |        |      |
| 24  | T      | 1980+ |        |       |        |      |        |      |
| 25  | T      | 1980+ |        |       |        |      |        |      |
| 26  | T      | 1954+ |        |       |        |      |        |      |
| 27  | T      | 1982+ |        |       |        |      |        |      |
| 28  | T      | 1982+ |        |       |        |      |        |      |
| 29  |        |       |        |       |        |      |        |      |
| 30  | 0.5    | 1937  |        |       |        |      |        |      |
| 31  | 0.8    | 1955  |        |       |        |      |        |      |

+ Last of several occurrences



**GREATEST DAILY SNOWFALL (CONT.)**

| Day | September |       | October |       | November |       | December |       |
|-----|-----------|-------|---------|-------|----------|-------|----------|-------|
|     | Amount    | Year  | Amount  | Year  | Amount   | Year  | Amount   | Year  |
| 1   |           |       | 6.6     | 1971  | 3.4      | 1991  | 9.5      | 1982  |
| 2   |           |       | T       | 1971+ | 2.3      | 1938  | 5.0      | 1921  |
| 3   |           |       | T       | 1969+ | 4.4      | 1973  | 6.9      | 1983  |
| 4   |           |       | T       | 1957+ | 1.8      | 1956  | 4.2      | 1994+ |
| 5   |           |       | 0.5     | 1912  | 1.0      | 1947  | 4.0      | 1920  |
| 6   |           |       | 0.5     | 1913  | 4.5      | 1920  | 1.9      | 1972  |
| 7   | T         | 1971  | 1.4     | 1985  | 1.7      | 1986  | 12.0     | 1919  |
| 8   |           |       | T       | 1973+ | 8.2      | 1903  | 7.2      | 1983  |
| 9   |           |       | 0.5     | 1949+ | 1.4      | 1911  | 3.0      | 1932  |
| 10  |           |       | 0.3     | 1913  | 3.5      | 1911  | 4.0      | 1922  |
| 11  | T         | 1903  | 0.2     | 1928  | 5.0      | 1978  | 4.0      | 1907+ |
| 12  | 0.5       | 1914  | 3.5     | 1899  | 4.0      | 1985  | 6.0      | 1926  |
| 13  | 0.5       | 1914  | 0.9     | 1966  | 1.0      | 1903  | 4.4      | 1990  |
| 14  |           |       | 1.1     | 1984  | 4.2      | 1971  | 3.1      | 1963  |
| 15  | T         | 1914  | 8.0     | 1980  | 3.1      | 1971+ | 1.1      | 1933  |
| 16  | 1.5       | 1965  | 0.3     | 1938  | 7.5      | 1930  | 3.5      | 1899  |
| 17  | 0.5       | 1965  | 2.2     | 1984  | 3.5      | 1931  | 7.0      | 1930  |
| 18  | T         | 1978+ | 4.8     | 1971  | 5.0      | 1941  | 1.8      | 1968  |
| 19  | 1.0       | 1983  | 9.0     | 1920  | 2.3      | 1902  | 3.4      | 1967  |
| 20  | T         | 1968  | 5.2     | 1920  | 6.9      | 1992  | 2.5      | 1934  |
| 21  | T         | 1968+ | 6.5     | 1953  | 4.8      | 1900  | 4.6      | 1963  |
| 22  | T         | 1931+ | 6.3     | 1975  | 3.5      | 1982  | 3.2      | 1987  |
| 23  | T         | 1961+ | 1.5     | 1923  | 3.4      | 1934  | 5.2      | 1951  |
| 24  | T         | 1970+ | 3.0     | 1954  | 4.7      | 1985  | 3.1      | 1983  |
| 25  | T         | 1934  | 1.1     | 1954  | 3.2      | 1985  | 10.8     | 1988  |
| 26  | 0.2       | 1924  | 0.2     | 1919  | 3.5      | 1948  | 4.8      | 1971  |
| 27  |           |       | 2.2     | 1946  | 4.0      | 1928  | 2.7      | 1982  |
| 28  | 1.2       | 1902  | 7.1     | 1989  | 4.3      | 1934  | 3.3      | 1972  |
| 29  | T         | 1961  | 2.0     | 1973  | 3.0      | 1991  | 7.4      | 1992  |
| 30  | T         | 1982  | 2.1     | 1909  | 2.1      | 1948  | 4.6      | 1934  |
| 31  |           |       | 1.6     | 1956  |          |       | 5.3      | 1959  |

+ Last of several occurrences

### GREATEST 24-HOUR SNOWFALL BY MONTH

| January |       |      | February |       |       | March  |         |       |
|---------|-------|------|----------|-------|-------|--------|---------|-------|
| Amount  | Date  | Year | Amount   | Date  | Year  | Amount | Date    | Year  |
| 10.1    | 17-18 | 1950 | 10.0     | 8     | 1909  | 14.6   | 23-24   | 1916  |
| 9.3     | 4-5   | 1982 | 7.5      | 21-22 | 1917  | 8.4    | 1-2     | 1985  |
| 9.0     | 19-20 | 1962 | 7.2      | 6-7   | 1937  | 8.0    | 31- 4/1 | 1936+ |
| 8.9     | 5-6   | 1940 | 7.0      | 11    | 1922+ | 7.3    | 4-5     | 1990+ |
| 8.1     | 10-11 | 1993 | 6.4      | 16-17 | 1984  | 6.6    | 8       | 1901  |

+ Last of several occurrences

| April  |       |       | May    |      |      | June   |      |       |
|--------|-------|-------|--------|------|------|--------|------|-------|
| Amount | Date  | Year  | Amount | Date | Year | Amount | Date | Year  |
| 14.0   | 5     | 1921  | 7.2    | 18   | 1903 | 1.0    | 7    | 1924+ |
| 10.0   | 25-26 | 1976+ | 5.2    | 11   | 1983 | 0.2    | 14   | 1981  |
| 9.0    | 22-23 | 1964  | 5.0    | 17   | 1903 |        |      |       |
| 8.9    | 2     | 1955  | 4.6    | 4    | 1975 |        |      |       |
| 7.9    | 9-10  | 1974  | 2.6    | 1    | 1988 |        |      |       |

+ Last of several occurrences

| July   |      |      | August         |      |      | September |      |       |
|--------|------|------|----------------|------|------|-----------|------|-------|
| Amount | Date | Year | Amount         | Date | Year | Amount    | Date | Year  |
| T      | 2    | 1921 | None on Record |      |      | 1.5       | 16   | 1965  |
|        |      |      |                |      |      | 1.2       | 28   | 1902  |
|        |      |      |                |      |      | 1.0       | 19   | 1983+ |
|        |      |      |                |      |      | 0.2       | 26   | 1924  |

+ Last of several occurrences

### GREATEST 24-HOUR SNOWFALL BY MONTH (CONT.)

| October          |      |      | November         |       |      | December         |       |       |
|------------------|------|------|------------------|-------|------|------------------|-------|-------|
| 24 Hour Snowfall | Date | Year | 24 Hour Snowfall | Date  | Year | 24 Hour Snowfall | Date  | Year  |
| 9.0              | 19   | 1920 | 8.2              | 8     | 1903 | 12.0             | 7     | 1919  |
| 8.0              | 15   | 1980 | 7.8              | 19-20 | 1992 | 10.8             | 25    | 1988  |
| 7.1              | 28   | 1989 | 7.5              | 16    | 1930 | 9.5              | 1     | 1982+ |
| 7.0              | 28   | 1961 | 7.3              | 24-25 | 1985 | 8.5              | 3-4   | 1983  |
| 6.6              | 1    | 1971 | 6.8              | 14-15 | 1971 | 8.4              | 23-24 | 1951  |

+ Last of several occurrences

### GREATEST SNOW DEPTH

| Month     | Amount | Date | Year  |
|-----------|--------|------|-------|
| January   | 21*    | 31*  | 1949* |
| February  | 20     | 1    | 1949  |
| March     | 13     | 11   | 1964+ |
| April     | 13.5   | 5    | 1921  |
| May       | 1      | 31   | 1955  |
| June      | T      | 15   | 1955+ |
| September | 1      | 17   | 1965  |
| October   | 7      | 15   | 1980+ |
| November  | 10     | 30   | 1985+ |
| December  | 14     | 27   | 1990+ |

+ Last of several occurrences

\* All-time greatest snow depth

**EARLIEST, LATEST AND AVERAGE DATES OF FIRST AND LAST MEASURABLE SNOWFALL INCLUDING AMOUNTS**

|          | First Snowfall     |        | Last Snowfall |        |
|----------|--------------------|--------|---------------|--------|
|          | Date               | Amount | Date          | Amount |
| Earliest | September 12, 1915 | 0.5    | March 5, 1940 | 1.4    |
| Latest   | December 18, 1959  | 0.2    | June 14, 1981 | 0.2    |
| Average  | October 30         |        | April 26      |        |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH A TRACE OR MORE OF SNOWFALL**

| Number of Days | Period   | Year         |
|----------------|--|--------------|
| 28             | February 5 to March 5                              | 1993         |
| 27             | November 25 to December 21                         | 1992         |
| 24             | January 20 to February 12                          | 1985         |
| 23             | January 25 to February 16                          | 1949         |
| 21             | February 17 to March 9<br>January 10 to January 30 | 1919<br>1958 |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH 0.1 INCHES OR MORE OF SNOWFALL**

| Number of Days | Period   | Year                 |
|----------------|--|----------------------|
| 13             | December 25 to January 6   | 1936-1937            |
| 11             | December 16 to December 26<br>February 15 to February 25                           | 1968<br>1993         |
| 10             | January 11 to January 20<br>January 21 to January 30<br>December 18 to December 27 | 1930<br>1958<br>1983 |
| 9              | November 8 to November 16  | 1903                 |
| 8              | December 19 to December 26<br>February 17 to February 24                           | 1916<br>1994         |

**GREATEST NUMBER OF CONSECUTIVE DAYS WITH  
1.0 INCHES OR MORE OF SNOWFALL**

| Number of Days | Period                     | Year  |
|----------------|----------------------------|-------|
| 7              | February 19 to February 25 | 1993  |
| 5              | January 15 to January 19   | 1935  |
| 4              | February 1 to February 4   | 1922  |
| 3              | December 4 to December 6   | 1994+ |

+ Last of several occurrences

**MAXIMUM, MINIMUM AND AVERAGE NUMBER OF DAYS WITH  
MEASURABLE SNOWFALL**

| Month     | Maximum | Year      | Minimum | Year      | Average |
|-----------|---------|-----------|---------|-----------|---------|
| September | 2       | 1965      | 0       | 1994+     | 0.1     |
| October   | 7       | 1920      | 0       | 1994+     | 1.2     |
| November  | 16      | 1985      | 0       | 1969+     | 4.3     |
| December  | 23      | 1983      | 1       | 1976+     | 8.5     |
| January   | 18      | 1979+     | 2       | 1946+     | 9.6     |
| February  | 18      | 1936      | 2       | 1991+     | 7.8     |
| March     | 17      | 1938      | 1       | 1994+     | 6.1     |
| April     | 13      | 1970      | 0       | 1990+     | 3.3     |
| May       | 4       | 1938+     | 0       | 1994+     | 0.8     |
| June      | 1       | 1981+     | 0       | 1994+     | *       |
| Season#   | 84      | 1992-1993 | 22      | 1958-1959 | 41.3    |

+ Last of several occurrences

# Season Begins July 1 and ends June 30

\* Less than 0.05 but greater than zero

Averages computed over entire period of record

**MAXIMUM, MINIMUM AND AVERAGE NUMBER OF DAYS WITH  
1.0 INCHES OR MORE OF AND 3.0 INCHES OR MORE OF SNOWFALL**

| Month     | 1.0 Inches or More (1939-1994) |            |         | 3.0 Inches or More (1951-1994) |           |         |
|-----------|--------------------------------|------------|---------|--------------------------------|-----------|---------|
|           | Maximum                        | Year       | Average | Maximum                        | Year      | Average |
| September | 1                              | 1983+      | *       | 0                              | none      | 0       |
| October   | 3                              | 1949       | 0.5     | 2                              | 1971+     | 0.2     |
| November  | 10                             | 1985       | 1.8     | 3                              | 1985      | 0.4     |
| December  | 12                             | 1983       | 2.9     | 3                              | 1983      | 0.6     |
| January   | 11                             | 1993       | 3.2     | 3                              | 1993+     | 0.7     |
| February  | 9                              | 1993       | 2.3     | 3                              | 1984      | 0.4     |
| March     | 7                              | 1982+      | 2.2     | 2                              | 1991+     | 0.3     |
| April     | 6                              | 1970       | 1.2     | 3                              | 1976      | 0.4     |
| May       | 1                              | 1990+      | 0.1     | 1                              | 1983+     | *       |
| Season#   | 30                             | 1992-1993+ | 11.6    | 9                              | 1992-1993 | 3.4     |

+ Last of several occurrences

# Season begins July 1 and ends June 30

\* Less than 0.5 but greater than zero

Averages computed over entire period of record

## MISCELLANEOUS CLIMATE DATA

### GREATEST AND AVERAGE NUMBER OF DAYS WITH THUNDERSTORMS AND HAIL

| Month     | Thunderstorms |       |         | Hail     |       |          |
|-----------|---------------|-------|---------|----------|-------|----------|
|           | Greatest      | Year  | Average | Greatest | Year  | Average# |
| January   | 2             | 1911  | 0.1     | — 1      | 1980+ | *        |
| February  | 1             | 1994+ | 0.2     | 2        | 1906  | 0.1      |
| March     | 2             | 1991+ | 0.4     | 4        | 1938+ | 0.3      |
| April     | 8             | 1915  | 1.0     | 4        | 1932+ | 0.6      |
| May       | 9             | 1963+ | 3.5     | 7        | 1921  | 0.8      |
| June      | 14            | 1967  | 4.7     | 3        | 1947+ | 0.4      |
| July      | 14            | 1936+ | 5.6     | 3        | 1930  | 0.4      |
| August    | 13            | 1945+ | 5.1     | 3        | 1922  | 0.3      |
| September | 11            | 1940+ | 2.6     | 1        | 1986+ | 0.2      |
| October   | 5             | 1938+ | 0.6     | 2        | 1939+ | 0.1      |
| November  | 1             | 1992+ | 0.1     | 1        | 1992  | *        |
| December  | 1             | 1988+ | 0.1     | 2        | 1906  | *        |
| Annual    | 56            | 1925  | 23.9    | 15       | 1921  | 3.8      |

+ Last of several occurrences

\* Less than 0.05 but greater than zero

# Average computed over entire period of record

**GREATEST, LEAST AND AVERAGE PERCENT OF POSSIBLE SUNSHINE**

| Month     | Greatest | Year  | Least | Year  | Average |
|-----------|----------|-------|-------|-------|---------|
| January   | 76       | 1961  | 17    | 1954+ | 40      |
| February  | 74       | 1908+ | 30    | 1993+ | 53      |
| March     | 83       | 1965  | 33    | 1907  | 61      |
| April     | 89       | 1977  | 41    | 1920+ | 66      |
| May       | 91       | 1924  | 45    | 1942  | 68      |
| June      | 94       | 1919  | 53    | 1963+ | 75      |
| July      | 97       | 1963  | 63    | 1913  | 83      |
| August    | 95       | 1944  | 59    | 1926  | 81      |
| September | 94       | 1974  | 55    | 1909  | 79      |
| October   | 91       | 1958  | 39    | 1919  | 70      |
| November  | 83       | 1907  | 20    | 1973  | 47      |
| December  | 73       | 1976  | 15    | 1951  | 40      |
| Annual    | 72       | 1976  | 53    | 1920  | 64      |

+ Last of several occurrences



**MOST, LEAST AND AVERAGE NUMBER OF CLEAR,  
PARTLY CLOUDY AND CLOUDY DAYS**

| Month | Clear         |                |       | Partly Cloudy |                |      | Cloudy         |                |       |
|-------|---------------|----------------|-------|---------------|----------------|------|----------------|----------------|-------|
|       | Most/<br>Year | Least/<br>Year | Avg.  | Most/<br>Year | Least/<br>Year | Avg. | Most /<br>Year | Least/<br>Year | Avg.  |
| Jan.  | 13<br>1919+   | 0<br>1982+     | 2.7   | 16<br>1904    | 1<br>1967+     | 6.7  | 29<br>1967     | 8<br>1908      | 21.6  |
| Feb.  | 18<br>1905    | 0<br>1940+     | 4.0   | 17<br>1960    | 2<br>1979+     | 6.3  | 25<br>1979+    | 4<br>1905      | 18.0  |
| Mar.  | 17<br>1911    | 1<br>1993+     | 5.1   | 20<br>1902    | 2<br>1983      | 8.2  | 28<br>1983     | 5<br>1911+     | 17.6  |
| Apr.  | 20<br>1908    | 2<br>1975+     | 6.3   | 20<br>1930    | 3<br>1978+     | 7.8  | 25<br>1975     | 1<br>1908      | 15.9  |
| May   | 20<br>1900    | 2<br>1980      | 7.5   | 19<br>1904    | 5<br>1963      | 9.9  | 21<br>1962     | 2<br>1924      | 13.6  |
| June  | 22<br>1919+   | 4<br>1913      | 11.8  | 19<br>1927    | 4<br>1986      | 9.6  | 17<br>1964     | 0<br>1910      | 8.6   |
| July  | 26<br>1935    | 7<br>1940      | 17.4  | 20<br>1904    | 4<br>1952+     | 8.9  | 13<br>1985     | 0<br>1911+     | 4.6   |
| Aug.  | 28<br>1944    | 8<br>1979+     | 15.4  | 18<br>1915+   | 3<br>1944      | 10.6 | 13<br>1968     | 0<br>1967+     | 5.0   |
| Sept. | 24<br>1975    | 6<br>1986      | 15.2  | 17<br>1968    | 2<br>1933      | 8.1  | 16<br>1959+    | 1<br>1979+     | 6.7   |
| Oct.  | 23<br>1937    | 3<br>1957+     | 12.0  | 19<br>1909    | 3<br>1987+     | 8.3  | 19<br>1957     | 1<br>1909      | 10.7  |
| Nov.  | 19<br>1936    | 0<br>1988+     | 5.1   | 15<br>1974    | 2<br>1908      | 7.1  | 25<br>1973+    | 1<br>1904      | 17.8  |
| Dec.  | 13<br>1904    | 0<br>1993+     | 3.4   | 16<br>1929+   | 2<br>1983+     | 6.8  | 28<br>1983     | 5<br>1905      | 20.8  |
| Ann.  | 160<br>1906+  | 78<br>1982     | 105.8 | 159<br>1929   | 82<br>1975     | 98.4 | 186<br>1893    | 62<br>1903     | 161.0 |

+ Last of several occurrences

**GREATEST AND AVERAGE NUMBER OF DAYS WITH  
DENSE FOG AND DENSE SMOKE OR HAZE**

|           | Dense Fog |       |         | Dense Smoke or Haze% |       |          |
|-----------|-----------|-------|---------|----------------------|-------|----------|
|           | Greatest  | Year  | Average | Greatest             | Year  | Average# |
| January   | 10        | 1944  | 4.5     | 9                    | 1981  | 1.4      |
| February  | 9         | 1977  | 3.3     | 14                   | 1977  | 1.3      |
| March     | 13        | 1985  | 1.6     | 4                    | 1993  | 0.2      |
| April     | 3         | 1994+ | 0.5     | 1                    | 1977+ | 0.1      |
| May       | 2         | 1980+ | 0.3     | 2                    | 1980  | 0.1      |
| June      | 1         | 1960+ | *       | 0                    |       | 0        |
| July      | 1         | 1982  | *       | 0                    |       | 0        |
| August    | 0         |       | 0       | 0                    |       | 0        |
| September | 2         | 1966+ | 0.1     | 1                    | 1986  | *        |
| October   | 3         | 1986  | 0.4     | 3                    | 1971  | 0.1      |
| November  | 6         | 1971  | 1.9     | 3                    | 1992  | 0.3      |
| December  | 17        | 1985  | 4.4     | 5                    | 1992+ | 0.6      |
| Annual    | 40        | 1985  | 17.0    | 25                   | 1993  | 4.1      |

+ Last of several occurrences

% Period of record 1951-1994

\* Less than 0.05 but greater than zero

# Average computed over entire period of record

For example: March averages two occurrences of dense smoke of haze every 10 years.

**HIGHEST, LOWEST AND MEAN AVERAGE  
WIND SPEED AND PEAK WIND**

| Month     | Average Wind Speed |      |        |       | Peak Wind |       |      |               |       |
|-----------|--------------------|------|--------|-------|-----------|-------|------|---------------|-------|
|           | Highest            | Year | Lowest | Year  | Mean      | Speed | Dir. | Date          | Year  |
| January   | 14.3               | 1972 | 5.5    | 1985  | 10.6      | 68    | W    | 6             | 1990  |
| February  | 15.1               | 1956 | 6.1    | 1941+ | 10.6      | 60    | S    | 8             | 1985  |
| March     | 15.9               | 1955 | 5.3    | 1906  | 11.2      | 72    | W    | 24            | 1955  |
| April     | 15.3               | 1960 | 6.5    | 1952  | 11.6      | 61    | N    | 19            | 1994+ |
| May       | 14                 | 1960 | 6.7    | 1915  | 10.5      | 61    | S    | 6             | 1994+ |
| June      | 13.7               | 1960 | 6.7    | 1931  | 10.1      | 55    | SW   | 12            | 1986  |
| July      | 11.6               | 1959 | 6.2    | 1915  | 9.1       | 66    | W    | 4             | 1986  |
| August    | 13                 | 1959 | 5.5    | 1915  | 8.9       | 68    | SW   | 26            | 1985  |
| September | 12.9               | 1959 | 6.3    | 1952  | 9.1       | 57    | W    | 1             | 1961  |
| October   | 13.1               | 1959 | 5.3    | 1907  | 9.3       | 54    | SW   | 20            | 1966+ |
| November  | 16.3               | 1955 | 4.9    | 1952  | 10.3      | 67    | W    | 10            | 1955  |
| December  | 15.8               | 1955 | 5.6    | 1985  | 9.9       | 57    | NW   | 15            | 1981  |
| Annual    | 13                 | 1959 | 7      | 1931  | 10.1      | 72    | W    | Mar. 24, 1955 |       |

+ Last of several occurrences

Note: The Direction of all mean average wind speeds is from the southwest.

### HIGHEST AND LOWEST SEA LEVEL PRESSURE BY MONTH

| Month     | Highest | Year       | Lowest | Year       |
|-----------|---------|------------|--------|------------|
| January   | 31.13*  | 1979       | 29.06# | 1916       |
| February  | 30.92   | 1910       | 29.18  | 1936       |
| March     | 30.85   | 1951       | 29.07  | 1906       |
| April     | 30.72   | 1939       | 29.18  | 1937       |
| May       | 30.53   | 1970       | 29.29  | 1922, 1988 |
| June      | 30.56   | 1917       | 29.17  | 1950       |
| July      | 30.37   | 1945, 1959 | 29.32  | 1986       |
| August    | 30.40   | 1908       | 29.36  | 1944       |
| September | 30.58   | 1970       | 29.29  | 1986       |
| October   | 30.74   | 1935       | 29.28  | 1935       |
| November  | 31.03   | 1979       | 29.06# | 1982       |
| December  | 31.04   | 1990       | 29.06# | 1982       |

\* Highest of all time

# Lowest of all time

**MOST, LEAST AND AVERAGE NUMBER OF HEATING DEGREE DAYS**

| Month     | Most | Year      | Least | Year      | Average |
|-----------|------|-----------|-------|-----------|---------|
| July      | 136  | 1993      | 0     | 1990+     | 9       |
| August    | 143  | 1968      | 0     | 1982+     | 29      |
| September | 393  | 1965      | 38    | 1938      | 218     |
| October   | 720  | 1919      | 293   | 1933      | 527     |
| November  | 1143 | 1985      | 664   | 1928+     | 882     |
| December  | 1657 | 1985      | 773   | 1917      | 1249    |
| January   | 1867 | 1949      | 885   | 1953      | 1293    |
| February  | 1387 | 1964      | 682   | 1934      | 1005    |
| March     | 1192 | 1917      | 544   | 1934      | 890     |
| April     | 771  | 1970      | 319   | 1934      | 603     |
| May       | 500  | 1908      | 118   | 1934      | 353     |
| June      | 246  | 1945      | 6     | 1977      | 125     |
| Annual    | 8244 | 1916-1917 | 4784  | 1933-1934 | 7180    |

+ Last of several occurrences

Note: Heating degree day season runs from July 1 through June 30

**MOST, LEAST AND AVERAGE NUMBER OF COOLING DEGREE DAYS (1969-1995)**

| Month     | Most | Year | Least | Year  | Average |
|-----------|------|------|-------|-------|---------|
| April     | 3    | 1980 | 0     | 1995+ | 0       |
| May       | 17   | 1986 | 0     | 1995+ | 0       |
| June      | 181  | 1988 | 12    | 1991  | 56      |
| July      | 290  | 1975 | 24    | 1993  | 183     |
| August    | 237  | 1991 | 57    | 1993  | 144     |
| September | 79   | 1990 | 2     | 1993  | 38      |
| October   | 4    | 1975 | 0     | 1994+ | 0       |
| Annual    | 598  | 1988 | 103   | 1993  | 421     |

+ Last of several occurrences

Note: Cooling degree day season runs from January 1 through December 31

- 144 Arizona Cool Season Climatological Surface Wind and Pressure Gradient Study. Ira S. Brenner, May 1979. (PB298900/AS)
- 146 The BART Experiment. Morris S. Webb, October 1979. (PB80 155112)
- 147 Occurrence and Distribution of Flash Floods in the Western Region. Thomas L. Dietrich, December 1979. (PB80 160344)
- 149 Misinterpretations of Precipitation Probability Forecasts. Allan H. Murphy, Sarah Lichtenstein, Baruch Fischhoff, and Robert L. Winkler, February 1980. (PB80 174576)
- 150 Annual Data and Verification Tabulation - Eastern and Central North Pacific Tropical Storms and Hurricanes 1979. Emil B. Gunther and Staff, EPHC, April 1980. (PB80 220486)
- 151 VMC Model Performance in the Northeast Pacific. James E. Overland, PMEL-ERL, April 1980. (PB80 196033)
- 152 Climate of Salt Lake City, Utah. William J. Alder, Sean T. Buchanan, William Cope (Retired), James A. Cisco, Craig C. Schmidt, Alexander R. Smith (Retired), Wilbur E. Figgins (Retired), April 1996 - Sixth Revision (PB96 175583)
- 153 An Automatic Lightning Detection System in Northern California. James E. Rea and Chris E. Fontana, June 1980. (PB80 225592)
- 154 Regression Equation for the Peak Wind Gust 6 to 12 Hours in Advance at Great Falls During Strong Downslope Wind Storms. Michael J. Oard, July 1980. (PB91 108367)
- 155 A Raininess Index for the Arizona Monsoon. John H. Ten Harkel, July 1980. (PB81 106494)
- 156 The Effects of Terrain Distribution on Summer Thunderstorm Activity at Reno, Nevada. Christopher Dean Hill, July 1980. (PB81 102501)
- 157 An Operational Evaluation of the Scofield/Oliver Technique for Estimating Precipitation Rates from Satellite Imagery. Richard Ochoa, August 1980. (PB81 108227)
- 158 Hydrology Practicum. Thomas Dietrich, September 1980. (PB81 134033)
- 159 Tropical Cyclone Effects on California. Arnold Court, October 1980. (PB81 133779)
- 160 Eastern North Pacific Tropical Cyclone Occurrences During Intraseasonal Periods. Preston W. Leftwich and Gail M. Brown, February 1981. (PB81 205494)
- 161 Solar Radiation as a Sole Source of Energy for Photovoltaics in Las Vegas, Nevada, for July and December. Darryl Randerson, April 1981. (PB81 224503)
- 162 A Systems Approach to Real-Time Runoff Analysis with a Deterministic Rainfall-Runoff Model. Robert J.C. Burnash and R. Larry Ferral, April 1981. (PB81 224495)
- 163 A Comparison of Two Methods for Forecasting Thunderstorms at Luke Air Force Base, Arizona. LTC Keith R. Cooley, April 1981. (PB81 225393)
- 164 An Objective Aid for Forecasting Afternoon Relative Humidity Along the Washington Cascade East Slopes. Robert S. Robinson, April 1981. (PB81 23076)
- 165 Annual Data and Verification Tabulation, Eastern North Pacific Tropical Storms and Hurricanes 1980. Emil B. Gunther and Staff, May 1981. (PB81 230336)
- 166 Preliminary Estimates of Wind Power Potential at the Nevada Test Site. Howard G. Booth, June 1981. (PB82 127036)
- 167 ARAP User's Guide. Mark Mathewson, July 1981, Revised September 1981. (PB82 196783)
- 168 Forecasting the Onset of Coastal Gales Off Washington-Oregon. John R. Zimmerman and William D. Burton, August 1981. (PB82 127051)
- 169 A Statistical-Dynamical Model for Prediction of Tropical Cyclone Motion in the Eastern North Pacific Ocean. Preston W. Leftwich, Jr., October 1981. (PB82195298)
- 170 An Enhanced Plotter for Surface Airways Observations. Andrew J. Spry and Jeffrey L. Anderson, October 1981. (PB82 153863)
- 171 Verification of 72-Hour 500-MB Map-Type Predictions. R.F. Quiring, November 1981. (PB82-158098)
- 172 Forecasting Heavy Snow at Wenatchee, Washington. James W. Holcomb, December 1981. (PB82-177783)
- 173 Central San Joaquin Valley Type Maps. Thomas R. Crossan, December 1981. (PB82 196064)
- 174 ARAP Test Results. Mark A. Mathewson, December 1981. (PB82 198103)
- 175 Approximations to the Peak Surface Wind Gusts from Desert Thunderstorms. Darryl Randerson, June 1982. (PB82 253089)
- 176 Climate of Phoenix, Arizona. Robert J. Schmidli and Austin Jamison, April 1969 (Revised July 1996). (PB96-191614)
- 178 Annual Data and Verification Tabulation, Eastern North Pacific Tropical Storms and Hurricanes 1982. E.B. Gunther, June 1983. (PB85 106078)
- 179 Stratified Maximum Temperature Relationships Between Sixteen Zone Stations in Arizona and Respective Key Stations. Ira S. Brenner, June 1983. (PB83 249904)
- 180 Standard Hydrologic Exchange Format (SHEF) Version I. Phillip A. Pasteris, Vernon C. Bissel, David G. Bennett, August 1983. (PB85 106052)
- 181 Quantitative and Spatial Distribution of Winter Precipitation along Utah's Wasatch Front. Lawrence B. Dunn, August 1983. (PB85 106912)
- 182 500 Millibar Sign Frequency Teleconnection Charts - Winter. Lawrence B. Dunn, December 1983. (PB85 106276)
- 183 500 Millibar Sign Frequency Teleconnection Charts - Spring. Lawrence B. Dunn, January 1984. (PB85 111367)
- 184 Collection and Use of Lightning Strike Data in the Western U.S. During Summer 1983. Glenn Rasch and Mark Mathewson, February 1984. (PB85 110534)
- 185 500 Millibar Sign Frequency Teleconnection Charts - Summer. Lawrence B. Dunn, March 1984. (PB85 111359)
- 186 Annual Data and Verification Tabulation eastern North Pacific Tropical Storms and Hurricanes 1983. E.B. Gunther, March 1984. (PB85 109635)
- 187 500 Millibar Sign Frequency Teleconnection Charts - Fall. Lawrence B. Dunn, May 1984. (PB85-110930)
- 188 The Use and Interpretation of Isentropic Analyses. Jeffrey L. Anderson, October 1984. (PB85-132694)
- 189 Annual Data & Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1984. E.B. Gunther and R.L. Cross, April 1985. (PB85 187887AS)
- 190 Great Salt Lake Effect Snowfall: Some Notes and An Example. David M. Carpenter, October 1985. (PB86 119153/AS)
- 191 Large Scale Patterns Associated with Major Freeze Episodes in the Agricultural Southwest. Ronald S. Hamilton and Glenn R. Lussky, December 1985. (PB86 144474AS)
- 192 NWR Voice Synthesis Project: Phase I. Glen W. Sampson, January 1986. (PB86 145604/AS)
- 193 The MCC - An Overview and Case Study on Its Impact in the Western United States. Glenn R. Lussky, March 1986. (PB86 170651/AS)
- 194 Annual Data and Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1985. E.B. Gunther and R.L. Cross, March 1986. (PB86 170941/AS)
- 195 Radid Interpretation Guidelines. Roger G. Pappas, March 1986. (PB86 177680/AS)
- 196 A Mesoscale Convective Complex Type Storm over the Desert Southwest. Darryl Randerson, April 1986. (PB86 190998/AS)
- 197 The Effects of Eastern North Pacific Tropical Cyclones on the Southwestern United States. Walter Smith, August 1986. (PB87 106258AS)
- 198 Preliminary Lightning Climatology Studies for Idaho. Christopher D. Hill, Carl J. Gorski, and Michael C. Conger, April 1987. (PB87 180196/AS)
- 199 Heavy Rains and Flooding in Montana: A Case for Slantwise Convection. Glenn R. Lussky, April 1987. (PB87 185229/AS)
- 200 Annual Data and Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1986. Roger L. Cross and Kenneth B. Mielke, September 1987. (PB88 110895/AS)
- 201 An Inexpensive Solution for the Mass Distribution of Satellite Images. Glen W. Sampson and George Clark, September 1987. (PB88 114038/AS)
- 202 Annual Data and Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1987. Roger L. Cross and Kenneth B. Mielke, September 1988. (PB88-101935/AS)
- 203 An Investigation of the 24 September 1986 "Cold Sector" Tornado Outbreak in Northern California. John P. Monteverdi and Scott A. Braun, October 1988. (PB89 121297/AS)
- 204 Preliminary Analysis of Cloud-To-Ground Lightning in the Vicinity of the Nevada Test Site. Carven Scott, November 1988. (PB89 128649/AS)
- 205 Forecast Guidelines For Fire Weather and Forecasters - How Nighttime Humidity Affects Wildland Fuels. David W. Goens, February 1989. (PB89 162549/AS)
- 206 A Collection of Papers Related to Heavy Precipitation Forecasting. Western Region Headquarters, Scientific Services Division, August 1989. (PB89 230833/AS)
- 207 The Las Vegas McCarran International Airport Microburst of August 8, 1989. Carven A. Scott, June 1990. (PB90-240268)
- 208 Meteorological Factors Contributing to the Canyon Creek Fire Blowup, September 6 and 7, 1988. David W. Goens, June 1990. (PB90-245085)
- 209 Status Surge Prediction Along the Central California Coast. Peter Felsch and Woodrow Whitlatch, December 1990. (PB91-129239)
- 210 Hydrotools. Tom Egger, January 1991. (PB91-151787/AS)
- 211 A Northern Utah Soaker. Mark E. Struthwolf, February 1991. (PB91-168716)
- 212 Preliminary Analysis of the San Francisco Rainfall Record: 1849-1990. Jan Null, May 1991. (PB91-208439)
- 213 Idaho Zone Preformat, Temperature Guidance, and Verification. Mark A. Mollner, July 1991. (PB91-227405/AS)
- 214 Emergency Operational Meteorological Considerations During an Accidental Release of Hazardous Chemicals. Peter Mueller and Jerry Galt, August 1991. (PB91-235424)
- 215 WeatherTools. Tom Egger, October 1991. (PB93-184950)
- 216 Creating MOS Equations for RAWFS Stations Using Digital Model Data. Dennis D. Gettman, December 1991. (PB92-131473/AS)
- 217 Forecasting Heavy Snow Events in Missoula, Montana. Mike Richmond, May 1992. (PB92-198104)
- 218 NWS Winter Weather Workshop in Portland, Oregon. Various Authors, December 1992. (PB93-146785)
- 219 A Case Study of the Operational Usefulness of the Sharp Workstation in Forecasting a Mesocyclone-Induced Cold Sector Tornado Event in California. John P. Monteverdi, March 1993. (PB93-178697)
- 220 Climate of Pendleton, Oregon. Claudia Bell, August 1993. (PB93-227536)
- 221 Utilization of the Bulk Richardson Number, Helicity and Sounding Modification in the Assessment of the Severe Convective Storms of 3 August 1992. Eric C. Evenson, September 1993. (PB94-131943)
- 222 Convective and Rotational Parameters Associated with Three Tornado Episodes in Northern and Central California. John P. Monteverdi and John Quadros, September 1993. (PB94-131943)
- 223 Climate of San Luis Obispo, California. Gary Ryan, February 1994. (PB94-162062)
- 224 Climate of Wenatchee, Washington. Michael W. McFarland, Roger G. Buckman, and Gregory E. Matzen, March 1994. (PB94-164308)
- 225 Climate of Santa Barbara, California. Gary Ryan, December 1994. (PB95-173720)
- 226 Climate of Yakima, Washington. Greg DeVoir, David Hogan, and Jay Neher, December 1994. (PB95-173688)
- 227 Climate of Kalispell, Montana. Chris Maier, December 1994. (PB95-169488)
- 228 Forecasting Minimum Temperatures in the Santa Maria Agricultural District. Wilfred Pi and Peter Felsch, December 1994. (PB95-171088)
- 229 The 10 February 1994 Oroville Tornado--A Case Study. Mike Staudenmaier, Jr., April 1995. (PB95-241873)
- 230 Santa Ana Winds and the Fire Outbreak of Fall 1993. Ivory Small, June 1995. (PB95-241865)
- 231 Washington State Tornadoes. Tresté Huse, July 1995. (PB96-107024)
- 232 Fog Climatology at Spokane, Washington. Paul Frisbie, July 1995. (PB96-106604)
- 233 Storm Relative Isentropic Motion Associated with Cold Fronts in Northern Utah. Kevin B. Baker, Kathleen A. Hadley, and Lawrence B. Dunn, July 1995. (PB96-106596)
- 234 Some Climatological and Synoptic Aspects of Severe Weather Development in the Northwestern United States. Eric C. Evenson and Robert H. Johns, October 1995. (PB96-112958)
- 235 Climate of Las Vegas, Nevada. Paul H. Skrbac and Scott Cordero, December 1995. (PB96-135553)
- 236 Climate of Astoria, Oregon. Mark A. McInerney, January 1996.
- 237 The 6 July 1995 Severe Weather Events in the Northwestern United States: Recent Examples of SSWEs. Eric C. Evenson, April 1996.
- 238 Significant Weather Patterns Affecting West Central Montana. Joe Lester, May 1996. (PB96-18751)
- 239 Climate of Portland, Oregon. Clinton C. D. Rocky, May 1996. (PB96-17603)
- 240 Downslop Winds of Santa Barbara, CA. Gary Ryan, July 1996 (PB96-191697)
- 241 Operational Applications of the Real-time National Lightning Detection Network Data at the NWSO Tucson, AZ. Darren McCollum, David Bright, Jim Meyer, and John Glueck, September 1996

## NOAA SCIENTIFIC AND TECHNICAL PUBLICATIONS

*The National Oceanic and Atmospheric Administration* was established as part of the Department of Commerce on October 3, 1970. The mission responsibilities of NOAA are to assess the socioeconomic impact of natural and technological changes in the environment and to monitor and predict the state of the solid Earth, the oceans and their living resources, the atmosphere, and the space environment of the Earth.

The major components of NOAA regularly produce various types of scientific and technical information in the following kinds of publications.

**PROFESSIONAL PAPERS**—Important definitive research results, major techniques, and special investigations.

**CONTRACT AND GRANT REPORTS**—Reports prepared by contractors or grantees under NOAA sponsorship.

**ATLAS**—Presentation of analyzed data generally in the form of maps showing distribution of rainfall, chemical and physical conditions of oceans and atmosphere, distribution of fishes and marine mammals, ionospheric conditions, etc.

**TECHNICAL SERVICE PUBLICATIONS** -- Reports containing data, observations, instructions, etc. A partial listing includes data serials; prediction and outlook periodicals; technical manuals, training papers, planning reports, and information serials; and miscellaneous technical publications.

**TECHNICAL REPORTS**—Journal quality with extensive details, mathematical developments, or data listings.

**TECHNICAL MEMORANDUMS**—Reports of preliminary, partial, or negative research or technology results, interim instructions, and the like.



Information on availability of NOAA publications can be obtained from:

NATIONAL TECHNICAL INFORMATION SERVICE

U. S. DEPARTMENT OF COMMERCE

5285 PORT ROYAL ROAD

SPRINGFIELD, VA 22161