NOAA TECHNICAL MEMORANDUM
NWS WR-248

CLIMATE OF EUGENE, OREGON

Clinton C. D. Rockey
National Weather Service Forecast Office
Portland, Oregon

April 1997

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. Overaas, 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 177672/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 184296)
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 Donal 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 1996. (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. Sal October 1972. (COM 72 10021)
81 An Aid for Forecasting Summer Maximum Temperatures at Seattle, Washington. Edgar G. 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. Christop' Fontana, September 1976. (PB 273 677/AS)
110 Cool Inflow as a Weakening Influence on Eastern Pacific Tropical Cyclones. William J. D. 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 268 847)
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 Gudgel, 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. Mollner 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 Heflir James R. Fors, February 1979. (PB294216/AS)
139 Aids for Forecasting Minimum Temperature in the Wenatchee Frost District. Robert S. Rob. 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-248

CLIMATE OF EUGENE, OREGON

Clinton C. D. Rockey
National Weather Service Forecast Office
Portland, Oregon

April 1997

UNITED STATES
DEPARTMENT OF COMMERCE
William M. Daley, Secretary

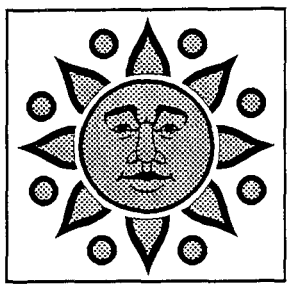
National Oceanic and
Atmospheric Administration
D. James Baker, Under
Secretary and Administrator

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

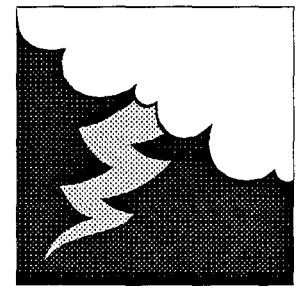
Delain A. Edman, Chief
Scientific Services Division
Salt Lake City, Utah

TABLE OF CONTENTS



CLIMATE OF EUGENE OREGON[1]

Clinton C. D. Rockey
NWSFO Portland, Oregon



Eugene is located at the upper or southern end of the fertile Willamette River Valley. Mahlon Sweet Field, location of the weather observation equipment, is nine miles northwest of the city center. The Cascade Mountains to the east and the Coast Range to the west bound the valley. Low hills lie to the south of the city, but the valley floor broadens rapidly to the north. The rolling, wooded Coast Range begins about five miles west of the airport and rise to elevations of 1,500 to 2,500 feet. The Coast Range is midway between Eugene and the Pacific Ocean, approximately 50 miles to the west. About ten miles east, the Coburg Hills rise to an elevation of 2,500 feet. The Cascade Range, which reaches elevations of over 10,000 feet, is about 75 miles east of Eugene. Small valleys extend into the hills in all directions and hard-surfaced highways, through passes in the Cascades, provide easy access to winter sports areas. Abundant precipitation and moderate temperatures result in rapid growth of timber, making lumbering a major industry. Much of the virgin timber has been harvested, but new growth grows quickly so there is very little bare ground in the area.

The Willamette River passes about five miles east of the airport and the Fern Ridge flood control reservoir, with a normal pool of 9,360 acres, begins about two miles southwest. These two water areas are the main source of local fog, but numerous small creeks and low places, which fill with water during the wet season, also produce considerable fog. The Coast Range acts as a barrier to coastal fog, but active storms cross these ridges with little hindrance. The Cascade Range blocks westward passage of all but the strongest continental air masses, but when air does flow into the Willamette Valley from the east, dry hot weather develops in summer, causing an extreme fire hazard. In winter, this situation causes clear sunny days and cool frosty nights.

The low pressure systems, with which rain is generally associated, usually pass inland north of Eugene. As a result, southwest winds with speeds of 10 to 20 mph usually accompany rainfall. Heavier storms bring winds of 30 to 40 mph and occasional southwest winds exceeding 50 mph are experienced. Fair weather in both summer and winter is most often accompanied by calm nights and daytime northerly winds increasing to speeds of 5 to 15 mph in the afternoon.

The change in seasonal rainfall is quite gradual. This first fall rain usually arrives during the second or third week of September, after which rain gradually increases until about the first of January and then slowly decreases in the latter part of June. July and August are normally very dry, occasionally passing without rainfall. When snow occurs, it frequently melts on contact with the ground or within a few hours, but occasionally an accumulation of a few inches will persist as a ground covering for several days. Snowfall for a winter season exceeds five inches 30 percent of the time. There have been a few instances where no snow occurred, while at the other extreme, snowfall exceeded three feet for the 1915-16, 1949-50, and 1968-69 seasons! In January 1950, snow on the ground reached a depth of eight inches and maintained that depth for eleven days. Nearly twenty years later, 47.1 inches of snow fell in January 1969, accumulating to a snow depth of 34 inches. In fact, a snow depth of at least one inch persisted for nineteen days.

Temperatures are largely controlled by maritime air from the Pacific Ocean. Long periods of extremely hot or severely cold weather rarely occur. High temperatures of 95 degrees or higher occur on the average, only three days per year. Low temperatures of 20 degrees or lower rarely occur, averaging only five days annually. The temperature has dipped to 32 degrees as late as

[1]Climatic Summary of Eugene taken from the Annual Local Climatological Data of Eugene Oregon, 1994. Provided by the National Climatic Data Center, Asheville, North Carolina.

June 13 and as early as September 24, but the average dates of their last occurrence in spring and first occurrence in fall are April 24 and October 25.

The long growing season and mild temperatures are favorable for diversified agriculture and numerous crops that are commercially grown. Due to the high ground water level, irrigation is practical and widely used to water cannery crops, berries, and pastures. Table beets, green beans, sweet corn, carrots, and pumpkins are grown in large quantities, then processed at the many processing centers in the Willamette Valley. Peaches, pears, cherries, plums, berries, and rhubarb are canned, with cherries and pears being the most numerous. Other agricultural products are apples, prunes, peppermint, spearmint, tomatoes, and cucumbers. Non-irrigated ranches and farms produce large amounts of hay, grain, grass seed, livestock, tree fruits, and nuts.

Station History

Eugene's weather records date back to October 1, 1890. The first records were kept by a cooperative station, maintained by the geography department at the University of Oregon, located just a few blocks southeast of downtown Eugene. Temperature, precipitation, wind direction, and snowfall were observed. At the same time, a river and rainfall station began keeping weather records. Elements observed were temperature, wind direction, snow depth, and precipitation. Observations at both locations were not continuous, with frequent gaps in the data occurring during the summer months.

The cooperative station maintained weather records at the campus until April 1912. Between 1912 and 1919, the station moved to several locations around the campus. The first move took the observation station to 533 East 10th Street, continuing there until August 13, 1915. The cooperative station transferred to Kincaid Park on August 13, 1915 and remained at Kincaid Park until September 1917. From October 1917 until November 1919, the cooperative station was located at 774 Mill Race Drive, which is on the north side of the campus. In December 1919, the cooperative station and the river and rainfall station were combined and relocated to 477 Third Avenue East.

On September 11, 1928, the United States Weather Bureau opened a second-order weather station at the Eugene airpark, located in southwestern Eugene near the current location of the Lane County Fairgrounds. This second-order station operated only during the day to assist airport operations. Starting in 1931, a staff took hourly observations 24 hours per day. Records at the cooperative station continued until its closure in 1945.

The United States Weather Bureau established a first-order weather station on November 22, 1937. The staff observed and recorded weather observations 24 hours per day. One of the primary reasons of opening a new weather station in Eugene was due to the increased air traffic between San Francisco and Seattle. Many smaller aircraft needed to land and refuel between the two cities. Eugene, like Medford and Salem, became stopping points for aircraft pilots. These new weather stations began to supply weather information to pilots; hence, pilot weather briefing became a significant operation. Old weather equipment was replaced and other equipment, such as anemometers and barometers were added. In addition to pilot weather briefing and data collection, the new weather office issued weather forecasts and storm warnings for Lane, Douglas, and Coos Counties.

With the completion of the new Mahlon Sweet Field, located about eight miles northwest of the airpark, weather records and observing equipment were moved to the new airport on December 21, 1942. In 1987, the National Weather Service (NWS), formerly known as the United States Weather Bureau, moved upstairs from the ground level to occupy the old control tower, which was vacated by the FAA when a new control tower was completed.

Full operations continued at Mahlon Sweet Field until September 1995. On September 1, 1995, ASOS, the Automated Surface Observing Station, became fully operational. Since that time, official weather observations have been automatically generated by ASOS with only a few augmentations. In March 1996, the rain collection procedures at Eugene changed. A tipping bucket was added to the ASOS. Unfortunately, the tipping bucket rainfall measurements were not representative of actual

rainfall. The problem was not corrected until late December 1996. However, a back-up universal rain gage ensured that reliable, more accurate rainfall measurements were collected during this time. Supplemental rainfall data is on page 71 and should be used as more representative of the actual rainfall between March and December 1996. Currently, the ASOS rainfall collection is reliable. In accordance with a nationwide modernization plan, weather forecasting and warning responsibilities of the Eugene NWS office were transferred to NWS office in Portland, Oregon on September 1, 1995.

The chart below provides details on the movement of the weather observing station and the physical characteristics of the equipment. The illustration on page 4 shows the topography of the southern Willamette Valley, including the various locations of the observing sites between 1890 and 1996. The intervals marked 500, 1000, and 1500 are the approximate elevation contours.

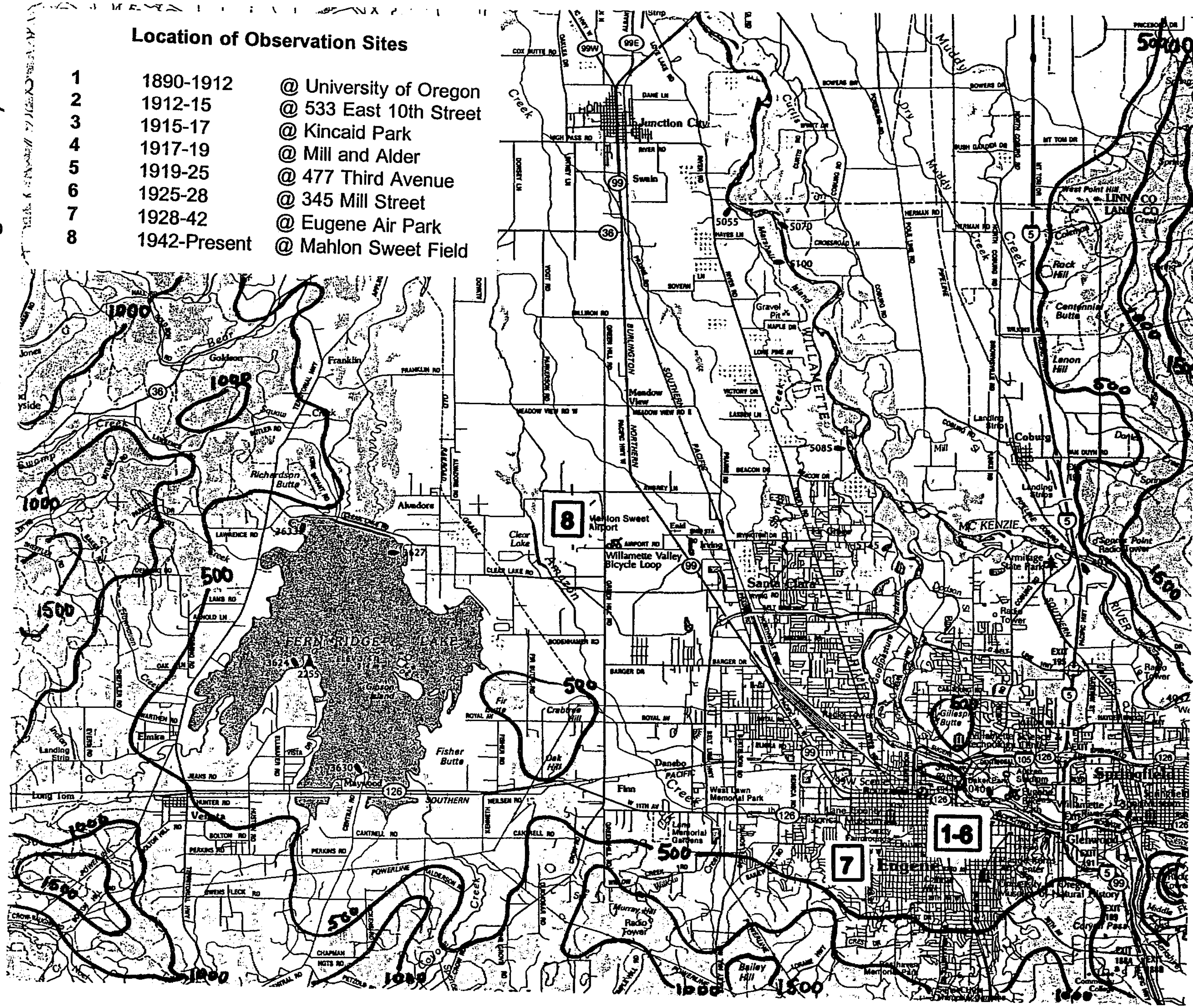
Acknowledgments: I would like to thank the many dedicated persons of the National Weather Service and University of Oregon, and cooperative observers who diligently took observations and maintained climate records over the past 100 years. Special thanks to Traci Hodgson, who contributed much time in the proofing process. I dedicate this climate study to Rick Wagner, Carolyn Gurney, Daryl Jameson, Dave Parameter, Janet Trimbur, David Zaff, Carl Bolon, Jonathan Slemmer, and Pamela Lambert, who, with myself, manned the Eugene weather office in its final year of operation, 1995-1996.

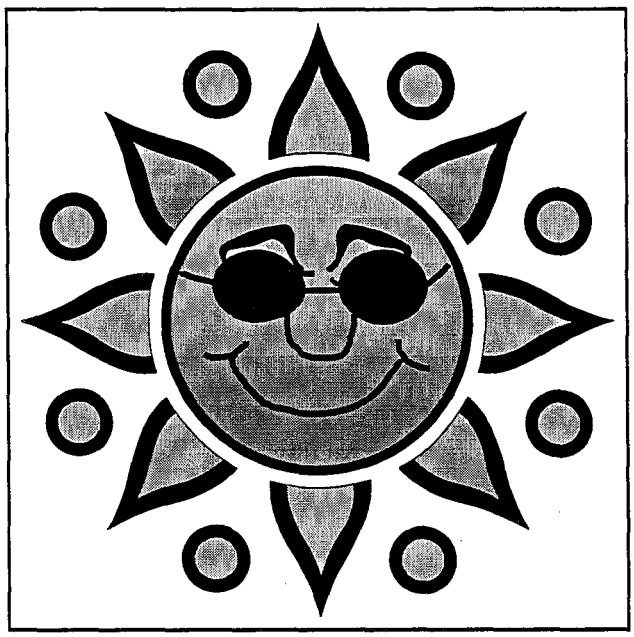
Eugene Observing Station Location and History

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE SEA LEVEL GROUND TEMPERATURE SITE	ELEVATION ABOVE GROUND WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAGE	WEIGHING RAIN GAGE	8 INCH RAIN GAGE	HYGROTHERMOMETER	AUTOMATIC OBSERVING EQUIPMENT *	REMARKS
COOPERATIVE																
Near Villard Hall U of O Campus	10/1890	3/1912	NA	44°03'	123°05'	449		4					4			Several instrument sites in vicinity during period.
533 East 10th Street	4/1912	8/13/15	0.5 mi. NW	44°03'	123°05'	449		4					4			
Kincaid Park	8/13/15	9/1917	1.5 mi.ESE	44°03'	123°03'	550		4					4			
744 Mill Race Drive (Mill and Alder)	10/1917	11/1919	1.5 mi.WSW	44°03'	123°05'	450		4					4			
477 Third Avenue East	12/1919	1/1/25	0.75 mi. NNW	44°03'	123°05'	450		4					4			
345 Mill Street	1/1/25	6/30/45	1 block SW	44°03'	123°05'	450		4					4			
AIRPORT																
Administration Building Eugene Air Park	9/11/28	12/21/42	2 mi. SW	44°02'	123°07'	429	60	4	4				4			Instrumental equipment gradually installed in 1938.
UAL Building Mahlon Sweet Field	12/21/42	7/15/53	7.8 mi. NW	44°07'	123°13'	364	34	4	4			4	4			
Administration Building Mahlon Sweet Field	7/15/53	Present	0.5 mi.NNE	44°07'	123°13'	361 d359	53 a20 f31	4 b4	4 b4	NA	NA h14	3 b3 e5 i16	3 b3 j14	NA c4 g5	NA	a - Moved to field 6/20/62. b - Minor move 12/6/62. c - Commissioned 2000' NW of thermometer site 7/31/63. d - Effective 7/31/63. e - Minor move 12/10/68. f - Raised 4/22/85. g - Minor adjustment and type change 8/28/85. h - Installed on roof 02/18/88. i - Moved to roof 02/18/88. j - Moved to roof 08/15/88.

* Type
M = AMOS
T = AUTOB
S = ASOS
W = AWOS

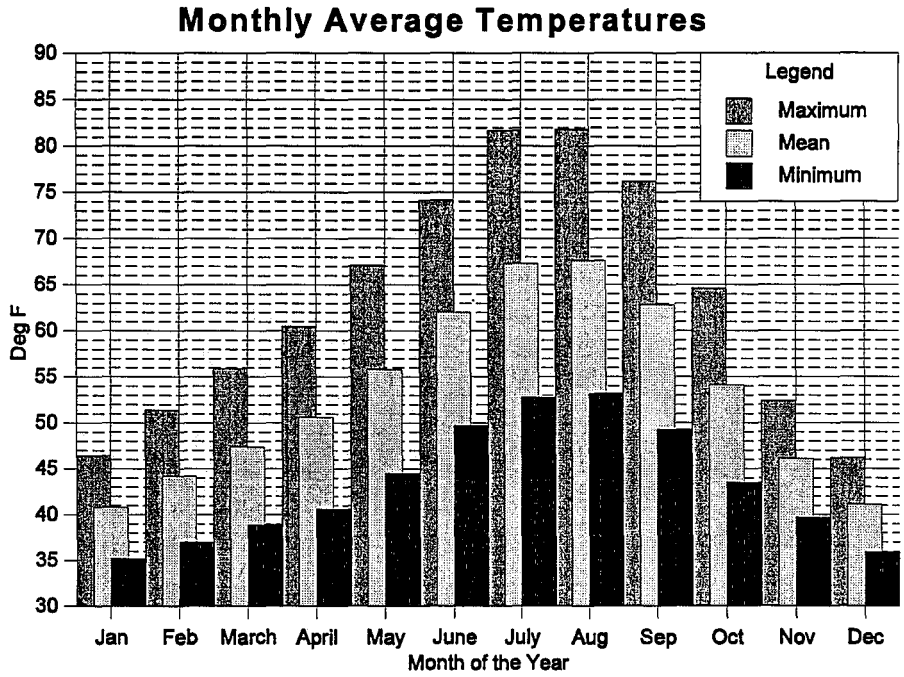
Map of the Southern Willamette Valley and Eugene
(including the location of the various Eugene observing locations)

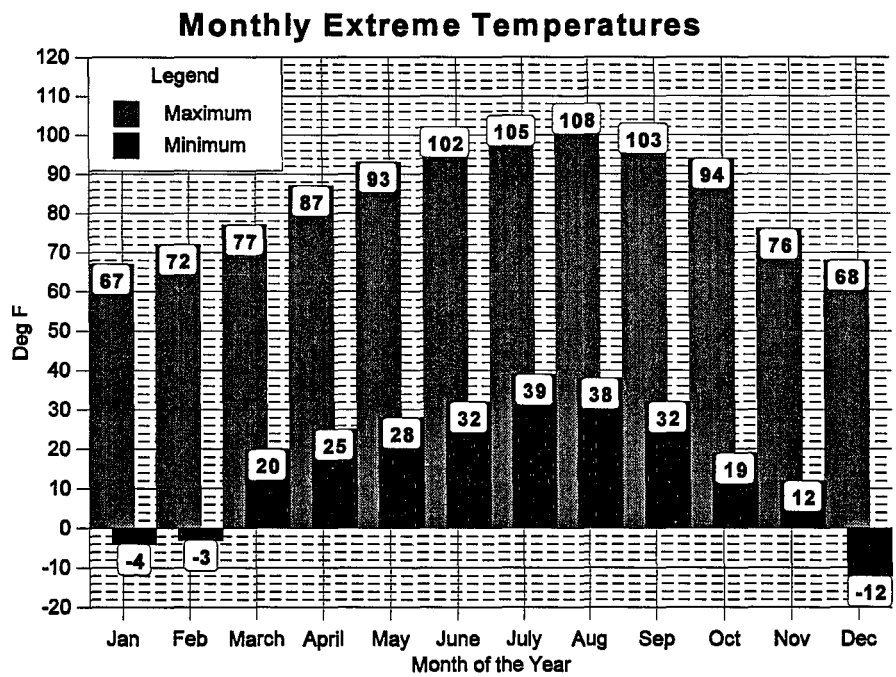




Temperature Records and Data

MONTHLY AVERAGE AND EXTREME TEMPERATURES





JANUARY DAILY TEMPERATURE DATA
(1931-1997)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	22	1979	61	1940	7	1979	52	1997	45	35	40	25	0
2	28	1952	57	1996	8	1950	49	1953	45	35	40	25	0
3	27	1959	60	1994	9	1950	51	1994	45	35	40	25	0
4	26	1959	63	1969	14	1949	51	1969	45	35	40	25	0
5	28	1991	62	1969	16	1949	53	1969	45	35	40	25	0
6	24	1982	62	1969	12	1982	52	1969	45	35	40	25	0
7	24	1937	60	1962	9	1937	51	1990	45	35	40	25	0
8	27	1937	62	1933	6	1937	48	1990	45	35	40	25	0
9	29	1949	63	1990	10	1974	48	1995	46	35	40	25	0
10	30	1993	58	1945	8	1993	45	1991	46	35	40	25	0
11	26	1963	59	1931	11	1949	47	1959	46	35	40	25	0
12	27	1963	59	1983	10	1937	51	1991	46	35	40	25	0
13	32	1993	62	1968	10	1949	51	1975	46	35	40	25	0
14	33	1950	60	1974	17	1949	51	1975	46	35	41	24	0
15	32	1993	64	1958	21	1947	55	1974	46	35	41	24	0
16	34	1997	62	1938	19	1984	50	1975	46	35	41	24	0
17	26	1950	67	1975	16	1984	52	1975	46	35	41	24	0
18	28	1950	66	1986	13	1943	50	1986	46	35	41	24	0
19	27	1937	61	1934	18	1935	49	1975	47	35	41	24	0
20	25	1962	64	1968	12	1962	50	1972	47	35	41	24	0
21	27	1962	58	1970	13	1962	50	1970	47	35	41	24	0
22	29	1962	69	1931	6	1962	50	1970	47	35	41	24	0
23	30	1969	60	1942	8	1962	49	1975	47	35	41	24	0
24	26	1969	65	1935	9	1949	54	1975	47	35	41	24	0
25	24	1969	64	1935	11	1949	49	1964	47	36	42	23	0
26	24	1957	64	1935	6	1957	47	1931	48	36	42	23	0
27	27	1957	69	1931	-4	1957	51	1967	48	36	42	23	0
28	28	1980	63	1976	1	1969	51	1967	48	36	42	23	0
29	28	1963	64	1992	2	1957	51	1995	48	36	42	23	0
30	31	1963	65	1995	0	1950	54	1995	48	36	42	23	0
31	22	1950	66	1934	-3	1950	57	1995	49	36	42	23	0

	JANUARY EXTREMES (most recent occurrence)								Normal Monthly Average[2]				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	22	1979	67	1975	-4	1957	57	1995	46.4	35.2	40.8	750	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

FEBRUARY DAILY TEMPERATURE DATA
(1931-1997)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	23	1950	63	1961	5	1950	47	1952	49	36	42	23	0
2	20	1950	69	1962	-2	1950	50	1968	49	36	43	22	0
3	17	1989	61	1963	-3	1950	54	1963	49	36	43	22	0
4	23	1989	60	1961	7	1989	48	1991	49	36	43	22	0
5	30	1989	61	1961	4	1989	48	1961	50	36	43	22	0
6	32	1989	66	1963	8	1989	51	1996	50	36	43	22	0
7	33	1989	61	1958	7	1989	54	1996	50	36	43	22	0
8	37	1989	66	1996	8	1989	53	1996	50	37	43	22	0
9	29	1933	68	1951	11	1933	49	1961	50	37	44	21	0
10	37	1936	69	1952	15	1983	47	1961	51	37	44	21	0
11	35	1936	63	1983	24	1948	46	1979	51	37	44	21	0
12	37	1986	66	1981	20	1948	48	1984	51	37	44	21	0
13	30	1995	65	1971	23	1949	50	1991	51	37	44	21	0
14	34	1990	64	1985	20	1990	51	1991	51	37	44	21	0
15	31	1936	66	1977	18	1936	48	1982	52	37	44	21	0
16	34	1956	64	1977	16	1956	50	1982	52	37	44	21	0
17	26	1936	65	1977	19	1936	48	1995	52	37	45	20	0
18	32	1936	68	1995	20	1936	52	1995	52	37	45	20	0
19	32	1993	72	1995	22	1942	54	1995	52	37	45	20	0
20	41	1971	67	1995	23	1955	52	1968	52	37	45	20	0
21	32	1957	64	1958	24	1975	51	1968	53	37	45	20	0
22	35	1957	64	1976	27	1942	52	1986	53	38	45	20	0
23	43	1982	71	1995	26	1951	53	1986	53	38	45	20	0
24	38	1962	67	1992	25	1962	50	1950	53	38	45	20	0
25	39	1962	68	1968	23	1962	49	1986	53	38	45	20	0
26	39	1971	78	1932	18	1962	50	1980	53	38	45	20	0
27	37	1971	68	1968	19	1962	53	1972	53	38	46	19	0
28	39	1971	68	1968	21	1960	51	1975	54	38	46	19	0
29	45	1960	71	1968	20	1960	46	1980	54	38	46	19	0
	FEBRUARY EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	17	1989	72	1995	-3	1950	54	1996	51.4	37.0	44.2	582	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

MARCH DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	36	1971	66	1994	21	1971	50	1975	54	38	46	19	0
2	42	1962	64	1938	24	1985	53	1934	54	38	46	19	0
3	38	1951	63	1992	26	1960	51	1950	54	38	46	19	0
4	41	1971	66	1968	26	1948	50	1950	54	38	46	19	0
5	37	1956	70	1986	23	1956	52	1979	54	38	46	19	0
6	41	1951	69	1979	20	1956	51	1986	55	38	46	19	0
7	41	1958	69	1941	25	1985	46	1986	55	38	47	18	0
8	40	1935	74	1953	26	1985	49	1944	55	39	47	18	0
9	41	1951	72	1946	22	1951	51	1983	55	39	47	18	0
10	40	1954	69	1934	27	1936	50	1996	55	39	47	18	0
11	44	1991	71	1938	26	1985	50	1972	55	39	47	18	0
12	42	1967	72	1934	25	1956	53	1972	55	39	47	18	0
13	44	1950	72	1934	26	1944	49	1966	55	39	47	18	0
14	45	1982	70	1940	24	1941	47	1993	56	39	47	18	0
15	45	1980	73	1974	27	1985	54	1974	56	39	47	18	0
16	46	1966	73	1947	25	1955	50	1974	56	39	47	18	0
17	45	1945	77	1978	27	1971	49	1993	56	39	47	18	0
18	45	1948	74	1939	27	1971	52	1932	56	39	48	17	0
19	44	1973	75	1978	27	1965	49	1984	56	39	48	17	0
20	40	1935	70	1978	25	1955	47	1988	56	39	48	17	0
21	43	1975	72	1934	26	1982	49	1931	57	39	48	17	0
22	43	1994	72	1939	28	1982	48	1967	57	39	48	17	0
23	42	1936	74	1940	28	1951	48	1971	57	39	48	17	0
24	40	1936	69	1974	25	1942	48	1940	57	39	48	17	0
25	44	1935	69	1978	27	1936	51	1974	57	39	48	17	0
26	43	1972	71	1941	27	1996	51	1974	57	39	48	17	0
27	45	1985	75	1969	26	1935	50	1974	57	39	48	17	0
28	40	1936	73	1969	28	1975	54	1934	58	40	49	16	0
29	40	1936	72	1995	28	1954	51	1934	58	40	49	16	0
30	45	1936	77	1995	24	1936	50	1969	58	40	49	16	0
31	42	1936	73	1939	26	1936	53	1931	58	40	49	16	0
	MARCH EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	36	1971	77	1995	20	1956	54	1974	55.9	38.9	47.4	546	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

APRIL DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	42	1936	76	1987	25	1936	52	1959	58	40	49	16	0
2	47	1975	77	1944	27	1953	51	1961	58	40	49	16	0
3	42	1936	75	1995	30	1970	49	1954	58	40	49	16	0
4	44	1982	80	1949	30	1950	50	1991	59	40	49	16	0
5	44	1937	75	1966	30	1956	51	1962	59	40	49	16	0
6	48	1991	78	1989	28	1975	49	1989	59	40	49	16	0
7	45	1975	80	1934	28	1970	51	1960	59	40	49	16	0
8	48	1995	75	1959	29	1953	49	1996	59	40	50	15	0
9	46	1983	79	1989	29	1982	51	1992	59	40	50	15	0
10	49	1991	77	1936	31	1972	49	1992	59	40	50	15	0
11	49	1981	83	1951	32	1975	50	1985	60	40	50	15	0
12	48	1972	82	1951	28	1983	50	1992	60	40	50	15	0
13	47	1955	79	1947	27	1983	50	1988	60	40	50	15	0
14	46	1982	81	1947	28	1977	50	1989	60	40	50	15	0
15	43	1963	81	1947	29	1955	50	1948	60	40	50	15	0
16	43	1967	76	1954	30	1982	54	1992	60	41	51	14	0
17	47	1963	80	1939	29	1977	52	1938	61	41	51	14	0
18	46	1963	84	1934	29	1982	54	1989	61	41	51	14	0
19	45	1955	85	1934	28	1972	56	1989	61	41	51	14	0
20	45	1963	87	1934	30	1963	52	1958	61	41	51	14	0
21	47	1960	77	1986	31	1951	48	1994	61	41	51	14	0
22	51	1964	81	1982	27	1972	52	1981	62	41	51	14	0
23	50	1961	75	1977	30	1960	50	1996	62	41	52	13	0
24	48	1963	77	1995	31	1986	48	1965	62	41	52	13	0
25	44	1955	80	1992	31	1985	49	1978	62	41	52	13	0
26	50	1955	86	1947	30	1943	49	1992	63	41	52	13	0
27	47	1963	81	1931	30	1948	56	1992	63	42	52	13	0
28	48	1972	83	1968	30	1967	54	1992	63	42	52	13	0
29	50	1964	86	1957	28	1954	53	1992	63	42	53	12	0
30	50	1964	79	1931	29	1972	52	1941	63	42	53	12	0
	APRIL EXTREMES (most recent occurrence)								**Normal Monthly Average**[2]				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	42	1936	87	1936	25	1936	56	1992	60.5	40.6	50.6	432	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

MAY DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	51	1963	88	1947	28	1954	54	1931	64	42	53	12	0
2	50	1963	87	1946	31	1952	53	1945	64	42	53	12	0
3	51	1996	83	1944	31	1964	52	1936	64	42	53	12	0
4	50	1950	83	1992	31	1996	59	1989	65	43	53	12	0
5	48	1964	86	1953	31	1978	59	1989	65	43	54	11	0
6	51	1962	85	1992	31	1984	58	1989	65	43	54	11	0
7	51	1941	90	1987	34	1980	55	1987	65	43	54	11	0
8	51	1983	93	1987	32	1996	59	1987	65	43	54	11	0
9	52	1983	87	1987	32	1948	53	1987	66	43	54	11	0
10	52	1986	88	1931	33	1979	53	1960	66	43	55	10	0
11	55	1956	88	1931	29	1985	53	1941	66	44	55	10	0
12	57	1991	86	1949	30	1985	55	1987	66	44	55	10	0
13	52	1955	92	1939	34	1958	54	1996	66	44	55	10	0
14	52	1955	92	1939	34	1958	59	1987	67	44	55	10	0
15	52	1966	85	1958	33	1952	53	1972	67	44	56	9	0
16	56	1974	86	1958	32	1980	53	1972	67	44	56	9	0
17	49	1991	87	1956	33	1976	54	1956	67	45	56	9	0
18	52	1991	85	1963	34	1976	54	1958	68	45	56	9	0
19	53	1948	86	1963	33	1982	54	1968	68	45	56	9	0
20	53	1936	91	1963	33	1976	54	1963	68	45	57	8	0
21	55	1996	87	1988	34	1978	55	1942	68	45	57	8	0
22	56	1984	87	1969	33	1977	55	1958	68	45	57	8	0
23	52	1989	91	1947	34	1978	58	1985	69	46	57	8	0
24	57	1962	88	1992	33	1977	55	1985	69	46	57	8	0
25	57	1962	89	1947	34	1975	56	1986	69	46	58	7	0
26	57	1980	87	1950	33	1973	58	1986	69	46	58	7	0
27	57	1977	87	1952	34	1966	56	1988	70	46	58	7	0
28	59	1985	92	1983	35	1982	56	1983	70	47	58	7	0
29	53	1932	89	1931	32	1979	57	1969	70	47	58	7	0
30	53	1976	92	1931	35	1979	57	1993	70	47	59	6	0
31	52	1971	90	1986	32	1955	60	1986	70	47	59	6	0

	MAY EXTREMES (most recent occurrence)								Normal Monthly Average[2]				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	48	1964	93	1987	28	1954	60	1986	67.1	44.5	55.8	285	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

JUNE DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	51	1971	97	1970	35	1973	60	1968	71	47	59	6	0
2	56	1943	95	1970	34	1977	56	1961	71	48	59	6	0
3	58	1977	93	1950	35	1976	57	1986	71	48	59	6	0
4	58	1963	89	1935	35	1980	58	1975	71	48	60	5	0
5	56	1984	93	1978	36	1976	57	1978	71	48	60	5	0
6	58	1954	93	1938	39	1954	56	1977	72	48	60	5	0
7	55	1950	87	1948	35	1979	58	1948	72	48	60	5	0
8	55	1954	93	1955	38	1979	64	1948	72	49	61	5	1
9	58	1972	88	1955	38	1976	58	1969	72	49	61	5	1
10	60	1954	90	1940	39	1984	57	1969	73	49	61	5	1
11	58	1950	94	1940	35	1956	58	1969	73	49	61	5	1
12	56	1982	89	1974	37	1952	58	1941	73	49	61	5	1
13	57	1980	91	1986	32	1976	59	1969	73	49	61	5	1
14	55	1952	89	1988	35	1976	57	1993	74	50	62	4	1
15	61	1991	96	1966	36	1979	60	1961	74	50	62	4	1
16	60	1979	95	1961	36	1955	62	1961	74	50	62	4	1
17	60	1975	100	1961	36	1996	59	1943	74	50	62	4	1
18	58	1995	97	1982	37	1954	59	1974	75	50	62	4	1
19	57	1991	93	1946	37	1942	59	1959	75	50	63	3	1
20	58	1991	96	1970	40	1956	57	1937	75	50	63	3	1
21	59	1991	96	1992	38	1983	61	1970	76	51	63	3	1
22	62	1943	102	1992	39	1979	61	1958	76	51	63	3	1
23	60	1975	97	1992	39	1985	58	1990	76	51	64	3	2
24	55	1975	95	1940	37	1985	58	1992	77	51	64	3	2
25	59	1975	96	1987	39	1985	63	1973	77	51	64	3	2
26	59	1975	95	1987	37	1976	62	1973	77	51	64	3	2
27	62	1970	92	1951	37	1965	63	1966	77	51	64	3	2
28	60	1982	97	1951	37	1971	60	1984	78	51	65	2	2
29	60	1963	100	1951	39	1971	60	1943	78	52	65	2	2
30	62	1983	96	1951	40	1949	60	1942	78	52	65	2	2
	JUNE EXTREMES (most recent occurrence)								**Normal Monthly Average**[2]				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	51	1971	102	1992	32	1976	64	1948	74.2	49.7	62.0	121	31

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

JULY DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	62	1955	98	1967	39	1973	63	1942	79	52	65	2	2
2	63	1966	98	1942	39	1954	62	1942	79	52	66	2	3
3	60	1980	99	1970	39	1955	62	1970	79	52	66	2	3
4	62	1980	95	1972	40	1932	58	1970	80	52	66	2	3
5	65	1955	97	1960	39	1986	57	1958	80	52	66	2	3
6	61	1981	100	1960	39	1935	58	1958	80	52	66	2	3
7	62	1963	98	1945	42	1981	58	1976	80	52	66	2	3
8	65	1983	96	1956	41	1981	59	1976	81	52	67	1	3
9	65	1974	96	1952	40	1964	59	1986	81	52	67	1	3
10	66	1936	95	1945	42	1933	58	1987	81	52	67	1	3
11	67	1956	103	1961	40	1981	61	1990	81	53	67	1	3
12	68	1977	105	1961	43	1971	65	1990	81	53	67	1	3
13	69	1982	99	1935	43	1977	61	1972	82	53	67	1	3
14	69	1983	102	1941	45	1979	64	1935	82	53	67	1	3
15	66	1955	102	1941	42	1982	63	1938	82	53	68	1	4
16	65	1987	102	1979	40	1956	63	1941	82	53	68	1	4
17	64	1987	101	1979	43	1986	66	1941	82	53	68	1	4
18	58	1987	100	1956	43	1962	65	1941	82	53	68	1	4
19	69	1949	102	1988	43	1984	64	1971	83	53	68	1	4
20	63	1954	105	1946	45	1953	63	1971	83	53	68	1	4
21	68	1934	104	1938	44	1976	63	1938	83	53	68	1	4
22	66	1993	100	1978	43	1982	64	1994	83	53	68	1	4
23	69	1949	98	1996	45	1957	64	1991	83	53	68	1	4
24	63	1955	99	1996	43	1973	60	1969	83	53	68	1	4
25	68	1943	101	1978	44	1957	61	1994	83	53	68	1	4
26	62	1947	101	1988	42	1953	63	1960	83	53	68	1	4
27	68	1947	104	1958	44	1953	61	1996	83	53	68	1	4
28	67	1993	99	1960	44	1959	63	1958	83	54	68	1	4
29	67	1975	96	1990	42	1956	62	1974	83	54	68	1	4
30	67	1982	98	1974	42	1956	62	1974	83	54	68	1	4
31	70	1964	99	1974	42	1944	59	1974	83	54	68	1	4
	JULY EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	58	1987	105	1961	39	1986	66	1941	81.7	52.8	67.3	38	109

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

AUGUST DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	63	1989	97	1974	43	1980	61	1965	83	54	68	1	4
2	65	1934	99	1939	43	1970	60	1986	83	54	68	1	4
3	68	1962	100	1993	43	1996	59	1947	83	54	69	0	4
4	68	1976	100	1990	46	1984	62	1961	83	54	69	0	4
5	71	1976	98	1945	42	1946	59	1976	83	54	69	0	4
6	69	1976	101	1972	43	1950	59	1943	83	54	68	1	4
7	65	1962	106	1972	44	1946	60	1937	83	54	68	1	4
8	70	1962	104	1978	43	1979	62	1990	83	54	68	1	4
9	67	1982	108	1981	44	1954	62	1963	83	54	68	1	4
10	69	1932	106	1981	45	1956	61	1963	82	54	68	1	4
11	69	1969	104	1992	43	1932	61	1990	82	54	68	1	4
12	68	1965	102	1977	45	1982	66	1992	82	54	68	1	4
13	62	1979	98	1967	41	1949	62	1992	82	53	68	1	4
14	68	1993	100	1942	39	1955	59	1983	82	53	68	1	4
15	67	1976	99	1967	41	1955	61	1990	82	53	68	1	4
16	66	1973	101	1977	38	1935	60	1967	82	53	68	1	4
17	66	1944	97	1940	40	1935	62	1933	82	53	68	1	4
18	63	1985	98	1950	39	1996	65	1941	82	53	67	1	3
19	66	1981	100	1939	42	1996	64	1941	82	53	67	1	3
20	65	1993	99	1951	42	1973	60	1989	81	53	67	1	3
21	65	1978	98	1950	39	1985	61	1990	81	53	67	1	3
22	65	1947	96	1988	38	1955	63	1990	81	53	67	1	3
23	61	1960	96	1988	42	1938	60	1976	81	53	67	1	3
24	60	1968	96	1982	42	1951	61	1985	81	53	67	1	3
25	64	1953	95	1967	41	1980	60	1965	81	53	67	1	3
26	67	1966	94	1984	40	1980	61	1968	81	52	67	1	3
27	64	1991	98	1972	40	1966	66	1935	81	52	67	1	3
28	63	1953	97	1931	41	1985	62	1935	81	52	67	1	3
29	65	1975	100	1944	38	1969	61	1990	81	52	67	1	3
30	63	1955	96	1987	42	1966	62	1974	80	52	66	2	3
31	63	1960	102	1987	42	1981	61	1961	80	52	66	2	3
	AUGUST EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	60	1968	108	1981	38	1969	66	1992	81.8	53.2	67.6	30	110

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

SEPTEMBER DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	65	1971	98	1988	39	1973	62	1974	80	52	66	2	3
2	67	1971	103	1988	40	1944	60	1996	80	52	66	2	3
3	65	1970	96	1949	39	1932	60	1977	80	51	66	2	3
4	59	1978	97	1955	40	1980	62	1977	79	51	65	2	2
5	61	1978	101	1944	42	1969	59	1939	79	51	65	2	2
6	64	1947	95	1958	38	1996	59	1970	79	51	65	2	2
7	65	1970	98	1958	39	1992	61	1963	79	51	65	2	2
8	60	1952	97	1948	40	1961	62	1974	78	51	65	2	2
9	62	1985	97	1948	39	1964	61	1963	78	51	64	3	2
10	62	1987	98	1948	38	1964	62	1960	78	50	64	3	2
11	61	1987	96	1975	36	1936	58	1990	78	50	64	3	2
12	64	1936	96	1975	40	1984	59	1937	78	50	64	3	2
13	59	1980	95	1957	37	1989	57	1975	77	50	64	3	2
14	62	1977	95	1967	33	1970	59	1975	77	50	63	4	2
15	60	1959	96	1981	36	1969	59	1995	77	49	63	4	2
16	60	1946	91	1994	35	1936	59	1995	76	49	63	4	2
17	61	1985	93	1991	34	1965	58	1976	76	49	63	4	2
18	62	1977	91	1991	34	1988	57	1962	76	49	62	4	1
19	61	1968	93	1974	35	1947	61	1984	75	49	62	4	1
20	62	1959	94	1974	35	1947	61	1939	75	49	62	4	1
21	61	1945	95	1994	34	1955	58	1979	75	48	62	4	1
22	60	1948	94	1957	34	1989	56	1973	74	48	61	5	1
23	52	1948	96	1943	35	1993	56	1992	74	48	61	5	1
24	54	1933	96	1974	35	1990	56	1950	74	48	61	5	1
25	62	1986	93	1991	33	1934	58	1979	73	48	60	6	1
26	53	1948	93	1949	33	1961	57	1956	73	47	60	6	1
27	59	1977	92	1967	32	1972	58	1995	73	47	60	6	1
28	55	1971	87	1935	32	1945	57	1976	72	47	60	6	1
29	53	1971	87	1993	33	1954	61	1966	72	47	59	7	1
30	57	1936	88	1987	32	1983	58	1951	71	46	59	7	1
	SEPTEMBER EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	52	1948	103	1988	32	1983	62	1977	76.2	49.3	62.8	116	50

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

OCTOBER DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	59	1953	92	1987	30	1954	57	1951	71	46	58	7	0
2	54	1946	94	1980	32	1954	58	1947	71	46	58	7	0
3	54	1950	86	1932	29	1973	58	1975	70	46	58	7	0
4	53	1957	86	1964	33	1973	58	1996	70	46	58	7	0
5	57	1958	92	1980	33	1972	55	1975	69	45	57	8	0
6	52	1949	86	1987	33	1974	58	1988	69	45	57	8	0
7	54	1962	87	1976	30	1990	56	1950	68	45	57	8	0
8	55	1981	83	1943	29	1985	55	1964	68	45	56	9	0
9	54	1969	88	1979	26	1985	54	1953	68	44	56	9	0
10	48	1972	91	1934	32	1960	58	1938	67	44	56	9	0
11	52	1955	79	1964	32	1994	55	1959	67	44	56	9	0
12	50	1954	77	1952	32	1969	55	1993	66	44	55	10	0
13	53	1954	79	1936	30	1970	55	1932	66	44	55	10	0
14	50	1966	83	1970	29	1969	56	1988	66	44	55	10	0
15	49	1984	88	1991	32	1989	59	1988	65	43	54	11	0
16	48	1984	81	1989	26	1946	54	1978	65	43	54	11	0
17	53	1971	83	1940	26	1971	55	1937	64	43	54	11	0
18	46	1984	82	1940	27	1949	56	1947	64	43	53	12	0
19	51	1945	86	1940	25	1949	57	1940	63	43	53	12	0
20	49	1981	74	1991	24	1949	53	1973	63	43	53	12	0
21	50	1984	79	1944	26	1949	55	1963	62	43	53	12	0
22	49	1995	78	1937	25	1980	58	1959	62	42	52	13	0
23	51	1984	78	1992	28	1935	58	1959	62	42	52	13	0
24	50	1956	74	1994	27	1935	55	1937	61	42	52	13	0
25	49	1969	78	1944	28	1978	55	1986	61	42	51	14	0
26	50	1996	79	1944	26	1954	57	1994	60	42	51	14	0
27	47	1971	73	1944	26	1948	54	1937	60	42	51	14	0
28	43	1936	75	1987	19	1971	55	1939	59	42	51	14	0
29	46	1971	67	1966	22	1971	52	1968	59	42	51	14	0
30	36	1935	74	1988	27	1991	55	1966	59	42	50	15	0
31	37	1935	75	1949	23	1995	54	1987	58	41	50	15	0
	OCTOBER EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	36	1935	94	1980	19	1971	59	1988	64.6	43.5	54.1	338	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

NOVEMBER DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	36	1935	73	1931	22	1935	54	1992	58	41	50	15	0
2	36	1935	70	1970	16	1935	55	1975	57	41	49	16	0
3	41	1935	76	1975	15	1935	55	1965	57	41	49	16	0
4	39	1935	71	1975	15	1935	52	1988	56	41	49	16	0
5	40	1973	75	1934	20	1935	56	1958	56	41	48	17	0
6	42	1935	69	1939	22	1971	54	1974	56	41	48	17	0
7	44	1993	69	1978	24	1935	53	1991	55	41	48	17	0
8	37	1993	65	1941	24	1936	55	1968	55	41	48	17	0
9	41	1985	67	1955	24	1982	55	1990	54	41	48	17	0
10	42	1985	67	1990	23	1982	53	1989	54	40	47	18	0
11	40	1985	70	1974	20	1978	51	1973	54	40	47	18	0
12	37	1955	69	1974	17	1978	57	1996	53	40	47	18	0
13	32	1955	68	1995	12	1978	52	1941	53	40	47	18	0
14	32	1955	64	1967	18	1955	51	1966	53	40	46	19	0
15	25	1955	63	1965	14	1955	53	1976	52	40	46	19	0
16	24	1955	71	1976	21	1955	57	1976	52	40	46	19	0
17	39	1971	70	1932	18	1955	52	1976	52	40	46	19	0
18	40	1935	63	1965	24	1977	50	1932	51	39	45	20	0
19	30	1977	62	1968	25	1944	48	1966	51	39	45	20	0
20	33	1977	69	1937	24	1977	52	1958	51	39	45	20	0
21	34	1977	63	1933	24	1970	48	1958	50	39	45	20	0
22	34	1970	64	1942	21	1931	50	1995	50	39	45	20	0
23	27	1985	64	1959	18	1985	51	1995	50	39	44	21	0
24	25	1985	68	1949	15	1993	53	1995	50	39	44	21	0
25	35	1961	69	1947	16	1993	51	1977	49	39	44	21	0
26	34	1978	64	1933	15	1952	48	1949	49	38	44	21	0
27	38	1952	66	1955	17	1952	52	1996	49	38	44	21	0
28	35	1985	60	1995	15	1952	52	1995	49	38	43	22	0
29	26	1985	68	1941	16	1985	53	1995	48	38	43	22	0
30	29	1985	63	1939	16	1985	53	1966	48	38	43	22	0

	NOVEMBER EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	24	1965	76	1975	12	1978	57	1996	52.4	39.7	46.1	567	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

DECEMBER DAILY TEMPERATURE DATA
(1931-1996)

	RECORD MAXIMUM TEMPERATURES				RECORD MINIMUM TEMPERATURES				CLIMATIC NORMALS[1] (based on 1961-90 normals)				
Day	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
1	26	1985	64	1958	21	1985	52	1975	48	38	43	22	0
2	33	1969	67	1958	22	1985	52	1975	48	37	43	22	0
3	39	1988	65	1939	24	1976	53	1975	48	37	43	22	0
4	32	1972	66	1989	20	1990	54	1989	48	37	42	23	0
5	35	1972	60	1944	20	1972	48	1989	47	37	42	23	0
6	24	1972	61	1962	15	1972	48	1965	47	37	42	23	0
7	20	1972	67	1938	-6	1972	49	1938	47	37	42	23	0
8	13	1972	62	1939	-12	1972	51	1939	47	37	42	23	0
9	19	1972	62	1933	-5	1972	48	1990	47	36	42	23	0
10	16	1972	64	1993	-7	1972	50	1958	47	36	42	23	0
11	31	1972	62	1955	-5	1972	53	1955	47	36	41	24	0
12	29	1932	65	1952	6	1932	50	1966	46	36	41	24	0
13	28	1972	68	1994	11	1932	50	1977	46	36	41	24	0
14	26	1972	59	1962	6	1932	50	1977	46	36	41	24	0
15	32	1972	65	1941	10	1932	51	1939	46	36	41	24	0
16	28	1965	61	1974	12	1964	49	1973	46	36	41	24	0
17	23	1964	68	1979	10	1964	48	1994	46	36	41	24	0
18	32	1965	64	1931	19	1964	47	1979	46	36	41	24	0
19	29	1984	64	1940	18	1984	51	1972	46	36	41	24	0
20	17	1990	64	1994	8	1990	50	1972	46	35	41	24	0
21	16	1990	62	1955	6	1990	50	1972	46	35	41	24	0
22	20	1990	60	1950	4	1990	56	1933	46	35	40	25	0
23	22	1990	64	1950	10	1990	48	1964	45	35	40	25	0
24	21	1983	58	1980	9	1990	47	1964	45	35	40	25	0
25	29	1951	62	1980	15	1990	57	1980	45	35	40	25	0
26	32	1993	62	1933	18	1985	49	1967	45	35	40	25	0
27	33	1987	61	1994	18	1985	47	1967	45	35	40	25	0
28	31	1956	65	1937	19	1985	50	1945	45	35	40	25	0
29	26	1990	60	1950	12	1978	50	1939	45	35	40	25	0
30	29	1978	66	1980	10	1978	51	1995	45	35	40	25	0
31	26	1978	62	1996	10	1978	48	1996	45	35	40	25	0
	DECEMBER EXTREMES (most recent occurrence)								**Normal Monthly Average[2]**				
	MIN	Year	MAX	Year	MIN	Year	MAX	Year	MAX	MIN	Mean	HDD	CDD
	13	1972	68	1979	-12	1972	57	1980	46.2	35.9	41.1	741	0

[1]HDD are Heating Degree Days and CDD are Cooling Degree Days.

[2]HDD and CDD monthly average values are based on the actual occurrences rather than the total of daily normal values.

NUMBER OF DAYS PER MONTH WITH MAXIMUM TEMPERATURE...

Maximum Temperature of 90+ Deg

Month	AVG[1]	Most/Year	Least/Year
January	0	0 in 1997	0 in 1997
February	0	0 in 1997	0 in 1997
March	0	0 in 1996	0 in 1996
April	0	0 in 1996	0 in 1996
May	0.1	2 in 1987	0 in 1996
June	1.2	9 in 1970	0 in 1996
July	6.1	13 in 1990	0 in 1993
August	5.0	19 in 1967	0 in 1994
September	2.6	11 in 1974	0 in 1996
October	0.1	2 in 1980	0 in 1996
November	0	0 in 1996	0 in 1996
December	0	0 in 1996	0 in 1996
Year	15.1	31 in 1958	0 in 1954

Maximum Temperature of 32 Deg or Less

Month	AVG[1]	Most/Year	Least/Year
January	1.7	13 in 1930	0 in 1997
February	0.3	5 in 1989	0 in 1997
March	0	0 in 1996	0 in 1996
April	0	0 in 1996	0 in 1996
May	0	0 in 1996	0 in 1996
June	0	0 in 1996	0 in 1996
July	0	0 in 1996	0 in 1996
August	0	0 in 1996	0 in 1996
September	0	0 in 1996	0 in 1996
October	0	0 in 1996	0 in 1996
November	0.2	4 in 1985	0 in 1996
December	0.9	10 in 1972	0 in 1996
Year	3.1	15 in 1930	0 in 1994

NUMBER OF DAYS PER MONTH WITH MINIMUM TEMPERATURE...

Minimum Temperature of 32 Deg or Less

Month	AVG[1]	Most/Year	Least/Year
January	14.7	31 in 1949	5 in 1996
February	9.7	21 in 1936	4 in 1991
March	6.8	22 in 1954	0 in 1993
April	2.6	10 in 1982	0 in 1996
May	0.4	4 in 1952	0 in 1996
June	<0.1	1 in 1976	0 in 1996
July	0	0 in 1996	0 in 1996
August	0	0 in 1996	0 in 1996
September	0.1	1 in 1993	0 in 1996
October	2.0	9 in 1954	0 in 1993
November	7.4	22 in 1993	1 in 1988
December	11.5	25 in 1985	6 in 1991
Year	55.3	110 in 1985	16 in 1934

Minimum Temperature of 15 Deg or Less

Month	AVG[2]	Most/Year	Least/Year
January	–	9 in 1949	0 in 1997
February	–	7 in 1989	0 in 1997
March	–	0 in 1996	0 in 1996
April	–	0 in 1996	0 in 1996
May	–	0 in 1996	0 in 1996
June	–	0 in 1996	0 in 1996
July	–	0 in 1996	0 in 1996
August	–	0 in 1996	0 in 1996
September	–	0 in 1996	0 in 1996
October	–	0 in 1996	0 in 1996
November	–	2 in 1978	0 in 1996
December	–	9 in 1972	0 in 1996
Year	–	12 in 1924	0 in 1996

[1]Averages are the 1961-1990 Climatic Normals.

[2]Averages have not been calculated at this time.

CUMULATIVE FREQUENCY OF MAXIMUM TEMPERATURES
(based on temperature data from 1948-1992)

How to use this table: The maximum temperature in July is 75 degrees or warmer 80.4% of the time.

TEMP (F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
>=105	0	0	0	0	0	0	0.1	0.2	0	0	0	0	<0.1
>=100	0	0	0	0	0	0.2	1.1	1.3	0.1	0	0	0	0.2
>=95	0	0	0	0	0	1.4	7.2	6.5	2.4	0	0	0	1.5
>=90	0	0	0	0	0.4	4.2	19.8	17.1	8.4	0.3	0	0	4.2
>=85	0	0	0	0.1	3.1	13.3	39.1	37.0	18.7	1.6	0	0	9.5
>=80	0	0	0	0.7	9.2	26.8	61.2	59.7	35.0	4.9	0	0	16.6
>=75	0	0	0.2	4.9	20.0	44.4	80.4	81.6	56.1	10.9	0.1	0	25.1
>=70	0	0	1.9	13.7	35.8	66.4	93.2	93.4	76.4	25.4	0.6	0	34.1
>=65	0.2	2.5	8.7	29.0	57.6	87.6	99.0	99.0	93.6	46.6	3.1	0.4	44.2
>=60	2.8	10.7	24.9	51.3	82.0	97.9	99.9	100	99.0	71.3	16.3	3.2	55.2
>=55	12.9	29.4	52.0	79.5	96.5	100	100	100	99.8	89.7	42.3	14.0	68.2
>=50	35.8	63.1	82.9	96.6	99.9	100	100	100	100	98.0	70.3	37.2	82.0
>=45	60.8	86.0	97.3	99.7	100	100	100	100	100	99.9	87.8	61.7	91.1
>=40	79.3	95.5	99.7	100	100	100	100	100	100	100	96.5	83.5	96.2
>=35	91.6	98.7	100	100	100	100	100	100	100	100	98.8	95.1	98.7
>=30	97.8	99.5	100	100	100	100	100	100	100	100	99.6	98.1	99.6
>=25	99.6	99.6	100	100	100	100	100	100	100	100	99.9	99.1	99.9
>=20	100	99.9	100	100	100	100	100	100	100	100	100	99.6	100
>=15	100	100	100	100	100	100	100	100	100	100	100	99.9	100
CLIMATIC NORMAL MONTHLY MAXIMUM TEMPERATURES (based on 1961-1990 data)													
	46.4	51.4	55.9	60.5	67.1	74.2	81.7	81.8	76.2	64.6	52.4	46.2	63.2

CUMULATIVE FREQUENCY OF MINIMUM TEMPERATURES
(based on temperature data from 1948-1992)

How to use this table: The minimum temperature in May is 45 degrees or warmer 40.1% of the time.

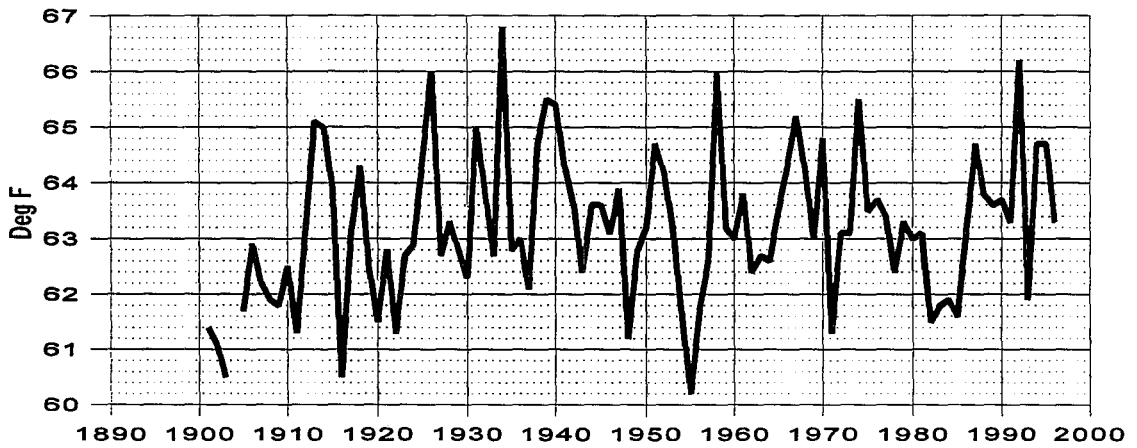
TEMP (F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
>=65	0	0	0	0	0	0	0.1	0.1	0	0	0	0	<0.1
>=60	0	0	0	0	0.1	1.0	2.2	3.7	1.0	0	0	0	0.7
>=55	0.1	0	0	0.2	1.6	11.3	23.7	25.9	10.1	1.6	0.4	0.1	6.3
>=50	1.6	1.7	1.3	2.9	12.6	42.4	65.8	64.9	37.2	11.2	4.8	1.5	20.8
>=45	7.9	8.7	9.0	16.5	40.1	77.8	93.5	93.3	71.0	35.6	19.9	7.8	40.3
>=40	22.9	27.4	31.2	43.9	73.8	95.5	99.7	99.6	92.1	64.0	44.4	25.7	60.2
>=35	44.2	54.3	63.9	78.8	95.3	99.9	100	100	98.8	87.0	67.8	52.3	78.6
>=30	70.0	82.4	90.9	98.4	99.9	100	100	100	100	97.9	87.6	79.2	92.2
>=25	85.8	95.4	99.5	100	100	100	100	100	100	99.8	95.2	91.5	97.3
>=20	94.5	98.3	100	100	100	100	100	100	100	99.9	98.6	96.9	99.0
>=15	97.1	99.1	100	100	100	100	100	100	100	100	99.8	98.4	99.5
>=10	98.9	99.3	100	100	100	100	100	100	100	100	100	99.3	99.8
>=5	99.6	99.8	100	100	100	100	100	100	100	100	100	99.6	99.9
>=0	99.9	99.8	100	100	100	100	100	100	100	100	100	99.6	99.9
>=-5	100	100	100	100	100	100	100	100	100	100	100	99.8	~100
>=-10	100	100	100	100	100	100	100	100	100	100	100	99.9	~100
CLIMATIC NORMAL MONTHLY MINIMUM TEMPERATURES (based on 1961-1990 data)													
	35.2	37.0	38.9	40.6	44.5	49.7	52.8	53.2	49.3	43.5	39.7	35.9	43.4

LONGEST HOT SPELLS AND COLD SNAPS
(1890-1996)

	Consecutive Days	Dates	Temperatures (degrees Farenheit)
Maximum Temperature	4	Aug 8-7, 1981	101/103/108/106
of 100 Degrees	3	Aug 10-12, 1977	101/101/102
or Greater	3	July 22-24, 1928	100/101/102
	2	July 20-21, 1994	101/102
Maximum Temperature	11	July 13-23, 1938	98/100/97/95/92/92/92/100/104/96/91
of 90 Degrees	10	July 26-Aug 4, 1974	92/95/97/94/98/99/97/94/94/92
or Greater	9	August 3-11, 1990	91/100/94/90/94/93/95/99/100
	9	July 21-29, 1939	94/98/97/90/94/101/98/96/92
	8	Sept 18-25, 1974	90/93/94/95/92/93/96/90
	8	July 21-28, 1962	91/93/95/93/92/96/96/92
	8	July 18-25, 1946	91/101/105/99/93/94/92/95
	8	July 6-13, 1945	94/98/94/94/95/93/94/90
	8	Sept 4-11, 1944	94/101/93/93/96/96/97/90
Maximum Temperature	10	Dec 17-26, 1924	23/17/17/21/28/23/29/23/20/30
of 32 Degrees	7	Dec 29-Jan 4, 1978-79	28/29/26/22/29/31/31
or Lower	6	Dec 19-24, 1990	31/17/16/20/22/28
	6	Dec 6-11, 1972	24/20/13/19/16/31
	6	Jan 20-25, 1930	27/22/27/27/28/27
	6	Feb 7-12, 1929	15/15/14/17/16/18
Minimum Temperature	33	Jan 1-Feb 2, 1949	26/21/19/14/16/22/28/19/14/14/11/13/10/ 17/26/23/31/27/23/17/23/20/14/9/11/17/ 27/24/23/31/29/30/32
of 32 Degrees or Lower	24	Dec 10-Jan 2, 1985-86	28/23/21/23/23/28/22/24/23/22/20/21/22/ 24/22/21/18/18/19/30/28/32/30/29
	23	Jan 6-28, 1930	31/24/21/20/15/10/14/13/18/29/19/15/17/ 24/12/6/12/21/21/18/25/23/23
	20	Nov 18-Dec 7, 1956	30/29/25/25/26/27/25/27/27/24/23/24/24/ 28/27/29/32/32/28/28
Mimimum Temperature	11	Dec 4-14, 1972	20/20/15/-6/-12/-5/-7/-5/14/15/9
of 20 Degrees	11	Dec 17-27, 1924	10/2/4/10/17/7/-2/-4/-1/1/16
or Lower	8	Feb 2-9, 1989	14/8/7/4/8/7/8/18
	8	Jan 4-11, 1974	18/18/12/11/12/10/10/13
	8	Nov 23-30, 1952	20/18/18/15/17/15/16/17
	8	Dec 8-15, 1932	18/9/6/5/6/11/6/10
Minimum Temperature	6	Feb 3-8, 1989	8/7/4/8/7/8
of 10 Degrees	5	Dec 20-24, 1990	8/6/4/10/9
or Lower	5	Dec 7-11, 1972	-6/-12/-5/-7/-5
	5	Jan 26-30, 1957	6/-4/5/2/5
	5	Jan 30-Feb 3, 1950	0/-3/5/-2/-3
	5	Dec 26-30, 1924	7/-2/-4/-1/1
Minimum Temperature	5	Dec 7-11, 1972	-6/-12/-5/-7/-5
of 0 Degrees	3	Dec 23-25, 1924	-2/-4/-1
or Lower	2	Feb 2-3, 1950	-2/-3
	2	Jan 30-31, 1950	0/-3

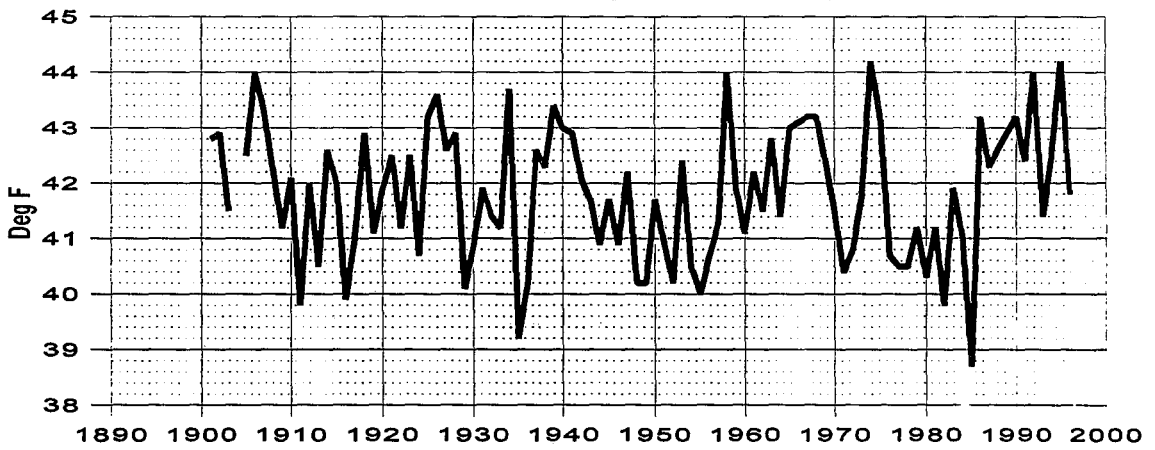
AVERAGE ANNUAL MAXIMUM (1890-1996)

Climatic Annual Average 63.2 degrees



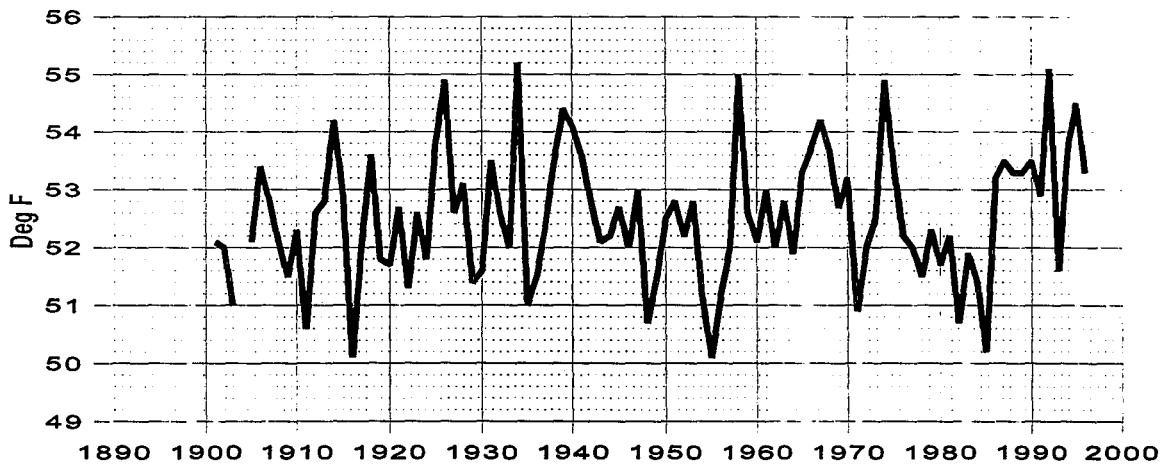
AVERAGE ANNUAL MINIMUM (1890-1996)

Climatic Annual Average 43.4 degrees



AVERAGE ANNUAL MEAN (1890-1996)

Climatic Annual Average 53.3 degrees



MONTHLY AVERAGE MAXIMUM TEMPERATURES (1890-1997)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1890	Official Weather Records Began on October 1, 1890									NA	NA	50.9	NA
1891	46.6	43.4	51.0	59.5	67.0	67.9	NA	NA	NA	65.0	56.3	46.4	NA
1892	45.2	50.2	56.2	55.7	67.6	70.9	NA	NA	NA	NA	55.0	45.2	NA
1893	40.5	47.5	53.4	53.2	63.6	67.3	NA	NA	NA	NA	NA	NA	NA
1894	NA	NA	NA	NA	NA	NA	NA	NA	NA	61.9	55.1	44.0	NA
1895	46.4	50.0	54.9	62.2	64.4	73.6	78.0	79.4	NA	64.9	49.5	47.2	NA
1896	50.2	52.8	53.8	54.5	60.1	72.0	84.7	76.8	72.6	64.7	45.6	49.6	61.5
1897	44.7	48.9	47.1	63.1	70.7	69.5	NA	NA	NA	62.6	52.8	NA	NA
1898	43.8	51.6	51.0	60.0	63.3	NA	NA	NA	NA	NA	NA	NA	NA
1899	NA	47.6	50.9	57.7	59.4	NA	NA	70.6	73.7	61.3	58.2	49.3	NA
1900	51.0	48.8	59.0	61.2	NA	NA	NA	NA	NA	60.6	54.0	49.3	NA
1901	44.1	50.4	55.2	57.7	64.9	68.0	75.3	82.2	69.6	66.4	56.3	46.3	61.4
1902	44.1	53.1	51.0	57.4	63.3	71.2	75.3	79.6	73.3	64.3	52.0	48.1	61.1
1903	46.6	45.5	51.7	58.6	65.3	72.1	77.9	78.1	71.8	61.5	51.0	45.8	60.5
1904	46.6	47.5	50.5	62.3	68.2	NA	NA	NA	NA	NA	55.0	47.8	NA
1905	44.6	50.5	58.4	64.3	63.5	70.2	81.5	78.7	71.9	59.3	52.2	45.8	61.7
1906	48.9	50.1	52.7	65.5	65.3	69.1	84.7	80.9	71.9	64.2	52.4	48.7	62.9
1907	41.5	53.8	52.3	62.0	68.8	70.8	79.7	75.8	72.0	64.3	55.4	50.1	62.2
1908	48.8	50.0	54.5	62.4	61.3	69.8	81.7	78.4	75.1	62.3	55.2	44.3	61.9
1909	43.5	50.4	56.6	61.9	66.0	74.1	75.6	80.1	75.5	63.7	53.5	40.8	61.8
1910	44.7	44.6	59.4	64.1	69.4	69.7	81.8	77.4	71.5	65.8	52.0	49.8	62.5
1911	45.0	47.9	58.6	58.5	62.3	70.6	83.9	79.4	66.5	62.5	53.1	47.4	61.3
1912	50.1	51.9	54.7	60.3	68.5	73.0	77.3	75.2	71.8	61.5	63.9	50.5	63.2
1913	47.6	53.4	61.0	65.5	73.7	72.3	78.3	82.0	78.6	63.9	56.5	48.6	65.1
1914	52.5	51.4	60.6	57.5	76.7	75.9	84.1	82.6	70.7	65.8	58.0	43.9	65.0
1915	44.6	52.2	60.6	66.0	67.0	76.2	78.0	84.1	73.8	65.4	51.7	47.3	63.9
1916	37.8	53.9	53.4	62.6	63.2	71.8	73.6	78.8	72.6	64.2	49.5	44.0	60.5
1917	45.5	47.8	49.2	57.4	62.8	74.0	85.0	86.5	74.5	65.8	55.2	53.1	63.1
1918	51.7	50.3	56.4	65.9	66.6	80.6	79.8	80.7	77.3	63.4	52.8	46.4	64.3
1919	46.1	50.0	56.4	64.6	68.6	73.0	83.0	82.6	71.8	58.4	52.8	42.8	62.5
1920	48.0	48.4	53.2	56.9	67.4	72.8	79.8	82.9	69.6	59.2	52.7	47.6	61.5
1921	47.0	52.9	55.5	59.9	66.2	74.5	80.1	80.5	72.2	65.6	54.4	44.8	62.8
1922	43.2	46.8	52.0	57.0	66.2	78.7	83.5	78.2	76.7	61.9	46.9	45.7	61.3
1923	47.7	45.4	54.6	62.3	67.0	72.6	78.2	82.8	75.6	62.2	55.3	48.9	62.7
1924	46.5	55.1	53.7	64.9	72.5	74.4	81.6	78.9	74.7	62.0	50.0	40.5	62.9
1925	50.5	53.6	56.6	62.9	71.1	75.7	83.6	79.2	72.4	65.0	52.3	49.5	64.4
1926	47.3	54.0	64.4	70.6	69.3	81.2	85.0	79.4	72.2	65.9	55.7	47.1	66.0
1927	46.4	51.5	54.1	61.3	65.2	74.8	82.1	82.8	69.9	64.7	56.0	44.0	62.7
1928	48.5	50.9	58.8	59.6	73.8	72.2	82.2	81.5	72.4	62.0	52.4	45.3	63.3
1929	38.8	46.3	56.6	57.5	69.4	72.4	81.8	82.7	76.3	67.7	53.1	50.5	62.8
1930	35.6	53.9	59.4	64.6	64.9	72.8	79.7	81.9	73.8	63.9	51.2	46.3	62.3
1931	50.1	52.3	57.8	66.6	75.1	73.9	84.0	83.3	74.4	65.1	51.9	45.8	65.0
1932	45.8	50.7	56.3	62.3	66.6	77.3	78.9	80.7	78.7	67.1	57.2	43.6	63.8
1933	45.4	46.9	55.9	62.2	61.9	72.8	82.3	83.5	69.9	67.1	51.6	53.1	62.7
1934	52.4	55.9	64.8	70.4	71.6	76.1	79.4	82.9	75.6	68.3	55.2	49.3	66.8
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AVERAGE MAXIMUM TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1935	48.0	52.3	51.5	61.2	68.9	77.2	80.1	81.9	78.7	59.9	48.5	45.0	62.8
1936	48.0	43.4	52.5	65.2	69.2	74.8	79.8	82.9	75.3	67.5	49.4	47.5	63.0
1937	35.5	46.6	55.0	55.9	69.3	74.5	80.5	80.7	74.8	66.9	56.5	48.9	62.1
1938	46.4	51.1	55.0	64.0	71.2	78.5	87.0	80.7	78.6	64.6	50.5	48.5	64.7
1939	48.4	48.2	58.5	67.7	72.3	72.5	83.4	84.0	77.4	64.1	56.2	53.0	65.5
1940	47.1	52.9	60.3	63.3	71.5	79.3	81.0	84.4	74.1	66.7	50.7	50.5	65.4
1941	48.2	53.8	62.8	64.3	67.5	71.8	85.4	79.9	71.3	63.0	55.7	47.8	64.3
1942	43.5	51.2	56.0	61.9	65.3	71.2	81.1	84.0	78.4	67.3	53.4	49.5	63.6
1943	40.6	53.4	55.2	62.8	65.6	70.3	82.0	78.7	80.0	62.8	52.6	45.0	62.4
1944	45.6	50.3	56.3	59.6	67.7	73.0	83.4	81.3	80.6	69.6	51.3	44.4	63.6
1945	47.0	52.0	52.4	59.2	68.0	75.7	85.7	83.0	75.4	65.6	51.4	47.6	63.6
1946	47.6	50.5	55.2	62.2	71.8	72.6	82.3	83.1	73.8	59.1	52.1	47.1	63.1
1947	43.5	54.0	59.2	64.5	74.1	71.2	78.2	78.5	76.2	63.4	54.3	49.3	63.9
1948	47.5	49.3	53.1	55.8	64.9	76.3	79.8	77.4	75.4	62.1	50.2	42.4	61.2
1949	36.3	48.3	54.9	64.7	70.6	76.9	81.1	80.3	76.5	59.9	57.8	46.8	62.8
1950	37.8	49.3	52.9	60.3	68.6	73.8	84.7	86.1	77.4	60.3	54.1	53.2	63.2
1951	46.8	51.9	51.5	68.2	69.1	82.2	83.4	83.3	79.5	62.6	54.1	43.9	64.7
1952	45.5	51.4	53.2	63.9	70.4	71.3	85.0	81.7	81.2	70.8	47.8	47.9	64.2
1953	52.5	52.1	54.4	60.1	63.2	68.4	81.5	78.9	77.3	65.7	55.6	48.4	63.2
1954	46.7	51.8	53.7	61.0	67.7	67.8	76.9	74.7	72.4	62.6	56.2	47.5	61.6
1955	44.2	47.9	50.5	53.6	64.6	72.6	74.5	80.5	74.3	62.1	49.7	47.9	60.2
1956	47.9	43.0	52.7	61.6	67.7	70.6	82.3	79.8	76.6	61.6	50.0	46.6	61.7
1957	38.6	50.5	54.0	62.5	68.1	74.2	79.7	78.7	80.4	62.5	53.2	48.6	62.6
1958	49.1	55.3	54.8	60.9	73.5	74.2	87.5	87.2	75.9	66.9	54.4	52.7	66.0
1959	48.8	50.7	55.8	62.8	64.8	72.6	84.7	80.8	70.2	65.0	54.4	47.2	63.2
1960	43.8	50.3	55.7	60.6	64.0	76.6	86.0	78.1	76.9	65.3	53.2	45.2	63.0
1961	50.8	53.7	54.8	61.1	65.1	78.0	83.1	84.3	72.7	63.6	50.2	47.6	63.8
1962	45.6	49.6	52.9	63.4	61.1	74.0	81.9	79.2	76.5	61.2	55.2	48.1	62.4
1963	42.2	57.2	54.5	55.6	67.4	70.9	75.5	81.2	79.6	65.7	53.8	49.0	62.7
1964	48.8	51.6	53.6	58.2	65.3	71.5	81.2	79.9	76.0	68.2	48.2	45.2	62.6
1965	44.4	52.2	60.0	61.3	65.7	74.4	84.4	80.5	75.1	65.5	55.2	43.8	63.5
1966	46.2	49.9	54.7	64.3	69.5	76.8	81.6	83.5	77.4	63.8	53.7	50.5	64.3
1967	49.6	53.2	52.5	56.3	69.3	78.5	85.5	90.4	81.6	64.0	53.9	47.8	65.2
1968	47.7	58.3	58.8	60.3	67.4	75.0	84.8	78.6	74.7	62.7	55.1	46.5	64.2
1969	42.0	48.1	59.7	60.8	72.3	75.8	81.1	80.5	74.2	60.4	52.6	48.5	63.0
1970	47.4	54.7	56.7	57.3	69.1	79.6	87.8	85.2	75.3	65.3	54.0	45.6	64.8
1971	45.5	48.1	51.3	58.6	66.1	70.4	82.7	83.7	73.6	60.8	51.0	44.2	61.3
1972	44.4	50.9	57.9	56.8	69.8	74.7	85.9	85.7	73.2	63.2	53.4	41.6	63.1
1973	44.1	53.0	53.1	61.5	69.6	74.9	84.9	79.3	75.3	63.9	49.0	48.9	63.1
1974	47.0	49.9	57.6	61.9	67.0	76.9	81.1	83.2	85.1	69.5	55.5	51.4	65.5
1975	51.7	50.9	52.6	56.8	68.1	73.1	82.5	77.4	82.8	62.4	54.2	49.3	63.5
1976	49.3	50.6	54.0	59.6	68.4	73.1	84.6	78.5	78.0	67.9	55.3	44.5	63.7
1977	49.0	54.2	54.7	64.7	62.7	75.9	80.2	84.9	71.1	63.5	51.4	48.6	63.4
1978	47.5	50.8	59.8	57.5	65.3	75.8	82.3	80.5	70.9	67.3	48.7	42.8	62.4
1979	38.2	48.7	58.9	60.1	69.2	76.7	84.6	79.9	77.2	67.5	49.3	49.8	63.3
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AVERAGE MAXIMUM TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1980	43.5	51.1	54.4	62.6	65.5	68.4	81.7	80.1	77.5	67.6	54.6	49.3	63.0
1981	46.8	51.4	56.2	60.9	65.5	71.5	80.2	84.9	77.4	61.7	53.1	47.7	63.1
1982	42.0	49.6	54.0	58.4	68.0	74.4	78.1	81.5	74.4	63.5	49.4	45.2	61.5
1983	48.8	51.9	55.8	61.5	68.3	70.4	74.7	79.8	73.0	62.9	52.6	41.4	61.8
1984	48.3	52.3	57.8	57.1	64.5	70.3	82.3	81.2	75.6	59.4	50.3	43.4	61.9
1985	41.3	50.1	53.6	63.2	68.1	76.4	87.3	81.0	70.9	63.0	44.5	39.7	61.6
1986	50.0	50.5	59.9	58.6	66.2	76.1	76.5	86.2	70.1	65.3	53.2	46.3	63.2
1987	46.3	51.9	56.8	64.8	69.8	78.5	76.1	84.1	77.3	72.1	53.7	44.4	64.7
1988	44.5	52.7	57.4	61.0	65.0	72.6	83.2	83.1	79.2	67.9	52.7	46.7	63.8
1989	48.6	44.2	54.7	66.6	67.5	75.3	77.7	80.0	81.2	65.3	55.2	46.5	63.6
1990	48.6	48.9	58.7	64.7	65.8	72.6	86.0	82.8	78.4	62.5	54.4	41.0	63.7
1991	46.4	56.7	53.3	57.7	61.4	68.0	82.8	82.2	82.4	68.3	54.4	46.3	63.3
1992	50.9	55.8	62.0	63.9	74.7	78.8	82.8	85.6	76.6	65.9	52.1	45.0	66.2
1993	42.2	46.5	57.7	59.2	69.6	71.8	74.5	80.5	79.6	68.8	47.7	44.5	61.9
1994	49.2	49.7	59.4	63.4	69.7	73.4	86.5	82.2	79.4	65.3	50.0	48.6	64.7
1995	50.6	56.1	58.0	60.5	69.7	73.3	82.6	80.8	77.7	62.3	56.9	48.0	64.7
1996	47.2	50.3	56.6	62.1	63.1	73.6	86.7	84.0	73.7	62.1	52.4	48.1	63.3
1997	47.2	50.4											
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

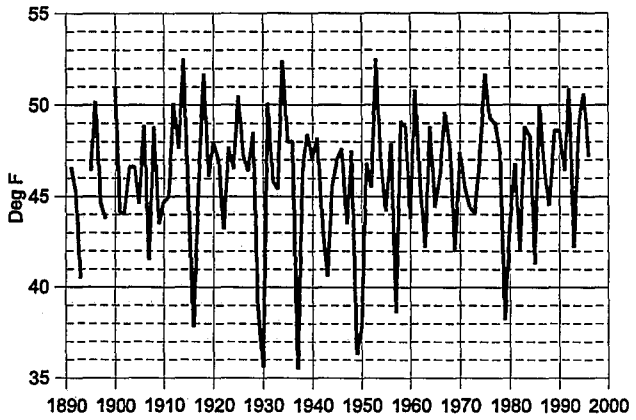
Average Monthly Maximum Temperature (1961-90 Climatic Normals)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
46.4	51.4	55.9	60.5	67.1	74.2	81.7	81.8	76.2	64.6	52.4	46.2	63.2

MONTHLY AVERAGE MAXIMUM TEMPERATURES

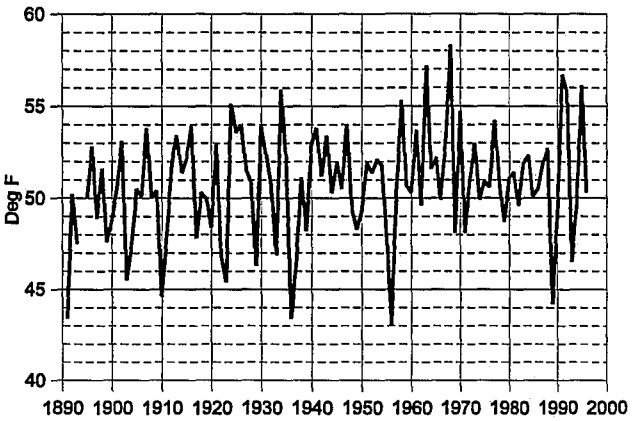
JANUARY (1890-1996)

Climatic Monthly Average 46.4 degrees



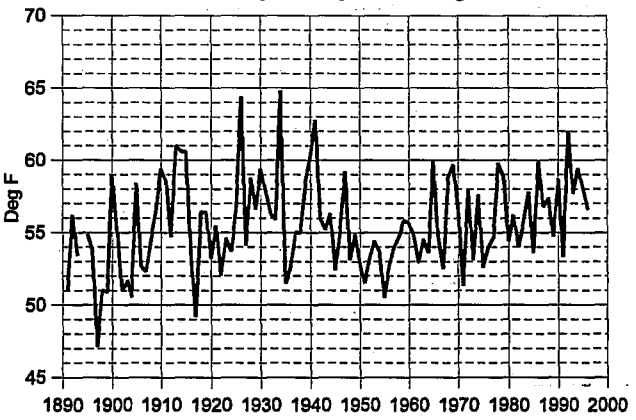
FEBRUARY (1890-1996)

Climatic Monthly Average 51.4 degrees



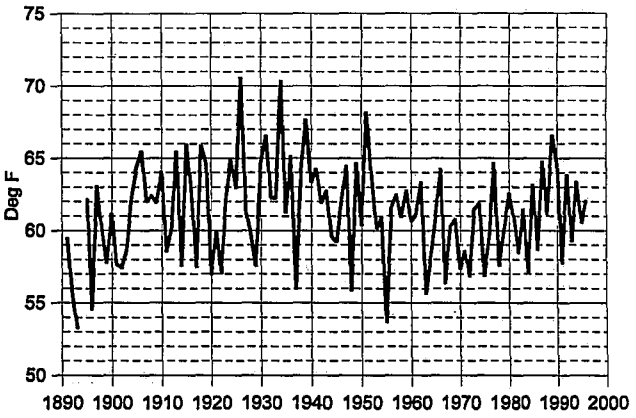
MARCH (1890-1996)

Climatic Monthly Average 55.9 degrees



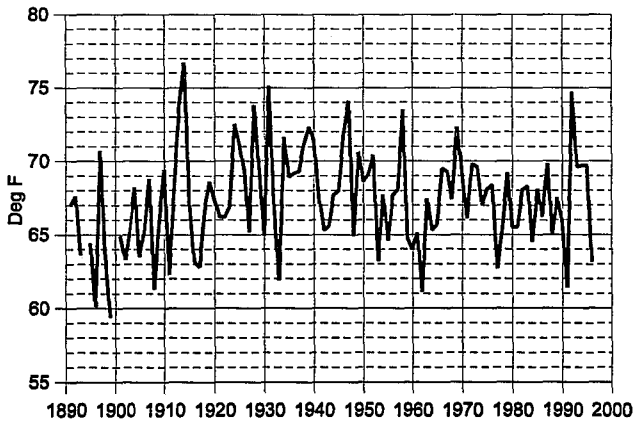
APRIL (1890-1996)

Climatic Monthly Average 60.5 degrees



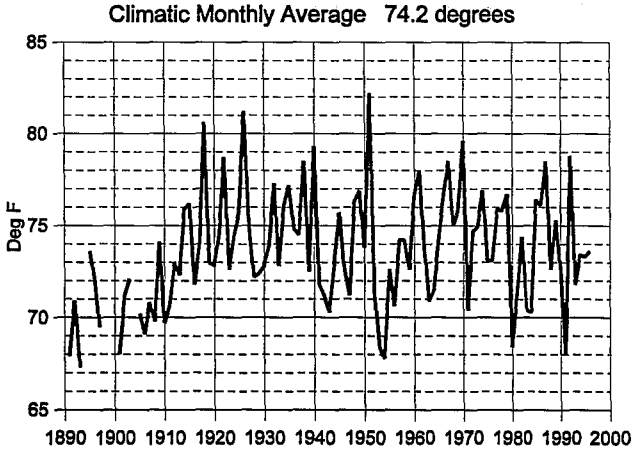
MAY (1890-1996)

Climatic Monthly Average 67.1 degrees



JUNE (1890-1996)

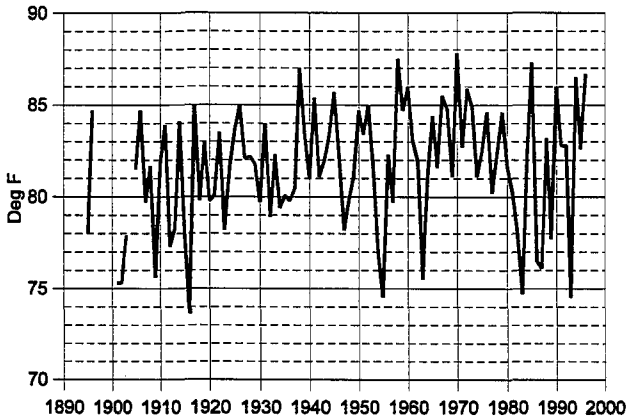
Climatic Monthly Average 74.2 degrees



MONTHLY AVERAGE MAXIMUM TEMPERATURES (continued)

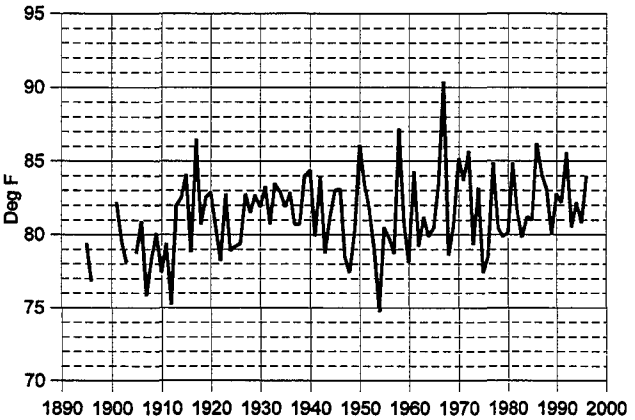
JULY (1890-1996)

Climatic Monthly Average 81.7 degrees



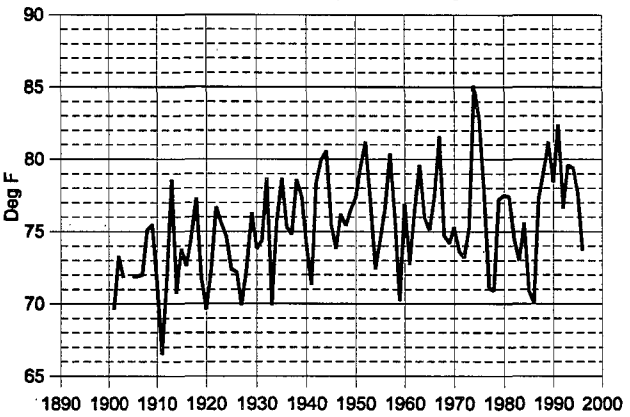
AUGUST (1890-1996)

Climatic Monthly Average 81.8 degrees



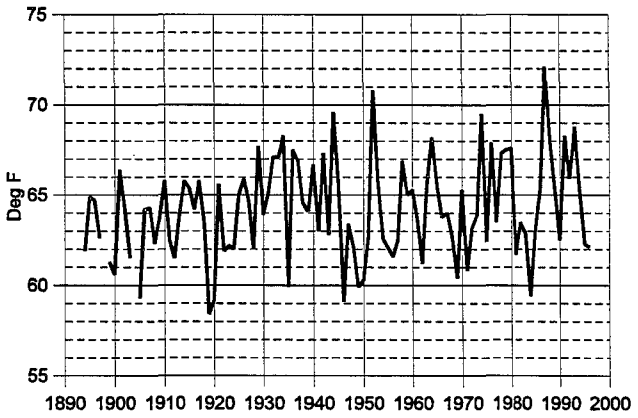
SEPTEMBER (1890-1996)

Climatic Monthly Average 76.2 degrees



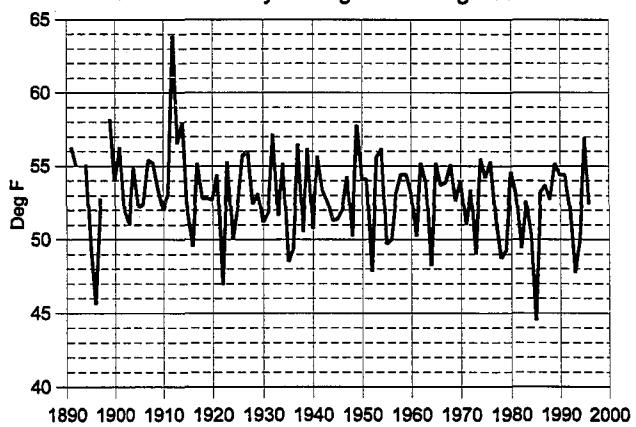
OCTOBER (1890-1996)

Climatic Monthly Average 64.6 degrees



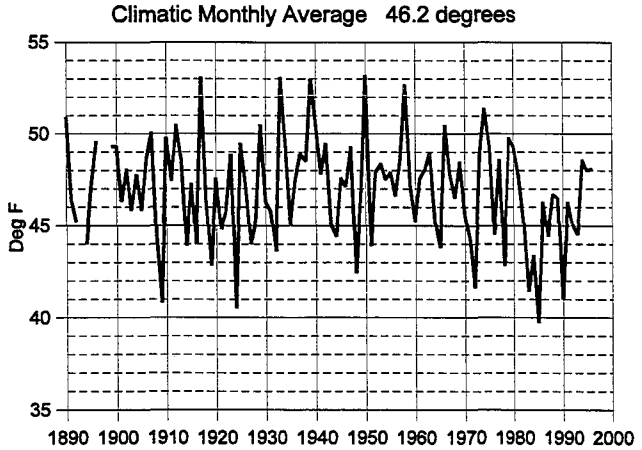
NOVEMBER (1890-1996)

Climatic Monthly Average 52.4 degrees



DECEMBER (1890-1996)

Climatic Monthly Average 46.2 degrees



MONTHLY AVERAGE MINIMUM TEMPERATURES (1890-1997)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1890	Official Weather Records Began on October 1, 1890									NA	NA	37.5	NA
1891	35.8	33.5	36.8	43.0	46.5	49.1	NA	NA	NA	47.4	44.0	37.3	NA
1892	35.2	35.7	40.6	40.4	46.2	48.1	NA	NA	NA	NA	40.3	34.7	NA
1893	29.1	35.8	38.3	40.9	44.5	46.5	NA	NA	NA	NA	NA	NA	NA
1894	NA	NA	NA	NA	NA	NA	NA	NA	NA	44.8	40.8	33.2	NA
1895	34.0	35.9	34.8	41.0	45.9	48.1	50.8	51.3	NA	41.2	35.6	37.9	NA
1896	38.0	37.4	38.0	39.7	44.0	47.7	54.7	54.0	47.8	43.4	34.7	40.8	43.4
1897	35.2	37.8	34.5	42.2	46.9	50.7	NA	NA	NA	41.5	39.7	38.6	NA
1898	33.8	40.0	33.5	40.4	43.0	NA	NA	NA	NA	NA	NA	NA	NA
1899	NA	33.1	35.8	39.9	42.4	NA	NA	50.7	49.4	41.6	45.7	37.5	NA
1900	36.9	37.7	41.6	40.8	NA	NA	NA	NA	NA	43.4	39.6	38.7	NA
1901	33.7	34.6	38.1	38.6	46.2	48.4	48.9	52.8	46.7	48.4	41.6	35.0	42.8
1902	33.0	40.6	38.1	40.9	46.7	48.2	50.6	50.7	47.0	44.4	39.6	35.3	42.9
1903	34.6	29.8	33.6	37.6	44.9	51.1	51.1	51.1	47.5	43.7	39.1	34.1	41.5
1904	36.0	35.2	36.8	42.6	43.6	NA	NA	NA	NA	NA	43.1	36.0	NA
1905	34.4	33.4	42.1	42.3	44.7	49.6	52.5	50.2	49.9	42.1	33.7	35.3	42.5
1906	37.9	36.6	36.4	41.3	44.6	48.2	56.1	51.7	48.6	45.8	41.0	39.3	44.0
1907	29.9	40.2	37.3	40.5	44.9	49.2	52.3	51.2	48.1	47.5	39.7	38.9	43.3
1908	37.5	35.1	37.4	39.5	41.5	47.3	53.5	50.9	46.8	42.7	40.6	33.5	42.2
1909	29.8	38.4	39.6	37.4	41.7	47.3	50.1	48.3	48.3	44.9	40.3	28.4	41.2
1910	31.1	32.8	41.1	41.8	47.3	46.1	50.9	45.9	46.5	44.6	39.4	37.3	42.1
1911	32.3	30.7	34.3	34.7	41.5	45.5	50.9	49.7	46.1	39.5	38.0	34.9	39.8
1912	37.5	39.1	34.4	37.8	42.2	47.9	53.6	52.3	49.7	37.5	36.8	35.4	42.0
1913	32.9	29.9	30.7	37.2	39.0	47.4	52.1	51.9	44.9	42.8	41.3	35.3	40.5
1914	39.1	35.8	41.0	43.4	46.4	49.5	50.5	46.8	46.5	46.3	39.0	27.3	42.6
1915	32.1	34.6	39.8	40.0	43.6	43.9	51.7	53.4	46.2	42.8	40.0	36.0	42.0
1916	27.8	37.2	37.1	39.6	41.3	46.3	49.0	50.3	48.3	35.6	32.9	32.8	39.9
1917	30.6	32.6	32.3	39.2	42.8	44.9	50.1	49.8	49.4	39.2	39.2	42.5	41.1
1918	39.6	34.9	37.8	39.2	41.8	49.8	51.3	52.1	50.1	45.7	38.5	34.1	42.9
1919	33.7	36.4	37.0	40.6	42.6	45.8	50.9	51.1	47.8	38.7	39.2	29.1	41.1
1920	34.6	31.6	36.8	39.1	39.4	47.3	51.5	52.0	49.7	45.3	37.7	37.4	41.9
1921	34.8	38.2	39.3	39.6	43.4	51.1	48.5	50.9	44.3	44.4	43.2	32.6	42.5
1922	29.8	32.7	35.7	37.6	44.1	48.6	50.4	51.3	47.9	45.8	35.7	34.4	41.2
1923	37.4	31.8	35.8	41.0	45.1	48.1	53.5	52.8	48.4	43.5	39.0	33.6	42.5
1924	31.0	39.7	35.2	37.9	43.7	47.1	48.2	50.3	46.2	44.2	38.4	26.4	40.7
1925	39.1	39.1	37.2	41.9	46.6	48.3	52.0	49.7	48.7	40.2	38.7	37.3	43.2
1926	34.9	40.1	38.2	44.0	45.9	50.1	50.5	51.6	45.0	45.4	42.1	35.8	43.6
1927	35.1	36.2	36.5	38.8	42.9	49.6	50.8	51.4	49.2	44.6	43.5	32.7	42.6
1928	36.7	34.8	42.1	41.0	44.7	49.2	52.2	49.2	46.4	44.4	40.3	33.2	42.9
1929	30.8	28.3	37.8	37.8	42.9	48.4	49.7	49.4	44.0	42.6	31.8	38.0	40.1
1930	23.2	39.3	36.3	43.5	41.7	46.4	48.7	51.8	47.2	42.0	36.6	33.5	40.9
1931	36.7	34.1	38.6	40.5	44.8	48.4	51.0	49.0	47.2	42.4	34.8	34.7	41.9
1932	32.8	33.2	40.4	39.6	43.3	49.2	49.0	51.1	44.4	43.2	41.5	29.7	41.4
1933	33.5	31.6	36.8	37.1	42.1	47.2	49.4	50.4	45.6	43.2	36.4	40.9	41.2
1934	39.8	37.4	42.3	43.0	46.6	47.3	50.4	49.7	43.7	44.5	43.0	35.2	43.7
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AVERAGE MINIMUM TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1935	31.8	34.5	33.0	38.1	38.7	46.9	49.4	48.5	46.2	39.9	31.3	31.9	39.2
1936	34.5	28.5	33.5	39.8	45.0	48.9	49.8	48.6	43.7	40.0	31.3	36.5	40.2
1937	23.8	34.6	39.2	38.8	44.2	51.1	53.1	50.3	48.9	45.5	43.8	38.1	42.6
1938	34.8	34.8	36.6	41.1	44.2	48.5	53.0	48.7	51.2	45.0	34.6	34.7	42.3
1939	35.7	34.1	37.6	41.0	45.2	48.0	52.8	51.9	49.1	46.0	39.2	40.6	43.4
1940	32.4	39.0	39.6	40.6	44.5	48.5	51.8	51.8	52.1	46.7	36.1	34.0	43.0
1941	36.5	35.2	36.9	39.7	45.3	48.5	54.3	53.2	46.8	43.0	39.1	36.6	42.9
1942	31.7	35.3	34.3	40.0	45.9	47.4	53.5	52.4	46.6	42.2	38.5	37.1	42.1
1943	28.1	33.9	36.0	42.6	42.8	49.1	51.8	51.7	49.4	45.6	38.0	31.8	41.7
1944	32.1	34.7	34.7	39.8	42.9	47.9	50.3	49.7	47.9	43.8	36.1	30.7	40.9
1945	34.5	36.5	36.1	39.5	47.2	46.7	50.5	50.4	44.7	39.1	39.7	35.9	41.7
1946	34.1	35.0	37.0	38.9	44.3	47.4	51.2	48.9	45.1	38.5	35.0	35.8	40.9
1947	30.5	35.8	37.8	41.5	44.7	48.0	52.1	49.4	46.2	46.4	39.3	34.5	42.2
1948	29.8	31.9	35.3	38.3	43.8	52.1	49.9	51.2	45.5	40.3	34.5	30.0	40.2
1949	20.0	34.5	38.8	40.4	46.4	46.5	49.4	50.6	47.0	36.6	39.6	33.1	40.2
1950	24.6	33.0	37.0	37.4	41.4	50.2	50.7	51.5	46.7	45.3	40.5	42.1	41.7
1951	34.4	36.1	32.4	38.5	43.5	47.2	50.9	48.3	45.9	43.4	38.4	32.1	40.9
1952	33.1	34.3	35.9	37.9	40.8	47.1	50.5	50.4	47.0	40.9	29.1	35.3	40.2
1953	41.2	34.5	35.4	39.1	43.3	47.0	48.8	51.9	46.9	41.8	41.3	37.5	42.4
1954	34.5	34.5	31.7	38.3	42.0	45.4	48.6	49.6	45.6	38.7	42.7	33.8	40.5
1955	33.7	32.0	33.3	36.1	40.8	47.4	49.0	46.5	44.9	43.0	36.4	36.3	40.0
1956	35.6	31.4	35.7	39.1	45.4	45.3	50.9	50.5	45.8	40.2	33.7	34.9	40.7
1957	25.5	35.1	39.8	41.2	47.4	49.0	48.5	47.9	49.2	42.3	32.7	36.8	41.3
1958	36.7	42.2	34.9	40.2	46.5	52.7	54.5	52.4	47.9	40.2	39.7	39.5	44.0
1959	37.8	34.8	36.7	39.1	42.3	49.6	51.7	50.1	48.3	44.0	34.3	34.5	41.9
1960	31.8	34.4	37.9	40.2	43.1	47.3	50.9	49.5	46.2	41.5	37.5	32.6	41.1
1961	36.3	39.6	39.0	39.3	44.6	49.2	50.5	52.8	44.2	41.0	33.1	36.3	42.2
1962	29.4	35.0	36.3	40.8	42.8	45.7	47.9	50.2	48.9	43.9	40.4	36.9	41.5
1963	26.5	41.3	36.8	39.5	44.5	49.3	50.3	52.2	52.3	45.1	40.4	35.3	42.8
1964	35.9	31.6	36.5	37.5	41.0	48.1	51.5	51.2	45.9	43.1	38.2	35.7	41.4
1965	37.2	36.3	35.6	42.2	41.4	47.0	51.6	54.2	46.4	45.5	43.5	34.5	43.0
1966	36.3	34.3	38.4	40.7	40.9	48.3	51.8	50.8	51.7	43.1	41.2	39.6	43.1
1967	39.1	35.9	37.4	35.5	42.0	51.0	52.1	53.5	50.3	44.7	39.8	37.0	43.2
1968	35.2	39.3	39.3	36.7	43.3	48.1	52.6	54.1	49.7	43.1	43.1	35.4	43.2
1969	31.7	33.3	35.4	39.5	47.8	54.8	51.9	48.7	48.4	40.8	38.6	37.6	42.4
1970	37.5	34.2	36.9	36.5	43.1	51.2	52.0	49.9	45.1	39.9	37.1	34.4	41.5
1971	34.6	34.0	34.8	37.9	42.9	45.2	50.6	52.6	44.7	38.1	35.9	33.1	40.4
1972	31.3	36.1	39.2	36.3	43.9	47.0	52.1	52.4	44.7	39.0	40.6	26.9	40.8
1973	32.4	36.0	36.7	38.3	42.2	48.4	50.4	48.6	50.0	41.5	39.5	37.8	41.8
1974	31.5	36.4	41.3	43.2	45.1	50.8	54.7	54.5	50.0	40.4	41.9	40.0	44.2
1975	40.0	36.0	36.8	36.0	42.8	49.0	54.5	51.5	49.4	47.6	38.2	36.7	43.2
1976	34.7	33.1	34.5	38.0	40.8	43.1	50.8	53.6	49.5	40.0	39.8	30.9	40.7
1977	28.7	34.8	35.1	36.7	39.9	46.0	48.2	54.5	47.6	41.4	35.6	37.4	40.5
1978	37.5	37.6	36.9	38.6	40.0	49.2	50.4	51.6	48.3	38.7	29.8	27.5	40.5
1979	24.8	37.0	38.6	40.6	41.7	43.2	49.9	51.0	50.0	45.4	35.4	36.2	41.2
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AVERAGE MINIMUM TEMPERATURES (1890-1997)

(continued)

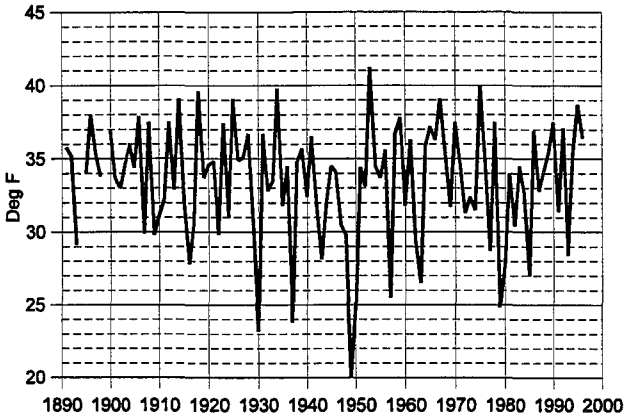
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1980	27.8	34.6	36.5	38.9	40.8	46.5	51.8	46.8	46.2	40.6	38.2	35.3	40.3
1981	34.0	35.4	35.6	38.9	43.2	47.4	49.4	51.5	46.5	38.7	37.6	35.9	41.2
1982	30.4	33.0	34.2	34.4	39.8	50.0	50.6	51.5	47.4	40.8	32.2	33.3	39.8
1983	34.5	38.2	40.7	36.7	43.9	46.7	51.2	52.4	45.1	41.3	40.5	31.2	41.9
1984	32.7	36.1	39.2	38.7	41.9	46.3	49.5	50.8	45.9	42.1	37.3	31.2	41.0
1985	27.0	31.1	32.0	40.7	41.7	46.4	52.5	50.5	45.6	40.5	30.6	26.3	38.7
1986	36.9	38.9	41.0	38.4	44.3	51.0	49.6	53.5	47.5	43.5	39.8	33.4	43.2
1987	32.8	35.5	37.8	39.9	46.0	48.0	52.6	51.0	48.0	40.8	39.9	35.1	42.3
1988	34.1	35.4	36.1	42.3	43.5	48.8	52.5	49.9	46.8	46.5	41.3	34.4	42.6
1989	35.5	27.4	39.7	44.5	45.5	50.9	52.9	53.3	48.0	42.5	39.5	35.6	42.9
1990	37.5	34.0	38.8	42.1	44.5	51.5	54.7	56.3	51.2	41.6	39.4	27.2	43.2
1991	31.4	40.7	35.5	39.8	44.0	47.0	52.1	53.2	47.7	40.3	40.8	36.2	42.4
1992	37.1	39.2	38.6	44.2	45.5	51.4	53.8	52.2	49.1	43.0	39.6	34.0	44.0
1993	28.4	30.5	41.5	43.2	47.5	49.1	50.5	53.0	45.8	43.4	29.3	34.0	41.4
1994	35.4	33.6	36.7	42.6	46.5	48.6	52.8	51.2	50.0	41.0	35.7	36.9	42.6
1995	38.7	39.5	37.7	40.2	45.4	48.9	55.0	50.2	51.6	40.8	43.6	37.1	44.2
1996	36.4	34.8	38.0	42.1	42.4	45.0	52.2	49.3	44.9	41.6	38.2	36.7	41.8
1997	34.5	34.1											
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

Average Monthly Minimum Temperature (1961-90 Climatic Normals)												
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
35.2	37.0	38.9	40.6	44.5	49.7	52.8	53.2	49.3	43.5	39.7	35.9	43.4

MONTHLY AVERAGE MINIMUM TEMPERATURES

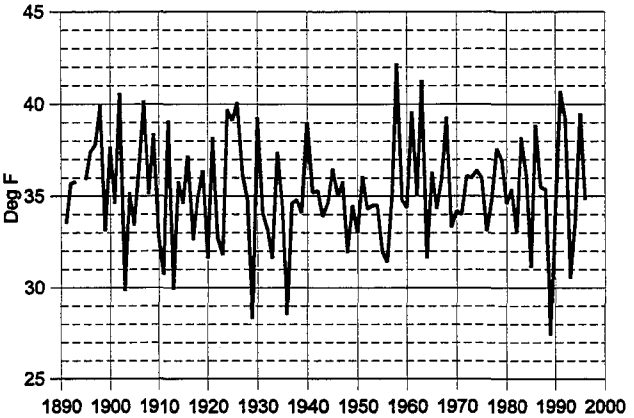
JANUARY (1890-1996)

Climatic Monthly Average 35.2 degrees



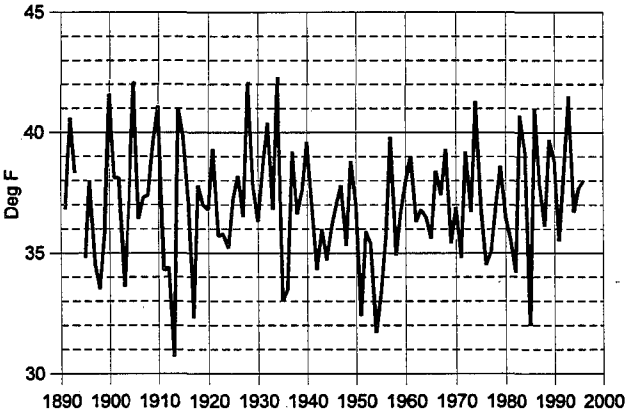
FEBRUARY (1890-1996)

Climatic Monthly Average 37.0 degrees



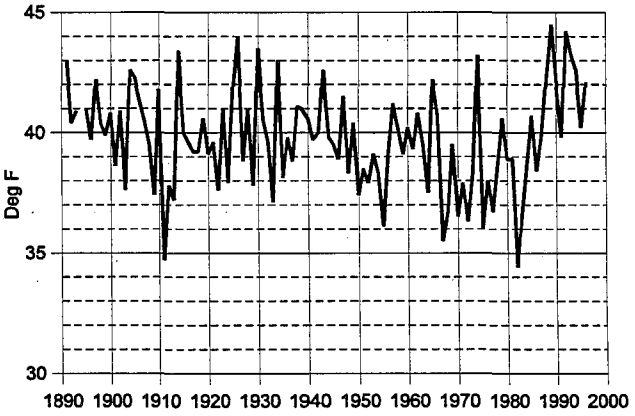
MARCH (1890-1996)

Climatic Monthly Average 38.9 degrees



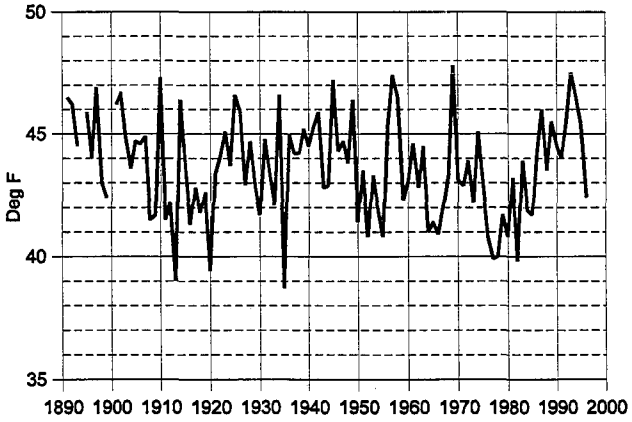
APRIL (1890-1996)

Climatic Monthly Average 40.6 degrees



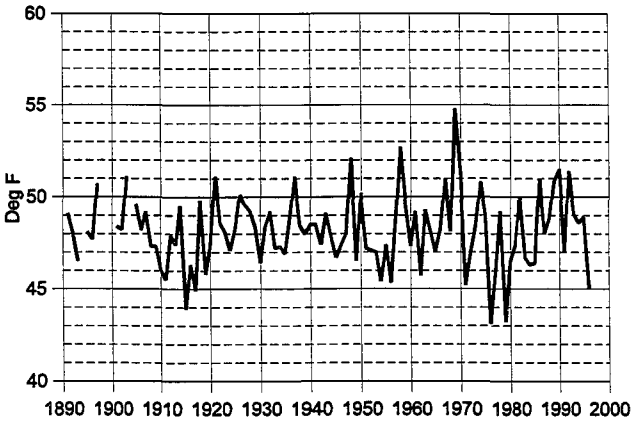
MAY (1890-1996)

Climatic Monthly Average 44.5 degrees



JUNE (1890-1996)

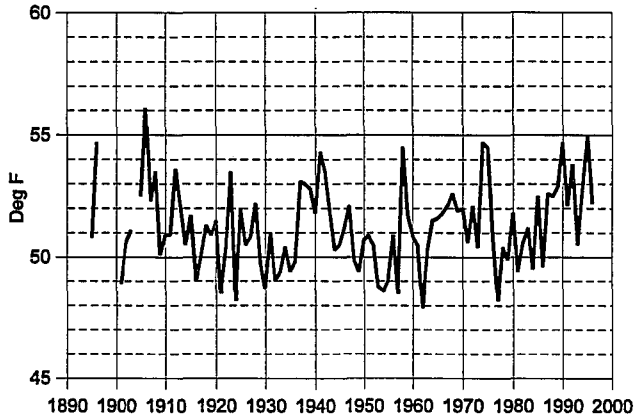
Climatic Monthly Average 49.7 degrees



MONTHLY AVERAGE MINIMUM TEMPERATURES (continued)

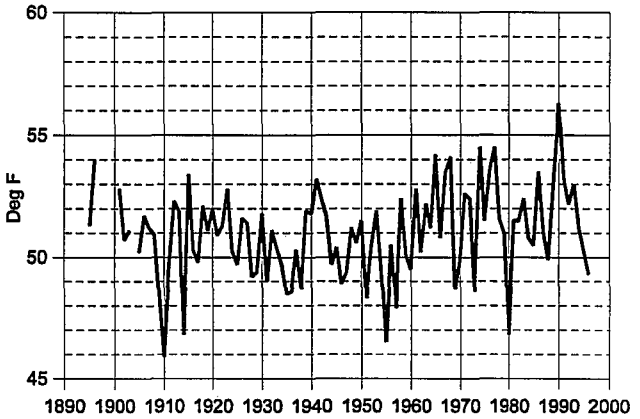
JULY (1890-1996)

Climatic Monthly Average 52.8 degrees



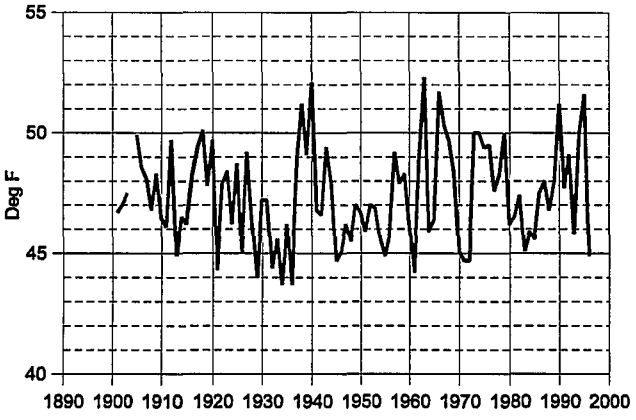
AUGUST (1890-1996)

Climatic Monthly Average 53.2 degrees



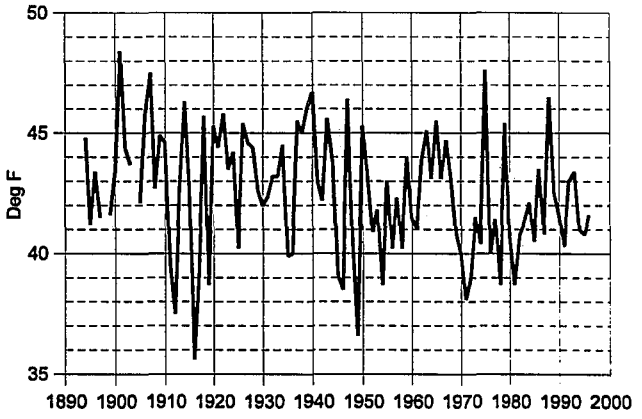
SEPTEMBER (1890-1996)

Climatic Monthly Average 49.3 degrees



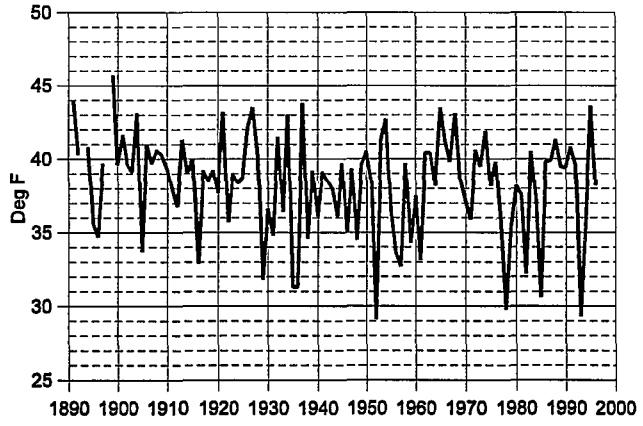
OCTOBER (1890-1996)

Climatic Monthly Average 43.5 degrees



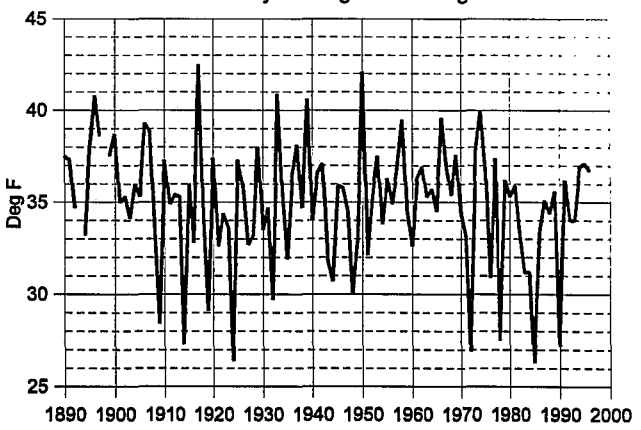
NOVEMBER (1890-1996)

Climatic Monthly Average 39.7 degrees



DECEMBER (1890-1996)

Climatic Monthly Average 35.9 degrees



MONTHLY AVERAGE MEAN TEMPERATURES (1890-1997)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1890	Official Weather Records Began on October 1, 1890									NA	NA	44.2	NA
1891	41.2	38.5	43.9	51.3	56.8	58.5	NA	NA	NA	56.2	50.2	41.9	NA
1892	40.2	43.0	48.4	48.1	56.9	59.5	NA	NA	NA	NA	47.7	40.0	NA
1893	34.8	41.7	46.9	47.1	54.1	56.9	NA	NA	NA	NA	NA	NA	NA
1894	NA	NA	NA	NA	NA	NA	NA	NA	NA	53.4	48.0	38.6	NA
1895	40.2	43.0	44.9	51.6	55.2	60.9	64.4	65.4	NA	53.1	42.6	42.6	NA
1896	44.1	45.1	45.9	47.1	52.0	59.8	69.7	65.4	60.2	54.1	40.2	45.2	52.4
1897	40.0	43.4	40.8	52.6	58.8	60.1	NA	NA	NA	52.0	46.2	NA	NA
1898	38.8	45.8	42.2	50.2	53.2	NA	NA	NA	NA	NA	NA	NA	NA
1899	NA	40.3	43.4	48.3	50.7	NA	NA	60.6	61.6	51.4	52.0	43.4	NA
1900	44.0	43.2	50.3	51.1	NA	NA	NA	NA	NA	52.0	46.8	44.0	NA
1901	38.9	42.5	46.6	48.2	55.6	58.2	62.1	67.5	58.2	57.4	49.0	40.6	52.1
1902	38.6	46.8	44.6	49.2	55.0	59.7	63.0	65.2	60.2	54.4	45.8	41.8	52.0
1903	40.6	37.6	42.6	48.1	55.1	61.6	64.5	64.6	59.6	52.6	45.0	40.0	51.0
1904	41.3	41.4	43.6	52.4	55.9	NA	NA	NA	NA	NA	49.0	41.9	NA
1905	39.5	42.0	50.2	53.3	54.1	59.9	67.0	64.4	60.9	50.7	43.0	40.6	52.1
1906	43.4	43.4	44.6	53.4	55.0	58.6	70.4	66.3	60.2	55.0	46.7	45.0	53.4
1907	35.7	47.0	44.8	51.2	56.8	60.0	66.0	63.5	60.0	55.9	47.6	44.5	52.8
1908	43.2	42.6	46.0	51.0	51.4	58.6	67.6	64.6	61.0	52.5	47.9	38.9	52.1
1909	36.6	44.4	48.1	49.6	53.8	60.7	62.8	64.2	61.9	54.3	46.9	34.6	51.5
1910	37.9	38.7	50.2	53.0	58.4	57.9	66.4	61.6	59.0	55.2	45.7	43.6	52.3
1911	38.6	39.3	46.4	46.6	51.9	58.0	67.4	64.6	56.3	51.0	45.6	41.0	50.6
1912	43.8	45.5	44.5	49.0	55.4	60.4	65.4	63.8	60.8	49.5	50.4	43.0	52.6
1913	40.2	41.6	45.8	51.4	56.4	59.8	65.2	67.0	61.8	53.4	48.9	42.0	52.8
1914	45.8	43.6	50.8	55.4	61.4	62.7	67.3	64.7	58.6	56.0	48.5	35.6	54.2
1915	38.4	43.4	50.2	53.0	55.3	60.1	64.9	68.8	60.0	54.1	45.9	41.7	53.0
1916	32.8	45.6	45.2	51.1	52.2	59.0	61.3	64.6	60.4	49.9	41.2	38.4	50.1
1917	38.0	40.2	40.8	48.3	52.8	59.4	67.6	68.2	62.0	52.5	47.2	47.8	52.1
1918	45.6	42.6	47.1	52.6	54.2	65.2	65.6	66.4	63.7	54.6	45.6	40.2	53.6
1919	39.9	43.2	46.7	52.6	55.6	59.4	67.0	66.8	59.8	48.6	46.0	36.0	51.8
1920	41.3	40.0	45.0	48.0	53.4	60.0	65.6	67.4	59.6	52.2	45.2	42.5	51.7
1921	40.9	45.6	47.4	49.8	54.8	62.8	64.3	65.7	58.2	55.0	48.8	38.7	52.7
1922	36.5	39.8	43.8	47.3	55.2	63.6	67.0	64.8	62.3	53.8	41.3	40.0	51.3
1923	42.6	38.6	45.2	51.6	56.0	60.4	65.8	67.8	62.0	52.8	47.2	41.2	52.6
1924	38.8	47.4	44.4	51.2	58.1	60.8	64.9	64.6	60.4	53.1	44.2	33.4	51.8
1925	44.8	46.4	46.9	52.4	58.8	62.0	67.8	64.4	60.6	52.6	45.5	43.4	53.8
1926	41.1	47.8	51.3	57.3	56.0	65.6	67.8	65.5	58.6	55.6	48.9	41.4	54.9
1927	40.8	43.8	45.3	50.0	54.0	62.2	66.4	67.1	59.4	54.6	49.8	38.4	52.6
1928	42.6	42.8	50.4	50.3	59.2	60.7	67.2	65.4	59.4	53.2	46.4	39.2	53.1
1929	34.8	37.3	47.2	47.6	56.2	60.4	65.8	66.0	60.2	55.2	42.4	44.2	51.4
1930	29.4	46.6	47.8	54.0	53.3	59.6	64.2	66.8	60.5	53.0	43.9	39.9	51.6
1931	43.4	43.2	48.2	53.6	60.0	61.2	67.5	66.2	60.8	53.8	43.4	40.2	53.5
1932	39.3	42.0	48.4	51.0	55.0	63.2	64.0	65.9	61.6	55.2	49.4	36.6	52.6
1933	39.4	39.2	46.4	49.6	52.0	60.0	65.8	67.0	57.8	55.2	44.0	47.0	52.0
1934	46.1	46.5	53.6	56.7	59.1	61.7	64.9	66.3	59.6	56.4	49.1	42.2	55.2
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AVERAGE MEAN TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1935	39.9	43.4	42.2	49.6	53.8	62.0	64.8	65.2	62.4	49.9	39.9	38.4	51.0
1936	41.2	36.0	43.0	52.5	57.1	61.8	64.8	65.8	59.5	53.8	40.4	42.0	51.5
1937	29.6	40.6	47.1	47.4	56.8	62.8	66.8	65.5	61.8	56.2	50.2	43.5	52.4
1938	40.6	43.0	45.8	52.6	57.7	63.5	70.0	64.7	64.9	54.8	42.6	41.6	53.5
1939	42.0	41.2	48.0	54.4	58.8	60.2	68.1	68.0	63.2	55.0	47.7	46.8	54.4
1940	39.8	46.0	49.9	51.8	58.0	63.9	66.4	68.1	63.1	56.7	43.4	42.3	54.1
1941	42.4	44.5	49.8	52.0	56.4	60.2	69.8	66.6	59.0	53.0	47.4	42.2	53.6
1942	37.6	43.2	45.2	51.0	55.6	59.3	67.3	68.2	62.5	54.8	46.0	43.3	52.8
1943	34.4	43.6	45.6	52.7	54.2	59.7	66.9	65.2	64.7	54.2	45.3	38.4	52.1
1944	38.8	42.5	45.5	49.7	55.3	60.4	66.8	65.5	64.2	56.7	43.7	37.6	52.2
1945	40.8	44.2	44.2	49.4	57.6	61.2	68.1	66.7	60.0	52.4	45.6	41.8	52.7
1946	40.8	42.8	46.1	50.6	58.0	60.0	66.8	66.0	59.4	48.8	43.6	41.4	52.0
1947	37.0	44.9	48.5	53.0	59.4	59.6	65.2	64.0	61.2	54.9	46.8	41.9	53.0
1948	38.6	40.6	44.2	47.0	54.4	64.2	64.8	64.3	60.4	51.2	42.4	36.2	50.7
1949	28.2	41.4	46.8	52.6	58.5	61.7	65.2	65.4	61.8	48.2	48.7	40.0	51.5
1950	31.2	41.2	45.0	48.9	55.0	62.0	67.7	68.8	62.1	52.8	47.3	47.7	52.5
1951	40.6	44.0	42.0	53.4	56.2	64.7	67.2	65.8	62.7	53.0	46.3	38.0	52.8
1952	39.3	42.9	44.6	50.9	55.6	59.2	67.8	66.1	64.1	55.9	38.5	41.6	52.2
1953	46.9	43.3	44.9	49.6	53.3	57.7	65.2	65.4	62.1	53.8	48.5	43.0	52.8
1954	40.6	43.2	42.7	49.7	54.9	56.6	62.8	62.2	59.0	50.7	49.5	40.7	51.1
1955	39.0	40.0	41.9	44.9	52.7	60.0	61.8	63.5	59.6	52.6	43.1	42.1	50.1
1956	41.8	37.2	44.2	50.4	56.6	58.0	66.6	65.2	61.2	50.9	41.9	40.8	51.2
1957	32.1	42.8	46.9	51.9	57.8	61.6	64.1	63.3	64.8	52.4	43.0	42.7	52.0
1958	42.9	48.8	44.9	50.6	60.0	63.5	71.0	69.8	61.9	53.6	47.1	46.1	55.0
1959	43.3	42.8	46.3	51.0	53.6	61.1	68.2	65.5	59.3	54.5	44.4	40.9	52.6
1960	37.8	42.4	46.8	50.4	53.6	62.0	68.5	63.8	61.6	53.4	45.4	38.9	52.1
1961	43.6	46.7	46.9	50.2	54.9	63.6	66.8	68.6	58.5	52.3	41.7	42.0	53.0
1962	37.5	42.3	44.6	52.1	52.0	59.9	64.9	64.7	62.7	52.6	47.8	42.5	52.0
1963	34.4	49.3	45.7	47.6	56.0	60.1	62.9	66.7	66.0	55.4	47.1	42.2	52.8
1964	42.4	41.6	45.1	47.9	53.2	59.8	66.4	65.6	61.0	55.7	43.2	40.5	51.9
1965	40.8	44.3	47.8	51.8	53.6	60.7	68.0	67.4	60.8	55.5	49.4	39.2	53.3
1966	41.3	42.1	46.6	52.5	55.2	62.6	66.7	67.2	64.6	53.5	47.5	45.1	53.7
1967	44.4	44.6	45.0	45.9	55.7	64.8	68.8	72.0	66.0	54.4	46.9	42.4	54.2
1968	41.5	48.9	49.1	48.5	55.5	61.6	68.7	66.4	62.2	52.9	48.2	41.0	53.7
1969	36.9	40.7	47.6	50.2	60.1	65.3	66.5	64.6	61.3	50.6	45.6	43.1	52.7
1970	42.5	44.5	46.8	46.9	56.1	65.4	69.9	67.6	60.2	52.6	45.6	40.0	53.2
1971	40.1	41.1	43.1	48.3	54.5	57.8	66.7	68.2	59.2	49.5	43.5	38.7	50.9
1972	37.9	43.5	48.6	46.6	56.9	60.9	69.0	69.1	59.0	51.1	47.0	34.3	52.0
1973	38.3	44.5	44.9	49.9	55.9	61.7	67.7	64.0	62.7	52.7	44.3	43.4	52.5
1974	39.3	43.2	49.5	52.6	56.1	63.9	67.9	68.9	67.6	55.0	48.7	45.7	54.9
1975	45.9	43.5	44.7	46.4	55.5	61.1	68.5	64.5	66.1	55.0	46.2	43.0	53.4
1976	42.0	41.9	44.3	48.8	54.6	58.1	67.7	66.1	63.8	54.0	47.6	37.7	52.2
1977	38.9	44.5	44.9	50.7	51.3	61.0	64.2	69.7	59.4	52.5	43.5	43.0	52.0
1978	42.5	44.2	48.4	48.1	52.7	62.5	66.4	66.1	59.6	53.0	39.3	35.2	51.5
1979	31.5	42.9	48.8	50.4	55.5	60.0	67.3	65.5	63.6	56.5	42.4	43.0	52.3
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AVERAGE MEAN TEMPERATURES (1890-1997)

(continued)

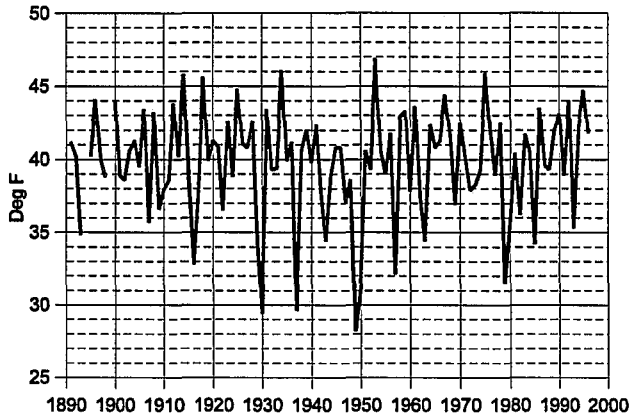
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1980	35.7	42.9	45.5	50.8	53.2	57.5	66.8	63.5	61.9	54.1	46.4	42.3	51.7
1981	40.4	43.4	45.9	49.9	54.4	59.5	64.8	68.2	62.0	50.2	45.4	41.8	52.2
1982	36.2	41.3	44.1	46.4	53.9	62.2	64.4	66.5	60.9	52.2	40.8	39.3	50.7
1983	41.7	45.1	48.3	49.1	56.1	58.6	63.0	66.1	59.1	52.1	46.6	36.3	51.9
1984	40.5	44.2	48.5	47.9	53.2	58.3	65.9	66.0	60.8	50.8	43.8	37.3	51.4
1985	34.2	40.6	42.8	52.0	54.9	61.4	69.9	65.8	58.3	51.8	37.6	33.0	50.2
1986	43.5	44.7	50.5	48.5	55.3	63.6	63.1	69.9	58.8	54.4	46.5	39.9	53.2
1987	39.6	43.7	47.3	52.4	57.9	63.3	64.4	67.6	62.7	56.5	46.8	39.8	53.5
1988	39.3	44.1	46.8	51.7	54.3	60.7	67.9	66.5	63.0	57.2	47.0	40.6	53.3
1989	42.1	35.8	47.2	55.6	56.5	63.1	65.3	66.7	64.6	53.9	47.4	41.1	53.3
1990	43.1	41.5	48.8	53.4	55.2	62.1	70.4	69.6	64.8	52.1	46.9	34.1	53.5
1991	38.9	48.7	44.4	48.8	52.7	57.5	67.5	67.7	65.1	54.3	47.6	41.3	52.9
1992	44.0	47.5	50.3	54.1	60.1	65.1	68.3	68.9	62.9	54.5	45.9	39.5	55.1
1993	35.3	38.5	49.6	51.2	58.6	60.5	62.5	66.8	62.7	56.1	38.5	39.3	51.6
1994	42.3	41.7	48.1	53.0	58.1	61.0	69.7	66.7	64.7	53.2	42.9	42.8	53.7
1995	44.7	47.8	47.9	50.4	57.6	61.1	68.8	65.5	65.2	51.6	50.2	42.5	54.5
1996	41.8	42.5	47.3	52.1	52.8	59.3	69.5	66.6	59.3	51.8	45.3	42.4	53.3
1997	40.9	42.2											
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

Average Monthly Mean Temperature (1961-90 Climatic Normals)												
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
40.8	44.2	47.4	50.6	55.8	62.0	67.3	67.6	62.8	54.1	46.1	41.1	53.3

MONTHLY AVERAGE MEAN TEMPERATURES

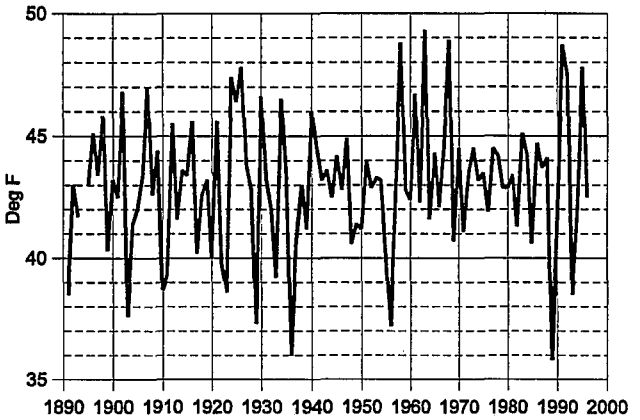
JANUARY (1890-1996)

Climatic Monthly Average 40.8 degrees



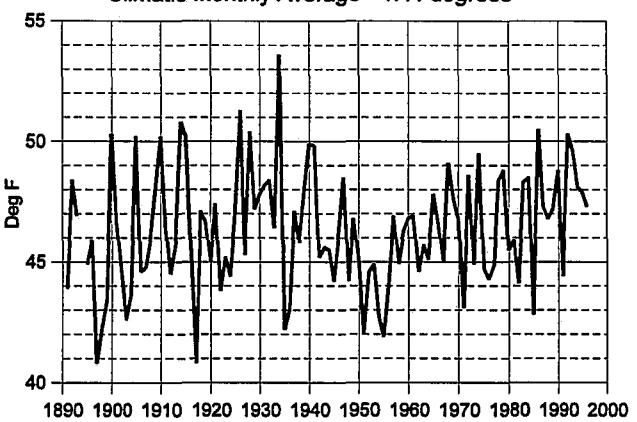
FEBRUARY (1890-1996)

Climatic Monthly Average 44.2 degrees



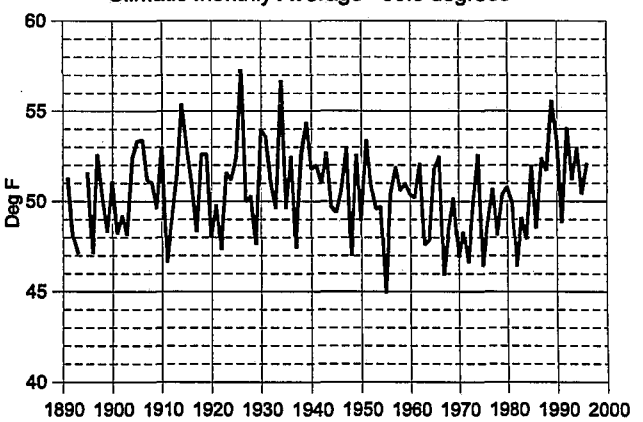
MARCH (1890-1996)

Climatic Monthly Average 47.4 degrees



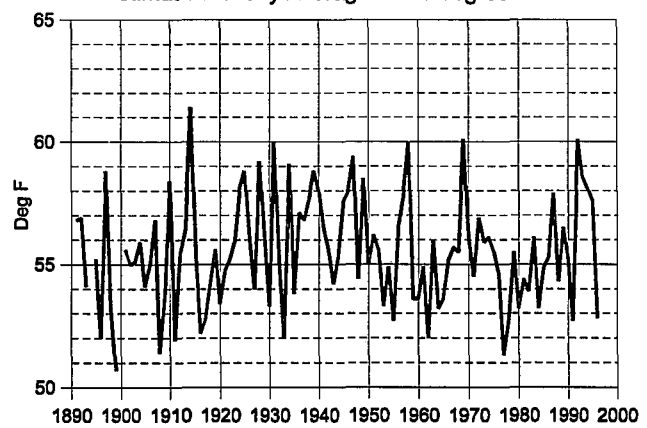
APRIL (1890-1996)

Climatic Monthly Average 50.6 degrees



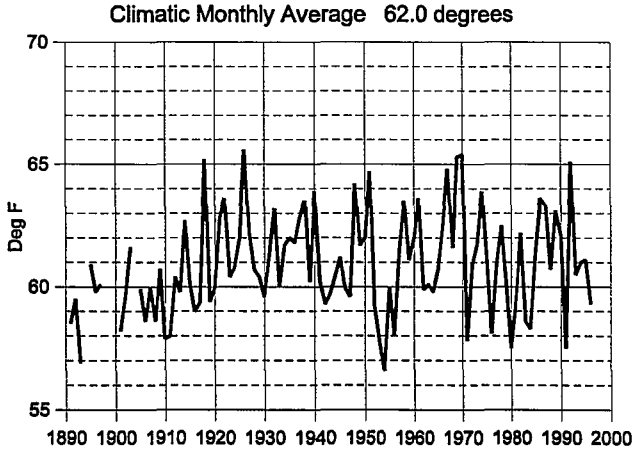
MAY (1890-1996)

Climatic Monthly Average 55.8 degrees



JUNE (1890-1996)

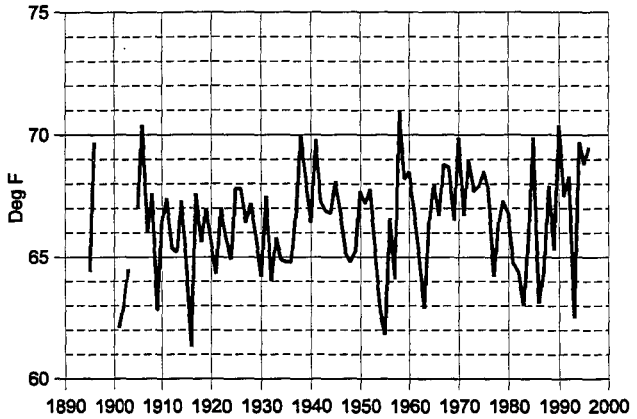
Climatic Monthly Average 62.0 degrees



MONTHLY AVERAGE MEAN TEMPERATURES (continued)

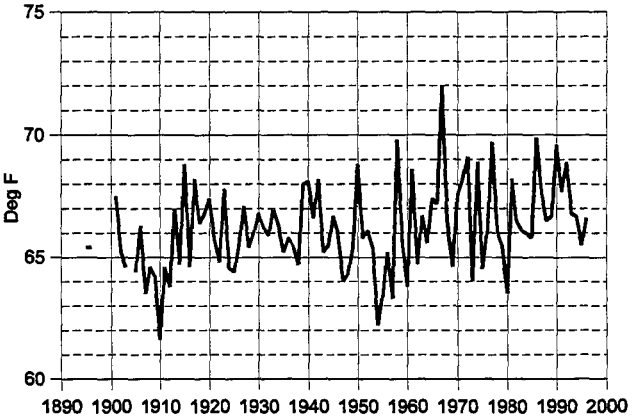
JULY (1890-1996)

Climatic Monthly Average 67.3 degrees



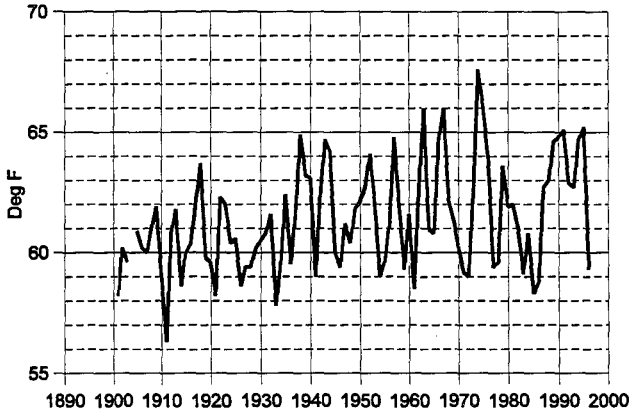
AUGUST (1890-1996)

Climatic Monthly Average 67.6 degrees



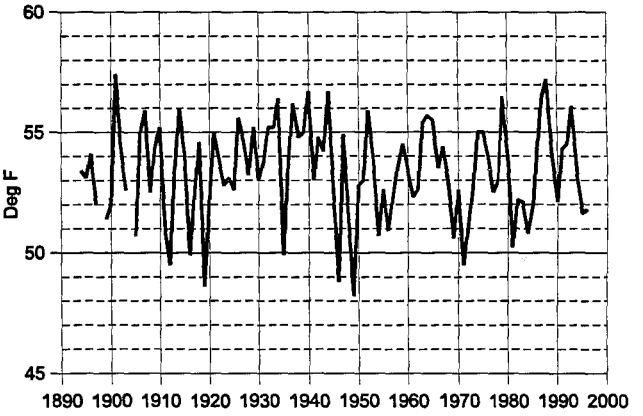
SEPTEMBER (1890-1996)

Climatic Monthly Average 62.8 degrees



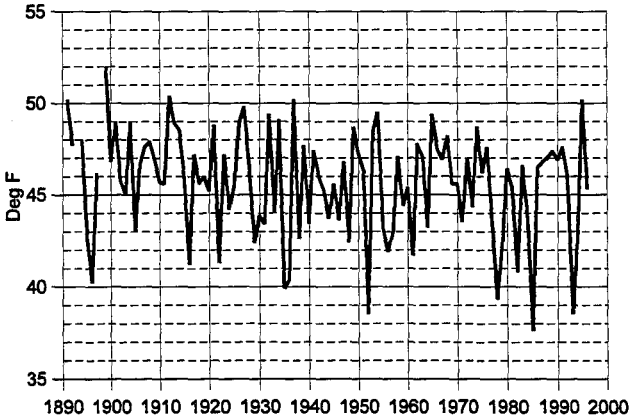
OCTOBER (1890-1996)

Climatic Monthly Average 54.1 degrees



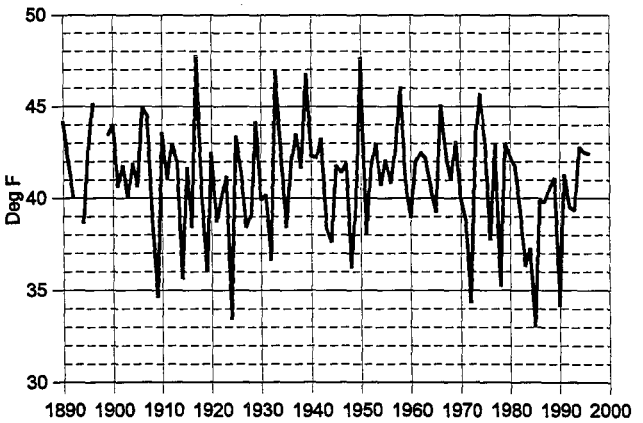
NOVEMBER (1890-1996)

Climatic Monthly Average 46.1 degrees



DECEMBER (1890-1996)

Climatic Monthly Average 41.1 degrees



MONTHLY AND ANNUAL TEMPERATURE DATA
WARMEST AND COLDEST FIVE[1]

MONTH	AVERAGE MAXIMUM Warmest 5		AVERAGE MAXIMUM Coldest 5		AVERAGE MINIMUM Warmest 5		AVERAGE MINIMUM Coldest 5		AVERAGE MEAN Warmest 5		AVERAGE MEAN Coldest 5	
January	52.5	1953	35.5	1937	41.2	1953	20.0	1949	46.9	1953	28.2	1949
	52.5	1914	35.6	1930	40.0	1975	23.2	1930	46.1	1934	29.4	1930
	52.4	1934	36.3	1949	39.8	1934	23.8	1937	45.9	1975	29.6	1937
	51.7	1975	37.8	1950	39.6	1918	24.6	1950	45.8	1914	31.2	1950
	51.7	1918	37.8	1916	39.1	1967[2]	24.8	1978	45.6	1918	31.5	1979
	Climatic Normal 46.4				Climatic Normal 35.2				Climatic Normal 40.8			
February	58.3	1968	43.0	1956	42.2	1958	27.4	1989	49.3	1963	35.8	1989
	57.2	1963	43.4	1936	41.3	1963	28.3	1929	48.9	1968	36.0	1936
	56.7	1991	43.4	1891	40.7	1991	28.5	1936	48.8	1958	37.2	1956
	56.1	1995	44.2	1989	40.6	1902	29.8	1903	48.7	1991	37.3	1929
	55.9	1934	44.6	1910	40.2	1907	29.9	1913	47.8	1995[2]	37.6	1903
	Climatic Normal 51.4				Climatic Normal 37.0				Climatic Normal 44.2			
March	64.8	1934	47.1	1897	42.3	1934	30.7	1913	53.6	1934	40.8	1917
	64.4	1926	49.2	1917	42.1	1928	31.7	1954	51.3	1926	40.8	1897
	62.8	1941	50.5	1955	42.1	1905	32.0	1985	50.8	1914	41.9	1955
	62.0	1992	50.5	1904	41.6	1900	32.3	1917	50.5	1986	42.0	1951
	61.0	1913	50.9	1899	41.5	1993	32.4	1951	50.4	1928	42.2	1935[2]
	Climatic Normal 55.9				Climatic Normal 38.9				Climatic Normal 47.4			
April	70.6	1926	53.2	1893	44.5	1989	34.4	1982	57.3	1926	44.9	1955
	70.4	1934	53.6	1955	44.2	1992	34.7	1911	56.7	1934	45.9	1967
	68.2	1951	54.5	1896	44.0	1926	35.5	1967	55.6	1989	46.4	1982
	67.7	1939	55.6	1963	43.5	1930	36.0	1975	55.4	1914	46.4	1975
	66.6	1989[2]	55.7	1892	43.4	1914	36.1	1955	54.4	1939	46.6	1972[2]
	Climatic Normal 60.5				Climatic Normal 40.6				Climatic Normal 50.6			
May	76.7	1914	59.4	1899	47.8	1969	38.7	1935	61.4	1914	50.7	1899
	75.1	1931	60.1	1896	47.5	1993	39.0	1913	60.1	1992	51.3	1977
	74.7	1992	61.1	1962	47.4	1957	39.4	1920	60.1	1969	51.4	1908
	74.1	1947	61.3	1908	47.3	1910	39.8	1982	60.0	1958	51.9	1911
	73.8	1928	61.4	1991	47.2	1945	39.9	1977	60.0	1931	52.0	1962[2]
	Climatic Normal 67.1				Climatic Normal 44.5				Climatic Normal 55.8			
June	82.2	1951	67.3	1893	54.8	1969	43.1	1976	65.6	1926	56.6	1954
	81.2	1926	67.8	1954	52.7	1958	43.2	1979	65.4	1970	56.9	1893
	80.6	1918	67.9	1891	52.1	1948	43.9	1915	65.3	1969	57.5	1991
	79.6	1970	68.0	1991	51.5	1990	44.9	1917	65.2	1918	57.5	1980
	79.3	1940	68.0	1901	51.4	1992	45.0	1996	65.1	1992	57.7	1953
	Climatic Normal 74.2				Climatic Normal 49.7				Climatic Normal 62.0			
July	87.8	1970	73.6	1916	56.1	1906	47.9	1962	71.0	1958	61.3	1916
	87.5	1958	74.5	1993	55.0	1995	48.2	1977	70.4	1990	61.8	1955
	87.3	1985	74.5	1955	54.7	1990	48.2	1924	70.4	1906	62.1	1901
	87.0	1938	74.7	1983	54.7	1974	48.5	1957	70.0	1938	62.5	1993
	86.7	1996	75.3	1902[2]	54.7	1896	48.5	1921	69.9	1985[1]	62.8	1954[2]
	Climatic Normal 81.7				Climatic Normal 52.8				Climatic Normal 67.3			

MONTHLY AND ANNUAL TEMPERATURE DATA
WARMEST AND COLDEST FIVE[1] (continued)

MONTH	AVERAGE MAXIMUM Warmest 5		Coldest 5		AVERAGE MINIMUM Warmest 5		Coldest 5		AVERAGE MEAN Warmest 5		Coldest 5	
August	90.4	1967	70.6	1899	56.3	1990	45.9	1910	72.0	1967	60.6	1899
	87.2	1958	74.7	1954	54.5	1977	46.5	1955	69.9	1986	61.6	1910
	86.5	1917	75.2	1912	54.5	1974	46.8	1980	69.8	1958	62.2	1954
	86.2	1986	75.8	1907	54.2	1965	46.8	1913	69.7	1977	63.3	1957
	86.1	1950	76.8	1896	54.1	1968	47.9	1957	69.6	1990	63.5	1980[2]
	Climatic Normal 81.8				Climatic Normal 53.2				Climatic Normal 67.6			
September	85.1	1974	66.5	1911	52.3	1963	43.7	1936	67.6	1974	56.3	1911
	82.8	1975	69.6	1920	52.1	1940	43.7	1934	66.1	1975	57.8	1933
	82.4	1991	69.6	1901	51.7	1966	44.0	1929	66.0	1967	58.2	1901
	81.6	1967	69.9	1933	51.6	1995	44.2	1961	66.0	1963	58.3	1985
	81.2	1989[2]	69.9	1927	51.2	1990[2]	44.3	1921	65.2	1995	58.5	1961
	Climatic Normal 76.2				Climatic Normal 49.3				Climatic Normal 62.8			
October	72.1	1987	58.4	1918	48.4	1901	35.6	1916	57.4	1901	48.2	1949
	70.8	1952	59.1	1946	47.6	1975	36.6	1949	57.2	1988	48.6	1919
	69.6	1944	59.2	1919	47.5	1907	37.5	1912	56.7	1944	48.8	1946
	69.5	1974	59.3	1905	47.4	1891	38.1	1971	56.7	1940	49.5	1971
	68.8	1993	59.4	1984	46.7	1940	38.5	1946	56.5	1987[2]	49.5	1912
	Climatic Normal 64.6				Climatic Normal 43.5				Climatic Normal 54.1			
November	63.9	1912	44.5	1985	45.7	1899	29.1	1952	52.0	1899	37.6	1985
	58.2	1899	45.6	1896	44.0	1891	29.3	1993	50.4	1912	38.5	1993
	58.0	1914	46.9	1922	43.8	1937	29.8	1978	50.2	1995	38.5	1952
	57.8	1949	47.7	1993	43.6	1995	30.6	1985	50.2	1937	39.3	1978
	57.2	1932	47.8	1952	43.5	1965[2]	31.3	1936[2]	50.2	1891	39.9	1935
	Climatic Normal 52.4				Climatic Normal 39.7				Climatic Normal 46.1			
December	53.2	1950	39.7	1985	42.5	1917	26.3	1985	47.8	1917	33.0	1985
	53.1	1933	40.5	1924	42.1	1950	26.4	1924	47.7	1950	33.4	1924
	53.1	1917	40.8	1909	40.9	1933	26.9	1972	47.0	1933	34.1	1990
	53.0	1939	41.0	1990	40.8	1896	27.2	1990	46.8	1939	34.6	1909
	52.7	1958	41.4	1983	40.6	1939	27.3	1914	46.1	1958	35.2	1978
	Climatic Normal 46.2				Climatic Normal 35.9				Climatic Normal 41.1			
Year	66.8	1934	60.2	1955	44.2	1995	38.7	1985	55.2	1934	50.1	1955
	66.2	1992	60.5	1916	44.2	1974	39.2	1935	55.1	1992	50.1	1916
	66.0	1958	60.5	1903	44.0	1992	39.8	1982	55.0	1958	50.2	1985
	66.0	1926	61.1	1902	44.0	1958	39.8	1911	54.9	1974	50.6	1911
	65.5	1974[2]	61.2	1948	44.0	1906	39.9	1916	54.9	1926	50.7	1982[2]
	Climatic Normal 63.2				Climatic Normal 43.4				Climatic Normal 53.3			

[1]Period of record is from 1890 through 1996. Climatic normals based on 1961-90 temperature data.
[2] In some instances, an identical temperature may have occurred on several years. As a result, the most recent year of occurrence is listed.

MONTHLY EXTREME MAXIMUM TEMPERATURES (1890-1997)

(NA indicates that the data is not available due to incomplete observations during the time period)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1890	Official Weather Records Began on October 1, 1890									NA	NA	62	NA
1891	59	50	64	73	79	84	NA	NA	NA	81	74	63	NA
1892	59	58	76	72	85	93	NA	NA	NA	NA	70	60	NA
1893	55	60	72	71	76	89	NA	NA	NA	NA	NA	NA	NA
1894	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	70	59	NA
1895	62	62	70	80	87	90	96	93	NA	81	60	66	NA
1896	66	66	67	65	78	93	97	94	89	80	62	61	97
1897	59	59	57	80	91	85	NA	NA	NA	82	69	NA	NA
1898	52	68	65	76	76	NA	NA	NA	NA	NA	NA	NA	NA
1899	NA	60	60	76	72	NA	NA	85	88	79	65	60	NA
1900	65	59	75	85	NA	NA	NA	NA	NA	72	65	64	NA
1901	58	72	68	67	85	84	86	96	84	78	66	62	96
1902	60	74	63	72	85	88	92	97	91	80	61	60	97
1903	57	55	67	68	79	94	83	89	80	74	59	62	94
1904	59	57	61	84	80	NA	NA	NA	NA	NA	63	58	NA
1905	57	69	72	79	78	81	98	91	84	72	62	56	98
1906	63	65	65	87	84	85	96	90	82	81	67	62	96
1907	54	64	70	77	85	91	99	85	93	77	65	63	99
1908	56	60	70	80	73	86	93	94	85	84	75	58	94
1909	57	66	67	71	84	89	86	92	92	78	67	59	92
1910	55	57	70	86	84	89	95	88	82	80	66	60	95
1911	59	57	74	74	82	83	98	90	83	75	64	55	98
1912	60	58	68	86	90	90	95	86	81	73	70	62	95
1913	55	69	69	76	84	88	92	97	88	76	71	62	97
1914	69	63	75	79	87	92	98	99	84	75	66	60	99
1915	54	59	75	79	80	93	95	97	87	75	65	57	97
1916	54	70	68	74	80	91	85	93	85	78	64	55	93
1917	53	62	66	70	75	89	98	94	87	80	64	65	98
1918	59	64	73	83	80	90	90	98	88	77	67	58	98
1919	66	67	75	78	84	83	98	97	86	74	65	66	98
1920	67	54	61	75	81	85	93	98	88	78	61	59	98
1921	58	62	68	71	82	83	90	93	80	78	63	62	93
1922	53	60	64	72	91	91	97	89	94	72	59	60	97
1923	60	58	80	83	87	90	91	93	96	84	63	59	96
1924	64	69	69	80	88	98	98	92	92	75	59	59	98
1925	63	64	71	81	83	100	93	96	88	74	64	61	100
1926	64	65	77	89	83	99	104	92	89	80	64	67	104
1927	58	62	66	82	87	89	97	99	85	78	73	58	99
1928	65	65	70	77	88	88	102	91	88	78	67	66	102
1929	51	58	71	73	83	90	92	94	87	80	64	60	94
1930	59	70	77	75	78	92	91	95	91	74	68	60	95
1931	69	66	68	82	92	91	99	97	92	79	73	64	99
1932	60	78	73	75	81	90	88	100	89	86	70	56	100
1933	62	65	70	76	82	87	93	97	85	79	64	63	97
1934	66	64	72	87	86	90	90	96	98	91	75	60	98
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY EXTREME MAXIMUM TEMPERATURES (1890-1997)
(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1935	65	62	66	75	80	93	99	97	92	78	62	57	99
1936	58	68	66	77	83	85	90	93	91	83	62	58	93
1937	48	57	62	69	81	91	91	91	93	78	69	65	93
1938	62	62	71	75	89	93	104	89	90	78	60	67	104
1939	57	57	74	81	92	87	101	100	90	74	69	65	101
1940	61	59	74	82	84	95	90	97	87	86	62	64	97
1941	60	59	72	79	85	92	102	96	80	71	68	65	102
1942	60	61	73	76	82	94	98	100	90	82	64	57	100
1943	58	63	66	80	83	87	95	89	96	83	63	58	96
1944	58	58	68	77	83	88	94	100	101	80	62	61	101
1945	60	60	65	73	83	91	98	98	92	85	65	61	98
1946	58	65	72	77	87	93	105	95	90	70	58	60	105
1947	56	64	74	86	91	87	87	88	90	76	69	58	91
1948	56	65	69	67	80	93	91	88	98	73	60	53	98
1949	48	63	64	80	86	89	97	94	96	75	71	58	97
1950	53	65	71	76	87	93	94	99	95	78	64	64	99
1951	63	68	64	83	84	100	102	99	95	82	65	56	102
1952	60	69	66	75	87	85	97	100	96	87	59	65	100
1953	59	59	74	74	86	80	93	95	93	82	63	60	95
1954	62	61	62	76	84	83	85	86	85	71	70	56	86
1955	54	57	63	71	78	93	89	95	97	76	67	62	97
1956	58	52	66	77	87	85	100	93	91	82	65	59	100
1957	52	66	63	86	83	83	88	90	95	71	64	60	95
1958	64	65	65	78	86	93	104	96	98	87	66	67	104
1959	58	65	65	77	83	88	98	95	88	77	64	60	98
1960	64	61	71	76	79	88	100	98	95	81	62	61	100
1961	60	63	69	75	84	100	105	97	89	83	60	57	105
1962	62	69	67	79	69	85	96	91	90	76	67	61	96
1963	54	66	70	70	91	92	89	95	96	76	64	61	96
1964	61	65	71	69	82	86	95	96	86	86	63	62	96
1965	56	64	68	77	80	92	99	93	89	82	63	59	99
1966	57	59	69	75	85	96	95	95	94	84	63	60	96
1967	57	62	70	64	85	92	98	99	96	74	64	60	99
1968	64	68	68	83	80	94	99	95	93	74	64	56	99
1969	63	57	75	72	87	97	95	90	90	76	66	64	97
1970	60	65	65	66	88	97	99	99	90	88	70	58	99
1971	65	66	61	73	85	87	98	101	86	81	59	54	101
1972	54	62	73	71	91	89	99	106	96	81	63	61	106
1973	58	64	65	71	85	92	99	89	94	73	62	56	99
1974	63	58	73	72	79	94	99	97	96	83	70	61	99
1975	67	65	62	70	85	88	96	89	96	84	76	63	96
1976	63	64	69	78	86	92	96	92	91	87	71	61	96
1977	61	66	68	75	74	86	94	102	87	72	64	60	102
1978	55	59	77	75	85	93	101	104	82	77	69	56	104
1979	53	57	69	74	83	91	102	90	92	88	64	68	102
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY EXTREME MAXIMUM TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1980	56	63	63	79	78	78	96	92	94	94	70	66	96
1981	55	66	65	79	80	86	98	108	96	75	67	58	108
1982	57	64	65	81	83	97	88	96	91	75	60	57	97
1983	61	63	64	74	92	84	92	91	82	74	63	56	92
1984	62	65	70	74	84	87	94	94	88	84	60	52	94
1985	50	64	62	77	85	94	99	94	88	79	65	55	99
1986	66	67	70	77	90	91	89	97	92	77	62	59	97
1987	57	61	70	81	93	96	96	102	95	92	66	60	102
1988	60	63	70	77	87	89	102	96	103	90	66	59	103
1989	62	60	65	79	82	95	88	92	96	79	66	66	96
1990	63	66	69	77	83	95	99	100	92	75	67	57	100
1991	58	67	67	68	72	83	99	94	95	88	65	57	99
1992	64	67	69	80	88	102	99	104	86	78	65	54	104
1993	64	60	68	70	81	86	87	100	94	87	62	64	100
1994	60	63	72	73	82	86	102	89	95	77	59	64	102
1995	65	72	77	77	86	95	99	92	89	74	68	59	99
1996	58	66	68	77	78	83	99	101	86	82	66	62	101
1997	60	59											
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

Extreme Maximum Temperatures 1931-1996 (EUGENE NWS)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
	69	78	77	87	93	102	105	108	103	94	76	68	108
Year	1931	1932	1995[1]	1934	1987	1992	1961[1]	1981	1988	1980	1975	1979	1981

Extreme Maximum Temperature 1890-1996 (ALL LOCATIONS)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
	69	78	80	89	93	102	105	108	103	94	76	68	108
Year	1931[1]	1932	1923	1926	1987	1992	1961[1]	1981	1988	1980	1975	1979	1981

[1]This temperature has occurred more than once. As a result, the most recent occurrence listed.

MONTHLY EXTREME MINIMUM TEMPERATURES (1890-1997)

(NA indicates that the data is not available due to incomplete observations during the time period)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1890	Official Weather Records Began on October 1, 1890									NA	NA	28	NA
1891	23	27	19	32	35	38	NA	NA	NA	35	32	28	19
1892	29	26	33	33	38	40	NA	NA	NA	NA	32	23	23
1893	17	19	29	33	38	39	NA	NA	NA	NA	NA	NA	NA
1894	NA	NA	NA	NA	NA	NA	NA	NA	NA	34	25	22	NA
1895	23	24	24	32	36	40	42	45	NA	29	22	29	22
1896	25	29	20	30	37	40	47	49	38	38	12	30	12
1897	24	30	28	34	36	40	NA	NA	NA	32	29	31	24
1898	26	34	26	31	35	NA	NA	NA	NA	NA	NA	NA	NA
1899	NA	0	29	31	33	NA	NA	44	43	26	35	28	NA
1900	27	23	35	31	NA	NA	NA	NA	NA	36	22	27	22
1901	27	21	32	31	37	40	41	46	38	43	33	23	21
1902	14	32	32	33	38	41	43	42	37	36	31	26	14
1903	25	23	27	31	35	40	43	45	37	34	31	24	23
1904	30	29	30	32	36	NA	NA	NA	NA	NA	37	27	27
1905	23	15	32	32	36	44	47	40	41	30	28	26	15
1906	29	27	21	29	37	42	45	45	39	29	24	28	21
1907	10	31	26	34	33	42	46	38	37	40	30	32	10
1908	28	21	28	30	35	41	46	40	32	34	30	25	21
1909	6	31	30	30	33	39	43	41	37	38	25	18	6
1910	16	18	30	32	39	39	44	41	38	31	31	29	16
1911	21	23	25	26	34	37	42	43	39	30	23	29	21
1912	23	31	25	32	34	41	46	46	42	31	31	27	23
1913	19	23	18	30	30	34	44	42	36	35	29	29	18
1914	30	25	35	34	34	39	43	35	34	36	32	7	7
1915	20	31	32	33	31	34	45	48	38	32	33	17	17
1916	14	28	28	31	31	34	42	40	38	27	19	26	14
1917	15	23	20	30	35	38	42	42	41	25	30	30	15
1918	22	25	25	28	34	38	41	45	40	34	30	19	19
1919	18	25	30	32	33	38	41	45	36	29	18	-3	-3
1920	22	24	30	31	32	38	42	42	42	28	25	26	22
1921	27	25	30	29	34	44	41	44	33	36	34	17	17
1922	16	23	25	32	35	44	42	44	41	33	27	20	16
1923	22	20	25	35	35	39	47	46	42	31	30	21	20
1924	8	30	28	29	36	41	43	40	36	32	29	-4	-4
1925	30	30	29	33	36	41	47	43	41	32	27	29	27
1926	24	31	30	35	37	42	39	45	30	30	32	21	21
1927	13	25	30	27	36	39	44	45	38	32	32	19	13
1928	22	26	33	31	35	41	46	43	37	30	31	23	22
1929	17	14	28	27	36	37	43	44	35	29	19	29	14
1930	6	27	28	36	34	38	41	43	38	34	26	25	6
1931	26	26	25	31	35	40	45	43	38	34	20	21	20
1932	21	18	27	34	35	43	40	43	37	33	31	5	5
1933	19	11	27	30	36	40	42	43	35	29	27	29	11
1934	29	27	32	30	36	39	43	44	33	35	35	24	24
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY EXTREME MINIMUM TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1935	16	24	25	32	32	37	39	38	37	27	15	20	15
1936	19	16	24	25	35	43	44	43	35	28	22	25	16
1937	6	30	30	32	36	42	46	42	36	36	35	30	6
1938	27	28	29	31	34	39	43	42	47	32	23	18	18
1939	29	26	29	33	34	38	44	43	41	34	32	27	26
1940	23	30	29	32	37	39	44	46	38	37	23	14	14
1941	29	28	24	33	36	40	45	44	36	37	24	22	22
1942	16	22	25	32	33	37	43	44	36	34	26	26	16
1943	9	29	27	30	34	43	44	45	38	35	27	24	9
1944	25	28	25	31	36	38	42	42	38	37	25	16	16
1945	21	26	28	30	41	39	44	44	32	28	31	20	20
1946	27	28	32	31	37	39	44	40	36	26	26	19	19
1947	16	25	31	34	33	38	44	41	35	37	25	28	16
1948	19	19	26	30	32	44	42	42	37	26	24	17	17
1949	9	22	32	30	33	37	41	41	36	24	32	26	9
1950	-3	-3	27	30	34	41	43	43	33	30	27	35	-3
1951	14	26	22	30	36	39	45	41	33	30	27	24	14
1952	24	27	28	29	31	36	45	42	39	32	15	27	15
1953	31	27	26	27	37	39	42	45	35	31	30	28	26
1954	20	27	27	28	28	37	39	44	33	26	28	23	20
1955	27	22	23	29	32	36	39	38	34	35	14	22	14
1956	21	16	20	30	36	35	42	44	36	33	23	27	16
1957	-4	26	28	31	40	41	43	41	38	30	24	28	-4
1958	27	28	27	34	34	43	45	47	37	29	22	28	22
1959	19	23	28	30	35	40	43	45	40	28	19	25	19
1960	20	20	24	30	34	40	42	40	36	32	28	22	20
1961	24	30	32	32	38	39	42	42	33	30	21	20	20
1962	6	18	28	33	33	39	40	42	39	32	28	20	6
1963	11	32	28	30	37	42	44	45	45	32	27	23	11
1964	29	25	29	29	31	40	40	43	37	31	26	10	10
1965	32	29	27	32	32	37	44	44	34	37	31	21	21
1966	25	28	30	34	34	37	45	42	44	30	31	33	25
1967	30	28	28	30	36	44	46	46	43	38	30	24	24
1968	26	27	29	28	34	40	46	48	40	37	33	13	13
1969	1	26	27	33	35	48	45	38	36	29	28	27	1
1970	21	28	30	28	37	40	43	43	33	30	24	26	21
1971	18	25	21	32	36	37	43	43	36	19	22	21	18
1972	15	20	29	27	33	39	43	42	32	31	32	-12	-12
1973	22	28	29	30	33	35	39	39	39	29	25	29	22
1974	10	28	28	32	35	40	46	47	38	32	33	29	10
1975	26	24	28	28	33	41	46	44	43	38	29	23	23
1976	25	20	25	31	33	32	41	44	42	30	21	23	20
1977	15	27	27	28	32	34	40	44	40	35	24	25	15
1978	25	28	25	29	31	42	40	44	38	28	12	10	10
1979	7	12	31	33	32	35	40	43	40	37	28	26	7
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY EXTREME MINIMUM TEMPERATURES (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1980	8	23	31	28	32	35	42	40	38	25	29	23	8
1981	27	27	27	29	35	38	40	41	38	29	22	24	22
1982	12	17	26	28	32	40	42	44	38	26	23	17	12
1983	21	23	32	27	36	38	41	42	32	31	29	10	10
1984	16	26	29	33	31	38	43	44	34	32	28	18	16
1985	20	17	24	31	29	37	45	39	35	26	16	18	16
1986	27	25	34	31	35	41	39	47	40	35	29	22	22
1987	21	26	29	32	35	37	45	46	37	32	32	25	21
1988	24	22	28	31	36	38	42	42	34	34	31	22	22
1989	27	4	32	33	37	43	46	45	38	30	28	28	4
1990	28	20	28	33	33	46	42	46	42	30	31	4	4
1991	22	28	31	31	38	35	42	46	40	27	28	27	22
1992	23	27	32	32	36	43	48	44	39	30	25	20	20
1993	8	19	33	35	40	41	45	44	35	34	15	24	8
1994	24	20	28	34	36	39	46	45	44	32	28	25	20
1995	26	25	26	32	39	41	46	42	45	23	21	23	21
1996	20	18	27	35	31	36	44	39	36	30	29	24	18
1997	19	26											
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

Extreme Minimum Temperatures 1931-1996 (Mahlon Sweet Field)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
	-4	-3	20	25	28	32	39	38	32	19	12	-12	-12
Year	1957	1950	1956	1936	1954	1976	1986[1]	1969[1]	1983[1]	1971	1978	1972	1972

Extreme Minimum Temperature 1890-1996 (All Locations)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
	-4	-3	18	25	28	32	39	35	30	19	12	-12	-12
Year	1957	1950	1913	1936	1954	1976	1986[1]	1914	1926	1971	1978[1]	1972	1972

[1]Temperature occurred more than once. As a result, the year of most recent occurrence is listed.

FIRST AND LAST OCCURRENCE OF HIGH TEMPERATURE OF AT LEAST...

	70 Degrees				80 Degrees				90 Degrees				100 Degrees			
Year	First Date		Last Date		First Date		Last Date		First Date		Last Date		First Date		Last Date	
Due to lapses in observations, some data are not available (NA). Two dashes mean temperature did not occur.																
1897	75	4/9	73	10/17	80	4/16	81	10/6	91	5/28	NA	NA	NA	NA	NA	NA
1898	76	4/12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1899	76	4/8	70	10/6	NA	NA	80	9/27	NA	NA	NA	NA	NA	NA	NA	NA
1900	75	3/13	70	10/16	85	4/29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1901	72	2/28	71	10/25	85	5/25	80	9/21	96	8/4	90	8/22	--	--	--	--
1902	72	2/15	72	10/12	85	5/26	80	10/2	92	7/19	91	9/8	--	--	--	--
1903	70	5/2	74	10/17	NA	NA	80	9/22	94	6/7	94	6/17	--	--	--	--
1904	74	4/9	NA	NA	84	4/12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1905	71	3/1	72	10/1	81	6/10	81	9/22	98	7/8	91	8/8	--	--	--	--
1906	72	4/5	70	10/13	81	4/6	81	10/9	95	7/2	90	8/27	--	--	--	--
1907	70	3/30	75	10/11	81	5/15	80	9/22	91	6/26	91	9/9	--	--	--	--
1908	70	3/23	75	11/2	80	4/30	84	10/1	90	7/7	93	8/19	--	--	--	--
1909	71	4/8	NA	NA	84	5/2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1910	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1911	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1912	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1913	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1914	73	3/19	71	10/25	84	6/1	83	9/24	92	6/14	90	8/15	--	--	--	--
1915	70	3/19	72	10/21	80	5/6	80	9/20	93	6/30	93	8/29	--	--	--	--
1916	70	2/14	70	10/22	80	5/2	83	9/21	91	6/16	93	8/25	--	--	--	--
1917	70	4/24	70	10/15	80	6/8	80	10/5	90	7/13	90	8/26	--	--	--	--
1918	73	3/29	71	10/12	81	4/19	81	9/28	90	6/30	95	8/31	--	--	--	--
1919	75	3/29	71	10/8	84	5/21	80	9/25	90	7/8	91	8/24	--	--	--	--
1920	75	4/26	73	10/5	81	5/16	80	9/16	93	7/7	91	8/21	--	--	--	--
1921	70	4/8	70	10/28	82	5/24	80	9/10	90	7/22	93	8/7	--	--	--	--
1922	72	4/25	72	10/24	84	5/14	84	9/25	91	5/30	91	9/12	--	--	--	--
1923	70	3/27	72	10/13	80	3/29	84	10/1	90	6/28	96	9/7	--	--	--	--
1924	71	4/7	75	10/24	80	4/26	81	9/13	90	6/2	92	9/12	--	--	--	--
1925	71	3/24	74	10/27	81	4/28	86	9/23	99	6/24	92	8/9	100	6/25	100	6/25
1926	70	3/12	70	10/16	86	4/14	80	10/6	90	6/3	92	8/24	104	7/10	104	7/10
1927	75	4/22	70	11/3	82	4/25	85	8/18	95	7/22	91	8/18	--	--	--	--
1928	70	3/18	78	10/8	80	5/10	87	9/22	92	7/11	91	8/9	100	7/22	102	7/24
1929	71	3/4	73	10/26	83	5/11	80	10/4	90	6/24	90	8/29	--	--	--	--
1930	70	2/17	74	10/6	84	6/6	80	9/26	92	6/15	91	9/2	--	--	--	--
1931	71	4/9	73	11/1	81	4/27	84	9/5	92	5/30	91	9/4	--	--	--	--
1932	78	2/26	70	11/17	81	5/9	82	9/4	90	6/10	96	9/6	100	8/4	100	8/4
1933	70	3/19	70	10/26	80	5/28	85	9/9	91	7/14	92	8/25	--	--	--	--
1934	71	3/9	75	11/5	80	4/7	80	10/10	90	6/11	91	10/10	--	--	--	--
1935	71	4/13	74	10/8	80	5/20	83	9/29	92	6/5	92	9/8	--	--	--	--
1936	77	4/10	73	10/18	81	5/10	83	10/10	90	7/20	91	9/27	--	--	--	--
1937	75	5/1	73	10/27	81	5/2	85	9/16	91	6/2	93	9/14	--	--	--	--
1938	71	3/11	71	10/26	81	5/20	80	9/26	93	6/6	90	9/17	100	7/14	104	7/21
1939	74	3/18	70	10/20	80	5/17	80	9/26	92	5/13	90	9/21	101	7/26	100	8/19
	70 Degrees				80 Degrees				90 Degrees				100 Degrees			
Year	First Date		Last Date		First Date		Last Date		First Date		Last Date		First Date		Last Date	

FIRST AND LAST OCCURRENCE OF HIGH TEMPERATURES OF AT LEAST...

(continued)

	70 Degrees				80 Degrees				90 Degrees				100 Degrees			
Year	First Date		Last Date		First Date		Last Date		First Date		Last Date		First Date		Last Date	
1940	71	3/21	70	10/19	82	4/12	86	10/19	90	6/10	91	8/29	--	--	--	--
1941	72	3/15	71	10/10	83	5/10	80	9/24	92	6/11	93	8/19	102	7/14	102	7/15
1942	73	3/30	73	10/22	80	5/20	82	9/9	94	6/30	90	9/22	100	8/14	100	8/14
1943	70	4/1	70	10/8	80	4/12	83	10/8	91	7/19	90	9/24	--	--	--	--
1944	77	4/2	73	10/27	83	5/3	80	10/10	91	7/17	90	9/11	100	8/29	101	9/5
1945	71	4/18	70	10/25	83	5/2	82	10/8	90	6/17	92	9/12	--	--	--	--
1946	72	3/9	70	10/11	82	5/1	80	9/29	93	6/19	90	9/9	101	7/19	105	7/20
1947	73	3/15	71	10/25	81	4/14	80	9/29	91	5/23	90	9/23	--	--	--	--
1948	70	5/5	72	10/18	80	5/23	80	9/13	92	6/28	95	9/12	--	--	--	--
1949	74	4/6	75	10/31	81	5/6	80	9/26	90	7/12	93	9/26	--	--	--	--
1950	71	3/31	71	10/12	80	5/11	83	9/23	93	6/3	92	9/21	--	--	--	--
1951	75	4/3	77	10/9	83	4/11	82	10/8	91	6/25	93	9/17	100	6/29	102	7/11
1952	73	4/4	72	10/20	84	5/16	81	10/14	92	7/7	94	9/22	100	8/3	100	8/3
1953	74	3/8	75	10/8	81	5/4	82	10/5	93	7/6	90	9/10	--	--	--	--
1954	71	4/15	70	11/4	81	5/7	85	9/25	--	--	--	--	--	--	--	--
1955	71	4/6	74	10/24	80	6/6	80	9/12	93	6/8	97	9/5	--	--	--	--
1956	72	4/18	70	10/15	83	5/16	82	10/6	96	7/8	91	9/5	100	7/18	100	7/19
1957	72	4/27	70	10/11	81	4/28	80	9/23	90	8/22	94	9/23	--	--	--	--
1958	78	4/12	72	10/14	85	5/15	80	10/5	93	6/17	98	9/7	104	7/27	104	7/27
1959	70	4/7	71	10/24	83	5/12	84	9/9	92	7/10	91	8/8	--	--	--	--
1960	70	3/19	76	10/22	82	6/1	81	10/1	97	7/5	93	9/10	100	7/6	100	7/6
1961	74	4/1	70	10/15	82	5/18	83	10/15	93	6/15	97	8/21	100	6/17	105	7/12
1962	77	4/12	72	10/2	81	6/19	82	9/24	91	7/21	90	9/17	--	--	--	--
1963	70	3/20	72	10/21	80	5/17	89	9/27	91	5/20	90	9/9	--	--	--	--
1964	71	3/29	71	10/23	80	5/26	82	10/6	94	7/11	95	8/24	--	--	--	--
1965	74	4/19	74	10/26	80	5/11	82	10/2	92	6/30	90	8/31	--	--	--	--
1966	74	4/3	71	10/10	80	5/4	84	10/4	96	6/15	91	9/5	--	--	--	--
1967	70	3/22	74	10/31	83	5/16	85	9/28	92	6/18	92	9/27	--	--	--	--
1968	71	2/29	71	10/27	83	4/28	84	9/29	94	6/25	93	9/5	--	--	--	--
1969	71	3/15	71	10/7	86	5/7	83	9/12	94	6/16	90	9/10	--	--	--	--
1970	70	5/2	70	11/2	82	5/15	80	10/15	97	6/1	90	9/26	--	--	--	--
1971	73	4/5	76	10/9	85	5/11	81	10/5	92	7/17	90	8/24	101	8/11	101	8/11
1972	71	3/15	70	10/17	81	5/12	81	10/7	91	5/28	92	9/3	101	8/6	106	8/7
1973	71	4/5	73	10/18	80	5/12	80	9/28	92	6/21	94	9/10	--	--	--	--
1974	73	3/15	70	11/11	83	6/1	80	10/17	90	6/17	90	9/25	--	--	--	--
1975	71	4/14	71	11/4	83	5/13	84	10/1	94	7/23	95	9/21	--	--	--	--
1976	70	4/29	71	11/16	81	5/8	87	10/7	92	6/18	91	9/10	--	--	--	--
1977	70	4/4	71	10/24	83	6/5	82	9/13	90	7/23	90	8/16	102	8/12	101	8/16
1978	77	3/17	70	10/26	83	5/19	80	9/26	93	6/5	99	8/9	100	7/21	104	8/8
1979	70	4/5	71	10/24	83	5/21	81	10/10	91	6/2	90	8/10	102	7/16	101	7/17
1980	77	4/12	70	11/3	80	5/29	81	10/9	96	7/21	92	10/5	--	--	--	--
1981	71	4/18	75	10/1	83	5/24	81	9/17	90	7/2	96	9/15	101	8/7	106	8/10
1982	73	4/20	74	10/14	81	4/22	81	9/23	97	6/18	91	9/2	--	--	--	--
	70 Degrees				80 Degrees				90 Degrees				100 Degrees			
Year	First Date		Last Date		First Date		Last Date		First Date		Last Date		First Date		Last Date	

FIRST AND LAST OCCURRENCE OF HIGH TEMPERATURE OF AT LEAST...

(continued)

	70 Degrees				80 Degrees				90 Degrees				100 Degrees			
Year	First Date		Last Date		First Date		Last Date		First Date		Last Date		First Date		Last Date	
1983	71	4/15	74	10/26	80	5/20	81	9/22	92	5/28	90	8/14	--	--	--	--
1984	70	3/8	71	10/9	82	5/28	84	10/7	92	7/15	94	8/26	--	--	--	--
1985	73	4/6	78	10/5	80	5/16	84	9/26	94	6/17	91	8/26	--	--	--	--
1986	70	3/5	74	10/25	83	5/24	80	9/6	90	5/31	91	9/6	--	--	--	--
1987	70	3/31	75	10/28	81	4/27	80	10/19	90	5/7	92	10/1	102	8/31	102	8/31
1988	70	3/18	74	10/30	81	5/11	80	10/1	90	7/19	90	10/1	102	7/19	103	9/2
1989	72	4/5	72	10/17	82	5/5	85	9/28	91	6/23	92	9/23	--	--	--	--
1990	72	4/4	70	10/24	83	5/4	82	9/28	95	6/21	92	9/21	100	8/4	100	8/11
1991	71	5/1	74	10/20	83	6/10	88	10/15	91	7/2	93	9/25	--	--	--	--
1992	72	4/1	78	10/23	80	4/25	85	9/29	96	6/21	91	8/27	102	6/22	104	8/11
1993	70	4/7	73	10/30	81	5/17	85	10/3	93	8/1	92	9/9	100	8/3	100	8/3
1994	72	3/27	64	10/24	82	5/6	86	9/27	92	7/7	93	9/22	101	7/20	102	7/21
1995	72	2/19	71	10/15	85	5/25	82	9/23	94	6/28	91	8/20	--	--	--	--
1996	73	4/5	70	10/9	83	6/2	82	10/9	93	7/7	93	8/29	101	8/10	101	8/10
1997																
1998																
1999																
2000																
2001																
2002																
2003																

EARLIEST FIRST OCCURRENCE IN THE YEAR OF HIGH TEMPERATURE OF AT LEAST...			
70 Degrees	80 Degrees	90 Degrees	100 Degrees
70 Feb 14, 1916	80 March 29, 1923	90 May 7, 1987	100 June 17, 1961

LATEST FIRST OCCURRENCE IN THE YEAR OF HIGH TEMPERATURE OF AT LEAST...			
70 Degrees	80 Degrees	90 Degrees	100 Degrees
70 May 5, 1948	81 June 19, 1962	90 Aug 22, 1957	102 Aug 31, 1987

EARLIEST LAST OCCURRENCE IN THE YEAR OF HIGH TEMPERATURE OFAT LEAST...			
70 Degrees	80 Degrees	90 Degrees	100 Degrees
75 Oct 1, 1981	85 August 18, 1927	94 June 7, 1903	100 June 25, 1925

LATEST LAST OCCURRENCE IN THE YEAR OF HIGH TEMPERATURE OF AT LEAST...			
70 Degrees	80 Degrees	90 Degrees	100 Degrees
70 Nov 17, 1932	80 Oct 19, 1987[1]	92 Oct 5, 1980	101 Sept 5, 1944

[1]Temperature has occurred more than once and the most recent occurrence is listed.

MONTHLY AND SEASONAL HEATING DEGREE DAY UNITS

(1931-1997)

Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1930-31	--	--	--	--	--	--	659	597	512	334	164	118	---
1931-32	20	30	152	341	645	764	788	663	512	405	304	90	4714
1932-33	43	39	114	297	470	869	782	714	573	452	397	151	4901
1933-34	28	47	209	294	623	554	580	511	346	248	183	112	3735
1934-35	19	19	179	267	462	698	773	592	701	449	339	103	4601
1935-36	79	52	101	450	748	816	725	828	670	364	235	102	5170
1936-37	27	23	164	325	731	712	1088	679	557	523	249	91	5169
1937-38	19	46	127	263	440	658	753	613	588	367	233	98	4205
1938-39	9	26	39	308	673	719	740	700	566	380	176	191	4527
1939-40	48	32	120	355	629	578	782	554	468	389	218	78	4251
1940-41	19	8	85	271	649	701	698	575	468	392	274	160	4300
1941-42	15	39	178	371	521	691	866	623	645	420	298	190	4857
1942-43	26	34	84	317	572	670	953	600	598	381	336	171	4742
1943-44	27	32	63	333	595	825	808	651	598	462	302	148	4844
1944-45	30	49	92	258	637	850	752	580	642	473	232	140	4735
1945-46	16	16	161	393	584	719	751	625	583	433	217	169	4667
1946-47	50	35	178	501	646	729	868	563	508	358	186	167	4789
1947-48	32	60	128	316	544	718	820	707	644	538	328	76	4911
1948-49	52	44	178	430	679	894	1144	660	556	368	200	109	5343
1949-50	54	32	119	517	491	772	1038	662	614	480	304	123	5206
1950-51	15	14	117	373	525	530	749	581	706	342	265	73	4290
1951-52	14	44	89	363	553	831	789	636	628	414	287	172	4820
1952-53	18	37	82	280	788	719	556	600	615	456	361	211	4723
1953-54	39	41	101	343	488	679	747	604	684	452	306	243	4727
1954-55	74	87	175	434	457	746	802	693	706	598	375	162	5309
1955-56	115	70	189	377	650	702	712	798	636	430	265	206	5150
1956-57	46	50	111	428	689	745	1011	613	551	392	216	104	4956
1957-58	42	58	51	382	652	682	675	451	613	426	154	92	4278
1958-59	0	2	116	349	531	575	667	615	574	413	348	127	4317
1959-60	38	25	167	317	612	740	834	648	556	432	347	106	4822
1960-61	21	84	117	350	581	802	658	507	556	436	309	98	4519
1961-62	35	12	195	391	695	708	845	629	625	379	396	156	5066
1962-63	71	45	80	379	507	691	943	437	589	515	288	169	4714
1963-64	71	25	44	289	530	699	691	671	610	505	360	151	4646
1964-65	40	45	120	282	646	753	744	572	522	389	350	138	4601
1965-66	31	17	132	288	461	791	728	634	565	368	295	108	4418
1966-67	25	31	53	352	517	611	633	566	614	564	285	64	4315
1967-68	5	1	28	322	538	693	722	461	486	487	287	123	4153
1968-69	9	39	100	366	497	738	867	673	536	438	160	44	4467
1969-70	17	44	134	440	576	673	692	568	557	534	272	75	4582
1970-71	11	11	135	374	576	769	767	664	671	496	318	212	5004
1971-72	60	23	169	474	638	811	834	617	503	547	256	123	5055
1972-73	23	27	202	424	536	945	825	567	615	444	276	132	5016
1973-74	29	77	90	374	614	666	790	604	472	364	270	84	4434
1974-75	29	16	25	305	480	589	585	595	623	548	294	138	4227
Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL

MONTHLY AND SEASONAL HEATING DEGREE DAY UNITS

(1931-1997) continued

Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1975-76	18	56	40	302	557	676	707	664	636	478	316	210	4660
1976-77	10	38	58	340	518	840	801	567	615	422	417	126	4752
1977-78	68	20	178	385	637	675	690	576	508	503	375	102	4717
1978-79	52	48	165	366	763	919	1029	614	496	432	288	159	5331
1979-80	33	19	50	257	673	671	901	634	599	421	361	219	4838
1980-81	29	65	101	344	551	697	752	599	585	446	321	164	4654
1981-82	64	33	121	450	580	710	887	657	642	551	335	124	5154
1982-83	67	20	137	392	719	791	716	553	511	470	287	189	4852
1983-84	78	15	171	393	544	879	753	596	502	504	359	207	5001
1984-85	33	19	145	440	628	851	948	674	678	383	311	128	5238
1985-86	5	43	197	405	817	983	662	562	444	489	321	93	5021
1986-87	74	3	213	319	548	773	784	589	539	370	245	105	4562
1987-88	60	17	94	262	537	774	790	600	561	395	327	136	4553
1988-89	29	31	108	244	533	749	705	811	544	278	271	87	4390
1989-90	31	21	65	336	522	733	674	654	498	340	296	106	4276
1990-91	16	10	39	394	532	952	803	449	632	479	376	220	4902
1991-92	17	25	59	325	515	729	643	502	448	326	165	66	3820
1992-93	7	14	91	319	566	782	912	732	472	406	191	143	4635
1993-94	76	36	108	274	787	792	695	648	516	353	208	124	4617
1994-95	14	6	56	360	657	683	620	475	523	433	232	151	4210
1995-96	9	39	49	411	437	686	710	644	539	378	371	176	4449
1996-97	31	39	167	402	583	693	739	630					
1997-98													
1998-99													
Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
Climatic Monthly and Seasonal HDD Normals (based on 1961-90 data)													
Normal	38	30	116	338	567	741	750	582	546	432	285	121	4546
Least Monthly and Seasonal HDD and Year of Occurrence													
Least	0	1	25	244	437	530	556	437	444	248	154	44	3735
Year	1958	1967	1974	1988	1995	1950	1953	1963	1986	1934	1958	1969	1933-34
Most Monthly and Seasonal HDD and Year of Occurrence													
Most	115	87	213	517	817	983	1144	828	706	598	417	243	5343
Year	1955	1954	1986	1949	1985	1985	1949	1936	1955[1]	1955	1977	1954	1948-49

[1]Most HDD of 706 in March has also occurred previously in 1951.

What are Heating Degree Days? Heating Degree Day Units (HDD) are used by utility companies and other institutions for determining energy consumption requirements.

How to Calculate Heating Degree Day Units:
Subtract the **mean** daily temperature (in degrees F) from 65. The difference is the number of HDD units. All negative values are recorded as zero. Monthly and seasonal values are sums of the daily values during the appropriate period.

Example: Assume that the Mean Temperature on October 4 was 45 deg F.
According to the HDD formula, 65 - 45 = 20, so there were 20 HDD on October 4.

CUMULATIVE HEATING DEGREE DAYS

(Season is from July 1st through June 30th)

DAY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	2	39	70	191	537	1111	1855	2603	3181	3724	4152	4431
2	4	40	72	198	553	1133	1880	2625	3200	3740	4164	4437
3	6	40	74	205	569	1155	1905	2647	3219	3756	4176	4443
4	8	40	76	212	585	1178	1930	2669	3238	3772	4188	4448
5	10	40	78	220	602	1201	1955	2691	3257	3788	4199	4453
6	12	41	80	228	619	1224	1980	2713	3276	3804	4210	4458
7	14	42	82	236	636	1247	2005	2735	3294	3820	4221	4463
8	15	43	84	245	653	1270	2030	2757	3312	3835	4232	4468
9	16	44	87	254	670	1293	2055	2778	3330	3850	4243	4473
10	17	45	90	263	688	1316	2080	2799	3348	3865	4253	4478
11	18	46	93	272	706	1340	2105	2820	3366	3880	4263	4483
12	19	47	96	282	724	1364	2130	2841	3384	3895	4273	4488
13	20	48	99	292	742	1388	2155	2862	3402	3910	4283	4493
14	21	49	103	302	761	1412	2179	2883	3420	3925	4293	4497
15	22	50	107	313	780	1436	2203	2904	3438	3940	4302	4501
16	23	51	111	324	799	1460	2227	2925	3456	3954	4311	4505
17	24	52	115	335	818	1484	2251	2945	3474	3968	4320	4509
18	25	53	119	347	838	1508	2275	2965	3491	3982	4329	4513
19	26	54	123	359	858	1532	2299	2985	3508	3996	4338	4516
20	27	55	127	371	878	1556	2323	3005	3525	4010	4346	4519
21	28	56	131	383	898	1580	2347	3025	3542	4024	4354	4522
22	29	57	136	396	918	1605	2371	3045	3559	4038	4362	4525
23	30	58	141	409	939	1630	2395	3065	3576	4051	4370	4528
24	31	59	146	422	960	1655	2419	3085	3593	4064	4378	4531
25	32	60	152	436	981	1680	2442	3105	3610	4077	4385	4534
26	33	61	158	450	1002	1705	2465	3124	3627	4090	4392	4537
27	34	62	164	464	1023	1730	2488	3143	3644	4103	4399	4540
28	35	63	170	478	1045	1755	2511	3162	3660	4116	4406	4542
29	36	64	177	492	1067	1780	2534		3676	4128	4413	4544
30	37	66	184	507	1089	1805	2557		3692	4140	4419	4546
31	38	68		522		1830	2580		3708		4425	

(based on the 1961-90 Climatic Normals)

CDD

MONTHLY AND SEASONAL COOLING DEGREE DAY UNITS

(1948-1997)

Season	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1948	0	0	0	0	0	55	52	23	42	0	0	0	172
1949	0	0	0	0	5	18	63	49	23	0	0	0	158
1950	0	0	0	0	1	39	105	141	36	2	0	0	324
1951	0	0	0	0	1	72	89	77	26	0	0	0	265
1952	0	0	0	0	3	4	112	78	61	2	0	0	260
1953	0	0	0	0	4	0	53	62	22	0	0	0	141
1954	0	0	0	0	0	0	11	8	3	0	0	0	22
1955	0	0	0	0	0	21	24	32	34	0	0	0	111
1956	0	0	0	0	9	4	105	63	6	0	0	0	187
1957	0	0	0	2	2	9	24	14	52	0	0	0	103
1958	0	0	0	0	8	53	193	157	30	2	0	0	443
1959	0	0	0	0	0	18	143	48	2	1	0	0	212
1960	0	0	0	0	0	23	135	53	19	0	0	0	230
1961	0	0	0	0	2	64	102	129	4	3	0	0	304
1962	0	0	0	0	0	9	75	42	21	0	0	0	147
1963	0	0	0	0	13	29	14	85	82	0	0	0	223
1964	0	0	0	0	0	3	91	70	7	0	0	0	171
1965	0	0	0	0	0	16	133	99	13	0	0	0	261
1966	0	0	0	0	0	41	86	106	48	0	0	0	281
1967	0	0	0	0	2	65	129	225	64	0	0	0	485
1968	0	0	0	0	0	30	128	87	23	0	0	0	268
1969	0	0	0	0	12	60	72	37	33	0	0	0	214
1970	0	0	0	0	4	93	173	99	1	0	0	0	370
1971	0	0	0	0	0	3	119	129	2	0	0	0	253
1972	0	0	0	0	11	6	156	159	26	0	0	0	358
1973	0	0	0	0	2	38	119	50	26	0	0	0	235
1974	0	0	0	0	3	57	127	143	110	0	0	0	440
1975	0	0	0	0	3	25	135	47	82	1	0	0	293
1976	0	0	0	0	3	12	101	82	30	3	0	0	231
1977	0	0	0	0	0	10	52	177	12	0	0	0	251
1978	0	0	0	0	2	34	101	88	10	0	0	0	235
1979	0	0	0	0	0	16	111	40	15	0	0	0	182
1980	0	0	0	0	0	0	91	23	16	12	0	0	142
1981	0	0	0	1	0	4	63	138	38	0	0	0	244
1982	0	0	0	0	0	51	59	73	20	0	0	0	203
1983	0	0	0	0	17	3	23	56	0	0	0	0	99
1984	0	0	0	0	2	14	69	55	23	5	0	0	168
1985	0	0	0	0	4	28	166	73	2	0	0	0	273
1986	0	0	0	0	26	55	20	165	34	0	0	0	300
1987	0	0	0	0	32	59	48	104	30	4	0	0	277
1988	0	0	0	0	2	15	127	85	53	8	0	0	290
1989	0	0	0	1	14	38	47	81	60	0	0	0	241
1990	0	0	0	0	0	26	192	157	42	0	0	0	417
1991	0	0	0	0	0	2	101	117	71	1	0	0	292
1992	0	0	0	2	21	75	115	144	34	0	0	0	391
Season	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL

MONTHLY AND SEASONAL COOLING DEGREE DAY UNITS

1948-1997 (continued)

Season	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1993	0	0	0	0	0	12	9	95	46	5	0	0	167
1994	0	0	0	0	1	12	166	64	59	0	0	0	302
1995	0	0	0	0	7	41	135	61	48	0	0	0	292
1996	0	0	0	0	0	2	176	99	3	2	0	0	282
1997	0	0											
1998													
1999													
2000													
2001													
2002													
2003													
Season	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Climatic Monthly and Seasonal CDD Normals (based on 1961-90 data)													
Normal	0	0	0	0	0	31	109	110	50	0	0	0	300
Least Monthly and Seasonal CDD and Year of Occurrence (most recent year listed)													
Least	0	0	0	0	0	0	9	8	0	0	0	0	22
Year	1996	1996	1996	1996	1996	1980	1993	1954	1983	1995	1995	1995	1954
Most Monthly and Seasonal CDD and Year of Occurrence (most recent year listed)													
Most	0	0	0	2	32	93	193	225	110	12	0	0	485
Year	1997	1997	1996	1992	1987	1970	1958	1967	1974	1980	1995	1995	1967

What are Cooling Degree Days? Cooling Degree Day Units (CDD) are used by utility companies and other institutions for determining energy consumption and cooling requirements.

How to Calculate Cooling Degree Day Units:
Subtract the **65** from the daily mean temperature (in degrees F). The difference is the number of CDD units. All negative values are recorded as zero. Monthly and seasonal values are sums of the daily values during the appropriate period.

Example: Assume that the Mean Temperature on July 20 was 77 deg F.
According to the CDD formula, 77 - 65 = 12, so there were 12 CDD on July 20.

CUMULATIVE COOLING DEGREE DAYS

(Season is from January 1st through December 31st)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	33	144	253	300	300	300
2	0	0	0	0	0	0	36	148	256	300	300	300
3	0	0	0	0	0	0	39	152	259	300	300	300
4	0	0	0	0	0	0	42	156	261	300	300	300
5	0	0	0	0	0	0	45	160	263	300	300	300
6	0	0	0	0	0	0	48	164	265	300	300	300
7	0	0	0	0	0	0	51	168	267	300	300	300
8	0	0	0	0	0	1	54	172	269	300	300	300
9	0	0	0	0	0	2	57	176	271	300	300	300
10	0	0	0	0	0	3	60	180	273	300	300	300
11	0	0	0	0	0	4	63	184	275	300	300	300
12	0	0	0	0	0	5	66	188	277	300	300	300
13	0	0	0	0	0	6	69	192	279	300	300	300
14	0	0	0	0	0	7	72	196	281	300	300	300
15	0	0	0	0	0	8	76	200	283	300	300	300
16	0	0	0	0	0	9	80	204	285	300	300	300
17	0	0	0	0	0	10	84	208	287	300	300	300
18	0	0	0	0	0	11	88	211	288	300	300	300
19	0	0	0	0	0	12	92	214	289	300	300	300
20	0	0	0	0	0	13	96	217	290	300	300	300
21	0	0	0	0	0	14	100	220	291	300	300	300
22	0	0	0	0	0	15	104	223	292	300	300	300
23	0	0	0	0	0	17	108	226	293	300	300	300
24	0	0	0	0	0	19	112	229	294	300	300	300
25	0	0	0	0	0	21	116	232	295	300	300	300
26	0	0	0	0	0	23	120	235	296	300	300	300
27	0	0	0	0	0	25	124	238	297	300	300	300
28	0	0	0	0	0	27	128	241	298	300	300	300
29	0		0	0	0	29	132	244	299	300	300	300
30	0		0	0	0	31	136	247	300	300	300	300
31	0		0		0		140	250		300		300

(based on the 1961-90 Climatic Normals)

FREEZE DATA

Latest Freeze in Spring, Earliest Freeze in Autumn, and Length of Freeze-Free Period

	Latest Date in Spring		Earliest Date in Autumn		Freeze-Free Period		Latest Date in Spring		Earliest Date in Autumn		Freeze-Free Period
Year	Temp	Date	Temp	Date	(days)	Year	Temp	Date	Temp	Date	(days)
1895	32	4/4	32	10/30	209	1939	32	3/29	32	11/4	220
1896	32	4/3	32	11/6	217	1940	32	4/2	32	11/13	224
1897	30	3/30	32	10/15	199	1941	32	3/24	32	11/17	238
1898	32	4/18	32	NA	NA	1942	32	4/29	30	11/9	193
1899	31	4/23	28	10/13	173	1943	30	4/26	29	11/7	195
1900	32	4/9	29	11/19	224	1944	31	4/25	30	11/13	202
1901	31	4/15	23	12/12	241	1945	31	4/13	32	9/28	168
1902	32	3/29	32	11/4	220	1946	31	4/30	26	10/16	169
1903	32	4/10	31	11/17	222	1947	31	3/27	31	11/21	239
1904	32	4/23	32	12/2	223	1948	32	5/9	30	10/17	172
1905	32	4/10	31	10/18	191	1949	32	4/30	30	10/16	169
1906	32	4/12	29	10/21	192	1950	31	4/27	30	10/1	167
1907	32	3/12	30	11/3	236	1951	31	4/22	30	10/31	191
1908	32	4/25	32	9/24	152	1952	32	5/5	32	10/16	163
1909	32	4/21	32	11/14	207	1953	29	4/8	31	10/23	197
1910	32	4/14	32	10/26	195	1954	28	5/1	30	10/1	152
1911	32	4/29	32	10/17	171	1955	32	5/31	31	11/11	163
1912	32	4/19	32	10/4	168	1956	31	4/6	30	11/18	225
1913	32	5/13	32	11/3	174	1957	31	4/7	30	10/21	210
1914	31	2/16	32	11/7	264	1958	29	3/16	31	10/21	217
1915	31	5/1	32	10/11	163	1959	32	4/15	28	10/30	197
1916	31	5/11	27	10/4	147	1960	30	4/23	32	10/10	169
1917	30	4/15	31	10/17	185	1961	32	4/23	30	10/8	167
1918	32	4/13	32	11/27	229	1962	32	3/28	32	10/17	202
1919	32	4/8	32	10/19	193	1963	30	4/20	32	10/19	181
1920	32	5/10	28	10/31	174	1964	31	5/3	31	10/26	177
1921	30	4/6	31	12/3	241	1965	32	5/6	31	11/28	206
1922	32	4/23	27	11/3	193	1966	31	3/22	30	10/14	206
1923	31	3/26	31	10/24	209	1967	30	4/28	30	11/21	207
1924	31	4/25	32	10/11	169	1968	32	4/18	32	12/16	242
1925	32	3/29	32	10/13	197	1969	32	3/25	32	10/12	201
1926	31	3/25	30	9/24	183	1970	31	4/17	31	10/7	173
1927	26	4/20	32	10/31	194	1971	32	4/1	28	10/16	169
1928	31	4/6	30	10/12	188	1972	29	4/30	32	9/27	151
1929	27	4/6	29	10/29	206	1973	32	4/7	29	10/3	179
1930	32	3/18	32	11/14	211	1974	32	4/12	32	10/7	178
1931	31	4/19	30	11/2	208	1975	31	4/28	32	11/12	198
1932	31	3/21	32	11/10	234	1976	32	6/13	30	10/18	137
1933	32	4/10	29	10/21	193	1977	32	4/19	32	11/3	198
1934	30	4/3	30	12/6	247	1978	32	5/6	30	10/22	169
1935	32	5/11	28	10/23	165	1979	32	5/29	30	11/8	163
1936	32	4/8	28	10/29	204	1980	32	5/16	25	10/22	159
1937	32	4/29	31	12/4	219	1981	29	4/13	32	10/14	186
1938	31	4/1	32	10/16	198	1982	32	5/11	26	10/19	161

FREEZE DATA (continued)

Latest Freeze in Spring, Earliest Freeze in Autumn, and Length of Freeze-Free Period

	Latest Date in Spring		Earliest Date in Autumn		Freeze-Free Period		Latest Date in Spring		Earliest Date in Autumn		Freeze-Free Period
Year	Temp	Date	Temp	Date	(days)	Year	Temp	Date	Temp	Date	(days)
1983	31	4/24	32	9/30	159	1994	32	3/26	32	10/11	199
1984	31	5/6	32	10/29	176	1995	32	4/16	32	10/19	176
1985	30	5/12	29	10/8	151	1996	32	5/8	30	10/17	162
1986	31	4/24	32	11/10	201	1997					
1987	32	4/19	32	10/27	191	1998					
1988	31	4/8	31	11/29	235	1999					
1989	32	3/4	32	10/15	225	2000					
1990	28	3/13	30	10/7	208	2001					
1991	32	4/29	32	10/29	183	2002					
1992	32	4/23	30	10/15	175	2003					

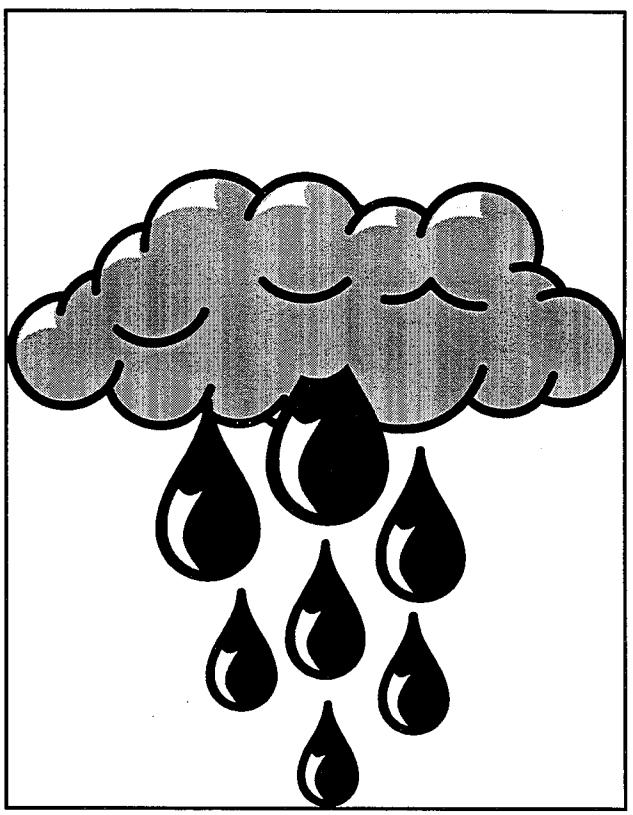
Historical Freeze Data for Eugene

Average Last Freeze Date in Spring	**April 24**	
Latest Last Freeze in Spring	June 13, 1976	
Earliest Last Freeze in Spring	February 16, 1914	
Average First Freeze Date in Autumn	**October 25**	
Earliest First Freeze in Autumn	September 24, 1908 and 1926	
Latest First Freeze in Autumn	December 16, 1968	
Average Length of Freeze Free Period	**184 days**	
Shortest Freeze-Free Period	137 days	June 13-October 18, 1976
Longest Freeze-Free Period	264 days	February 16-November 7, 1914

Average Occurrence of Selected Last and First Temperatures and the Length of Time Between Selected Critical Temperatures[1]

Temperature	24 Deg F	28 Deg F	32 Deg F	36 Deg F
Average Last Occurrence in Spring	January 28	February 19	April 24	May 8
Average First Occurrence in Autumn	December 21	December 1	November 7	October 20
Period of Time between Last Temperature in Spring and First Temperature in Autumn	328 days	286 days	200 days	165 days

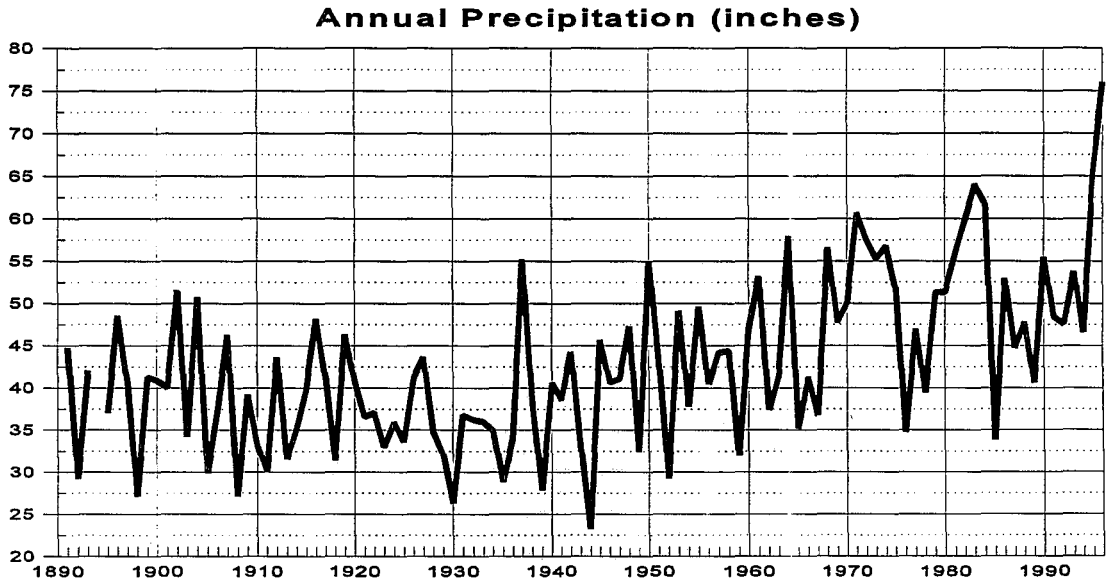
[1]Values and dates are based on data from the Fern Ridge Agricultural station, located near Mahlon Sweet Field.



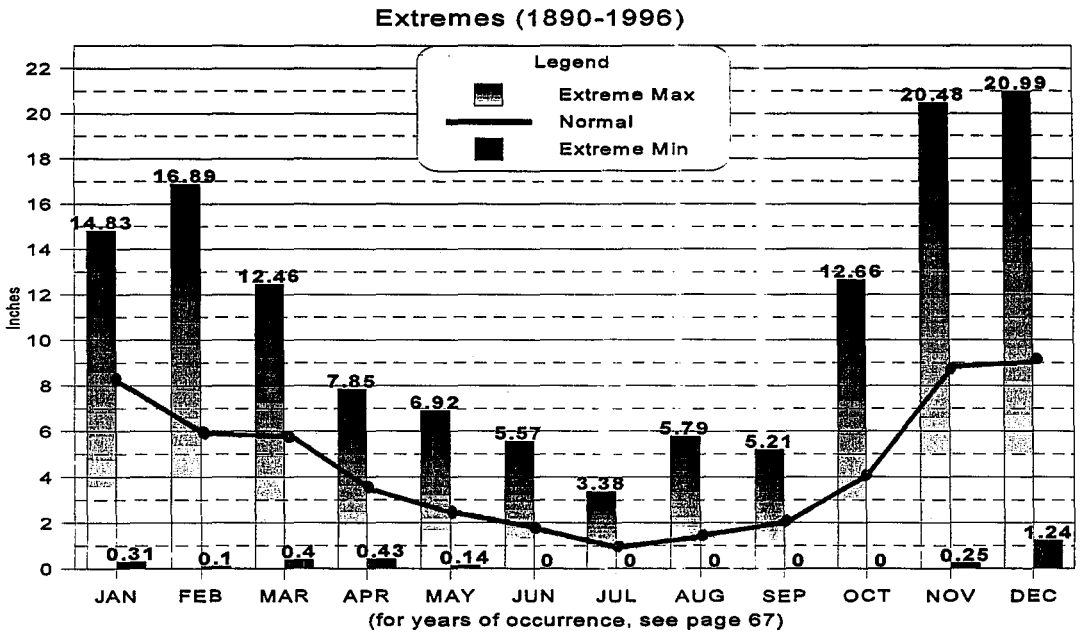
Precipitation Records and Data

ANNUAL AND MONTHLY PRECIPITATION GRAPHS[1]

Total Annual Precipitation (1890-1996)



Monthly Precipitation Extremes and Climatic Normals



[1]Rainfall collection procedures changed on March 1st, 1996. Therefore, the official rainfall for March-December 1996 is from ASOS and may not be representative of actual rainfall. See page 71 for supplemental rainfall report, which is more representative of the March-December 1996 rainfall.

JANUARY PRECIPITATION DATA
(1931-1997)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.27	.27	.27	20.61	1.24	1948
2	.27	.54	.54	20.88	3.39	1933
3	.27	.81	.81	21.15	3.87	1966
4	.27	1.08	1.08	21.42	2.04	1976
5	.27	1.35	1.35	21.69	3.08	1977
6	.27	1.62	1.62	21.96	3.18	1948
7	.27	1.89	1.89	22.23	3.28	1976
8	.27	2.16	2.16	22.50	1.81	1959
9	.27	2.43	2.43	22.77	1.86	1989
10	.26	2.69	2.69	23.03	2.21	1969
11	.26	2.95	2.95	23.29	3.00	1959
12	.26	3.21	3.21	23.55	1.98	1980
13	.26	3.47	3.47	23.81	4.15	1995
14	.26	3.73	3.73	24.07	2.12	1974
15	.26	3.99	3.99	24.33	4.74	1974
16	.26	4.25	4.25	24.59	1.55	1971
17	.26	4.51	4.51	24.85	1.83	1964
18	.26	4.77	4.77	25.11	1.58	1953
19	.25	5.02	5.02	25.36	3.77	1964
20	.25	5.27	5.27	25.61	4.26	1972
21	.25	5.52	5.52	25.86	1.74	1993
22	.25	5.77	5.77	26.11	1.47	1970
23	.25	6.02	6.02	26.36	1.82	1965
24	.24	6.26	6.26	26.60	1.24	1996
25	.24	6.50	6.50	26.84	1.68	1970
26	.24	6.74	6.74	27.08	1.53	1950
27	.24	6.98	6.98	27.32	2.66	1954
28	.24	7.22	7.22	27.56	1.57	1990
29	.23	7.45	7.45	27.79	2.06	1958
30	.23	7.68	7.68	28.02	1.57	1961
31	.23	7.91	7.91	28.25	1.50	1969

Normal Monthly Accumulation Totals: JAN	JAN	YTD	WTD	January's Greatest: Amt	Year
7.91	7.91	7.91	28.25	4.74	1974

[1] Water Year runs from October 1 through September 30

FEBRUARY PRECIPITATION DATA
(1931-1997)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.23	.23	8.14	28.48	2.29	1937
2	.22	.45	8.36	28.70	0.82	1953
3	.22	.67	8.58	28.92	1.13	1952
4	.22	.89	8.80	29.14	1.26	1951
5	.22	1.11	9.02	29.36	0.98	1996
6	.21	1.32	9.23	29.57	2.89	1996
7	.21	1.53	9.44	29.78	3.69	1996
8	.21	1.74	9.65	29.99	1.58	1996
9	.21	1.95	9.86	30.20	2.39	1961
10	.20	2.15	10.06	30.40	3.87	1961
11	.20	2.35	10.26	30.60	1.86	1986
12	.20	2.55	10.46	30.80	3.43	1984
13	.20	2.75	10.66	31.00	2.08	1982
14	.20	2.95	10.86	31.20	1.55	1982
15	.20	3.15	11.06	31.40	2.70	1958
16	.20	3.35	11.26	31.60	1.45	1970
17	.20	3.55	11.46	31.80	2.30	1983
18	.19	3.74	11.65	31.99	2.10	1974
19	.19	3.93	11.84	32.18	1.78	1992
20	.19	4.12	12.03	32.37	2.08	1956
21	.19	4.31	12.22	32.56	1.51	1948
22	.19	4.50	12.41	32.75	2.18	1986
23	.19	4.69	12.60	32.94	1.92	1996
24	.19	4.88	12.79	33.13	1.76	1958
25	.19	5.07	12.98	33.32	1.01	1957
26	.19	5.26	13.17	33.51	1.30	1974
27	.19	5.45	13.36	33.70	1.21	1972
28	.19	5.64	13.55	33.89	1.13	1977
29	—	—	—	—	0.27	1972
	Climatic normals are not computed for February 29th.					

Normal Monthly Accumulation Totals: FEB	FEB	YTD	WTD	February's Greatest: Amt	Year
5.64	5.64	13.55	33.89	3.87	1961

Other January Monthly Statistics
Greatest 24-hour Rainfall: 4.88" on 14th-15th, 1974
Greatest 24-hour Snowfall: 22.9" 25th-26th, 1969
Wettest Month: 1964 with 14.63 inches
Driest Month: 1985 with 0.31 inch
Snowiest Month: 1969 with 47.1 inches

Other February Monthly Statistics:
Greatest 24-hour Rainfall: 4.81" 12-13th, 1984
Greatest 24-hour Snowfall: 5.7" 19th-20th,1993
Wettest Month: 1996 with 16.89 inches
Driest Month: 1920 with 0.20 inch
Snowiest Month: 1917 with 22.7 inches

MARCH PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.19	.19	13.74	34.08	1.91	1972
2	.19	.38	13.93	34.27	1.09	1947
3	.19	.57	14.12	34.46	1.13	1956
4	.19	.76	14.31	34.65	1.14	1995
5	.19	.95	14.50	34.84	1.81	1989
6	.19	1.14	14.69	35.03	1.02	1957
7	.19	1.33	14.88	35.22	1.22	1957
8	.19	1.52	15.07	35.41	1.20	1960
9	.19	1.71	15.26	35.60	1.30	1983
10	.19	1.90	15.45	35.79	0.75	1971
11	.19	2.09	15.64	35.98	1.12	1971
12	.19	2.28	15.83	36.17	1.74	1989
13	.19	2.47	16.02	36.36	1.67	1980
14	.19	2.66	16.21	36.55	1.69	1974
15	.19	2.85	16.40	36.74	0.99	1993
16	.18	3.03	16.58	36.92	1.38	1993
17	.18	3.21	16.76	37.10	1.46	1945
18	.18	3.39	16.94	37.28	1.20	1975
19	.18	3.57	17.12	37.46	1.27	1938
20	.18	3.75	17.30	37.64	0.90	1945
21	.17	3.92	17.47	37.81	0.98	1975
22	.17	4.09	17.64	37.98	1.10	1976
23	.17	4.26	17.81	38.15	1.39	1985
24	.17	4.43	17.98	38.32	1.99	1976
25	.16	4.59	18.14	38.48	1.56	1962
26	.16	4.75	18.30	38.64	1.42	1962
27	.16	4.91	18.46	38.80	1.10	1974
28	.16	5.07	18.62	38.96	1.32	1974
29	.15	5.22	18.77	39.11	2.21	1963
30	.15	5.37	18.92	39.26	1.59	1994
31	.15	5.52	19.07	39.41	0.88	1976

Normal Monthly Accumulation Totals: MAR	MAR	YTD	WTD	March's Greatest: Amt	Year
5.52	5.52	19.07	39.41	2.21	1963

[1]Water Year runs from October 1 through September 30.

Other March Monthly Statistics
Greatest 24-hour Rainfall: 2.44" on 29th-30th, 1963
Greatest 24-hour Snowfall: 4.9" on 5th, 1951
Wettest Month: 1974 with 12.46 inches
Driest Month: 1926 with 0.40 inch
Snowiest Month: 1916 with 15.7 inches

APRIL PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.14	.14	19.21	39.55	1.07	1931
2	.14	.28	19.35	39.69	1.18	1982
3	.13	.41	19.48	39.82	0.95	1993
4	.13	.54	19.61	39.95	0.45	1941
5	.13	.67	19.74	40.08	1.09	1972
6	.12	.79	19.86	40.20	1.12	1980
7	.12	.91	19.98	40.32	1.29	1995
8	.12	1.03	20.10	40.44	1.45	1971
9	.12	1.15	20.22	40.56	1.79	1992
10	.11	1.26	20.33	40.67	1.19	1982
11	.11	1.37	20.44	40.78	1.43	1981
12	.11	1.48	20.55	40.89	0.87	1955
13	.11	1.59	20.66	41.00	2.05	1982
14	.10	1.69	20.76	41.10	0.88	1978
15	.10	1.79	20.86	41.20	1.01	1937
16	.10	1.89	20.96	41.30	1.03	1979
17	.10	1.99	21.06	41.40	0.56	1958
18	.10	2.09	21.16	41.50	0.57	1967
19	.09	2.18	21.25	41.59	0.84	1965
20	.09	2.27	21.34	41.68	0.96	1980
21	.09	2.36	21.43	41.77	0.61	1988
22	.09	2.45	21.52	41.86	0.84	1978
23	.09	2.54	21.61	41.95	1.57	1996
24	.09	2.63	21.70	42.04	0.63	1975
25	.08	2.71	21.78	42.12	0.66	1970
26	.08	2.79	21.86	42.20	0.62	1953
27	.08	2.87	21.94	42.28	1.32	1962
28	.08	2.95	22.02	42.36	0.97	1969
29	.08	3.03	22.10	42.44	0.94	1992
30	.08	3.11	22.18	42.52	1.78	1936

Normal Monthly Accumulation Totals: APR	APR	YTD	WTD	April's Greatest: Amt	Year
3.11	3.11	22.18	42.52	2.05	1982

Other April Monthly Statistics:
Greatest 24-hour Rainfall: 2.38" on 8th-9th, 1992
Wettest Month: 1993 with 7.85 inches
Driest Month: 1909 with 0.43 inch

MAY PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.08	.08	22.26	42.60	1.47	1949
2	.08	.16	22.34	42.68	0.74	1975
3	.08	.24	22.42	42.76	0.86	1993
4	.08	.32	22.50	42.84	0.74	1979
5	.08	.40	22.58	42.92	1.57	1963
6	.08	.48	22.66	43.00	1.38	1963
7	.07	.55	22.73	43.07	0.47	1983
8	.07	.62	22.80	43.14	0.38	1933
9	.07	.69	22.87	43.21	0.78	1967
10	.07	.76	22.94	43.28	0.67	1961
11	.07	.83	23.01	43.35	1.01	1937
12	.07	.90	23.08	43.42	0.70	1945
13	.07	.97	23.15	43.49	0.98	1969
14	.07	1.04	23.22	43.56	0.96	1936
15	.07	1.11	23.29	43.63	0.62	1994
16	.07	1.18	23.36	43.70	1.94	1972
17	.07	1.25	23.43	43.77	0.63	1976
18	.07	1.32	23.50	43.84	0.60	1969
19	.07	1.39	23.57	43.91	0.57	1965
20	.07	1.46	23.64	43.98	0.59	1932
21	.07	1.53	23.71	44.05	0.67	1996
22	.07	1.60	23.78	44.12	0.85	1942
23	.07	1.67	23.85	44.19	0.60	1953
24	.07	1.74	23.92	44.26	0.86	1993
25	.06	1.80	23.98	44.32	0.86	1960
26	.06	1.86	24.04	44.38	0.80	1993
27	.06	1.92	24.10	44.44	0.53	1948
28	.06	1.98	24.16	44.50	0.59	1993
29	.06	2.04	24.22	44.56	1.46	1932
30	.06	2.10	24.28	44.62	0.86	1932
31	.06	2.16	24.34	44.68	0.75	1993

Normal Monthly Accumulation Totals: MAY	MAY	YTD	WTD	May's Greatest: Amt	Year
2.16	2.16	24.34	44.68	1.94	1972

[1]Water Year runs from October 1 through September 30.

Other May Monthly Statistics

Greatest 24-hour Rainfall: 2.37" on 16th-17th, 1972

Wettest Month: 1993 with 6.92 inches
Driest Month: 1992 with 0.14 inch

JUNE PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.06	.06	24.40	44.74	0.88	1967
2	.06	.12	24.46	44.80	0.48	1958
3	.06	.18	24.52	44.86	0.45	1977
4	.06	.24	24.58	44.92	0.50	1964
5	.06	.30	24.64	44.98	1.17	1993
6	.06	.36	24.70	45.04	1.28	1984
7	.06	.42	24.76	45.10	1.02	1985
8	.06	.48	24.82	45.16	1.34	1981
9	.06	.54	24.88	45.22	0.68	1972
10	.05	.59	24.93	45.27	0.87	1937
11	.05	.64	24.98	45.32	0.98	1937
12	.05	.69	25.03	45.37	0.33	1981
13	.05	.74	25.08	45.42	0.78	1980
14	.05	.79	25.13	45.47	0.95	1952
15	.05	.84	25.18	45.52	0.85	1936
16	.05	.89	25.23	45.57	0.49	1931
17	.05	.94	25.28	45.62	0.45	1931
18	.05	.99	25.33	45.67	0.40	1964
19	.04	1.03	25.37	45.71	0.49	1943
20	.04	1.07	25.41	45.75	0.86	1937
21	.04	1.11	25.45	45.79	0.71	1967
22	.04	1.15	25.49	45.83	0.33	1963
23	.04	1.19	25.53	45.87	0.60	1969
24	.04	1.23	25.57	45.91	0.87	1971
25	.04	1.27	25.61	45.95	1.12	1942
26	.04	1.31	25.65	45.99	1.04	1982
27	.03	1.34	25.68	46.02	0.64	1969
28	.03	1.37	25.71	46.05	1.56	1952
29	.03	1.40	25.74	46.08	1.10	1952
30	.03	1.43	25.77	46.11	0.41	1983

Normal Monthly Accumulation Totals: JUN	JUN	YTD	WTD	June's Greatest: Amt	Year
1.43	1.43	25.77	46.11	1.56	1952

Other June Monthly Statistics:

Greatest 24-hour Rainfall: 2.36" 28th-29th, 1952

Wettest Month: 1937 with 5.57 inches
Driest Month: 1951 with a Trace

JULY PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.03	.03	25.80	46.14	0.96	1983
2	.03	.06	25.83	46.17	0.69	1990
3	.02	.08	25.85	46.19	0.36	1939
4	.02	.10	25.87	46.21	0.92	1992
5	.02	.12	25.89	46.23	0.38	1992
6	.02	.14	25.91	46.25	0.12	1948
7	.02	.16	25.93	46.27	0.24	1983
8	.02	.18	25.95	46.29	0.46	1946
9	.02	.20	25.97	46.31	0.61	1995
10	.02	.22	25.99	46.33	0.22	1936
11	.02	.24	26.01	46.35	0.17	1976
12	.02	.26	26.03	46.37	0.01	1947
13	.01	.27	26.04	46.38	0.40	1982
14	.01	.28	26.05	46.39	0.18	1964
15	.01	.29	26.06	46.40	0.40	1978
16	.01	.30	26.07	46.41	0.56	1974
17	.01	.31	26.08	46.42	0.49	1996
18	.01	.32	26.09	46.43	2.41	1987
19	.01	.33	26.10	46.44	0.09	1945
20	.01	.34	26.11	46.45	0.22	1965
21	.01	.35	26.12	46.46	0.61	1993
22	.01	.36	26.13	46.47	0.20	1934
23	.01	.37	26.14	46.48	0.01	1993
24	.01	.38	26.15	46.49	0.05	1947
25	.01	.39	26.16	46.50	0.27	1984
26	.02	.41	26.18	46.52	0.88	1947
27	.02	.43	26.20	46.54	1.36	1947
28	.02	.45	26.22	46.56	0.57	1975
29	.02	.47	26.24	46.58	0.18	1974
30	.02	.49	26.26	46.60	0.58	1985
31	.02	.51	26.28	46.62	0.79	1985

Normal Monthly Accumulation Totals: JUL	JUL	YTD	WTD	July's Greatest: Amt	Year
0.51	0.51	26.28	46.62	2.41	1987

AUGUST PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.02	.02	26.30	46.64	0.37	1989
2	.02	.04	26.32	46.66	0.24	1962
3	.02	.06	26.34	46.68	0.35	1962
4	.02	.08	26.36	46.70	0.31	1943
5	.02	.10	26.38	46.72	0.34	1957
6	.03	.13	26.41	46.75	0.10	1962
7	.03	.16	26.44	46.78	0.47	1962
8	.03	.19	26.47	46.81	0.02	1989
9	.03	.22	26.50	46.84	0.25	1947
10	.03	.25	26.53	46.87	0.03	1982
11	.03	.28	26.56	46.90	0.39	1965
12	.03	.31	26.59	46.93	0.19	1978
13	.03	.34	26.62	46.96	0.44	1968
14	.03	.37	26.65	46.99	0.70	1976
15	.03	.40	26.68	47.02	0.64	1978
16	.04	.44	26.72	47.06	1.41	1972
17	.04	.48	26.76	47.10	1.07	1990
18	.04	.52	26.80	47.14	0.46	1979
19	.04	.56	26.84	47.18	1.52	1993
20	.04	.60	26.88	47.22	0.27	1972
21	.04	.64	26.92	47.26	1.88	1979
22	.04	.68	26.96	47.30	0.40	1937
23	.04	.72	27.00	47.34	0.86	1968
24	.04	.76	27.04	47.38	0.82	1968
25	.04	.80	27.08	47.42	0.58	1968
26	.04	.84	27.12	47.46	0.25	1968
27	.04	.88	27.16	47.50	0.73	1975
28	.05	.93	27.21	47.55	1.21	1983
29	.05	.98	27.26	47.60	1.17	1983
30	.05	1.03	27.31	47.65	0.36	1983
31	.05	1.08	27.36	47.70	0.76	1971

Normal Monthly Accumulation Totals: AUG	AUG	YTD	WTD	August's Greatest: Amt	Year
1.08	1.08	27.36	47.70	1.88	1979

[1]Water Year runs from October 1 through September 30.

Other July Monthly Statistics
Greatest 24-hour Rainfall: 2.44" on 17th-18th, 1987
Wettest Month: 1916 with 3.38 inches
Driest Month: 1967 with No Rain
Also No Rain in 1906,1910, 1914, 1921, 1922, 1926, and 1933.

Other August Monthly Statistics:
Greatest 24-hour Rainfall: 1.54" 18-19th, 1993
Wettest Month: 1968 with 5.79 inches
Driest Month: 1967 with No Rain
Also No Rain in 1892, 1893, 1909, 1911, 1928, and 1931.

SEPTEMBER PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.05	.05	27.41	47.75	1.32	1979
2	.05	.10	27.46	47.80	1.74	1941
3	.05	.15	27.51	47.85	0.56	1960
4	.05	.20	27.56	47.90	0.38	1978
5	.05	.25	27.61	47.95	0.62	1984
6	.05	.30	27.66	48.00	0.62	1973
7	.05	.35	27.71	48.05	0.93	1938
8	.05	.40	27.76	48.10	0.36	1994
9	.05	.45	27.81	48.15	0.85	1978
10	.05	.50	27.86	48.20	0.48	1962
11	.05	.55	27.91	48.25	0.44	1966
12	.05	.60	27.96	48.30	1.17	1985
13	.05	.65	28.01	48.35	0.68	1968
14	.06	.71	28.07	48.41	0.73	1976
15	.06	.77	28.13	48.47	1.17	1963
16	.06	.83	28.19	48.53	1.01	1946
17	.06	.89	28.25	48.59	1.02	1969
18	.06	.95	28.31	48.65	1.01	1940
19	.06	1.01	28.37	48.71	0.72	1988
20	.06	1.07	28.43	48.77	0.51	1970
21	.06	1.13	28.49	48.83	1.12	1972
22	.06	1.19	28.55	48.89	0.75	1948
23	.06	1.25	28.61	48.95	0.99	1948
24	.06	1.31	28.67	49.01	0.38	1950
25	.06	1.37	28.73	49.07	0.85	1986
26	.06	1.43	28.79	49.13	1.34	1981
27	.06	1.49	28.85	49.19	0.68	1981
28	.06	1.55	28.91	49.25	1.22	1962
29	.06	1.61	28.97	49.31	0.62	1994
30	.06	1.67	29.03	49.37	0.70	1953

Normal Monthly Accumulation Totals: SEP	SEP	YTD	WTD	September's Greatest: Amt	Year
1.67	1.67	29.03	49.37	1.74	1941

OCTOBER PRECIPITATION DATA
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.06	.06	29.09	.06	1.93	1937
2	.06	.12	29.15	.12	1.38	1967
3	.06	.18	29.21	.18	0.96	1950
4	.06	.24	29.27	.24	0.95	1965
5	.07	.31	29.34	.31	0.98	1975
6	.07	.38	29.41	.38	0.76	1981
7	.07	.45	29.48	.45	1.54	1962
8	.07	.52	29.55	.52	0.57	1959
9	.07	.59	29.62	.59	3.62	1955
10	.08	.67	29.70	.67	1.01	1947
11	.08	.75	29.78	.75	1.64	1968
12	.08	.83	29.86	.83	1.22	1962
13	.09	.92	29.95	.92	1.36	1935
14	.09	1.01	30.04	1.01	0.54	1932
15	.10	1.11	30.14	1.11	3.01	1947
16	.10	1.21	30.24	1.21	0.73	1947
17	.10	1.31	30.34	1.31	0.87	1950
18	.11	1.42	30.45	1.42	2.91	1979
19	.11	1.53	30.56	1.53	1.75	1947
20	.12	1.65	30.68	1.65	1.59	1979
21	.13	1.78	30.81	1.78	1.39	1934
22	.13	1.91	30.94	1.91	1.74	1931
23	.14	2.05	31.08	2.05	1.16	1943
24	.14	2.19	31.22	2.19	1.79	1940
25	.15	2.34	31.37	2.34	1.71	1956
26	.16	2.50	31.53	2.50	1.18	1989
27	.17	2.67	31.70	2.67	2.22	1994
28	.17	2.84	31.87	2.84	1.93	1950
29	.18	3.02	32.05	3.02	1.91	1950
30	.19	3.21	32.24	3.21	2.75	1990
31	.20	3.41	32.44	3.41	3.70	1994

Normal Monthly Accumulation Totals: OCT	OCT	YTD	WTD	October's Greatest: Amt	Year
3.41	3.41	32.44	3.41	3.70	1994

[1]Water Year runs from October 1 through September 30.

Other September Monthly Statistics
Greatest 24-hour Rainfall: 1.68" on 14th-15th, 1963

Wettest Month: 1927 with 5.21 inches
Driest Month: 1993 with A Trace

Other October Monthly Statistics:
Greatest 24-hour Rainfall: 3.85" on 8th-9th, 1955
Wettest Month: 1950 with 12.66 inches
Driest Month: 1895 with A Trace
Snowiest Month: 1935 with 1.0 inch

NOVEMBER PRECIPITATION DATA[1]
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.21	.21	32.65	3.62	1.50	1984
2	.21	.42	32.86	3.83	3.20	1984
3	.22	.64	33.08	4.05	1.38	1972
4	.23	.87	33.31	4.28	1.77	1973
5	.24	1.11	33.55	4.52	1.38	1991
6	.24	1.35	33.79	4.76	1.17	1974
7	.25	1.60	34.04	5.01	2.00	1963
8	.26	1.86	34.30	5.27	1.97	1973
9	.26	2.12	34.56	5.53	2.09	1984
10	.27	2.39	34.83	5.80	1.55	1937
11	.27	2.66	35.10	6.07	1.70	1981
12	.28	2.94	35.38	6.35	1.29	1965
13	.28	3.22	35.66	6.63	1.94	1966
14	.29	3.51	35.95	6.92	1.33	1973
15	.29	3.80	36.24	7.21	3.61	1950
16	.29	4.09	36.53	7.50	1.16	1988
17	.30	4.39	36.83	7.80	1.78	1950
18	.30	4.69	37.13	8.10	4.03	1996
19	.30	4.99	37.43	8.40	2.40	1996
20	.30	5.29	37.73	8.70	1.76	1986
21	.30	5.59	38.03	9.00	2.00	1980
22	.30	5.89	38.33	9.30	2.93	1961
23	.30	6.19	38.63	9.60	2.30	1960
24	.31	6.50	38.94	9.91	4.18	1960
25	.31	6.81	39.25	10.22	2.25	1977
26	.31	7.12	39.56	10.53	2.41	1971
27	.30	7.42	39.86	10.83	2.42	1986
28	.30	7.72	40.16	11.13	1.60	1973
29	.30	8.02	40.46	11.43	1.67	1982
30	.30	8.32	40.76	11.73	2.85	1975

Normal Monthly Accumulation Totals: NOV	NOV	YTD	WTD	November's Greatest: Amt	Year
8.32	8.32	40.76	11.73	4.18	1960

DECEMBER PRECIPITATION DATA[1]
(1931-1996)

Day	Climatic Normals: Daily	Month to Date	Year to Date	Water Year[1] to Date	Greatest Daily Precipitation: Amt	Year
1	.30	.30	41.06	12.03	2.09	1987
2	.30	.60	41.36	12.33	4.48	1980
3	.29	.89	41.65	12.62	3.14	1987
4	.29	1.18	41.94	12.91	2.89	1968
5	.29	1.47	42.23	13.20	4.89	1981
6	.29	1.76	42.52	13.49	1.96	1983
7	.29	2.05	42.81	13.78	1.80	1993
8	.28	2.33	43.09	14.06	1.80	1992
9	.28	2.61	43.37	14.34	2.71	1987
10	.28	2.89	43.65	14.62	3.07	1993
11	.28	3.17	43.93	14.90	2.57	1969
12	.28	3.45	44.21	15.18	2.06	1995
13	.28	3.73	44.49	15.46	2.61	1977
14	.28	4.01	44.77	15.74	2.22	1981
15	.28	4.29	45.05	16.02	3.02	1982
16	.27	4.56	45.32	16.29	1.58	1977
17	.27	4.83	45.59	16.56	1.35	1957
18	.27	5.10	45.86	16.83	1.86	1941
19	.27	5.37	46.13	17.10	3.24	1957
20	.27	5.64	46.40	17.37	3.02	1955
21	.27	5.91	46.67	17.64	3.25	1964
22	.27	6.18	46.94	17.91	3.25	1964
23	.27	6.45	47.21	18.18	2.08	1964
24	.27	6.72	47.48	18.45	2.42	1980
25	.27	6.99	47.75	18.72	2.59	1955
26	.27	7.26	48.02	18.99	1.61	1955
27	.27	7.53	48.29	19.26	1.76	1931
28	.27	7.80	48.56	19.53	2.25	1945
29	.27	8.07	48.83	19.80	1.23	1996
30	.27	8.34	49.10	20.07	2.19	1970
31	.27	8.61	49.37	20.34	1.50	1942

Normal Monthly Accumulation Totals: DEC	DEC	YTD	WTD	December's Greatest: Amt	Year
8.61	8.61	49.37	20.34	4.89	1981

[1]Water Year runs from October 1 through September 30. Also see Supplemental Rainfall Report on page 71 for Nov and Dec.

Other November Monthly Statistics
Greatest 24-hour Rainfall: 4.21" on 1st-2nd, 1984
Greatest 24-hour Snowfall: 5.0" on 15th-16th, 1955
Wettest Month: 1973 with 20.48 inches
Driest Month: 1890 with 0.25 inch
Snowiest Month: 1955 with 6.0 inches

Other December Monthly Statistics:
Greatest 24-hour Rainfall: 5.15" on 5th-6th,1981
Greatest 24-hour Snowfall: 6.3" on 5th-6th,1972
Wettest Month: 1964 with 20.99 inches
Driest Month: 1976 with 1.24 inches
Snowiest Month: 1964 with 10.2 inches

MONTHLY AND ANNUAL PRECIPITATION (1890-1997)

(measurement in inches)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1890	Official Weather Records Began on October 1, 1890									1.19	0.25	2.76	NA
1891	4.65	9.97	2.78	2.30	3.00	2.06	0.18	0.20	1.56	3.35	4.31	10.40	44.76
1892	3.56	1.71	3.02	3.25	0.79	1.19	0.58	0	1.25	2.41	4.10	7.39	29.25
1893	2.47	5.48	2.57	4.49	3.07	1.12	0.33	0	4.33	6.64	7.59	3.93	42.02
1894	7.73	4.00	9.15	1.94	1.61	NA	NA	NA	NA	4.36	1.77	6.42	NA
1895	6.88	2.11	4.82	3.25	3.98	0.29	0.30	Trace	1.90	Trace	3.56	9.94	37.03
1896	7.56	3.52	4.37	5.89	4.57	0.36	0.29	1.87	0.66	1.71	11.86	5.81	48.47
1897	4.34	4.31	6.75	1.27	1.50	4.14	0.25	0.25	1.50	2.62	7.45	6.17	40.55
1898	2.43	2.49	1.90	1.99	2.93	1.66	0.12	0.38	3.00	1.50	4.50	4.26	27.16
1899	5.32	5.08	5.57	2.78	2.80	1.05	Trace	3.14	1.39	2.68	6.14	5.33	41.28
1900	5.38	3.82	5.44	2.35	2.42	2.55	0.12	0.24	3.50	4.87	3.55	6.65	40.89
1901	8.36	5.54	4.39	2.59	2.55	1.40	Trace	0.36	4.09	1.44	4.34	4.95	40.01
1902	3.43	8.34	4.19	5.49	3.99	0.32	2.37	0.17	0.91	1.76	10.69	9.84	51.50
1903	8.93	1.47	3.64	1.41	1.49	0.89	0.41	1.22	1.43	1.49	9.08	2.75	34.21
1904	5.30	12.10	10.49	3.83	2.29	0.29	0.75	0.15	0.50	3.00	4.03	7.98	50.71
1905	3.22	1.42	5.46	0.96	2.99	2.10	0.12	0.10	1.43	4.49	2.78	4.88	29.95
1906	5.01	5.99	2.91	1.83	3.08	2.94	0	Trace	2.49	3.53	5.02	4.75	37.55
1907	7.91	6.07	4.65	4.03	1.38	1.40	0.18	1.47	1.23	1.33	4.69	11.93	46.27
1908	2.82	2.67	2.87	0.81	2.46	1.76	0.02	0.76	0.37	5.04	3.68	3.96	27.22
1909	7.95	7.71	1.76	0.43	3.37	0.43	0.75	0	1.11	3.54	8.51	3.60	39.16
1910	3.49	4.18	1.71	1.74	2.47	1.03	0	Trace	1.08	2.37	10.51	4.62	33.20
1911	6.99	2.44	0.71	2.34	3.15	1.12	0.07	0	4.91	1.00	3.67	3.81	30.21
1912	6.47	4.32	2.80	3.32	4.09	4.31	0.57	1.32	1.97	3.17	6.98	4.26	43.58
1913	5.04	1.16	3.83	2.30	2.80	3.37	0.63	0.29	1.82	2.74	4.91	2.77	31.66
1914	9.66	3.72	3.00	3.16	0.84	1.79	0	Trace	4.11	3.36	3.07	2.51	35.22
1915	4.01	3.29	2.21	1.94	4.76	0.80	1.22	0.01	0.53	1.54	11.86	7.66	39.83
1916	5.76	5.42	9.93	2.81	2.99	2.19	3.38	0.85	1.57	0.84	7.62	4.82	48.18
1917	3.22	5.80	4.67	3.77	2.68	1.04	Trace	Trace	1.57	0.04	7.75	10.63	41.17
1918	4.94	6.21	3.31	1.01	2.23	0.02	0.19	0.98	0.74	2.63	5.24	3.90	31.40
1919	8.29	9.15	5.61	4.08	1.72	1.11	0.13	0.47	3.05	2.02	5.41	5.23	46.27
1920	2.14	0.10	4.09	3.52	0.63	3.15	0.52	0.86	4.27	5.24	7.15	9.00	40.67
1921	5.71	6.02	2.38	2.40	1.31	1.68	0	0.05	2.51	2.75	8.41	3.38	36.60
1922	3.78	4.21	6.28	3.63	1.27	0.70	0	0.34	2.55	3.83	3.44	8.03	37.06
1923	10.07	1.56	2.29	2.96	1.38	1.90	1.06	0.25	1.21	2.75	2.78	4.84	33.05
1924	2.45	4.24	2.22	0.76	0.78	0.36	Trace	0.49	2.01	7.77	9.77	5.03	35.88
1925	6.34	6.64	1.63	3.40	3.31	0.87	0.05	0.85	2.11	0.22	4.57	3.71	33.70
1926	4.00	10.11	0.40	1.60	2.92	0.23	0	1.24	1.49	3.89	10.74	4.54	41.16
1927	9.02	8.61	2.87	2.04	2.15	1.52	0.05	0.18	5.21	2.45	6.01	3.47	43.58
1928	5.82	1.92	7.81	4.13	0.57	0.28	0.10	0	1.05	2.10	3.97	7.16	34.91
1929	3.52	1.42	2.88	4.15	0.76	3.55	0.04	0.08	0.28	1.24	0.80	13.38	32.10
1930	3.96	4.91	1.73	2.75	2.32	1.02	0.01	0.01	1.86	1.85	3.96	2.01	26.39
1931	3.71	2.65	4.87	2.50	0.19	2.53	0	0	2.01	4.27	5.56	8.49	36.78
1932	5.11	1.92	6.04	3.54	4.35	0.54	0.30	0.28	0.12	2.98	4.99	6.05	36.22
1933	8.70	4.30	4.38	0.81	3.04	1.39	0	0.51	2.76	1.47	1.51	7.14	36.01
1934	4.62	1.23	3.00	2.06	2.11	0.97	0.44	0.34	0.69	4.35	7.81	7.37	34.99
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AND ANNUAL PRECIPITATION (1890-1997)
(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1935	3.87	3.66	4.26	2.50	0.32	0.33	0.35	0.07	1.59	4.23	3.52	4.21	28.91
1936	10.92	5.26	2.23	3.68	3.04	2.44	0.31	Trace	1.17	0.14	0.35	4.48	34.02
1937	4.15	8.22	3.26	7.17	2.40	5.57	0.09	1.13	0.99	5.02	9.73	7.48	55.21
1938	4.13	8.04	7.89	2.27	1.05	0.20	0.11	0.02	2.25	2.75	5.69	3.85	38.25
1939	3.84	4.39	3.23	0.90	2.39	1.29	0.68	0.91	0.70	3.07	0.51	6.00	27.91
1940	4.49	10.00	4.42	1.45	2.18	0.10	0.10	0.06	2.98	4.57	5.10	5.14	40.59
1941	3.56	1.85	1.39	2.39	3.94	1.48	0.17	0.75	2.58	2.24	7.32	10.93	38.60
1942	4.63	3.23	1.81	2.06	3.72	1.81	0.07	0.05	0.06	2.56	11.23	12.99	44.22
1943	6.10	2.14	4.70	2.98	1.28	2.16	0.27	1.70	0.06	5.67	2.81	3.26	33.13
1944	2.66	3.35	1.42	2.93	1.60	0.49	0.01	0.05	1.22	1.26	5.58	2.69	23.26
1945	4.46	5.56	6.72	3.46	2.93	0.04	0.12	0.39	0.91	1.75	11.60	7.70	45.64
1946	5.92	4.50	5.94	0.84	1.35	1.25	0.46	0.02	2.70	4.98	8.64	4.08	40.68
1947	3.75	3.08	6.40	2.54	0.47	3.62	2.63	0.68	0.96	10.14	2.94	3.90	41.11
1948	8.35	6.71	4.33	3.09	3.25	1.10	0.49	0.56	2.52	2.06	6.19	8.67	47.32
1949	1.68	9.73	3.52	0.83	2.65	0.32	0.01	0.08	0.73	1.94	5.92	5.04	32.45
1950	12.92	5.28	5.03	1.44	0.95	1.27	0.10	0.43	0.92	12.66	9.43	4.56	54.99
1951	8.85	5.23	3.90	0.55	1.75	Trace	0.01	0.51	1.22	5.73	7.40	7.82	42.97
1952	6.16	4.33	1.90	1.29	0.29	4.76	Trace	0.09	0.74	0.62	1.71	7.37	29.26
1953	11.13	5.41	4.88	2.55	4.41	1.63	Trace	1.09	1.03	3.05	6.51	7.40	49.09
1954	12.43	3.65	2.90	2.55	0.59	1.51	0.19	0.83	0.95	2.74	4.66	4.83	37.83
1955	3.26	2.06	3.04	4.65	0.45	0.86	0.82	Trace	1.38	6.89	6.69	19.49	49.59
1956	10.89	5.29	4.83	0.97	2.17	1.05	Trace	0.47	0.74	8.33	1.20	4.56	40.50
1957	2.98	5.87	8.66	2.16	3.11	0.85	0.19	0.54	1.03	3.13	2.81	12.82	44.15
1958	9.35	10.14	2.32	3.18	1.53	2.14	Trace	0.03	1.48	2.34	7.87	4.01	44.39
1959	12.39	5.41	3.61	0.90	2.16	0.80	0.32	0.06	0.88	2.23	1.42	2.76	32.94
1960	4.83	6.54	9.81	3.29	4.44	0.07	Trace	0.47	0.75	1.65	12.02	3.21	47.08
1961	5.25	11.58	8.42	1.48	2.87	0.76	0.32	0.34	1.12	4.31	9.36	7.37	53.18
1962	1.39	4.53	7.07	3.06	1.92	0.66	Trace	1.18	1.93	6.33	6.34	3.03	37.44
1963	2.55	5.27	7.17	5.23	3.95	1.40	0.32	0.17	2.19	2.39	7.87	3.09	41.60
1964	14.83	0.86	4.53	1.28	0.90	1.29	0.54	0.27	0.73	1.03	10.70	20.99	57.95
1965	9.92	1.60	0.79	2.29	0.90	0.44	0.24	0.90	Trace	2.43	7.43	7.69	35.26
1966	10.97	1.83	5.95	0.52	0.54	0.23	0.45	0.02	1.44	1.93	9.10	8.31	41.29
1967	10.33	2.13	2.90	3.02	1.59	1.70	0	0	1.83	5.10	3.22	4.99	36.81
1968	7.53	6.32	3.91	1.06	2.86	0.96	0.02	5.79	2.57	5.99	7.02	12.52	56.55
1969	12.67	3.21	2.74	2.92	2.38	3.13	Trace	Trace	2.05	4.22	2.74	11.68	47.74
1970	14.38	3.37	2.45	3.04	0.80	0.76	Trace	Trace	1.19	4.30	8.23	11.57	50.09
1971	10.83	5.11	7.99	4.49	2.52	3.10	Trace	1.33	3.04	3.32	9.48	9.46	60.67
1972	12.48	6.52	7.63	5.80	2.94	1.91	0.02	1.70	2.71	1.31	3.76	10.78	57.56
1973	6.20	2.09	5.18	1.67	0.86	1.35	Trace	0.80	2.48	2.37	20.48	11.82	55.30
1974	12.80	8.42	12.46	2.47	1.12	0.37	1.37	0.42	0.08	1.59	6.42	9.26	56.78
1975	6.93	6.79	7.56	2.90	2.16	0.88	1.18	2.09	Trace	5.69	8.47	7.12	51.77
1976	9.82	7.66	6.23	1.89	0.94	0.21	0.42	2.04	1.13	1.87	1.33	1.24	34.78
1977	1.11	5.05	4.66	1.47	2.84	0.97	0.11	1.70	2.39	2.87	9.14	14.60	46.91
1978	9.05	3.25	1.68	6.56	2.12	0.74	0.72	2.17	3.45	0.29	6.61	2.86	39.50
1979	2.98	9.52	3.12	4.71	2.61	0.56	0.41	3.46	2.32	8.12	6.09	7.38	51.28
1980	7.45	4.68	5.11	4.20	1.39	2.06	0.39	0.02	0.75	1.90	8.66	14.73	51.34
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

MONTHLY AND ANNUAL PRECIPITATION (1890-1997)

(continued)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
1981	2.13	4.35	4.16	2.69	3.27	3.51	0.08	Trace	3.15	5.42	9.51	17.63	55.90
1982	9.31	8.14	4.88	6.89	0.26	1.92	0.54	0.72	2.81	3.95	7.07	13.53	60.02
1983	6.75	12.28	10.58	3.35	1.81	1.78	1.77	3.19	0.54	1.36	13.13	7.47	64.01
1984	2.11	9.58	6.36	5.41	3.91	3.88	0.27	0.03	0.94	6.05	18.67	4.56	61.77
1985	0.31	5.15	5.65	0.49	1.53	2.51	1.37	0.04	2.13	4.83	6.31	3.51	33.83
1986	6.97	14.22	4.41	1.85	3.21	0.33	0.42	0.04	4.65	2.46	11.04	3.30	52.90
1987	9.66	4.47	2.81	2.04	2.00	0.07	3.00	0.26	0.20	0.24	4.65	15.40	44.80
1988	8.72	1.59	4.78	5.65	3.71	2.37	0.11	0.04	1.22	0.11	14.27	5.18	47.75
1989	6.68	3.45	10.93	1.73	3.85	1.03	0.49	1.21	0.64	2.95	5.00	2.70	40.66
1990	15.09	6.32	3.43	2.44	2.99	2.01	0.88	2.38	0.28	7.59	7.59	4.47	55.47
1991	3.73	3.58	9.79	5.22	6.03	0.99	0.64	0.68	0.10	1.93	10.47	5.28	48.44
1992	4.57	5.15	2.10	7.82	0.14	1.68	1.32	0.10	0.99	4.60	6.54	12.59	47.60
1993	6.85	2.64	8.58	7.85	6.92	3.70	1.14	1.80	Trace	1.45	1.98	10.82	53.73
1994	5.50	5.58	5.58	2.02	1.58	1.14	0.02	Trace	2.04	7.49	9.58	6.10	46.63
1995	15.36	3.74	6.42	5.59	2.10	2.33	1.13	0.98	1.10	3.91	9.47	13.43	65.56
1996	14.74	16.89	2.45[2]	3.91[2]	3.50[2]	0.39[2]	0.54[2]	0.09[2]	2.50[2]	4.51[2]	12.06[2]	14.95[2]	76.52[2]
1997	5.94	2.06											
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual

Average Monthly Precipitation (inches) (1961-90 Climatic Normals)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
7.91	5.64	5.52	3.11	2.16	1.43	0.51	1.08	1.67	3.41	8.32	8.61	49.37

Month and Year with the MOST Precipitation

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
14.83	16.89	12.46	7.85	6.92	5.57	3.38	5.79	5.21	12.66	20.48	20.99	76.52
1964	1996	1974	1993	1993	1937	1916	1968	1927	1950	1973	1964	1996

Month and Year with the LEAST Precipitation

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
0.31	0.10	0.40	0.43	0.14	Trace	0	0	Trace	Trace	0.25	1.24	23.26
1985	1920	1926	1909	1992	1951	1967[1]	1967[1]	1993[1]	1895	1890	1976	1944

[1]Precipitation amount has occurred more than one year. As a result, the most recent year of occurrence is listed.

[2]The method of rainfall collection changed on March 1st, 1996. Therefore, the official rainfall for March -December 1996 is from ASOS and may not be representative of actual rainfall. Refer to the supplemental rainfall data on page 71 for more representative rainfall during 1996.

MONTHLY and ANNUAL PRECIPITATION[1]: WETTEST AND DRIEST 5

	Mahlon Sweet Field (1931-1996)				All Eugene Locations (1890-1996)			
	Wettest 5		Driest 5		Wettest 5		Driest 5	
JANUARY	15.36	1995	0.31	1985	15.36	1995	0.31	1985
	15.09	1990	1.11	1977	15.09	1990	1.11	1977
AVG = 7.91	14.83	1964	1.39	1962	14.83	1964	1.39	1962
inches	14.74	1996	1.68	1949	14.74	1996	1.68	1949
	14.38	1970	2.11	1984	14.38	1970	2.11	1984
FEBRUARY	16.89	1996	0.86	1964	16.89	1996	0.10	1920
	14.22	1986	1.23	1934	14.22	1986	0.86	1964
AVG = 5.64	12.28	1983	1.59	1988	12.28	1983	1.16	1913
inches	11.58	1961	1.60	1965	12.10	1904	1.23	1934
	10.14	1958	1.83	1966	11.58	1961	1.42	1905/29
MARCH	12.46	1974	0.79	1965	12.46	1974	0.40	1926
	10.93	1989	1.39	1941	10.93	1989	0.71	1911
AVG = 5.52	10.58	1983	1.42	1944	10.58	1983	0.79	1965
inches	9.81	1960	1.68	1978	10.49	1904	1.39	1941
	9.79	1991	1.81	1942	9.93	1916	1.42	1944
APRIL	7.85	1993	0.49	1985	7.85	1993	0.43	1909
	7.82	1992	0.52	1966	7.82	1992	0.49	1985
AVG = 3.11	7.17	1937	0.55	1951	7.17	1937	0.52	1966
inches	6.89	1982	0.81	1933	6.89	1982	0.55	1951
	6.56	1978	0.83	1949	6.56	1978	0.76	1924
MAY	6.92	1993	0.14	1992	6.92	1993	0.14	1992
	6.03	1991	0.19	1931	6.03	1991	0.19	1931
AVG = 2.16	4.44	1960	0.26	1982	4.76	1915	0.26	1982
inches	4.41	1953	0.29	1952	4.57	1896	0.29	1952
	4.35	1932	0.32	1935	4.44	1960	0.32	1935
JUNE	5.57	1937	Trace	1951	5.57	1937	Trace	1951
	4.76	1952	0.04	1945	4.76	1952	0.02	1918
AVG = 1.43	3.88	1984	0.07	1987	4.31	1912	0.04	1945
inches	3.70	1993	0.07	1960	4.14	1897	0.07	1987
	3.62	1947	0.10	1940	3.88	1984	0.07	1960
JULY	3.00	1987	0.00	1967	3.38	1916	0.00	1967
	2.63	1947	0.00	1933	3.00	1987	0.00	1933
AVG = 0.51	1.77	1983	0.00	1931	2.63	1947	0.00	1931
inches	1.37	1985	Trace	1973	2.37	1902	0.00	1926
	1.37	1974	Trace in 1971/70/69/62/60 and 1958/56/53/52		1.77	1983	0.00 in 1922/21/14 and 1910/06	
AUGUST	5.79	1968	0.00	1967	5.79	1968	0.00	1967
	3.46	1979	0.00	1931	3.46	1979	0.00	1931
AVG = 1.08	3.19	1983	Trace	1994	3.19	1983	0.00	1928
inches	2.38	1990	Trace	1981	3.14	1899	0.00	1911
	2.17	1978	Trace in 1970/69/55/36		2.38	1990	0.00 in 1909, 1893 and 1892	

MONTHLY and ANNUAL PRECIPITATION[1]: WETTEST AND DRIEST 5 (cont.)

	Mahlon Sweet Field (1931-1996)				All Eugene Locations (1890-1996)			
	Wettest 5		Driest 5		Wettest 5		Driest 5	
SEPTEMBER	4.65	1986	Trace	1993	5.21	1927	Trace	1993
	3.45	1978	Trace	1975	4.91	1911	Trace	1975
AVG = 1.67	3.15	1981	Trace	1965	4.65	1986	Trace	1965
inches	3.04	1971	0.06	1943	4.33	1893	0.06	1943
	2.98	1940	0.06	1942	4.27	1920	0.06	1942
OCTOBER	12.66	1950	0.11	1988	12.66	1950	Trace	1895
	10.14	1947	0.14	1936	10.14	1947	0.04	1917
AVG = 3.41	8.33	1956	0.24	1987	8.33	1956	0.11	1988
inches	8.12	1979	0.29	1978	8.12	1979	0.14	1936
	7.59	1990	0.62	1952	7.77	1924	0.22	1925
NOVEMBER	20.48	1973	0.35	1936	20.48	1973	0.25	1890
	18.67	1984	0.51	1939	18.67	1984	0.35	1936
AVG = 8.32	14.27	1988	1.20	1956	14.27	1988	0.51	1939
inches	13.13	1983	1.33	1976	13.13	1983	0.80	1929
	12.06	1996	1.42	1959	12.06	1996	1.20	1956
DECEMBER	20.99	1964	1.24	1976	20.99	1964	1.24	1976
	19.49	1955	2.69	1944	19.49	1955	2.01	1930
AVG = 8.61	17.63	1981	2.70	1989	17.43	1981	2.51	1914
inches	15.40	1987	2.76	1959	15.40	1987	2.69	1944
	14.95	1996	2.86	1978	14.95	1996	2.70	1989
ANNUAL	76.52	1996	23.26	1944	76.52	1996	23.26	1944
	65.56	1995	27.91	1939	65.56	1995	26.39	1930
AVG = 49.37	64.01	1983	28.91	1935	64.01	1983	27.16	1898
inches	61.77	1984	29.26	1952	61.77	1984	27.22	1908
	60.67	1971	32.45	1949	60.67	1971	27.91	1939
WATER[2] YEAR	74.18	1973-74	24.74	1976-77	74.18	1973-74	23.68	1923-24
	72.47	1995-96	25.47	1943-44	72.47	1995-96	24.74	1976-77
AVG = 49.37	68.03	1981-82	26.28	1930-31	68.03	1981-82	25.47	1943-44
inches	66.60	1982-83	28.58	1933-34	66.60	1982-83	26.28	1930-31
	63.97	1971-72	28.75	1954-55	63.97	1971-72	27.71	1914-15

SPECIAL NOTE: The method of rainfall collection changed on March 1st, 1996. Therefore, the official rainfall for March -December 1996 is from ASOS and may not be representative of actual rainfall. Refer to the supplemental rainfall data on page 71 for more representative rainfall during 1996.

[1]Precipitation totals are in units of inches.
[2]Water year runs from October 1 through September 30.

WATER YEAR PRECIPITATION TOTALS[1]

(1890-1996)

The water year starts on October 1st and ends September 30th.

Water Year	Total	Water Year	Total	Water Year	Total	Water Year	Total	Water Year	Total
1890-91	30.90	1915-16	55.96	1940-41	32.92	1965-66	39.50	1990-91	50.41
1891-92	33.41	1916-17	36.03	1941-42	37.93	1966-67	42.84	1991-92	41.55
1892-93	37.76	1917-18	38.05	1942-43	48.17	1967-68	44.33	1992-93	63.21
1893-94	NA	1918-19	45.38	1943-44	25.47	1968-69	54.63	1993-94	37.71
1894-95	36.08	1919-20	31.94	1944-45	34.12	1969-70	44.63	1994-95	61.92
1895-96	42.59	1920-21	43.45	1945-46	44.03	1970-71	62.51	1995-96	72.47
1896-97	43.69	1921-22	37.30	1946-47	41.83	1971-72	63.97	1996-97	
1897-98	33.14	1922-23	37.98	1947-48	47.38	1972-73	36.48	1997-98	
1898-99	37.39	1923-24	23.68	1948-49	36.47	1973-74	74.18	1998-99	
1899-00	39.97	1924-25	47.77	1949-50	41.24	1974-75	47.76	1999-00	
1900-01	44.35	1925-26	30.49	1950-51	48.67	1975-76	51.62	2000-01	
1901-02	39.94	1926-27	50.82	1951-52	40.51	1976-77	24.74	2001-02	
1902-03	43.18	1927-28	33.61	1952-53	41.83	1977-78	56.35	2002-03	
1903-04	49.02	1928-29	29.91	1953-54	42.56	1978-79	39.45	2003-04	
1904-05	32.81	1929-30	33.99	1954-55	28.75	1979-80	47.64	2004-05	
1905-06	36.40	1930-31	26.28	1955-56	59.48	1980-81	48.63		
1906-07	41.62	1931-32	40.52	1956-57	39.48	1981-82	68.03		
1907-08	32.49	1932-33	39.91	1957-58	48.93	1982-83	66.60		
1908-09	36.19	1933-34	28.58	1958-59	40.75	1983-84	54.45		
1909-10	31.35	1934-35	36.48	1959-60	36.61	1984-85	48.46		
1910-11	39.23	1935-36	41.01	1960-61	49.02	1985-86	50.75		
1911-12	37.65	1936-37	37.95	1961-62	42.78	1986-87	41.31		
1912-13	35.65	1937-38	48.19	1962-63	43.95	1987-88	48.48		
1913-14	36.70	1938-39	30.62	1963-64	38.58	1988-89	49.57		
1914-15	27.71	1939-40	35.36	1964-65	49.80	1989-90	46.47		

[1]Precipitation totals are in units of inches.

AVERAGE WATER YEAR: **49.37 inches** (1961-90 Climatic Normal)

WETTEST FIVE WATER YEARS:

74.18 inches in 1973-74
72.47 inches in 1995-96
68.03 inches in 1981-82
66.60 inches in 1982-83
63.97 inches in 1971-72

DRIEST FIVE WATER YEARS:

23.68 inches in 1923-24
24.74 inches in 1976-77
25.47 inches in 1943-44
26.28 inches in 1930-31
27.71 inches in 1914-15

SUPPLEMENTAL RAINFALL DATA

(March-December 1996)

The method of collecting and measuring rainfall at Eugene changed on March 1st, 1996. Between March 1st and January 1st, 1996, official rainfall collection was performed by ASOS, which is the Automated Surface Observation System. Due to a problems with the system, rainfall collected by ASOS was not representative of actual rainfall during these months. As a result, rainfall data from a National Weather Service universal rain guage has been added as supplemental rainfall data, which is considered to be more representative of rainfall of actual rainfall in the Eugene-Springfield area.

The ASOS was replaced by a more accurate model in early January 1997, allowing ASOS-measured rainfall to be similar to actual rainfall.

Following is the rainfall from both the ASOS and the Universal guages (Official rainfall is from the ASOS), along with the record wettest months and the normal monthly rainfall.

Month of 1996	Normal	ASOS Rainfall	Universal Rainfall	Record Wettest Month
January	7.91	14.74	14.48	1964 with 14.83
February	5.64	16.89	17.08	1996 with 16.89
March	5.52	2.45	3.38	1974 with 12.46
April	3.11	3.91	5.38	1993 with 7.85
May	2.16	3.50	5.20	1993 with 6.92
June	1.43	0.39	0.64	1937 with 5.57
July	0.51	0.54	0.73	1916 with 3.38
August	1.08	0.09	0.21	1968 with 5.79
September	1.67	2.50	3.09	1927 with 5.21
October	3.41	4.50	7.04	1950 with 12.66
November	8.32	12.06	18.42	1973 with 20.48
December	8.61	14.95	26.28	1964 with 20.99
Year 1996	49.37	76.52	101.93	Prior to 1996: 1995 with 65.56

rainfall measured in units of inches

Following are significant records that were set by universal guage rainfall, but not ASOS guage rainfall. These do not appear in official climate records of Eugene, but are representative of actual 1996 rainfall:

Greatest Calendar Day Rainfall for November: November 18 6.24 inches
November 19 3.67 inches

November 18th is the wettest day ever in November, and the all-time wettest day.
November 19th is the 3rd wettest day in November, and the 13th all-time wettest day.

Greatest Calendar Day Rainfall Ever: November 18 6.24 inches

November 1996 is the 3rd wettest November on record with 18.42 inches.
December 1996 is the wettest December on record with 26.28 inches.

1996 is the wettest year ever, with 101.93 inches recorded. This is twice the normal rainfall for Eugene!

For more comprehensive rainfall records and comparisons with supplemental data, contact the Portland NWS office or the National Climatic Data Center in Asheville, NC.

GREATEST RAINFALL[1] DURING A TIME DURATION OF...

(Period of Record is January 1951 to July 1996)

MONTH	5 minutes	Date	10 minutes	Date	15 minutes	Date
January	0.14	28th of 1990	0.28	11th of 1959	0.32	11th of 1959
February	0.14	15th of 1990	0.21	1st of 1961	0.26	13th of 1984
March	0.17	10th of 1996	0.27	10th of 1996	0.32	10th of 1996
April	0.20	12th of 1992	0.22	12th of 1992	0.22	12th of 1992
May	0.23	16th of 1991	0.34	26th of 1993	0.45	26th of 1993
June	0.33	1st of 1967	0.60	1st of 1967	0.74	1st of 1967
July	0.18	4th of 1992	0.32	4th of 1992	0.43	4th of 1992
August	0.35	21st of 1979	0.93	21st of 1979	1.14	21st of 1979
September	0.30	1st of 1979	0.42	1st of 1979	0.43	1st of 1979
October	0.20	23rd of 1989	0.25	23rd of 1989	0.30	23rd of 1989
November	0.35	5th of 1988	0.46	5th of 1988	0.52	5th of 1988
December	0.15	4th of 1993	0.23	15th of 1982	0.34	15th of 1982
GREATEST	0.35	Nov. 5, 1988[2]	0.93	Aug. 21, 1979	1.14	Aug. 21, 1979

[1]Precipitation totals are in units of inches.
[2]Greatest precipitation in 5 minutes also occurred on the August 21st, 1979.

MONTH	30 minutes	Date	1 Hour	Date	2 Hours	Date	3 Hours	Date
January	0.52	11th/1959	0.70	11th/1959	1.18	11th/1959	1.50	11th/1959
February	0.38	7th/1996	0.66	7th/1996	1.03	7th/1996	1.50	7th/1996
March	0.42	10th/1996	0.56	12th/1989	1.01	12th/1989	1.01	12th/1989
April	0.33	9th/1992	0.51	17th/1987	0.70	23rd/1996	0.84	9th/1972
May	0.51	26th/1993	0.56	26th/1993	0.66	23rd/1989	0.76	26/1993
June	0.80	1st/1967	0.86	1st/1967	0.88	1st/1967	1.08	28th/1952
July	0.61	4th/1992	0.74	4th/1992	0.87	4th/1992	0.89	4th/1992
August	1.37	21st/1979	1.58	21st/1979	1.85	21st/1979	1.85	21st/1979
September	0.47	12th/1985	0.55	17th/1969	0.66	17th/1969	0.78	9th/1963
October	0.42	27th/1994	0.77	31st/1994	1.41	31st/1994	1.76	31st/1994
November	0.66	5th/1988	0.85	5th/1988	1.15	2nd/1984	1.56	25th/1977
December	0.47	15th/1982	0.66	15th/1982	1.04	4th/1975	1.49	4th/1975
GREATEST	1.37	8/21/1979	1.58	8/21/1979	1.85	8/21/1979	1.85	8/21/1979

[1]Precipitation totals are in units of inches.

GREATEST DAILY AND 24-HOUR RAINFALL[1] RECORDS

(October 1890 through October 1996)

	Greatest Calendar Day Rainfall			Greatest Any 24-Hour Rainfall		
Month	Rainfall	Date	Year	Rainfall	Date	Year
January	4.74	15th	1974	4.88	14th-15th	1974
February	3.87	10th	1961	4.81	12th-13th	1984
March	2.21	29th	1963	2.44	29th-30th	1963
April	2.05	13th	1982	2.38	8th-9th	1992
May	1.94	16th	1972	2.37	16th-17th	1972
June	1.56	28th	1952	2.36	28th-29th	1952
July	2.41	18th	1987	2.44	17th-18th	1987
August	1.88	21st	1979	1.54	18th-19th	1993
September	1.74	2nd	1941	1.68	14th-15th	1963
October	3.70	31st	1994	3.85	8th-9th	1955
November	4.18	24th	1960	4.21	1st-2nd	1984
December	4.89	5th	1981	5.15	5th-6th	1981
GREATEST	4.89	5th	1981	5.15	5th-6th	1981

[1]Precipitation totals are in units of inches.

DAYS WITH MEASURABLE RAINFALL

(0.01 Inch or More)

		1890-1996 (All Eugene Locations)				1931-1996 (Mahlon Sweet Field)			
Month	Normal	Most	Year	Least	Year	Most	Year	Least	Year
January	17.5	29	1925	8	1893	28	1950	6	1985
February	14.9	28	1904	2	1920	24	1979[2]	9	1988
March	16.6	28	1904	6	1926	26	1989	6	1969
April	12.9	24	1917[2]	5	1909	25	1993	4	1951
May	10.0	22	1915[2]	4	1928[2]	23	1933	1	1992
June	7.0	18	1913	2	1926[2]	16	1931	0	1951
July	2.5	7	1916[2]	0	1926[2]	8	1983[2]	0	1973[2]
August	3.9	9	1926	0	1928[2]	14	1968	0	1994[2]
September	5.7	20	1927	2	1896	13	1986[2]	0	1993[2]
October	11.0	21	1905	0	1895	23	1947	2	1987
November	16.4	29	1915	3	1890	28	1973	3	1936
December	18.0	27	1906	10	1921	29	1933	8	1985
ANNUAL	136.5	151	1891	116	1895	174	1948	101	1985

[2]Has occurred more than once therefore the most recent year of occurrence is listed.

WETTEST 10 DAYS OF EACH MONTH[1]

(1931-1996)

	January		February		March		April	
1.	4.74	1/14/1974	3.87	2/10/1961	2.21	3/29/1963	2.05	4/13/1982
2.	4.26	1/20/1972	3.69	2/ 6/1996	2.13	3/ 3/1991	1.79	4/ 9/1992
3.	4.15	1/13/1995	3.43	2/12/1984	1.99	3/24/1976	1.78	4/30/1936
4.	3.87	1/ 3/1966	2.89	2/ 7/1996	1.91	3/ 1/1972	1.49	4/13/1937
5.	3.77	1/19/1964	2.70	2/15/1958	1.81	3/ 5/1989	1.45	4/ 8/1971
6.	3.28	1/ 7/1976	2.39	2/ 9/1961	1.74	3/12/1989	1.43	4/11/1983
7.	3.18	1/ 6/1948	2.30	2/17/1983	1.74	3/29/1983	1.32	4/27/1962
8.	3.08	1/ 5/1978	2.29	2/ 1/1937	1.71	3/12/1946	1.29	4/ 7/1995
9.	3.00	1/11/1959	2.26	2/17/1949	1.69	3/14/1974	1.19	4/10/1982
10.	2.84	1/11/1936	2.21	2/ 7/1985	1.67	3/13/1980	1.15	4/ 8/1972

	May		June		July		August	
1.	1.94	5/16/1972	1.56	6/28/1952	2.41	7/18/1987	1.88	8/21/1979
2.	1.57	5/ 5/1963	1.34	6/ 8/1981	1.36	7/27/1947	1.52	8/19/1993
3.	1.47	5/ 1/1949	1.28	6/ 6/1984	0.96	7/ 1/1983	1.41	8/16/1972
4.	1.46	5/29/1932	1.17	6/ 5/1993	0.92	7/ 4/1992	1.36	8/16/1968
5.	1.38	5/ 6/1963	1.12	6/25/1942	0.88	7/26/1947	1.21	8/28/1983
6.	1.30	5/ 1/1986	1.10	6/29/1952	0.79	7/31/1985	1.17	8/29/1983
7.	1.26	5/ 7/1991	1.04	6/26/1982	0.63	7/ 2/1990	0.87	8/23/1968
8.	1.03	5/21/1939	1.02	6/ 7/1985	0.61	7/ 9/1995	0.82	8/24/1968
9.	1.01	5/11/1937	0.98	6/11/1937	0.57	7/28/1975	0.76	8/31/1971
10.	0.96	5/14/1936	0.95	6/14/1952	0.56	7/16/1974	0.64	8/19/1968

	September		October		November		December	
1.	1.34	9/26/1972	3.70	10/31/1994	4.18	11/24/1960	4.89	12/ 5/1981
2.	1.32	9/ 1/1963	3.62	10/ 9/1955	4.03	11/18/1996	4.48	12/ 2/1980
3.	1.27	9/14/1949	3.01	10/15/1947	3.61	11/15/1950	3.47	12/ 2/1941
4.	1.22	9/28/1932	2.91	10/18/1979	3.20	11/ 2/1984	3.25	12/21/1968
5.	1.17	9/12/1963	2.75	10/30/1990	2.93	11/22/1961	3.24	12/22/1964
6.	1.17	9/15/1993	2.22	10/27/1994	2.85	11/30/1975	3.24	12/19/1957
7.	1.15	9/ 1/1941	1.93	10/ 1/1937	2.42	11/27/1986	3.14	12/ 3/1987
8.	1.12	9/21/1972	1.93	10/28/1950	2.41	11/26/1971	3.12	12/21/1955
9.	1.07	9/15/1935	1.91	10/29/1950	2.40	11/19/1996	3.07	12/10/1993
10.	1.02	9/17/1969	1.75	10/19/1947	2.30	11/23/1960	3.02	12/15/1982

ALL-TIME WETTEST 20 DAYS ON RECORD

1.	4.89	January 5th, 1981	11.	3.70	October 31st, 1994
2.	4.74	January 14th,1974	12.	3.69	February 6th, 1996
3.	4.48	December 2nd, 1980	13.	3.62	October 9th, 1955
4.	4.26	January 20th, 1972	14.	3.61	November 15th, 1950
5.	4.18	November 24th, 1960	15.	3.47	December 2nd, 1941
6.	4.15	January 13th, 1995	16.	3.43	February 12th, 1984
7.	4.03	November 18th, 1996	17.	3.28	January 7th, 1976
8.	3.87	January 3rd, 1966	18.	3.25	December 21st, 1964
9.	3.87	February 10th, 1961	19.	3.24	December 22nd, 1964
10.	3.77	January 19th, 1964	20.	3.24	December 19th, 1957

[1]Day is defined as midnight to midnight.
[2]Refer to page 71 for supplemental rainfall data for wettest day on record and wettest days in November.

GREATEST NUMBER OF CONSECUTIVE DAYS WITH RAINFALL OF AT LEAST 0.01 INCH
(1890-1996)

Length of Wet Spell	Dates of Wet Spell	Total Rainfall During Wet Spell
34 Days	February 4th-March 9th, 1919	11.94 Inches
31 Days	February 3rd-March 14th, 1904	14.49 Inches
27 Days	December 11th-January 6th, 1933-34	6.06 Inches
25 Days	November 2nd-26th, 1906	4.91 Inches
24 Days	November 7th-30th, 1915	10.98 Inches
23 Days	January 23rd-February 14th, 1925	8.39 Inches
23 Days	December 4th-26th, 1906	4.32 Inches
21 Days	January 27th-February 16th, 1921	5.22 Inches
21 Days	February 12th-March 4th, 1909	6.15 Inches
21 Days	March 12th-April 1st, 1905	5.49 Inches
20 Days	November 13th-December 2, 1934	5.36 Inches
20 Days	November 11th-30, 1927	3.34 Inches
19 Days	January 6th-24th, 1950	9.57 Inches
19 Days	December 20th-January 7th, 1945-46	8.50 Inches
19 Days	November 8th-26th, 1937	9.30 Inches
19 Days	October 25th-November 12th, 1924	13.89 Inches
18 Days	November 8th-25th, 1983	9.65 Inches
18 Days	February 17th-March 5, 1956	7.59 Inches
18 Days	November 15th-December 2nd, 1921	9.78 Inches
18 Days	January 13th-30th, 1914	7.26 Inches
18 Days	February 12th-March 1, 1906	5.94 Inches
18 Days	January 8th-25th, 1906	4.88 Inches

GREATEST NUMBER OF CONSECUTIVE DAYS WITH NO RAIN
(1890-1996)

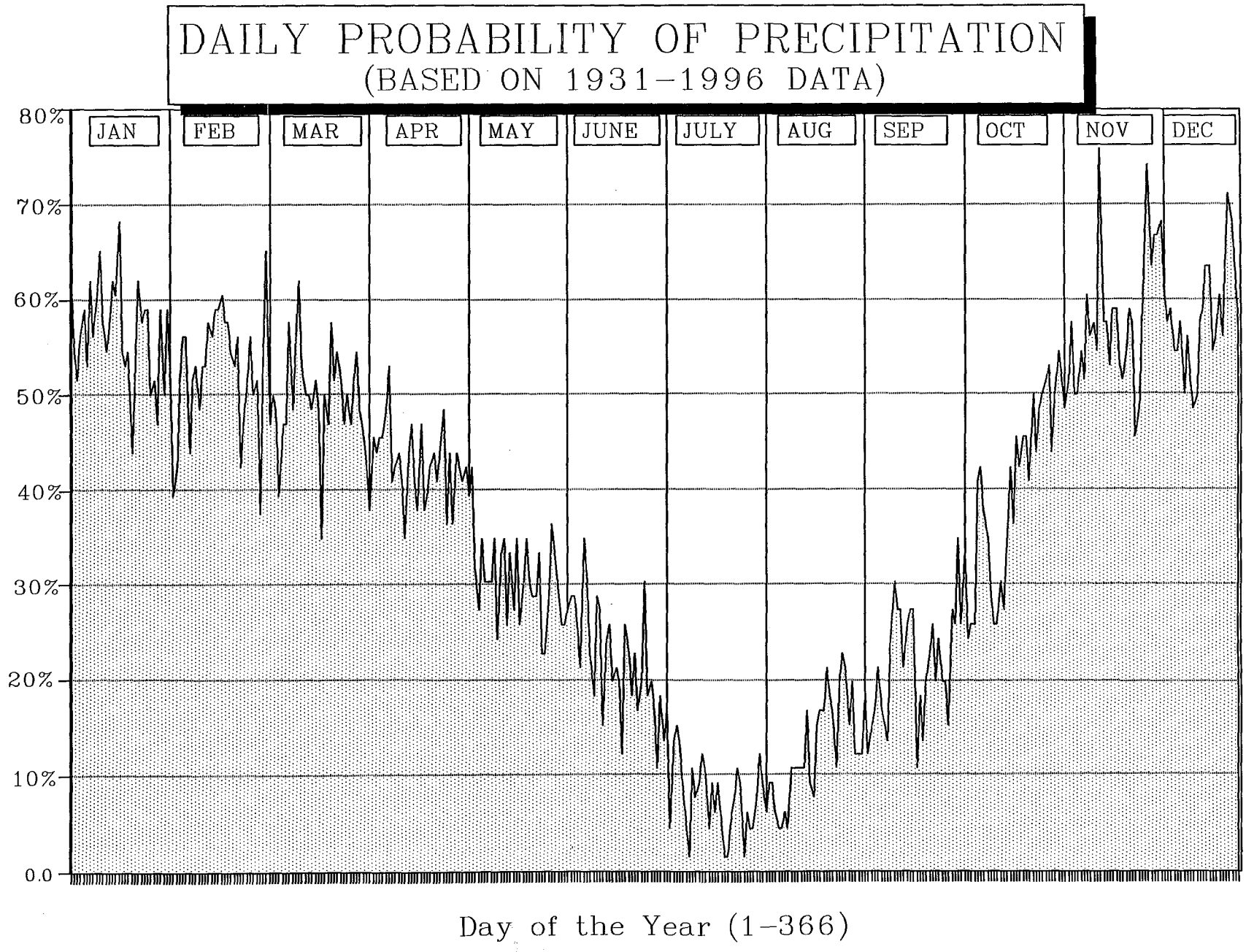
Length of Drought	Dates of Drought
79 Days	June 23rd-September 9th, 1967
67 Days	July 1st-September 5th, 1931
62 Days	July 5th-September 4th, 1928
58 Days	June 21st-August 17th, 1926
49 Days	June 27th-August 14th, 1914
48 Days	June 23rd-August 9th, 1922
45 Days	July 1st-August 14th, 1921
44 Days	June 16th-July 29th, 1985
44 Days	June 30th-August 12th, 1906
43 Days	July 17th-August 28th, 1986
43 Days	July 17th-August 28th, 1970
39 Days	July 15th-August 22nd, 1939
39 Days	July 13th-August 20th, 1923
39 Days	July 7th-August 14th, 1902
36 Days	July 2nd-August 6th, 1930
35 Days	June 19th-July 23rd, 1929
34 Days	July 10th-August 12th, 1979
34 Days	July 8th-August 10th, 1959
33 Days	September 26th-October 28th, 1987
33 Days	July 1st-August 2nd, 1933

DAYS WITH MEASURABLE PRECIPITATION[1] OF AT LEAST 0.01 INCH

1931-December 31, 1996

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	40	35	35	30	28	19	11	3	13	10	35	43
2	36	26	43	28	27	17	7	5	8	18	29	49
3	34	28	31	25	28	17	12	8	8	17	33	42
4	37	34	33	30	26	18	9	6	8	23	36	44
5	39	37	32	29	28	19	11	4	12	17	34	44
6	35	37	26	30	21	19	3	6	8	22	32	45
7	41	29	31	30	18	17	9	6	10	16	34	40
8	37	34	31	32	23	14	10	4	11	17	38	38
9	40	35	38	35	20	23	9	3	14	17	33	39
10	43	32	32	27	20	20	6	3	11	27	33	36
11	38	35	37	28	20	15	3	4	10	28	36	36
12	36	35	41	29	23	12	1	3	9	25	34	38
13	38	38	35	27	16	19	7	7	16	23	40	33
14	41	37	33	23	22	18	5	7	20	19	37	37
15	40	39	33	29	23	10	6	7	18	17	38	34
16	45	39	32	31	17	16	8	7	18	17	36	32
17	36	40	34	27	22	17	7	7	14	20	50	33
18	35	38	32	25	18	13	3	11	17	18	38	38
19	36	38	23	31	23	14	6	6	18	22	38	39
20	29	36	33	25	17	13	4	5	18	28	35	42
21	34	35	31	26	20	8	6	10	7	24	39	42
22	41	37	38	28	23	17	3	11	12	30	39	36
23	38	28	34	29	20	15	1	11	9	28	35	37
24	39	31	36	27	19	12	1	14	13	30	34	40
25	39	34	34	29	19	15	4	12	15	30	36	37
26	33	37	31	32	22	11	5	11	17	27	39	42
27	34	33	33	24	15	13	7	7	13	33	38	47
28	31	34	31	29	15	20	6	13	16	29	30	45
29	39	6[2]	34	24	19	12	1	15	13	32	32	42
30	33		36	29	24	13	4	14	13	33	38	38
31	39		32		22		3	10		34		38

[1]Based on observations taken at the National Weather Service office at Mahlon Sweet Field in Eugene.
[2]February 29 has occurred 16 times between 1931 and 1996.


DAILY PROBABILITY OF PRECIPITATION
(BASED ON 1931-1996 DATA)
80%
70%
60%
50%
40%
30%
20%
10%
0.0
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
Day of the Year (1-366)
DAILY PRECIP PROBABILITY

DAILY PROBABILITY OF MEASURABLE PRECIPITATION[1] OF AT LEAST 0.01 INCH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	60.6	53.0	53.0	45.5	42.4	28.8	16.7	4.5	19.7	15.2	53.0	65.2
2	54.5	39.4	65.2	42.4	40.9	25.8	10.6	7.6	12.1	27.3	43.9	74.2
3	51.5	42.4	47.0	37.9	42.4	25.8	18.2	12.1	12.1	25.8	50.0	63.6
4	56.1	51.5	50.0	45.5	39.4	27.3	13.6	9.1	12.1	34.8	54.5	66.7
5	59.1	56.1	48.5	43.9	42.4	28.8	16.7	6.1	18.2	25.8	51.5	66.7
6	53.0	56.1	39.4	45.5	31.8	28.8	4.5	9.1	12.1	33.3	48.5	68.2
7	62.1	43.9	47.0	45.5	27.3	25.8	13.6	9.1	15.2	24.2	51.5	60.6
8	56.1	51.5	47.0	48.5	34.8	21.2	15.2	6.1	16.7	25.8	57.6	57.6
9	60.6	53.0	57.6	53.0	30.3	34.8	13.6	4.5	21.2	25.8	50.0	59.1
10	65.2	48.5	48.5	40.9	30.3	30.3	9.1	4.5	16.7	40.9	50.0	54.5
11	57.6	53.0	56.1	42.4	30.3	22.7	4.5	6.1	15.2	42.4	54.5	54.5
12	54.5	53.0	62.1	43.9	34.8	18.2	1.5	4.5	13.6	37.9	51.5	57.6
13	57.6	57.6	53.0	40.9	24.2	28.8	10.6	10.6	24.2	34.8	60.6	50.0
14	62.1	56.1	50.0	34.8	33.3	27.3	7.6	10.6	30.3	28.8	56.1	56.1
15	60.6	59.1	50.0	43.9	34.8	15.2	9.1	10.6	27.3	25.8	57.5	51.5
16	68.2	59.1	48.5	47.0	25.8	24.2	12.1	10.6	27.3	25.8	54.5	48.5
17	54.5	60.6	51.5	40.9	33.3	25.8	10.6	10.6	21.2	30.3	75.8	50.0
18	53.0	57.6	48.5	37.9	27.3	19.7	4.5	16.7	25.8	27.3	57.6	57.6
19	54.5	57.6	34.8	47.0	34.8	21.2	9.1	9.1	27.3	33.3	57.6	59.1
20	43.9	54.5	50.0	37.9	25.8	19.7	6.1	7.6	27.3	42.4	53.0	63.6
21	51.5	53.0	47.0	39.4	30.3	12.1	9.1	15.2	10.6	36.4	59.1	63.6
22	62.1	56.1	57.6	42.4	34.8	25.8	4.5	16.7	18.2	45.5	59.1	54.5
23	57.6	42.4	51.5	43.9	30.3	22.7	1.5	16.7	13.6	42.4	53.0	56.1
24	59.1	47.0	54.5	40.9	28.8	18.2	1.5	21.2	19.7	45.5	51.5	60.6
25	59.1	51.5	51.5	43.9	28.8	22.7	6.1	18.2	22.7	45.5	54.5	56.1
26	50.0	56.1	47.0	48.5	33.3	16.7	7.6	16.7	25.8	40.9	59.1	63.6
27	51.5	50.0	50.0	36.4	22.7	19.7	10.6	10.6	19.7	50.0	57.6	71.2
28	47.0	51.5	47.0	43.9	22.7	30.3	9.1	19.7	24.2	43.9	45.5	68.2
29	59.1	37.5	51.5	36.4	28.8	18.2	1.5	22.7	19.7	48.5	48.5	63.6
30	50.0		54.5	43.9	36.4	19.7	6.1	21.2	19.7	50.0	57.6	57.6
31	59.1		48.5		33.3		4.5	15.2		51.5		57.6

[1]Based on observations taken at the National Weather Service office at Mahlon Sweet Field in Eugene between 1931 and 1996.
[2]February 29 probability has been calculated using 16 years due to occurrence of 16 Leap Years between 1931 and 1996.

SNOWFALL RECORDS AND EXTREMES[1]

(1931-1996)

	Days with Measurable[2] Snow				Greatest 24-hour Snowfall			Greatest Snow Depth		
Month	Most	Year	Least	Year	Total	Day(s)	Year	Total	Day(s)	Year
January	21	1950	0	1996	22.9	25th-26th	1969	34.0	27th-28th	1969
February	5	1990	0	1994	5.7	19th-20th	1993	8.0	1st	1950
March	4	1966	0	1996	4.9	5th	1951	4.0	3rd	1960
April	1	1950	0	1996	Trace	28th	1962	Trace	28th	1962
May	---	---	---	---	---	---	---	---	---	---
June	---	---	---	---	---	---	---	---	---	---
July	---	---	---	---	---	---	---	---	---	---
August	---	---	---	---	---	---	---	---	---	---
September	---	---	---	---	---	---	---	---	---	---
October	1	1935	0	1996	1.0	31st	1935	1.0	31st	1935
November	5	1955	0	1996	5.0	15th-16th	1955	5.0	17th	1955
December	7	1967	0	1996	6.3	5th-6th	1972	6.0	31st	1964
Season (Jul-Jun)	27	1949-1950	0	1991-1992	22.9	January 25th-26th, 1969		34.0	January 27th-28th, 1969	

[1]All precipitation measurements are in units of inches.
[2]Measurable snowfall is defined as snowfall of 0.01 inch or more.

EARLIEST AND LATEST SNOWFALL[1] OF THE WINTER SEASON

(1931-1996)

Latest Snowfall in Winter Season of...			Earliest Snowfall in Winter Season of...		
	Snowfall	Date		Snowfall	Date
Trace or more	Trace	April 28, 1962	Trace or more	Trace	October 27, 1971
0.1 inch or more	0.3	March 22,	0.1 inch or more	1.0	October 31, 1935
1.0 inch or more	1.5	March 10,	1.0 inch or more	1.0	October 31, 1935
2.0 inches or more	2.3	March 9, 1951	2.0 inches or more	4.4	November 16, 1955

[1]All precipitation measurements are in units of inches.

HISTORY OF A WHITE CHRISTMAS IN THE EUGENE/SPRINGFIELD AREA

A white Christmas in the Eugene/Springfield area is rare. In fact, between the years of 1931 and 1996, snow flakes have fallen only four times on Christmas day, and only five times on Christmas Eve. Here is a list of the dates on which snow has fallen, the snowfall totals and the probability of a white Christmas.

December 24th:
1948 1.0 inch snowfall
1983 2.1 inches snowfall
1937, 1954, and 1965 Trace

December 25th:
1983 0.8 inch snowfall
1952, 1954, and 1965 Trace
1990 snow on ground from earlier storm

CHANCE OF WHITE CHRISTMAS:

of receiving a Trace or more on Christmas Day...	6.1%
of receiving 0.1 inch or more on Christmas Day...	1.5%
of having snow on the ground on Christmas Day...	3.0%

MOST CONSECUTIVE DAYS WITH A SNOW DEPTH OF...
(1943-February 1997)

	Number of Days	Dates	Daily Snow Depth (inches)
1.0 Inch or More	19 Days	Jan 23rd-Feb 10th, 1969	2/2/1/20/29/34/28/23/18/16/15/13/8/7/7/7/4/1/1
	11 Days	December 6-16th, 1972	6/7/5/4/4/3/6/5/4/4/3
	9 Days	January 9-17th, 1993	3/2/1/3/3/2/2/1/1
	8 Days	February 2-9th, 1989	3/3/4/3/2/2/1/1
	8 Days	January 4-11th, 1982	3/2/3/3/3/3/3/2
	8 Days	January 24th-31st, 1957	2/4/7/6/5/5/5/2
	7 Days	December 19-25th, 1990	2/2/2/1/1/1/1
	5 Days	December 25-29th, 1983	3/3/2/1/1
	5 Days	Dec 28th-Jan 1, 1964-65	1/2/2/6/6
	5 Days	January 20-24th, 1962	2/2/2/2/2
	4 Days	December 12-15th, 1971	2/6/11/1
	4 Days	December 5-8th, 1956	1/4/2/1
	3 Days	February 13-15th, 1995	1/3/2
	3 Days	January 20-22nd, 1993	5/3/1
	3 Days	December 16-18th, 1987	5/3/1
	3 Days	December 1-3rd, 1985	2/6/4
	3 Days	Feb 27-March 1, 1971	1/2/1
	3 Days	January 1-3rd, 1965	1/2/1
	2 Days	February 27-28th, 1996	1/3
	2 Days	February 12-13th, 1990	1/2
	2 Days	December 12-13th, 1975	1/1
	2 Days	January 26-27th, 1975	2/1
	2 Days	January 9-10th, 1973	1/1
	2 Days	January 25-26th, 1972	1/1
	2 Days	Dec 31-Jan 1, 1965-66	1/2
	2 Days	November 24-25th, 1961	2/1
	2 Days	January 5-6th, 1959	1/1
	2 Days	March 5-6th, 1956	1/1
	2 Days	November 16-17th, 1955	2/5
	1 Day	Occurs often	

	Number of Days	Dates	Daily Snow Depth (inches)
6.0 Inches or More	13 Days	Jan 26th-Feb 7th, 1969	20/29/34/28/23/18/16/15/13/8/7/7/7
	2 Days	December 6-7th, 1972	6/7
	2 Days	January 13-14th, 1971	6/11
	2 Days	Dec 31st-Jan 1st, 1964-65	6/6
	2 Days	January 26-27th, 1957	7/6

	Number of Days	Dates	Daily Snow Depth (inches)
12.0 Inches or More	9 Days	Jan 26-Feb 3, 1969	20/29/34/28/23/18/16/15/13

This is the only occurrence of more than 12 inches snow depth.

MONTHLY AND SEASONAL SNOWFALL (1890-1997)

(Totals are in inches, and includes accumulations of snow, sleet, ice pellets, and hail)

Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Season
1890-91	Records begin Oct			0	0	0	0	5.7	7.5	0	0	0	13.2
1891-92	0	0	0	0	0	Trace	0	0	0	0	0	0	Trace
1892-93	0	0	0	0	0	5.0	15.9	15.0	0	0	0	0	35.9
1893-94	0	0	0	0	NA	NA	NA	NA	NA	NA	0	0	NA
1894-95	0	0	0	0	0	1.0	0	0	0	0	0	0	1.0
1895-96	0	0	0	0	0	0	2.0	0.5	2.5	0	0	0	5.0
1896-97	0	0	0	0	3.0	0	1.5	0.6	4.2	0	0	0	9.3
1897-98	0	0	0	0	0	0	1.3	0	2.0	0	0	0	3.3
1898-99	0	0	0	0	NA	NA	NA	2.0	3.0	0	0	0	NA
1899-00	0	0	0	0	0	0	0	0	0	0	0	0	0
1900-01	0	0	0	0	2.0	0	2.5	0	0	0	0	0	4.5
1901-02	0	0	0	0	0	0	3.5	0	0	0	0	0	3.5
1902-03	0	0	0	0	0	0	11.0	0.2	0	0	0	0	11.2
1903-04	0	0	0	0	0	0	1.6	0.5	1.3	0	0	0	3.4
1904-05	0	0	0	0	0	0	Trace	0.2	0	0	0	0	0.2
1905-06	0	0	0	0	0	0	0	0	4.0	0	0	0	4.0
1906-07	0	0	0	0	0	0	0.5	0	0	0	0	0	0.5
1907-08	0	0	0	0	0	0	0	0	Trace	0	0	0	Trace
1908-09	0	0	0	0	0	0	Trace	0	0	0	0	0	Trace
1909-10	0	0	0	0	0	6.8	2.0	1.5	0	0	0	0	10.3
1910-11	0	0	0	0	0	0	4.0	Trace	0	2.0	0	0	6.0
1911-12	0	0	0	0	0	0	0	0	0	0	0	0	0
1912-13	0	0	0	0	0	0	3.5	0	0.5	0	0	0	4.0
1913-14	0	0	0	0	0	0	2.0	0	0	0	0	0	2.0
1914-15	0	0	0	0	0	1.5	0	0	0	0	0	0	1.5
1915-16	0	0	0	0	0	Trace	26.0	3.2	15.7	0	0	0	44.9
1916-17	0	0	0	0	0	3.9	1.1	22.7	1.4	0	0	0	29.1
1917-18	0	0	0	0	0	0	0	Trace	1.0	0	0	0	1.0
1918-19	0	0	0	0	0	0	0	Trace	Trace	0	0	0	Trace
1919-20	0	0	0	0	0	8.5	0	0	1.8	0	0	0	10.3
1920-21	0	0	0	0	0	0	Trace	1.0	0	Trace	0	0	1.0
1921-22	0	0	0	0	0	1.2	3.3	1.0	1.0	Trace	0	0	6.5
1922-23	0	0	0	0	0	0.5	0.4	Trace	Trace	0	0	0	0.9
1923-24	0	0	0	0	0	0.5	5.7	0	Trace	Trace	0	0	6.2
1924-25	0	0	0	0	0	8.5	0	0	0	0	0	0	8.5
1925-26	0	0	0	0	0	0	0	0	0	0	0	0	0
1926-27	0	0	0	0	0	0.5	0.5	0	0	0	0	0	1.0
1927-28	0	0	0	0	0	3.5	0	0	0	0	0	0	3.5
1928-29	0	0	0	0	0	5.0	4.0	0	0	0	0	0	9.0
1929-30	0	0	0	0	0	0	9.5	Trace	0	0	0	0	9.5
1930-31	0	0	0	0	0	0	0	0	0	0	0	0	0
1931-32	0	0	0	0	0	Trace	5.0	Trace	0	0	0	0	5.0
1932-33	0	0	0	0	0	0	1.5	Trace	Trace	Trace	0	0	1.5
1933-34	0	0	0	0	0	Trace	0	0	0	0	0	0	Trace
1934-35	0	0	0	0	0	Trace	6.0	0	Trace	0	0	0	6.0
Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Season

MONTHLY AND SEASONAL SNOWFALL (1890-1997)
(continued)

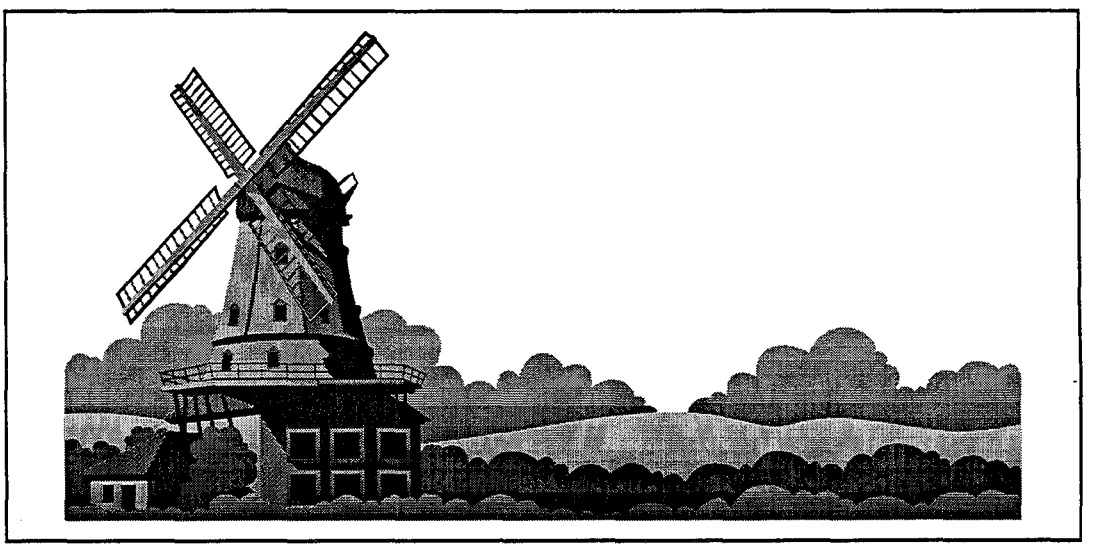
Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Season
1935-36	0	0	0	1.0	0	0	0	Trace	Trace	0	0	0	1.0
1936-37	0	0	0	0	0	Trace	2.5	5.5	Trace	0	0	0	8.0
1937-38	0	0	0	0	0	Trace	0	Trace	Trace	0	0	0	Trace
1938-39	0	0	0	0	0	Trace	Trace	1.5	Trace	0	0	0	1.5
1939-40	0	0	0	0	0	0	Trace	0	0	0	0	0	Trace
1940-41	0	0	0	0	0	0	0	0	0	0	0	0	0
1941-42	0	0	0	0	0	1.2	Trace	Trace	0	0	0	0	1.2
1942-43	0	0	0	0	0	Trace	14.0	Trace	Trace	0	0	0	14.0
1943-44	0	0	0	0	0	0	Trace	0	Trace	Trace	0	0	Trace
1944-45	0	0	0	0	0	0	0	0	Trace	0	0	0	Trace
1945-46	0	0	0	0	Trace	Trace	0.2	Trace	Trace	0	0	0	0.2
1946-47	0	0	0	0	Trace	Trace	1.2	0	0	0	0	0	1.2
1947-48	0	0	0	0	0	0	0.7	Trace	Trace	Trace	0	0	0.7
1948-49	0	0	0	0	0	1.0	7.4	4.8	0	0	0	0	13.2
1949-50	0	0	0	0	0	Trace	36.1	0.6	0.1	0	0	0	36.8
1950-51	0	0	0	0	Trace	0	1.4	0.4	10.8	0	0	0	12.6
1951-52	0	0	0	0	0	3.5	3.8	1.0	Trace	0	0	0	8.3
1952-53	0	0	0	0	0	Trace	0	Trace	Trace	0	0	0	Trace
1953-54	0	0	0	0	0	Trace	10.5	Trace	1.5	0	0	0	12.0
1954-55	0	0	0	0	0	0.2	0.2	0.3	Trace	Trace	0	0	0.7
1955-56	0	0	0	0	6.0	Trace	2.5	1.1	2.0	0	0	0	11.6
1956-57	0	0	0	Trace	0	5.2	7.9	Trace	Trace	0	0	0	13.1
1957-58	0	0	0	0	0	Trace	0	0	Trace	0	0	0	Trace
1958-59	0	0	0	0	Trace	0	1.2	Trace	0	0	0	0	1.2
1959-60	0	0	0	0	0	Trace	Trace	0	3.9	0	0	0	3.9
1960-61	0	0	0	0	0	0	0	0	0	0	0	0	0
1961-62	0	0	0	0	2.0	0	2.0	Trace	1.9	Trace	0	0	5.9
1962-63	0	0	0	0	0	0	3.9	0	Trace	Trace	0	0	3.9
1963-64	0	0	0	0	0	0	Trace	0	Trace	0	0	0	Trace
1964-65	0	0	0	0	Trace	10.2	4.9	Trace	Trace	0	0	0	15.1
1965-66	0	0	0	0	0	4.8	0.1	0.3	2.5	0	0	0	7.7
1966-67	0	0	0	0	0	0	Trace	0.7	Trace	Trace	0	0	0.7
1967-68	0	0	0	0	0	1.1	3.6	0	0	0	0	0	4.7
1968-69	0	0	0	0	Trace	2.3	47.1	Trace	0	0	0	0	49.4
1969-70	0	0	0	0	0	0	0.2	Trace	Trace	Trace	0	0	0.2
1970-71	0	0	0	0	Trace	0.1	18.9	4.5	0.8	Trace	0	0	24.3
1971-72	0	0	Trace	Trace	0	1.2	1.2	Trace	0.5	Trace	0	0	2.9
1972-73	0	0	0	0	0	9.9	1.1	0	Trace	Trace	0	0	11.0
1973-74	0	0	0	0	1.5	Trace	Trace	0.4	Trace	0	Trace	0	1.9
1974-75	0	0	0	0	0	Trace	4.0	Trace	Trace	Trace	Trace	0	4.0
1975-76	0	0	0	0	Trace	2.8	Trace	Trace	1.3	Trace	0	0	4.1
1976-77	0	0	0	0	0	0	0	Trace	Trace	0	Trace	0	Trace
1977-78	0	0	0	0	0.2	0	Trace	Trace	0	Trace	0	0	0.2
1978-79	0	0	0	0	1.0	Trace	Trace	Trace	0	Trace	0	0	1.0
1979-80	0	0	0	0	0	Trace	Trace	0	Trace	0	0	0	Trace
Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Season

MONTHLY AND SEASONAL SNOWFALL (1890-1997)

Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Season
1980-81	0	0	0	0	0	Trace	0	0	Trace	Trace	Trace	Trace	Trace
1981-82	0	0	0	0	Trace	Trace	5.0	2.1	Trace	Trace	0	0	7.1
1982-83	0	0	0	Trace	0	Trace	0	0	0	Trace	0	0	Trace
1983-84	0	0	0	0	Trace	3.7	Trace	Trace	Trace	Trace	Trace	0	3.7
1984-85	0	0	0	Trace	0	Trace	Trace	0.2	Trace	Trace	0	0	0.2
1985-86	0	0	0	0	2.3	4.7	0	2.8	0	Trace	Trace	0	9.8
1986-87	0	0	Trace	0	0	0	0	0	Trace	0	0	0	Trace
1987-88	0	0	0	0	0	6.0	0.7	1.0	0	Trace	0	0	7.7
1988-89	0	0	0	0	0	0.3	Trace	5.6	Trace	0	0	0	5.9
1989-90	0	0	0	0	Trace	0	Trace	8.8	0	0	0	0	8.8
1990-91	0	0	0	0	0	3.6	Trace	0	Trace	Trace	0	0	3.6
1991-92	0	0	0	0	0	0	0	0	0	Trace	0	0	Trace
1992-93	0	0	0	0	0	3.3	6.7	8.2	0	0	0	0	18.2
1993-94	0	0	0	0	Trace	0	0	Trace	0.3	0	0	0	0.3
1994-95	0	0	0	0	Trace	Trace	Trace	3.0	Trace	Trace	0	Trace	3.0
1995-96	0	0	0	0	0	0	Trace	6.0	0	0	0	0	6.0
1996-97	0	0	0	0	0	0	0	0					
1997-98													
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-05													
2005-06													
Season	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Season
Average Monthly Snowfall (1961-90 Climatic Normals)													
	0	0	0	Trace	0.3	1.2	3.6	0.8	0.5	Trace	0	0	6.4
Least Amount of Snow in a Month and Most Recent Year of Occurrence													
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1996	1996	1996	1996	1996	1996	1997	1997	1996	1996	1996	1996	1961
Greatest Amount of Snow in a Month and Year of Occurrence													
	0	0	T[1]	1.0	6.0	10.2	47.1	22.7	15.7	2.0	T[1]	T[1]	49.4
	1996	1996	1987	1935	1955	1964	1969	1917	1916	1911	1986	1995	1968-69

[1]Trace in May, June, and September was hail, not snow.

This page intentionally left blank.



OTHER CLIMATIC DATA AND RECORDS

DAYS WITH DENSE FOG[1]

(Visibility reduced to 1/4 mile or less)

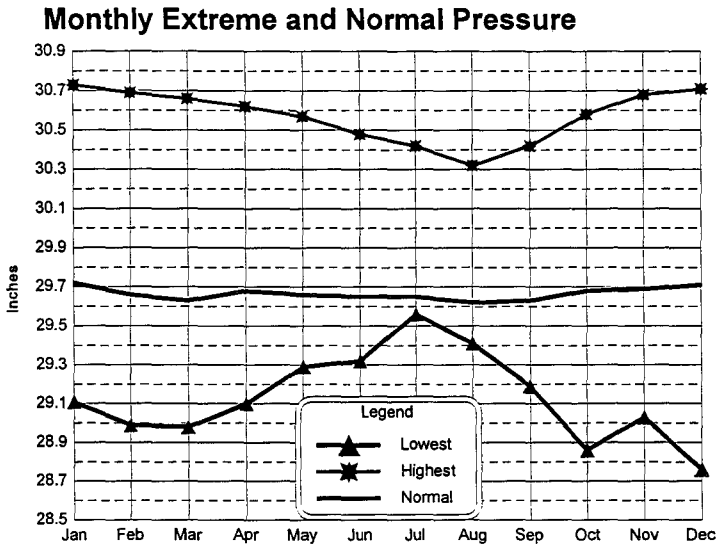
Month	Normal	Greatest	Year	Least	Year
January	9.0	24	1985	1	1956
February	6.8	14	1954	1	1979
March	3.9	12	1992	1	1995
April	2.2	7	1967	0	1986
May	1.2	10	1977	0	1995
June	0.8	5	1950	0	1992
July	0.4	3	1981	0	1996
August	0.9	6	1947	0	1992
September	4.3	12	1954	0	1992
October	10.8	20	1972,1945	3	1992
November	9.8	22	1952	2	1983
December	9.6	25	1976	2	1967
Annual	59.6	86	1976	37	1975

[1]Normal values are the 1961-90 climatic normals. Greatest and least values are for the period of record 1943-Feb 1997.

MOST CONSECUTIVE DAYS WITH...

DENSE FOG	20 Days	October 21st-November 9th, 1952
(1952-February 1997)	19 Days	January 9th-27th, 1985
	15 Days	November 21st-December 5th, 1969
	14 Days	January 28th-February 10th, 1954
	13 Days	December 19th-31st, 1989
	13 Days	January 26th-February 7th, 1984
	12 Days	January 4th-15th, 1981
	12 Days	October 13th-25th, 1981
	12 Days	October 21st-November 1st, 1965
	12 Days	October 21st-November 1st, 1958
	12 Days	November 21st-December 2nd, 1956
	11 Days	November 2nd-12th, 1976
	11 Days	December 24th-January 3rd, 1956-57
	11 Days	October 22nd-November 1st, 1954
	10 Days	November 12th-21st, 1995
	10 Days	December 15th-24th, 1976
LIGHT and DENSE FOG	38 Days	October 22nd-November 28, 1996
(1965-February 1997)	34 Days	November 30th-January 2nd, 1976-77
	30 Days	December 5th-January 3rd, 1995-96
	28 Days	January 15th-February 11th, 1997
	28 Days	November 24th-December 21st, 1986
	28 Days	December 27th-January 23rd, 1980-81
	26 Days	January 8th-February 2nd, 1985
	25 Days	January 5th-29th, 1996
	24 Days	November 10th-December 3rd, 1995
	23 Days	November 1st-23rd, 1993
	23 Days	December 9th-31st, 1989
	23 Days	October 15th-November 6th, 1983

MONTHLY NORMAL AND EXTREME PRESSURE VALUES[1]



Month	Normal	Highest	Year	Lowest	Year
January	29.72	30.73	1947	29.11	1983
February	29.66	30.69	1955	28.99	1958
March	29.63	30.66	1955	28.98	1978
April	29.68	30.62	1982	29.10	1972
May	29.66	30.57	1971	29.29	1979
June	29.65	30.48	1960	29.32	1973
July	29.65	30.42	1983	29.56	1977
August	29.62	30.32	1956	29.41	1961
September	29.63	30.42	1945	29.19	1977
October	29.68	30.58	1953	28.86	1962
November	29.69	30.68	1975	29.03	1981
December	29.71	30.72	1996	28.76	1995
Annual	29.67	30.73	January 1947	28.76	December 12th, 1995

[1]Normal values are the 1961-90 climatic normals. Extreme values are for the period of record 1931-February 1997.

WIND RECORDS AND DATA[1]

	Climatic Normals		Extremes (1931-February 1997)							
			Highest Avg.		Fastest Mile[2]			Peak Wind Gust		
Month	Dir.	Speed	Speed	Year	Dir.	Speed	Year	Dir.	Speed	Year
Jan	S	7.9	11.2	1954	SSW	58	1961	SW	66	1975
Feb	S	7.8	11.3	1961	SSW	54	1961	S	70	1961
Mar	S	8.2	10.5	1961	S	48	1963	S	78	1956
Apr	N	7.8	10.0	1961	S	44	1972	S	58	1982
May	N	7.4	9.4	1961	WSW	46	1961	SW	51	1975
June	N	7.6	9.5	1960	W	29	1988	W	41	1988
July	N	8.0	9.8	1994	NW	37	1986	NW	51	1986
Aug	N	7.6	9.2	1960	E	32	1979	N	39	1985
Sept	N	7.4	9.4	1971	SSW	32	1959	N	36	1988
Oct	S	6.7	9.0	1961	S	63	1962	S	86	1962
Nov	S	7.4	10.2	1988	SW	46	1957	S	58	1981
Dec	S	7.7	10.2	1971	S	50	1951	S	75	1951
Annual	-----	7.6	9.1	1961	South	63	Oct 12, 1962	South	86	Oct 12, 1962

[1]Wind Speeds are in units of miles per hour (mph). Dir is an abbreviation for direction. Climatic Records are 1961-90.
[2]Fastest Mile is the speed it takes for one mile of wind to pass a given point in one minute.

FIVE WINDIEST MONTHS AND YEARS[3]

(1949-February 1997)

January		February		March		April		May		June	
11.2	1954	11.3	1961	10.5	1961	10.0	1961	9.4	1961	9.5	1960
10.8	1951	10.0	1949	10.5	1956	9.5	1993	8.9	1972	9.3	1972
10.4	1972	9.8	1990	10.1	1971	9.4	1972[4]	8.7	1959	8.8	1961
10.0	1990	9.7	1960	9.8	1962	9.1	1954	8.3	1950	8.6	1992[4]
9.9	1956	9.6	1976	9.1	1966[4]	9.0	1982[4]	8.2	1988[4]	8.4	1994[4]

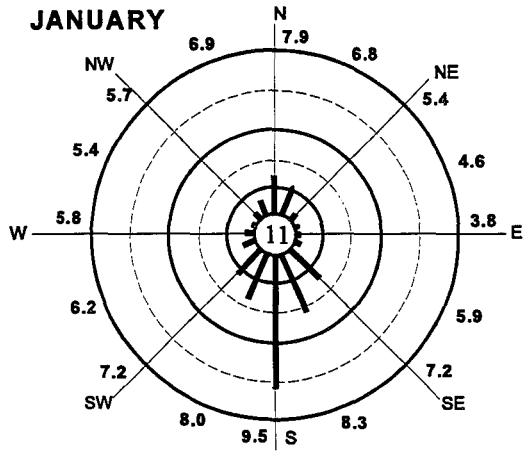
July		August		September		October		November		December	
9.8	1994	9.2	1960	9.4	1971	9.0	1961	10.2	1988	10.2	1971
9.6	1972[4]	9.0	1961	8.8	1959	8.5	1994[4]	9.7	1983	10.0	1955
9.5	1960	8.7	1975	8.7	1994[4]	8.4	1991	9.3	1994	9.5	1994
9.0	1961[4]	8.5	1988[4]	8.6	1992[4]	8.2	1950	9.2	1973[4]	9.3	1957
8.9	1985	8.4	1970	8.5	1961	8.0	1975	9.1	1985	9.2	1996[4]

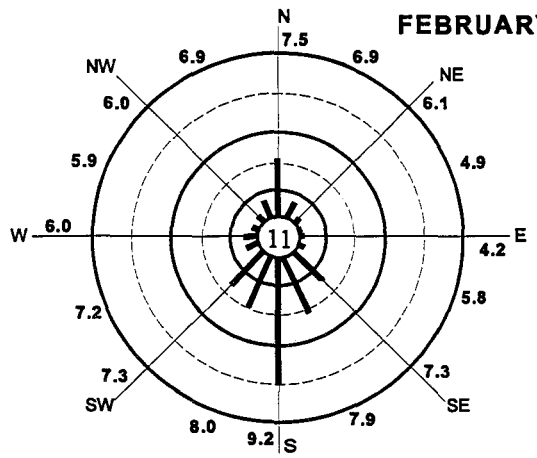
Five Windiest Years	
9.1	1961
9.0	1972
8.4	1971
8.3	1994 and 1959
8.2	1950

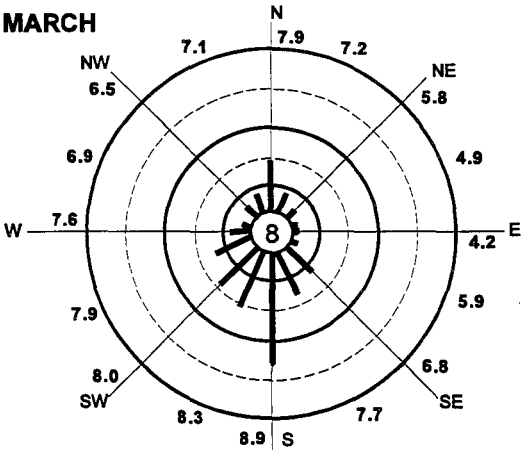
[3]All wind speeds are in units of miles per hour (mph).
[4]Wind speed has occurred more than once. As a result, the most recent year of occurrence is listed.

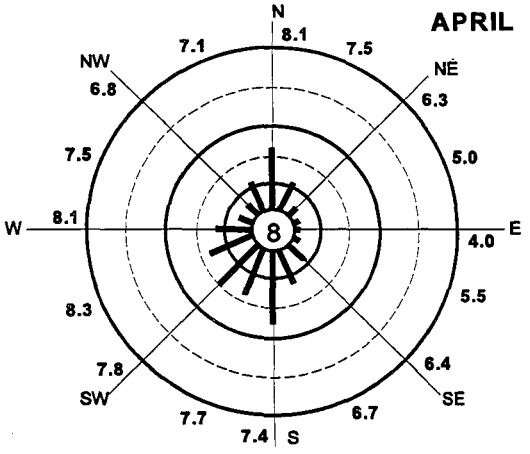
MONTHLY WIND DIRECTION ROSES

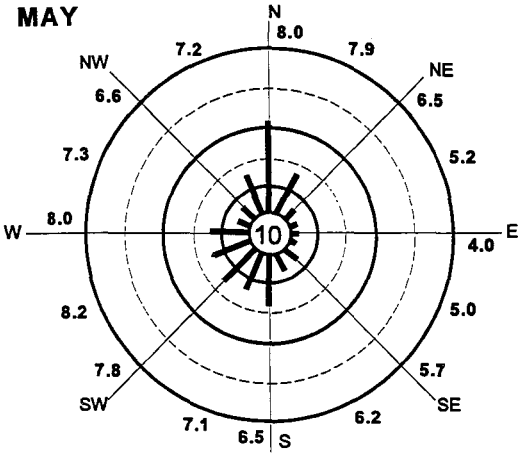
A wind rose indicates the percent of time that the wind was from a particular direction and the average speed from that direction. Each concentric circle represents a five percent interval starting with zero at the inner circle and ending with 25 percent at the outer circle. The value in the center circle is the percent of time with calm winds. The bold lines represent the percentages of wind from various directions while the bold values along the outer circle are the average wind speeds (in miles per hour) from a particular direction. For example, in January, the wind is from the south about 21 percent of the time, with an average speed of 9.5 mph. Roses based on hourly observations from 1948-1992.

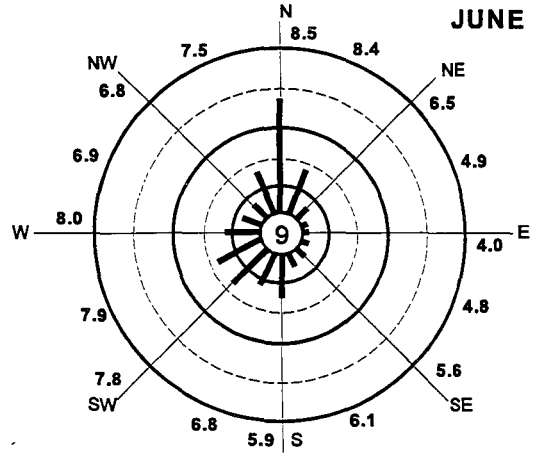




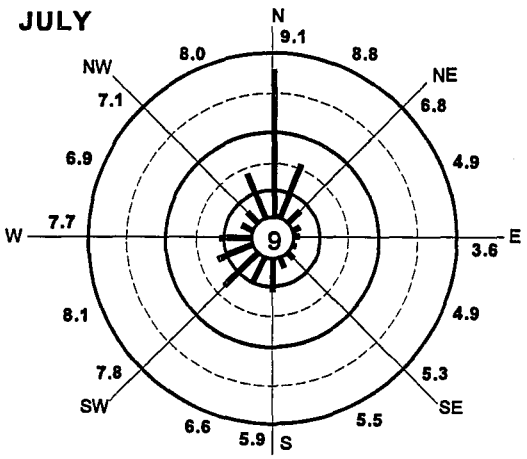


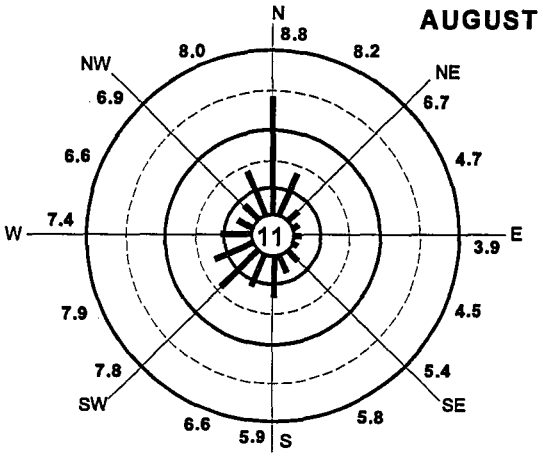


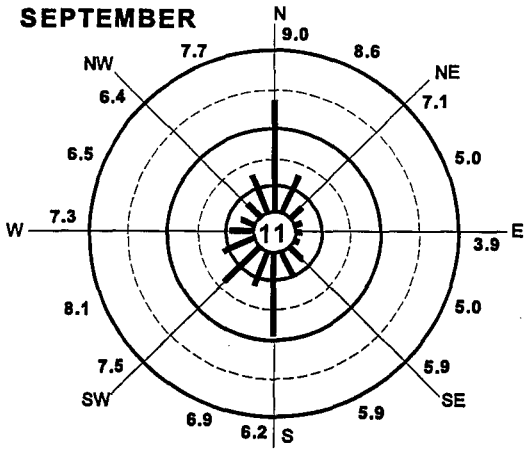


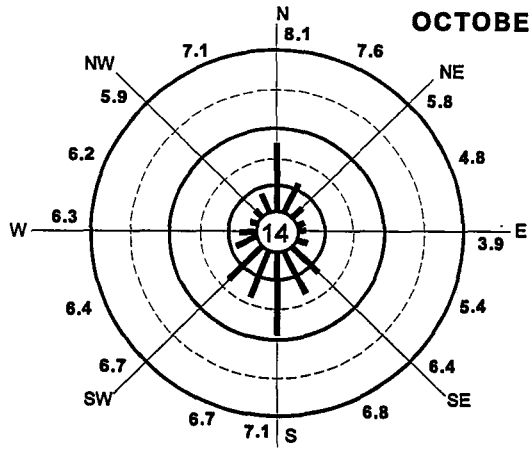


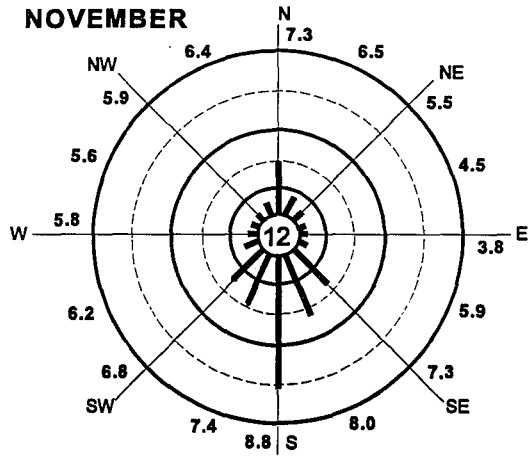
EUGENE WIND ROSES (continued)

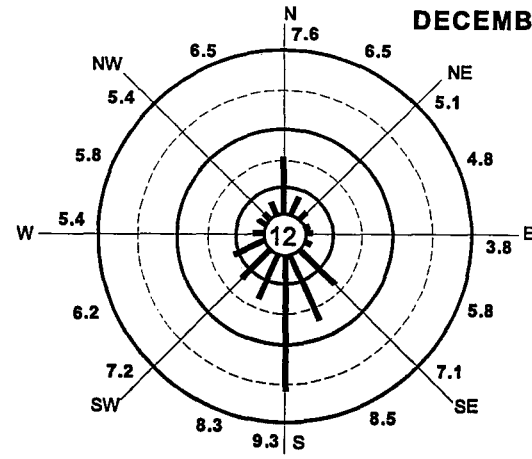








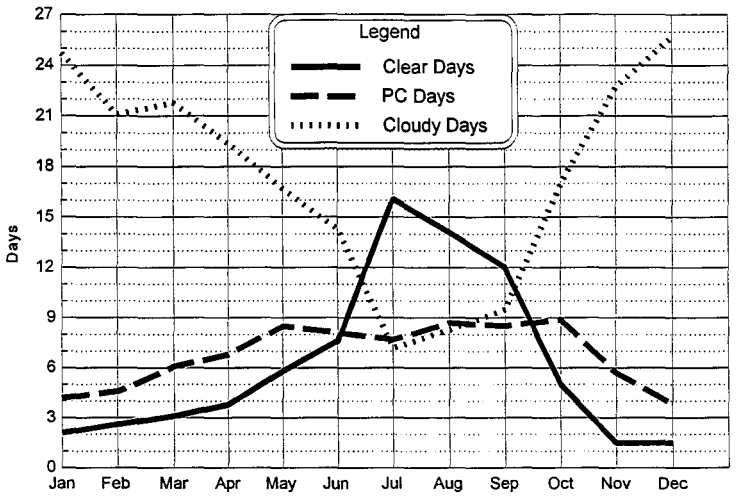




DAYS CLEAR, PARTLY CLOUDY, AND CLEAR

Days per Month of Clear/PC/Cloudy

(1961-90 Climatic Normals)



Monthly Average, Most and Least Number Days Per Month of Clear, Partly Cloudy, and Clear

(1890 through August 1995[1])

	Clear Skies (Clouds cover 0 to 0.3 of sky)					Partly Cloudy Skies (Clouds cover 0.4 to 0.7 of sky)					Cloudy Skies (Clouds cover 0.8 to 1.0 of sky)				
Month	AVG	Most	Year	Least	Year	AVG	Most	Year	Least	Year	AVG	Most	Year	Least	Year
JAN	2.1	11	1920	0	1990[2]	4.2	14	1940[2]	0	1982[2]	24.7	31	1978	11	1918
FEB	2.6	18	1911	0	1981[2]	4.6	16	1935[2]	0	1982[2]	21.1	27	1981	6	1931[2]
MAR	3.1	19	1926	0	1989[2]	6.1	18	1925	0	1897	21.8	28	1983	4	1910
APR	3.8	21	1931	0	1993[2]	6.8	20	1940	0	1893	19.4	30	1893	4	1936[2]
MAY	5.8	21	1924	1	1993[2]	8.5	17	1938	1	1895	16.7	25	1953	0	1931
JUN	7.6	28	1918	1	1891	8.1	16	1928	1	1918	14.3	22	1980[2]	0	1918
JUL	16.1	30	1922[2]	6	1987[2]	7.7	19	1911	0	1919[2]	7.2	19	1983	0	1944[2]
AUG	14.1	30	1931	4	1948	8.7	17	1938	0	1914[2]	8.3	18	1985	0	1932[2]
SEP	12.0	25	1908	0	1978	8.5	17	1940[2]	0	1909[2]	9.5	19	1978[2]	1	1935[2]
OCT	5.0	19	1919	0	1968[2]	8.9	16	1962	2	1922[2]	17.0	28	1975	5	1936[2]
NOV	1.5	20	1905	0	1992[2]	5.7	16	1932	0	1905[2]	22.7	29	1953	10	1931[2]
DEC	1.5	10	1924	0	1991[2]	3.8	25	1957	0	1983[2]	25.7	31	1968	11	1935[2]
Annual	75.1	195	1918	52	1983	81.7	165	1935	36	1908	208.4	251	1983	87	1918

[1]Due to ASOS technical difficulty, complete sky observations are not available after September 1995.
[2]Number of days occurred on more than one occasion. As a result the most recent occurrence is listed.

PERCENT FREQUENCY OF HOURLY TOTAL SKY COVER AMOUNTS

(based on hourly observations from 1948-1992)

How to use these tables: Each table represents a month of hourly observations, categorized into groups of sky coverage. For a specified hour of the day, sky coverage is classified as clear, scattered, broken and overcast along with their respective percentages. For example, at 7 am local time in March, clear skies occurred 7.0 percent of the time while 62.2 percent of the time skies were overcast.

Key to different clouds abbreviations and definitions:

CLR = Clear skies, where less than 0.1 of sky is covered clouds.
SCT = Scattered clouds, where 0.1 to less than 0.6 of the sky is covered clouds.
BKN = Broken clouds, where 0.6 to less than 0.9 of the sky is covered clouds.
OVC = Overcast skies, where greater than 0.9 of the sky is covered clouds.

JANUARY

Hour (LST)	CLR	SCT	BKN	OVC
0100	12.7	7.8	10.0	69.5
0400	10.6	7.0	9.5	72.9
0700	6.9	7.2	13.3	72.7
1000	5.2	7.1	14.8	72.9
1300	5.9	7.1	16.7	70.3
1600	7.2	9.2	16.6	67.1
1900	11.0	10.4	11.8	66.7
2200	12.8	9.6	9.5	68.1
All Day	8.8	8.2	13.0	70.0

FEBRUARY

Hour (LST)	CLR	SCT	BKN	OVC
0100	15.1	10.0	12.9	62.0
0400	10.5	9.4	11.1	68.9
0700	5.7	8.6	17.9	67.8
1000	6.4	7.5	16.1	70.0
1300	7.2	9.5	19.2	64.1
1600	8.7	10.9	21.9	58.5
1900	13.1	12.7	17.1	57.1
2200	15.9	13.9	14.0	56.3
All Day	10.0	10.2	16.6	63.2

MARCH

Hour (LST)	CLR	SCT	BKN	OVC
0100	20.3	11.2	12.2	56.4
0400	15.8	10.4	10.8	63.0
0700	7.0	10.1	20.7	62.2
1000	6.7	8.8	23.2	61.3
1300	7.5	12.1	26.0	54.3
1600	7.8	13.8	25.6	52.7
1900	11.3	16.4	20.9	51.4
2200	21.1	12.5	14.4	51.9
All Day	11.6	12.0	19.8	56.6

APRIL

Hour (LST)	CLR	SCT	BKN	OVC
0100	23.9	11.1	15.3	49.6
0400	20.1	11.7	12.5	55.7
0700	10.2	11.3	21.3	57.2
1000	8.4	12.5	22.9	56.2
1300	11.0	13.5	27.6	48.0
1600	10.7	15.4	28.7	45.3
1900	11.2	19.8	25.7	43.3
2200	21.8	17.0	16.5	44.7
All Day	14.0	14.1	21.9	50.0

MAY

Hour (LST)	CLR	SCT	BKN	OVC
0100	30.0	13.2	15.0	41.8
0400	21.6	15.2	17.2	46.0
0700	13.4	13.5	21.2	51.8
1000	12.3	15.1	24.7	48.0
1300	13.8	17.1	29.2	39.9
1600	14.1	20.9	29.5	35.6
1900	15.0	22.0	28.1	34.9
2200	27.9	19.3	17.1	35.7
All Day	17.7	17.2	23.4	41.8

JUNE

Hour (LST)	CLR	SCT	BKN	OVC
0100	36.5	13.7	11.4	38.4
0400	25.1	16.4	12.9	45.6
0700	17.3	15.4	17.9	49.5
1000	17.6	15.9	23.3	43.2
1300	20.5	19.3	25.5	34.7
1600	21.9	21.7	26.4	30.0
1900	22.7	23.6	24.7	29.0
2200	33.0	18.4	15.0	33.6
All Day	23.7	18.2	20.2	37.9

PERCENT FREQUENCY OF HOURLY TOTAL SKY COVER AMOUNTS(cont.)

JULY

Hour (LST)	CLR	SCT	BKN	OVC
0100	60.5	8.9	8.9	21.7
0400	50.0	11.9	10.5	27.6
0700	37.8	15.7	13.9	32.6
1000	39.9	17.3	15.3	27.4
1300	45.8	19.4	16.9	17.9
1600	47.4	22.2	16.6	13.8
1900	49.4	22.5	15.4	12.7
2200	61.3	12.9	10.1	15.7
All Day	48.3	16.8	13.8	21.1

AUGUST

Hour (LST)	CLR	SCT	BKN	OVC
0100	55.2	10.9	8.8	25.1
0400	51.5	10.3	9.1	29.0
0700	30.6	17.6	15.2	36.6
1000	34.1	18.9	17.6	29.5
1300	36.6	23.3	18.6	21.4
1600	36.8	26.1	19.6	17.6
1900	37.5	26.3	20.7	15.5
2200	53.3	14.4	11.6	20.6
All Day	40.9	19.1	15.6	24.4

SEPTEMBER

Hour (LST)	CLR	SCT	BKN	OVC
0100	52.8	11.2	9.1	26.9
0400	46.7	11.6	9.0	32.7
0700	26.0	16.7	19.1	38.2
1000	30.8	16.2	18.3	34.7
1300	34.7	19.7	21.0	24.7
1600	34.1	22.1	21.7	22.1
1900	34.4	26.1	18.4	21.1
2200	49.8	14.1	12.7	23.4
All Day	37.7	17.6	16.7	28.0

OCTOBER

Hour (LST)	CLR	SCT	BKN	OVC
0100	30.9	13.5	12.2	43.4
0400	24.5	11.3	12.7	51.4
0700	9.0	11.9	19.9	59.2
1000	13.0	12.0	18.6	56.5
1300	17.8	16.6	21.5	44.2
1600	19.4	18.4	23.7	38.5
1900	26.4	18.7	16.5	38.4
2200	33.2	13.2	13.9	39.7
All Day	21.1	14.6	17.8	46.6

NOVEMBER

Hour (LST)	CLR	SCT	BKN	OVC
0100	9.5	9.8	12.6	68.1
0400	6.6	9.8	11.2	72.4
0700	3.3	7.7	16.7	72.3
1000	3.4	7.4	16.9	72.3
1300	5.6	9.8	20.7	63.9
1600	7.7	11.6	20.5	60.1
1900	12.9	11.3	12.5	63.3
2200	11.2	11.5	11.9	65.3
All Day	7.4	9.8	15.7	67.1

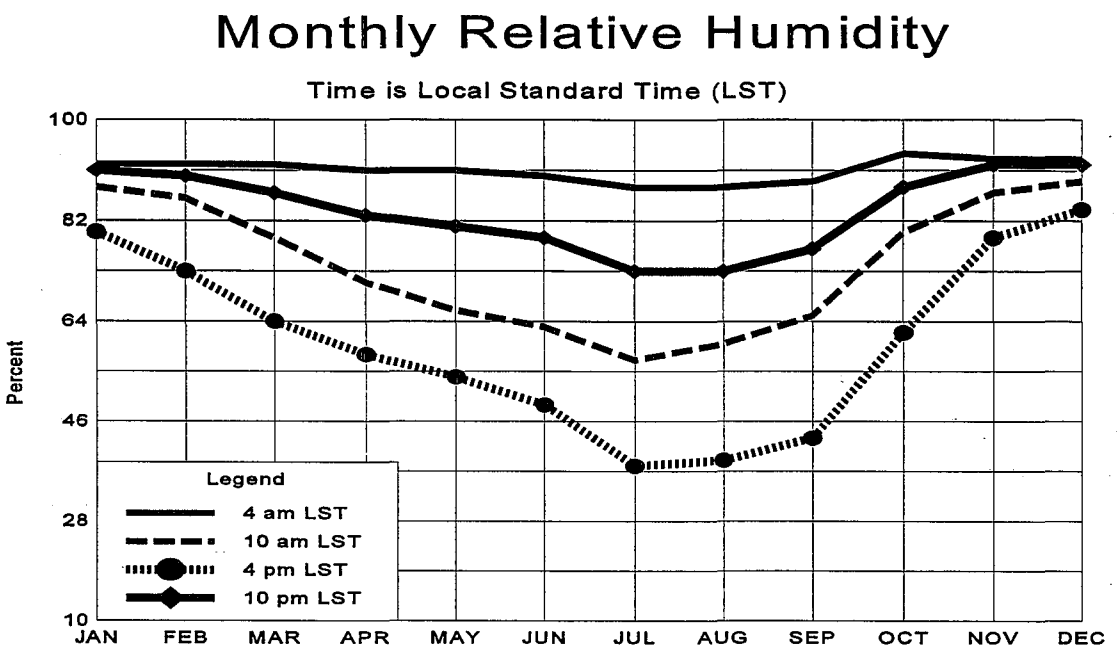
DECEMBER

Hour (LST)	CLR	SCT	BKN	OVC
0100	8.1	8.3	12.6	71.0
0400	7.2	7.4	8.5	76.9
0700	4.6	5.9	12.9	76.6
1000	3.4	5.9	15.9	74.9
1300	3.7	6.2	18.9	71.2
1600	4.9	8.3	17.0	69.8
1900	8.3	10.7	12.1	68.9
2200	10.4	7.1	10.1	72.4
All Day	6.1	7.5	13.8	72.6

ENTIRE YEAR

Hour (LST)	CLR	SCT	BKN	OVC
0100	29.6	10.8	11.7	47.8
0400	24.4	11.0	11.2	53.4
0700	14.4	11.8	17.5	56.3
1000	15.2	12.1	19.0	53.8
1300	17.6	14.5	21.8	46.1
1600	18.5	16.7	22.3	42.5
1900	21.2	18.4	18.7	41.8
2200	29.6	13.6	13.0	43.7
All Day	20.7	13.8	17.4	48.2

MONTHLY RELATIVE HUMIDITY DEPENDING ON TIME OF DAY[1]



Monthly Normal Relative Humidity (%) Based on Time of Day[1]

Time is Local Standard Time (LST)

TIME	JAN	FEB	MAR	APR	MAY	JUN
4 AM	92	92	92	91	91	90
10 AM	88	86	79	71	66	63
4 PM	80	73	64	58	54	49
10 PM	91	90	87	83	81	79

TIME	JUL	AUG	SEP	OCT	NOV	DEC	Annual
4 AM	88	88	89	94	93	93	91
10 AM	57	60	65	80	87	89	74
4 PM	38	39	43	62	79	84	60
10 PM	73	73	77	88	92	92	84

[1]Normals are the 30 year climatic normals, based on 1961-90 data.

SUNRISE AND SUNSET AT EUGENE, OREGON

NO. 1235

PACIFIC STANDARD TIME

DAY	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.	
	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.
1	7 48	4 45	7 31	5 23	6 50	6 01	5 55	6 40	5 05	7 16	4 33	7 49	4 33	8 00	5 00	7 37	5 36	6 49	6 10	5 54	6 49	5 03	7 28	4 36
2	7 48	4 46	7 30	5 24	6 49	6 02	5 53	6 41	5 03	7 17	4 32	7 50	4 34	8 00	5 01	7 36	5 37	6 48	6 11	5 52	6 51	5 02	7 29	4 36
3	7 48	4 47	7 29	5 25	6 47	6 04	5 51	6 42	5 02	7 18	4 32	7 51	4 34	7 59	5 02	7 35	5 38	6 46	6 13	5 50	6 52	5 00	7 30	4 35
4	7 48	4 48	7 27	5 27	6 45	6 05	5 49	6 43	5 00	7 20	4 31	7 51	4 35	7 59	5 04	7 33	5 39	6 44	6 14	5 49	6 53	4 59	7 31	4 35
5	7 48	4 49	7 26	5 28	6 43	6 06	5 47	6 45	4 59	7 21	4 31	7 52	4 35	7 59	5 05	7 32	5 40	6 42	6 15	5 47	6 55	4 58	7 32	4 35
6	7 48	4 50	7 25	5 30	6 42	6 07	5 46	6 46	4 58	7 22	4 30	7 53	4 36	7 59	5 06	7 31	5 41	6 40	6 16	5 45	6 56	4 57	7 33	4 35
7	7 48	4 51	7 24	5 31	6 40	6 09	5 44	6 47	4 56	7 23	4 30	7 53	4 37	7 58	5 07	7 29	5 42	6 38	6 17	5 43	6 57	4 55	7 34	4 34
8	7 48	4 52	7 22	5 32	6 38	6 10	5 42	6 48	4 55	7 24	4 30	7 54	4 38	7 58	5 08	7 28	5 44	6 37	6 19	5 42	6 59	4 54	7 35	4 34
9	7 47	4 53	7 21	5 34	6 36	6 11	5 40	6 49	4 54	7 25	4 30	7 55	4 38	7 57	5 09	7 27	5 45	6 35	6 20	5 40	7 00	4 53	7 36	4 34
10	7 47	4 54	7 20	5 35	6 35	6 12	5 39	6 51	4 52	7 27	4 29	7 55	4 39	7 57	5 10	7 25	5 46	6 33	6 21	5 38	7 01	4 52	7 37	4 34
11	7 47	4 55	7 18	5 37	6 33	6 14	5 37	6 52	4 51	7 28	4 29	7 56	4 40	7 56	5 11	7 24	5 47	6 31	6 22	5 36	7 03	4 51	7 38	4 34
12	7 46	4 57	7 17	5 38	6 31	6 15	5 35	6 53	4 50	7 29	4 29	7 56	4 41	7 56	5 13	7 22	5 48	6 29	6 24	5 35	7 04	4 50	7 39	4 34
13	7 46	4 58	7 16	5 39	6 29	6 16	5 33	6 54	4 49	7 30	4 29	7 57	4 41	7 55	5 14	7 21	5 49	6 27	6 25	5 33	7 05	4 49	7 39	4 35
14	7 45	4 59	7 14	5 41	6 27	6 18	5 32	6 56	4 48	7 31	4 29	7 57	4 42	7 54	5 15	7 19	5 50	6 26	6 26	5 31	7 07	4 48	7 40	4 35
15	7 45	5 00	7 13	5 42	6 26	6 19	5 30	6 57	4 47	7 32	4 29	7 58	4 43	7 54	5 16	7 18	5 52	6 24	6 27	5 29	7 08	4 47	7 41	4 35
16	7 44	5 01	7 11	5 43	6 24	6 20	5 28	6 58	4 46	7 33	4 29	7 58	4 44	7 53	5 17	7 16	5 53	6 22	6 29	5 28	7 09	4 46	7 42	4 35
17	7 44	5 03	7 10	5 45	6 22	6 21	5 27	6 59	4 45	7 34	4 29	7 59	4 45	7 52	5 18	7 15	5 54	6 20	6 30	5 26	7 11	4 45	7 42	4 36
18	7 43	5 04	7 08	5 46	6 20	6 23	5 25	7 00	4 44	7 36	4 29	7 59	4 46	7 52	5 19	7 13	5 55	6 18	6 31	5 24	7 12	4 44	7 43	4 36
19	7 43	5 05	7 07	5 48	6 18	6 24	5 23	7 02	4 43	7 37	4 29	7 59	4 47	7 51	5 21	7 11	5 56	6 16	6 32	5 23	7 13	4 43	7 44	4 36
20	7 42	5 06	7 05	5 49	6 17	6 25	5 22	7 03	4 42	7 38	4 29	7 59	4 48	7 50	5 22	7 10	5 57	6 14	6 34	5 21	7 14	4 42	7 44	4 37
21	7 41	5 08	7 03	5 50	6 15	6 26	5 20	7 04	4 41	7 39	4 29	8 00	4 49	7 49	5 23	7 08	5 59	6 13	6 35	5 20	7 16	4 41	7 45	4 37
22	7 40	5 09	7 02	5 52	6 13	6 27	5 18	7 05	4 40	7 40	4 30	8 00	4 50	7 48	5 24	7 07	6 00	6 11	6 36	5 18	7 17	4 41	7 45	4 38
23	7 40	5 10	7 00	5 53	6 11	6 29	5 17	7 06	4 39	7 41	4 30	8 00	4 51	7 47	5 25	7 05	6 01	6 09	6 37	5 16	7 18	4 40	7 46	4 38
24	7 39	5 12	6 59	5 54	6 09	6 30	5 15	7 08	4 38	7 42	4 30	8 00	4 52	7 46	5 26	7 03	6 02	6 07	6 39	5 15	7 19	4 39	7 46	4 39
25	7 38	5 13	6 57	5 56	6 07	6 31	5 14	7 09	4 37	7 43	4 30	8 00	4 53	7 45	5 28	7 01	6 03	6 05	6 40	5 13	7 21	4 39	7 47	4 39
26	7 37	5 14	6 55	5 57	6 06	6 32	5 12	7 10	4 36	7 44	4 31	8 00	4 54	7 44	5 29	7 00	6 04	6 03	6 41	5 12	7 22	4 38	7 47	4 40
27	7 36	5 16	6 54	5 58	6 04	6 34	5 10	7 11	4 36	7 45	4 31	8 00	4 55	7 43	5 30	6 58	6 05	6 01	6 43	5 10	7 23	4 38	7 47	4 41
28	7 35	5 17	6 52	6 00	6 02	6 35	5 09	7 12	4 35	7 46	4 32	8 00	4 56	7 42	5 31	6 56	6 07	6 00	6 44	5 09	7 24	4 37	7 48	4 42
29	7 34	5 19	6 51	6 01	6 00	6 36	5 07	7 14	4 34	7 46	4 32	8 00	4 57	7 41	5 32	6 55	6 08	5 58	6 45	5 07	7 25	4 37	7 48	4 42
30	7 33	5 20			5 58	6 37	5 06	7 15	4 34	7 47	4 33	8 00	4 58	7 40	5 33	6 53	6 09	5 56	6 47	5 06	7 27	4 36	7 48	4 43
31	7 32	5 21			5 56	6 38			4 33	7 48			4 59	7 38	5 34	6 51			6 48	5 04			7 48	4 44

Add one hour for Daylight Saving Time if and when in use.

I certify that the above data are the result of an accurate and true computation by the Nautical Almanac Office, United States Naval Observatory, an agency charged by Federal Statute (9 Stat. L 374, 375) with the duty of making such computations and publishing the results.

E. W. WOOLARD
Director Nautical Almanac
U. S. Naval Observatory

C. G. CHRISTIE
Captain, USN
Superintendent
U. S. Naval Observatory

NORMALS, MEANS, AND EXTREMES

EUGENE, OREGON

LATITUDE: 44° 07' N LONGITUDE:123° 13' W ELEVATION: FT. GRND 359 BARO 364 TIME ZONE: PACIFIC WBAN: 24221

	(a)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F														
Normals														
-Daily Maximum		46.4	51.4	55.9	60.5	67.1	74.2	81.7	81.8	76.2	64.6	52.4	46.2	63.2
-Daily Minimum		35.2	37.0	38.9	40.6	44.5	49.7	52.8	53.2	49.3	43.5	39.7	35.9	43.4
-Monthly		40.8	44.2	47.4	50.6	55.8	62.0	67.3	67.6	62.8	54.1	46.1	41.1	53.3
Extremes														
-Record Highest	52	67	71	77	86	93	102	105	108	103	94	76	68	108
-Year		1975	1968	1978	1957	1987	1992	1961	1981	1988	1980	1975	1979	AUG 1981
-Record Lowest	52	-4	-3	20	27	28	32	39	38	32	19	12	-12	-12
-Year		1957	1950	1956	1983	1954	1976	1986	1969	1983	1971	1978	1972	DEC 1972
NORMAL DEGREE DAYS:														
Heating (base 65 °F)		750	582	546	432	285	121	38	30	116	338	567	741	4546
Cooling (base 65 °F)		0	0	0	0	0	31	109	110	50	0	0	0	300
% OF POSSIBLE SUNSHINE														
MEAN SKY COVER(tenths)														
Sunrise - Sunset	50	8.5	8.3	8.0	7.6	6.8	6.2	3.9	4.5	5.0	7.0	8.5	8.9	6.9
MEAN NUMBER OF DAYS:														
Sunrise to Sunset														
-Clear	52	2.1	2.6	3.1	3.8	5.8	7.6	16.1	14.1	12.0	5.0	1.5	1.5	75.1
-Partly Cloudy	52	4.2	4.6	6.1	6.8	8.5	8.1	7.7	8.7	8.5	8.9	5.7	3.8	81.7
-Cloudy	52	24.7	21.1	21.8	19.4	16.7	14.3	7.2	8.3	9.5	17.0	22.7	25.7	208.4
Precipitation														
.01 inches or more	52	17.5	14.9	16.6	12.9	10.0	7.0	2.5	3.9	5.7	11.0	16.4	18.0	136.5
Snow,Ice Pellets,Hail														
1.0 inches or more	52	1.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	2.1
Thunderstorms	51	0.2	0.1	0.2	0.4	0.9	0.6	0.5	0.7	0.5	0.2	0.1	0.2	4.7
Heavy Fog Visibility														
1/4 mile or less	51	9.0	6.8	3.9	2.2	1.2	0.8	0.4	0.9	4.3	10.8	9.8	9.6	59.6
Temperature °F														
-Maximum														
90° and above	52	0.0	0.0	0.0	0.0	0.1	1.2	6.1	5.0	2.6	0.1	0.0	0.0	15.1
32° and below	52	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	3.1
-Minimum														
32° and below	52	14.7	9.7	6.8	2.6	0.4	0.*	0.0	0.0	0.1	2.0	7.4	11.5	55.3
0° and below	52	0.1	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
AV. STATION PRES.(mb)	20	1006.5	1004.5	1003.5	1005.0	1004.3	1004.2	1004.2	1003.2	1003.4	1005.0	1005.3	1006.2	1004.6
RELATIVE HUMIDITY (%)														
Hour 04	37	92	92	92	91	91	90	88	88	89	94	93	93	91
Hour 10 (Local Time)	50	88	86	79	71	66	63	57	60	65	80	87	89	74
Hour 16	50	80	73	64	58	54	49	38	39	43	62	79	84	60
Hour 22	39	91	90	87	83	81	79	73	73	77	88	92	92	84
PRECIPITATION (ins):														
Water Equivalent														
-Normal		7.91	5.64	5.52	3.11	2.16	1.43	0.51	1.08	1.67	3.41	8.32	8.61	49.37
-Maximum Monthly	52	15.09	14.22	12.46	7.85	6.92	4.76	3.00	5.79	4.65	12.66	20.48	20.99	20.99
-Year		1990	1986	1974	1993	1993	1952	1987	1968	1986	1950	1973	1964	DEC 1964
-Minimum Monthly	52	0.31	0.86	0.79	0.49	0.14	T	0.00	0.00	T	0.11	1.20	1.24	0.00
-Year		1985	1964	1965	1985	1992	1951	1967	1967	1993	1988	1956	1976	JUL 1967
-Maximum in 24 hrs	52	4.88	4.81	2.44	2.38	2.37	2.36	2.44	1.92	1.68	3.85	4.53	5.15	5.15
-Year		1974	1984	1963	1992	1972	1952	1987	1983	1981	1955	1960	1981	DEC 1981
Snow,Ice Pellets,Hail														
-Maximum Monthly	52	47.1	8.8	10.8	T	T	T	0.0	0.0	T	T	6.0	10.2	47.1
-Year		1969	1990	1951	1992	1986	1981			1986	1984	1955	1964	JAN 1969
-Maximum in 24 hrs	52	22.9	5.7	4.9	T	T	T	0.0	0.0	T	T	5.0	6.3	22.9
-Year		1969	1993	1951	1992	1986	1981			1986	1984	1955	1972	JAN 1969
WIND:														
Mean Speed (mph)	42	7.9	7.8	8.2	7.8	7.4	7.6	8.0	7.6	7.4	6.7	7.4	7.7	7.6
Prevailing Direction														

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)
NMC 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 23078)
165 Annual Data and Verification Tabulation, Eastern North Pacific Tropical Storms and Hurricanes 1980. Emil B. Gunther and Staff, May 1981. (PB82 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 153883)
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)
ARAP Test Results. Mark A. Mathewson, December 1981. (PB82 198103)
Approximations to the Peak Surface Wind Gusts from Desert Thunderstorms. Darryl Randerson, June 1982. (PB82 253089)
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 Spacial 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 1878887AS)
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)
Heavy Rains and Flooding in Montana: A Case for Slantwise Convection. Glenn R. Lussky, April 1987. (PB87 185229/AS)
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 Stratus 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 RAWS 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. (PB92-196104)
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. Trestè 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. (PB96-178751)
239 Climate of Portland, Oregon. Clinton C. D. Rockey, 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. (PB97-108450)
242 Climate of Pocatello, Idaho. Joe Heim, October 1996. (PB97-114540)
243 Climate of Great Falls, Montana. Matt Jackson and D. C. Williamson, December 1996. (PB97-126684)
244 WSR-88D VAD Wind Profile Data Influenced by Bird Migration over the Southwest United States. Jesus A. Haro, January 1997. (PB97-135263)
245 Climatology of Cape for Eastern Montana and Northern Wyoming. Heath Hockenberry and Keith Meier, January 1997. (PB97-133425)
246 A Western Region Guide to the Eta-29 Model. Mike Staudenmaier, Jr., March 1997. (PB97-144075)
247 The Northeast Nevada Climate Book. Edwin C. Clark, March 1997

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