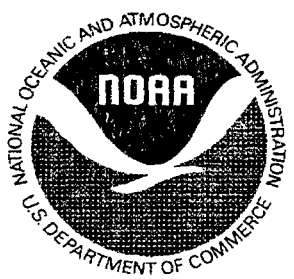


NOAA TECHNICAL MEMORANDUM
NWS WR-252

CLIMATE OF EUREKA, CALIFORNIA

Alan H. Puffer
NEXRAD Weather Service Office
Eureka, CA

February 1998

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. Christoph[illegible] 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 Heflic[illegible] James R. Fors, February 1979. (PB294216/AS)
139 Aids for Forecasting Minimum Temperature in the Wenatchee Frost District. Robert S. Ro 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-252

CLIMATE OF EUREKA, CALIFORNIA

Alan H. Puffer
NEXRAD Weather Service Office
Eureka, CA

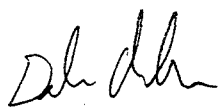
February 1998

UNITED STATES
DEPARTMENT OF COMMERCE
William M. Daley, Secretary

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

National Weather Service
Robert W. Winokur, Acting 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

Page

I. Station Location and History 1

II. Climatological & Topographical Summary 4

III. Rainfall Summary 9

A. Rainfall Normals 11

B. Rainfall Records 13

Annual Rainfall Rankings 15

Jul thru Jul Rankings 16

Oct thru Sep Rankings 17

Daily Averages and Records 18

C. Snowfall and Hail 24

IV. Temperature Summary 24

A. Temperature Normals 28

B. Temperature Records & Averages 31

Daily Averages and Records 32

V. Wind Summary 50

A. Wind Records 52

Daily Averages and Records 53

CLIMATE OF EUREKA, CALIFORNIA
A 110 Year Summary

Alan H. Puffer
National Weather Service Office
Eureka, California

I. STATION LOCATION AND HISTORY

Eureka, California, was established in May 1850, by the Union and Mendocino Companies, and incorporated on April 18, 1856. After a hotly fought election with the city of Arcata, Eureka became the county seat in 1856.

The city, located in Humboldt County, lies along the east and south sides of Humboldt Bay, ranging from two to three miles east of the Pacific Ocean. Situated on the northwest coast of California, Eureka is approximately 300 miles north of San Francisco.

The National Weather Service Office in Eureka is located at 40.48 degrees North latitude, and 124.11 degrees West longitude with a station elevation of 20 feet above mean sea level.

Humboldt Bay is from one-half mile to 4 miles in width and has a length of 14 miles, giving it a tidal area of close to 28 square miles. Humboldt Bay is the only sizable bay on the California coast north of San Francisco and south of Portland, Oregon. The entrance to the bay is about seven miles to the southwest of the National Weather Service Office.

Weather reports from California's northwest coast began on July 27, 1882, as Sergeant J. R. Williams of the U. S. Army Signal Service began sending three daily weather reports by telegraph from the Cape Mendocino Light House to the San Francisco office. These reports were taken at 7 AM, 3 PM, and 11 PM, Washington, D.C. time. The San Francisco office issued warnings which were then wired back to the observer for local display as needed.

Sergeant Williams was relieved by Serg't (the then abbreviation) John J. Mc Lean during November of 1882. A year later, in November of 1883, Serg't A. P. Leavitt took up the duties. He spent his entire military career at the Cape Mendocino Signal Office before leaving in November of 1886 as a Private!

On December 1, 1886, the first Eureka office was established by the U. S. Army Signal Service at the Buhne Building, located just south of Humboldt Bay at Second and G Streets.

On July 1, 1891, the Weather Bureau was formed under the new U. S. Department of Agriculture, which had replaced the former Commissioner of Agriculture in 1888.

The Signal Service honorably discharged its NCO's from active duty and many remained with the new Bureau as civilian employees.

The Eureka Weather Bureau Office moved into its second office, in the U. S. Post Office and Court House, at 5th and H Streets, on January 1, 1911.

In 1916, under pressure from various Chambers of Commerce along the Lower Eel River, the Eureka office began the Eel River Flood District. Three wire weight gages were installed along the Eel River; one at Fernbridge, the second at Garberville, and the third at Dos Rios in Mendocino County.

Due to the increases in services to the field of aviation, June of 1940 saw the Weather Bureau reassigned to the Department of Commerce.

After the disastrous flooding on the north coast during December of 1964, the State of California's Department of Water Resources established the Eureka Flood Center on November 1, 1965.

The Center was collocated with the Weather Bureau's office, to affect a joint cooperative effort to minimize the dangers of the floods that occur on the north coast rivers.

Under a governmental realignment in July of 1970, the Weather Bureau was transferred to the new National Oceanic and Atmospheric Administration, still under the Department of Commerce. It was renamed the National Weather Service.

On October 16, 1994, the Eureka National Weather Service Office moved into its present office on Woodley Island. Located in Humboldt Bay, the new office is about one-half mile north of the previous downtown site. The Eureka Flood Center also moved to the new location.

In regards to the early establishment of Eureka's river flood forecasting responsibilities, the following notes were taken from Form No. 1014 - Met'l; Jan 16th through 20th 1919 as follows.

> Jan 16th 1919..."A Southwest storm warning effective at 7:30 AM was issued by the San Francisco office this morning, but not received here until 10:10 AM, on account of wire trouble. Upon receipt, it was promptly repeated to display stations and the flags displayed locally. Though the verifying velocity did not occur at Eureka, this warning was abundantly justified. Strong Southerly winds and excessive rains occurred during the night of 16"-17", with floods in the principle streams."
>
> Jan 17th 1919..."Eel River floods. There was a moderately heavy rainfall during the day yesterday and Eel River rose steadily but not at an unusually rapid rate. Communication with the up-river gaging stations was irregular and was completely cut off after 2 PM at which hour a stage of 18 feet was reported at Dos Rios. The intensity of the storm

increased as night came on and during the night of the 16"-17" excessive rains occurred throughout the Eel watershed. At Dos Rios, 3.10 inches of rain fell during the 24 hours ending at 8 AM, at Garberville 4.55 inches during the same period of time, at Fernbridge 2.49 inches and at Eureka, 3.18 inches measured at 5 AM today. These excessive rains brought about a rapid acceleration of the rate at which the streams were rising, and by 8 AM a stage of 16.4 feet had been reached at Fernbridge; 25 feet at Dos Rios, and 18 feet at Garberville.

However, the reports from Dos Rios and Fernbridge were delayed by wire trouble until about 10 AM, while the Garberville report did not arrive until 3:22 PM. **With only one up-river reading available (Dos Rios), and making the first flood forecast ever attempted for this stream, a conservative warning "stage exceeding eighteen feet at Fernbridge" was issued at 10:30 AM, the reading at that place being then slightly under seventeen feet.** At 3 PM it had risen to 18.9 feet at Fernbridge, and at 5 PM the maximum of 19.3 feet was attained.

Meanwhile the Garberville report (showing a rapid decline on the South Fork) had been received, and at 5:30 PM, the following statement was issued, ""Upper rivers falling rapidly. Crest of rise passing Fernbridge. Flood waters will recede materially by Saturday morning.""

Jan 18th 1919..."The flood in the lower Eel river valley receded slowly during the night but the river was still above the flood stage at 8 AM (16.1 feet at Fernbridge)."

Jan 19th 1919..."The flood waters in the lower Eel river valley continued to subside, but, heavy rains having fallen late night and the river having raised to 20.7 feet at Dos Rios, inquiring persons were advised that the fall would be checked before tonight and be followed by a slight rise."

Jan 20th 1919..."Additional rains have caused another slight rise in the river at Fernbridge (as was indicated yesterday) and the gage there read 13.3 at 8 AM today.

It is not expected that the flood stage of 15 feet will be reached on this rise, as Dos Rios reported river falling at 3 PM, and the weather only partly cloudy, with North wind. Late reports state that the river began to fall during the day."

Thus began the Eureka office's efforts to minimize the effects of the flooding that storms bring to the northwest California rivers and streams.

II CLIMATOLOGICAL AND TOPOGRAPHICAL SUMMARY

The weather of the greater Humboldt Bay Region, including Eureka and the immediate coastal strip, is characterized as Mediterranean (being mild and with minimal temperature changes). The summers are dry and foggy, the winters wet.

Being in such close proximity to the ocean and bay, the Eureka Region experiences high relative humidity throughout the year as shown in the following table showing monthly averages. The times are Pacific Standard. The humidity generally reaches its highest levels in the late night and early morning hours when the coastal stratus and fog are most prevalent. At these times, the humidity averages 87 percent. During the late morning and early evening hours, the humidity decreases to an average of 78 percent.

The coastal range mountains extend south from the state of Washington, to near the San Francisco Bay Region.

The coastal hills surrounding the Humboldt Bay begin at Patrick's Point to the north, then extend to the southeast, then to the south, and finally to the southwest ending at Cape Mendocino. The tops of these hills range from about 1500 to 2500 feet, with Kings Peak to the south of Eureka, topping out at 4087 feet. The ring of hills greatly modifies the rainfall and the temperatures of the whole Humboldt Bay region. These hills are generally arranged in a northwest to southeast direction to the north and east of Eureka, and almost west to east to the south.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
4 AM	87	87	87	88	89	90	92	93	92	91	88	87	89
10 AM	79	77	74	75	76	78	82	84	82	81	79	80	79
4 PM	77	76	75	75	76	77	79	80	79	79	78	77	77
10 PM	83	83	82	83	85	86	89	90	89	88	84	83	85

Within this range lay the Humboldt Bay Region, which includes most of the population centers of Humboldt County. This Region is sheltered from the brunt of the heavier rainfall and wide temperature extremes by a surrounding range of coastal hills.

The immediate coastal plain is very narrow, extending from a little north of Mc Kinleyville, around the Humboldt Bay Region, and south to the lower Eel river valley.

There are two major rivers within the local Region. About nine miles north of Eureka the Mad River empties into the Pacific Ocean, while about 15 miles to the south, the Eel River meets the ocean.

There are several other smaller coastal rivers and streams that empty into the ocean as well. There are six small creeks, and sloughs emptying into Humboldt Bay. These river valleys show a greater variance in rain and temperature values, but do not affect the weather at Eureka or the immediate bay Region to any degree.

As storms move in from the Pacific Ocean, the winds ahead of the systems are generally from the southeast to southwest. Over the Humboldt Bay area, the hills generally deflect the winds south to southeast. However, with the incoming winds nearly perpendicular to the coastal range, the hills exert their greatest influence on the systems by forcibly lifting the incoming systems up and over the local Region. This leaves much of the down wind area, including Eureka and the immediate coastal Region, under a rain shadow.

Eureka's overall average of 38.50 inches is among the lowest on the north coast. Just to the west across the bay at Samoa, the overall average is only 33.05 inches.

This rain shadow is easy to see by comparing the following averages. Patrick's Point State Park, 24 miles north of Eureka, has an overall average of 60.79 inches of rain. Scotia, 23 miles south of Eureka, averages 47.20 inches of rain. Further inland at Willow Creek, 29 mile to the east, 48.34 inches of rain is the norm.

After the frontal activity passes onto the east, the winds are generally from the north to northwest. Again, the hills exert their influence on the local weather by channeling the colder air away from the coastal Region and into the surrounding coastal river valleys and inland regions.

With the cold and unstable air that follows many of the winter systems, Eureka experiences most of the thunderstorm activity that is reported at the station. During this time, Eureka receives its majority of hail and/or ice pellets.

Thunderstorm activity in the summer is extremely rare in Eureka, generally being fueled by the Arizona Monsoon. Most of the summertime activity occurs over the Trinity Alps to the east, and over South Fork Mountain to the southeast.

The colder air behind any frontal activity is constantly being modified by the ocean. Due to the California current flowing south along the coast, the sea surface temperature averages 50 to 52 degrees in the winter months. These moderate ocean temperatures help

protect Eureka and the immediate coastal Region from the more frigid temperatures which can accompany storms originating in the Gulf of Alaska.

The ring of hills also helps to lock in the marine effects in the summer when the sea surface temperatures warm to an average 55 to 57 degrees, helping to give Eureka and the surrounding area extensive fog and low clouds.

During the summer and fall, when the stratus and fog are more prevalent, the fog and stratus generally retreat offshore late in the morning to early in the afternoon, and then returns during the night, generally just before sunrise. This marine layer is usually from 800 to 1500 feet deep. There are periods when the day to night cycle is unbroken, and the entire area remains under continuous low clouds and fog for days on end.

Most of the summertime record high temperatures in Eureka occur during the times an offshore flow develops. This offshore flow generally develops when the inland valleys are under the influence of a thermal low-pressure trough.

As the thermal low moves west towards the coast, and is centered south of Eureka, the stratus and fog disappear and pleasant weather prevails over much of the Region.

The following list shows the various meteorological records that have been established in the past 110 years. The record rainfall of December 1996 is not included in this report.

Eureka, CA - NWS
Station Records

Temperatures

Maximum Temperature	87 Deg F on Oct 26 1993
Coldest Maximum Temperature	33 Deg F on Feb 08 1900
Highest Daily Average Temperature	73 Deg F on Sep 21 1939
Minimum Temperature	20 Deg F on Jan 14 1888
Warmest Minimum Temperature	63 Deg F on Aug 27 1894 Feb 26 1980, Jan 18 1981
Lowest Daily Average Temperature	28 Deg F on Jan 14 1888

Rain

		Amount (Inches)	Date (s)
05	Minute maximum	0.30	Jan 12 1979
10	Minute maximum	0.43	Jan 12 1979
15	Minute maximum	0.51	Nov 11 1926
20	Minute maximum	0.76	Feb 07 1978
30	Minute maximum	0.81	Feb 07 1978
45	Minute maximum	1.01	Dec 05 1952
60	Minute maximum	1.20	Oct 29 1950
80	Minute maximum	1.37	Oct 29 1950
100	Minute maximum	1.57	Oct 29 1950
120	Minute maximum	1.72	Oct 29 1950
150	Minute maximum	2.16	Oct 29 1950
180	Minute maximum	2.53	Oct 29 1950
1	Calendar day maximum	5.04	Oct 29 1950
2	Calendar days maximum	7.11	Feb 03 - 04 1950
3	Calendar days maximum	8.52	Oct 27 - 29 1950
4	Calendar days maximum	9.65	Feb 01 - 04 1890
5	Calendar days maximum	10.12	Oct 25 - 29 1950

10	Calendar days maximum	13.99	Jan 21 - 30 1903
15	Calendar days maximum	17.24	Jan 22 - Feb 05 1890
30	Calendar days maximum	26.69	Jan 09 - Feb 07 1890
60	Calendar days maximum	39.44	Dec 08 1889 - Feb 05 1890

Greatest in a calendar month	19.42	1902
Greatest in a calendar year	67.23	1893
Greatest in a Jul - Jun season	74.10	1889 - 1890
Greatest in a Oct - Sep season	74.39	1889 - 1890

Greatest number of consecutive days with measurable precipitation...
26 days 11.02 inches Dec 25 1935 - Jan 19 1936

Least in a calendar month	00.00	many
Least in a calendar month	21.17	1929
Least in a Jul - Jun season	17.56	1976 - 1977
Least in a Oct - Sep season	19.17	1976 - 1977

Greatest number of consecutive days with measurable precipitation...
81 days May 31 1940 - Sep 01 1940

Snow

24 hour maximum	3.4 Ins	Jan 13 1907
Greatest storm total	5.9 Ins	Jan 12 - 15 1907
Greatest in a calendar month	6.9 Ins	Jan 1907
Greatest depth on ground	3.4 Ins	Jan 13 1907

Pressure

Highest mean sea level pressure	30.71 Ins 1039.96 Mbs	Dec 09 1923
Lowest mean sea level pressure	28.91 Ins 979.01 Mbs	Feb 22 1891

Wind

Highest Gust	69 MPH	Jan 21 1981 Nov 13 1981
Fastest Mile	59 MPH	Jan 25 1914

III. RAINFALL SUMMARY

During the rainy season, generally November through March, Eureka receives over 75 percent of its average rainfall. Most of the rain normally falls in December and January, as shown in the chart below.

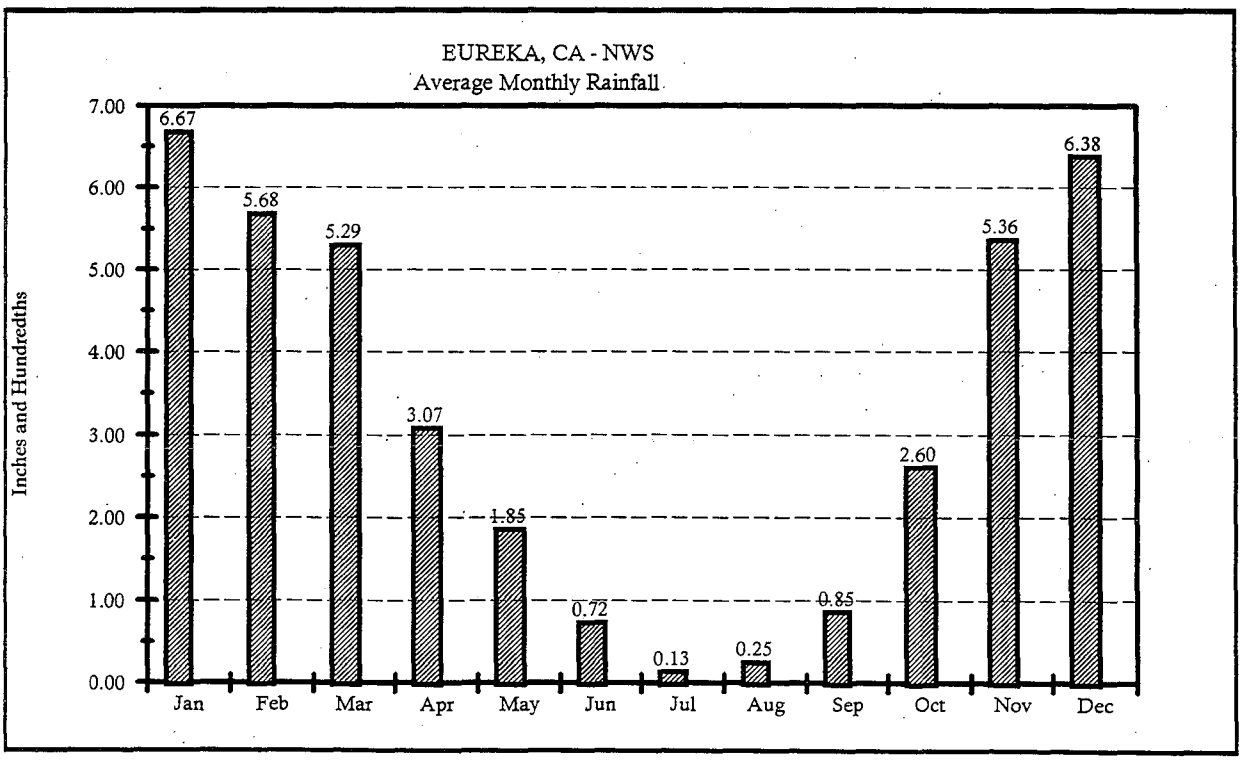
The average annual rainfall for Eureka's one hundred ten year history is 38.87 inches. This is one of the lowest, if not the lowest, averages in northwest California.

As there is minimal uplifting along the immediate west facing beaches, the rainfall for the local Region is dramatically less over Humboldt Bay and the immediate area to the west of the bay.

There is a marked increase in the rainfall pattern in as little as one-half mile of the station, suggesting the rain shield is indeed limited to the immediate bay area. This increase is attributed to the increasing elevation of the Region away from the bay.

Not included in this summary, is the record breaking rains in December of 1996, when Eureka received 21.26 inches of rain. This set a record for the month of December and is the wettest month in Eureka's history.

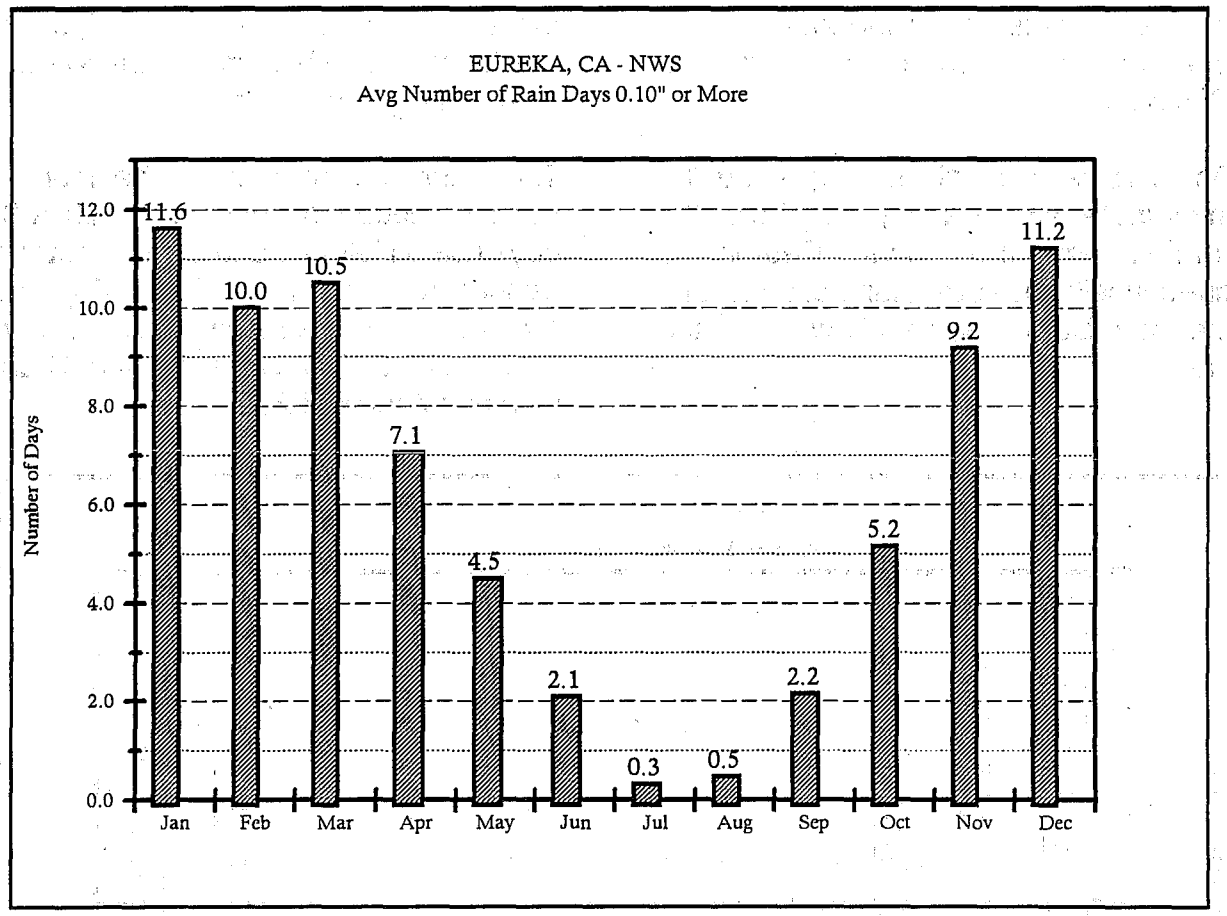
The graph below portrays the monthly rainfall reduced to a uniform length of 30 days using Helmut Landsberg's method, described in his book *Physical Climatology*, by increasing the February values by 6.2 % and reducing the 31 day months totals by 3.2%.



The chart below shows how many rainy days Eureka experiences.

A rainy day is defined as any day one tenth of an inch of rain is reported. As with the average monthly rainfall graph, the majority of the rain days occur in the November to March time frame.

During the winter season, the high pressure is displaced to the south allowing the winter storms that form in the Bering Sea and the Gulf of Alaska to reach the Pacific Northwest and northern California. There have been periods however, when this pattern is disrupted and the high pressure system remains in



The rainfall over much of the Pacific Northwest is governed by the location of the semi-permanent eastern Pacific high pressure system. This system is, for most of the year, centered about 600 miles west of northern California.

place and in fact, strengthens. This forces the winter storm tracks well to the north of the Region bringing extended periods of unusually light rain. This can result in drought conditions over much of the western United States.

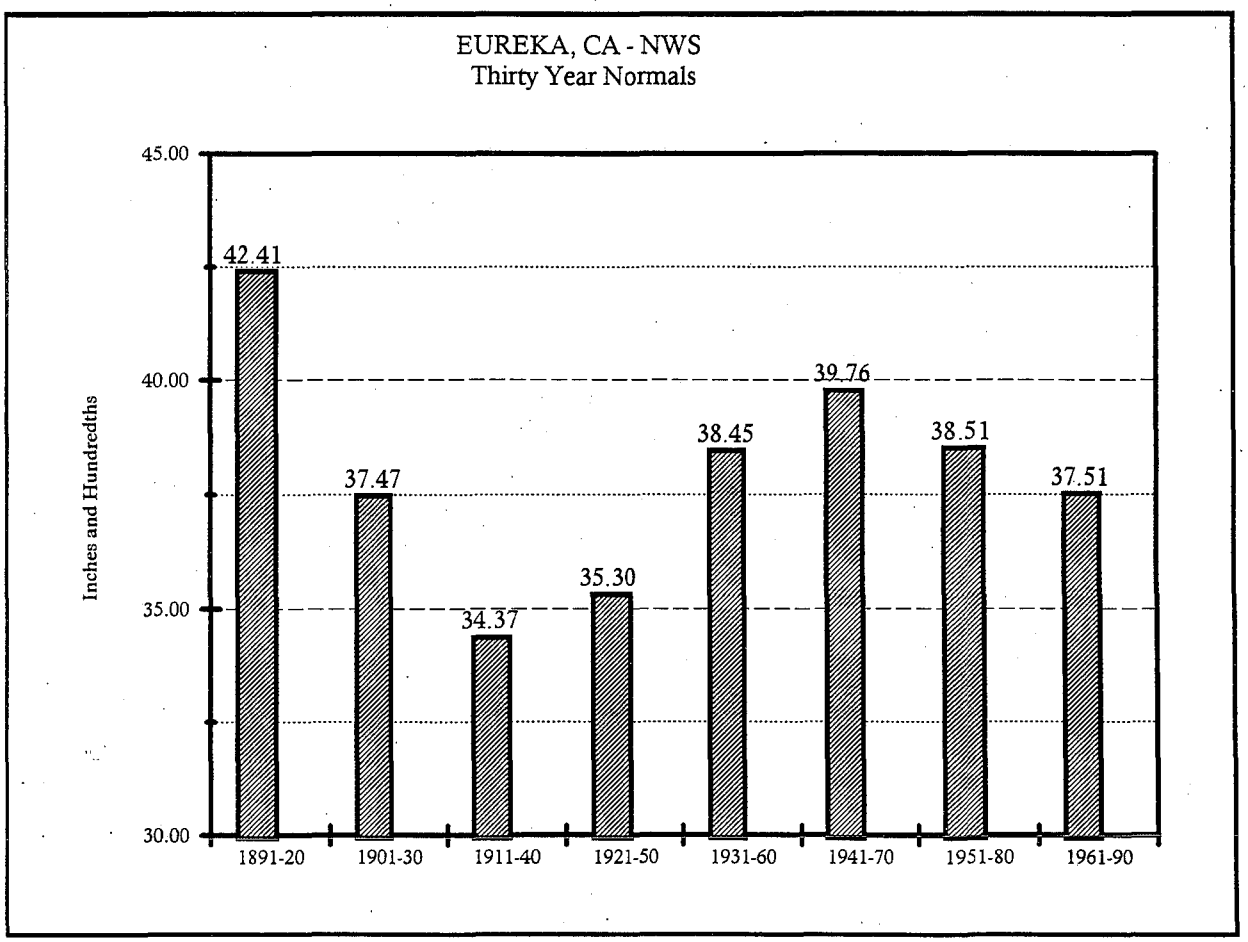
Drought conditions such as these can last 20 years or more, having been shown to occurred often in the past. The last prolonged drought occurred in the 1920's and 30's. Some periods have lasted longer than 50 years as indicated by the study of tree rings.

A. Rainfall Normals

Many of Eureka's monthly and annual rainfall records occurred near the turn of this century. This may be a sign of climatic change, or more likely, a normal cyclic event.

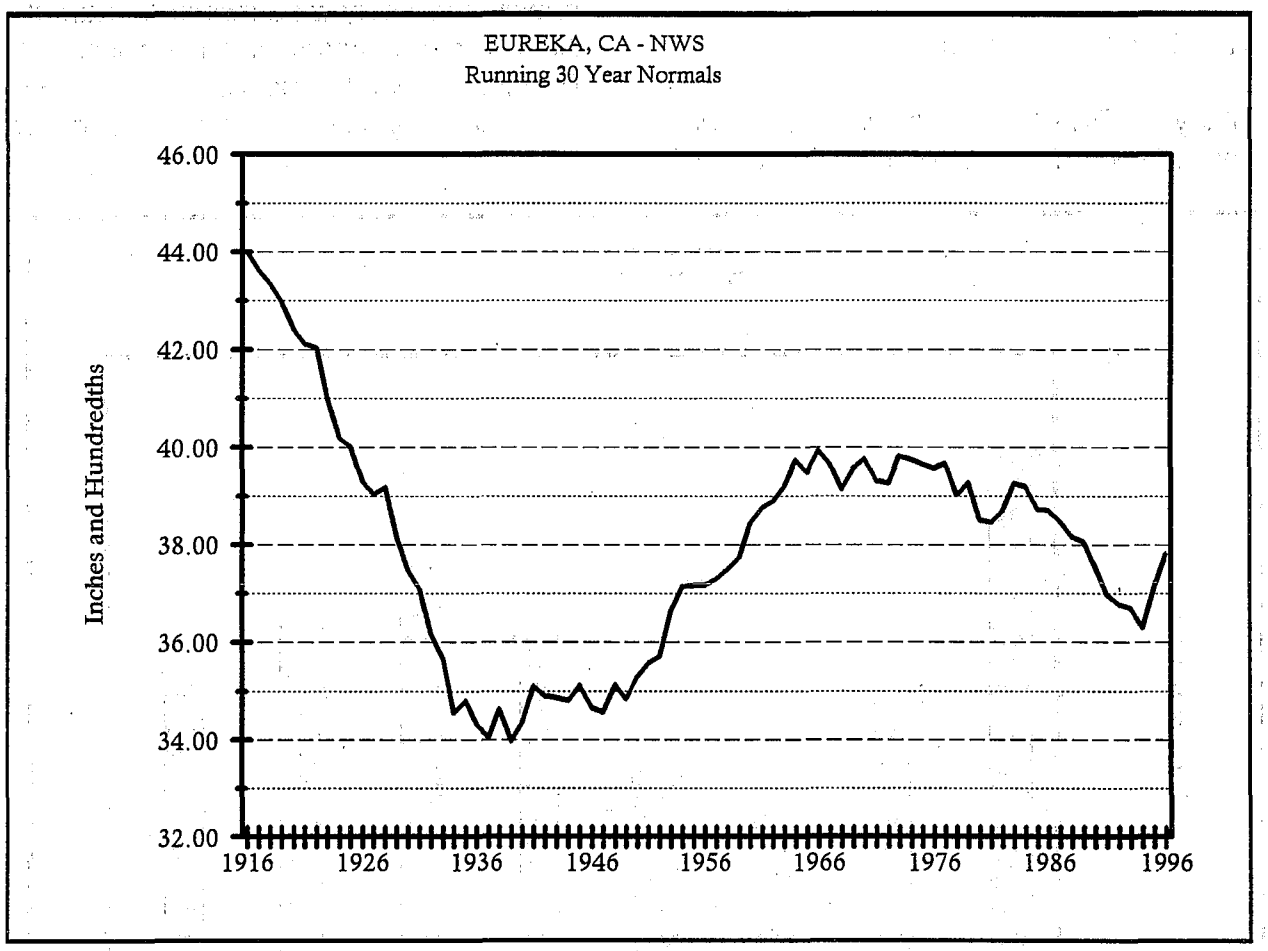
The chart below shows just how much, and how quickly, the 30-year normal rainfall has varied over time in Eureka.

With the 30-year normals ranging from over 41 inches to a low of less than 34 inches, the data for the Eureka office has shown extremely wide swings in rainfall. Annually, the overall average rainfall for Eureka is 38.87 inches for the one hundred ten years included in this report.



There are indications that data from the Cape Mendocino station was included in the early years to aid in establishing the monthly averages and the initial 30-year normals.

Those reports were not used in the preparation of this report. All data in this report are from the three weather offices in Eureka. The following graph depicts a running 30- year normal. The first point represents the 30-year normal ending in 1916. The second point is for the 1888-1917 period, and onto the last point, the 30-year period, 1967 through 1996.



This graph clearly shows just how rapidly the drought set in, beginning in the mid 1920's and lasting through the mid 1930's. It was during this time that Eureka experienced its driest year ever.

With the 30-year normals ranging from a high of 44.00 inches, to a low of 33.97 inches, demonstrates just how quickly the climatic values can vary.

It's been suggested by H. J. Critchfield in his book, *General Climatology*, data of at least 35 years be used to obtain mean values.

There are others who have suggested the use of a 50-year period to arrive at a monthly or annual mean value. Using this method rendered a maximum of 39.49 inches for Eureka, with a minimum of 36.26 inches.

The 50-year means greatly mask the rapid onset and ending of the variations that many are looking for.

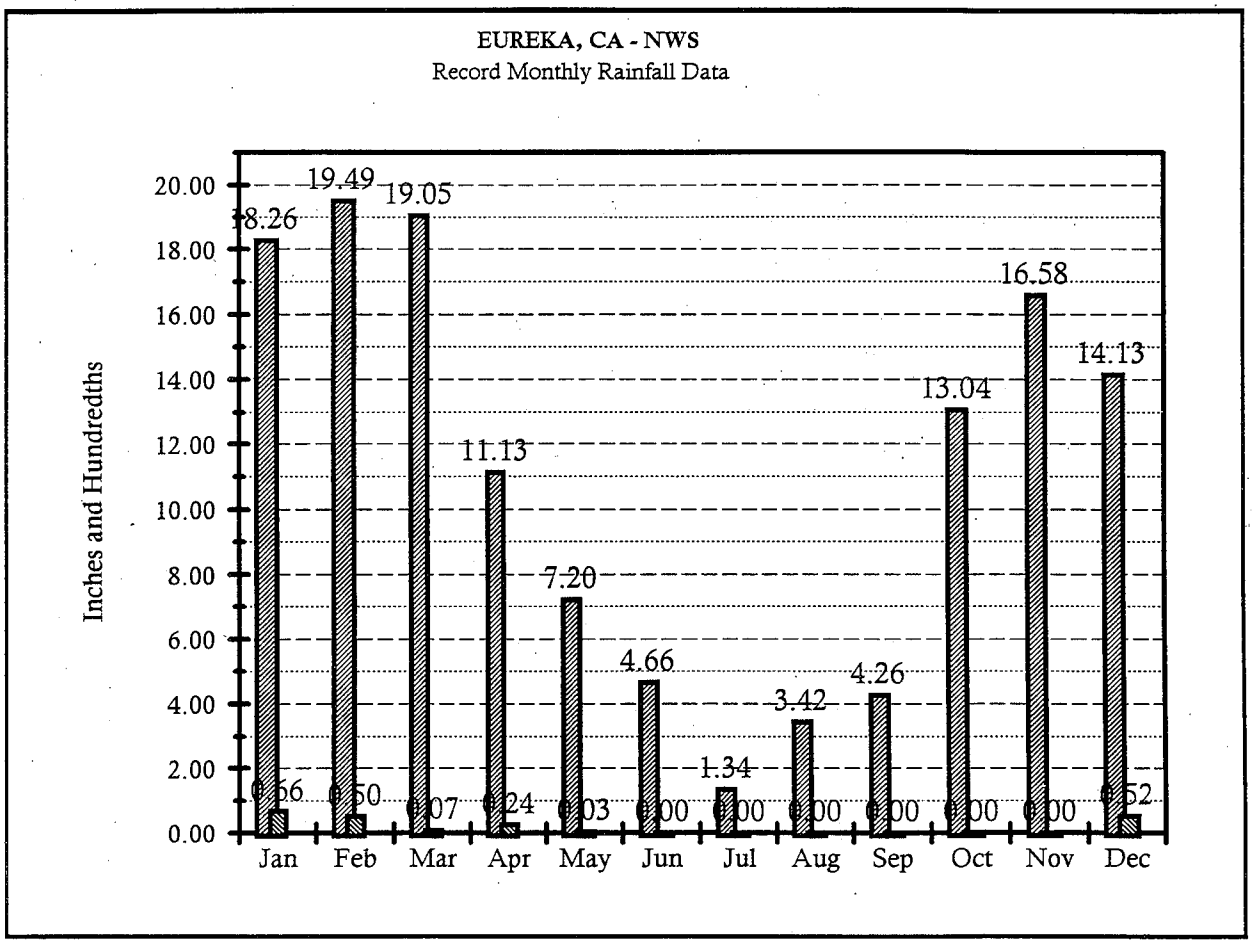
It was in the late 1870's that the now familiar 30-year normal was introduced.

B. Rainfall Records and Averages

The record rainfall in a calendar year was 67.23 inches which fell in 1983. The minimum rainfall of 21.17 inches was recorded in 1929.

The October through September season record maximum rainfall of 74.39 inches fell in 1889-90, and the minimum of 19.17 inches was reported in 1976-77.

The greatest number of consecutive days with measurable rain is 26 days, from December 25, 1935 through January 19, 1936. During this period, 11.02 inches of rain was recorded.



For the July through June season, the maximum record of 74.10 inches fell in 1889-90, while the minimum record of 17.56 inches fell in 1976-77.

The greatest number of consecutive days without any measurable rain is 81 days. This occurred from May 31, 1940 through September 01, 1940.

Below is a listing of the maximum rainfall for the stated period of time that has been recorded at the Eureka office at Fifth and H Streets, using a tipping bucket rain gage and the data being recorded on a triple register.

05 minute maximum.....	0.30 of an inch on Jan 12 1979
10 minute maximum.....	0.43 of an inch on Jan 12 1979
15 minute maximum.....	0.51 of an inch on Nov 11 1926
20 minute maximum.....	0.76 of an inch on Feb 07 1978
30 minute maximum.....	0.81 of an inch on Feb 07 1978
45 minute maximum.....	1.01 inches on Dec 06 1952
60 minute maximum.....	1.20 inches on Oct 29 1950
80 minute maximum.....	1.37 inches on Oct 29 1950
100 minute maximum...	1.57 inches on Oct 29 1950
120 minute maximum...	1.72 inches on Oct 29 1950
150 minute maximum...	2.16 inches on Oct 29 1950
180 minute maximum...	2.53 inches on Oct 29 1950
4 hour maximum.....	3.06 inches on Oct 29 1950
5 hour maximum.....	3.22 inches on Oct 29 1950
6 hour maximum.....	3.33 inches on Oct 29 1950
12 hour maximum.....	4.36 inches on Oct 29 1950
24 hour maximum.....	5.83 inches on Oct 28 & 29 1950
1 calendar day.....	5.04 inches on Oct 29 1950
2 calendar days.....	7.11 inches Feb 3 & 4 1890
3 calendar days.....	8.52 inches Oct 27-29 1950
4 calendar days.....	9.65 inches Feb 01-04 1890
5 calendar days.....	10.02 inches Feb 01-05 1890
6 calendar days.....	10.04 inches Jan 30-Feb 04 1890
8 calendar days.....	12.41 inches Jan 28-Feb 04 1890
10 calendar days.....	13.99 inches Jan 21-30 1903
15 calendar days.....	17.24 inches Jan 22 Feb 05 1890
30 calendar days.....	26.69 inches Jan 09-Feb 07 1890
60 calendar days.....	39.41 ins Dec 08 1889-Feb 05 1890

EUREKA, CA - NWS

Annual Rankings - January through December - Precipitation by Amounts and Year of Occurrences... 1887 through 1996.

01	67.23	1983	31	44.50	1897	61	36.93	1921	91	29.26	1992
02	64.47	1904	32	43.29	1981	62	36.92	1922	92	29.14	1959
03	59.62	1896	33	42.70	1954	63	36.51	1955	93	28.73	1917
04	58.76	1902	34	42.04	1901	64	36.48	1888	94	28.12	1949
05	55.54	1890	35	41.85	1963	65	36.07	1925	95	27.94	1918
06	54.11	1907	36	41.52	1895	66	36.02	1944	96	27.53	1924
07	53.71	1893	37	41.46	1940	67	35.91	1995	97	26.80	1936
08	53.30	1950	38	41.12	1952	68	35.69	1979	98	26.28	1965
09	52.12	1941	39	41.06	1906	69	35.64	1968	99	25.96	1947
10	51.88	1899	40	40.89	1957	70	35.31	1994	100	25.65	1978
11	51.64	1909	41	40.87	1958	71	35.25	1928	101	25.52	1905
12	51.28	1894	42	40.70	1984	72	35.18	1962	102	25.47	1989
13	50.91	1938	43	40.64	1942	73	34.26	1987	103	24.70	1946
14	50.32	1953	44	40.31	1966	74	34.22	1974	104	24.21	1930
15	49.02	1973	45	40.17	1887	75	33.80	1913	105	23.15	1991
16	48.89	1945	46	40.16	1961	76	33.79	1935	106	22.99	1985
17	48.70	1889	47	39.79	1915	77	33.40	1908	107	21.89	1923
18	48.22	1982	48	39.48	1892	78	32.65	1943	108	21.71	1976
19	47.90	1903	49	39.37	1993	79	32.43	1933	109	21.17	1929
20	47.39	1970	50	39.29	1920	80	31.91	1939			
21	47.04	1964	51	39.17	1972	81	31.60	1988			
22	46.59	1912	52	38.76	1971	82	31.32	1934			
23	46.09	1975	53	38.47	1956	83	31.12	1932			
24	45.80	1891	54	38.40	1916	84	30.91	1931			
25	45.47	1937	55	37.06	1926	85	30.91	1898			
26	45.04	1951	56	37.91	1914	86	30.48	1980			
27	45.01	1948	57	37.50	1986	87	29.85	1911			
28	44.98	1900	58	37.12	1967	88	29.65	1910			
29	44.78	1960	59	37.03	1927	89	29.34	1990			
30	44.57	1969	60	37.02	1919	90	29.29	1977			

EUREKA, CA - NWS

Seasonal Ranking - Jul through Jun - Precipitation by Amounts and Years of Occurrences... 1887-88 through 1995-96.

01	74.10	1889-90	31	43.94	1962-63	61	36.17	1977-7891	28.94	1961-62
02	65.21	1903-04	32	43.61	1992-93	62	36.03	1912-1392	28.22	1967-68
03	59.49	1982-83	33	43.22	1944-45	63	35.99	1907-0893	27.93	1986-87
04	56.56	1937-38	34	42.96	1908-09	64	35.72	1898-9994	27.85	1943-44
05	55.20	1893-94	35	42.42	1914-15	65	35.41	1890-9195	26.83	1989-90
06	53.05	1973-74	36	42.39	1953-54	66	35.23	1984-8596	26.78	1925-26
07	52.45	1895-96	37	42.26	1941-42	67	35.12	1897-9897	25.18	1922-23
08	51.96	1901-02	38	42.25	1947-48	68	34.87	1932-3398	25.15	1990-91
09	51.78	1994-95	39	41.50	1924-25	69	34.84	1988-8999	24.95	1978-79
10	51.73	1802-03	40	41.04	1942-43	70	34.79	1972-73100	24.34	1917-18
11	51.73	1899-00	41	40.80	1949-50	71	34.76	1921-22101	23.95	1919-20
12	51.10	1896-97	42	40.62	1964-65	72	34.66	1959-60102	22.66	1933-34
13	50.58	1926-27	43	40.56	1939-40	73	34.55	1935-36103	22.66	1933-34
14	50.54	1906-07	44	40.36	1909-10	74	34.47	1887-88104	21.92	1991-92
15	49.15	1892-93	45	40.04	1945-46	75	34.14	1888-89105	21.39	1946-47
16	48.96	1957-58	46	39.99	1915-16	76	33.65	1948-49106	21.29	1930-31
17	48.81	1920-21	47	39.87	1974-75	77	33.55	1975-76107	20.27	1923-24
18	48.56	1983-84	48	39.81	1934-35	78	33.44	1954-55108	17.56	1976-77
19	48.34	1981-82	49	39.80	1918-19	79	32.74	1904-05		
20	48.18	1970-71	50	39.68	1974-75	80	32.70	1958-59		
21	48.08	1940-41	51	39.04	1905-06	81	32.31	1987-88		
22	47.63	1952-53	52	38.91	1985-86	82	32.31	1965-66		
23	47.58	1900-01	53	38.70	1911-12	83	32.09	1910-11		
24	47.50	1968-69	54	38.22	1969-70	84	31.36	1916-17		
25	47.40	1951-52	55	38.14	1891-92	85	30.88	1938-39		
26	46.37	1955-56	56	37.97	1979-80	86	30.71	1927-28		
27	46.33	1950-51	57	37.60	1963-64	87	30.25	1936-37		
28	45.97	1894-95	58	37.32	1913-14	88	29.51	1980-81		
29	44.39	1966-67	59	36.62	1931-32	89	29.40	1928-29		
30	44.26	1960-61	60	36.56	1956-57	90	29.35	1993-94		

EUREKA, CA - NWS

Seasonal Ranking - Oct through Sep - Precipitation by
Amounts and Years of Occurrences... 1887-88 through 1994-95.

01	74.39	1889-90	31	43.94	1908-09	61	36.33	1984-85	91	28.76	1928-29
02	66.45	1903-04	32	43.93	1944-45	62	36.24	1931-32	92	28.49	1993-94
03	63.94	1982-83	33	43.85	1972-73	63	36.08	1972-73	93	28.07	1943-44
04	58.03	1937-38	34	43.63	1966-67	64	35.96	1977-78	94	26.89	1989-90
05	54.71	1893-94	35	42.52	1953-54	65	35.73	1988-89	95	26.37	1922-23
06	53.05	1906-07	36	42.45	1947-48	66	35.48	1898-99	96	25.53	1990-91
07	52.21	1902-03	37	42.17	1962-63	67	35.44	1932-33	97	25.51	1917-18
08	51.64	1994-95	38	41.73	1941-42	68	35.43	1897-98	98	25.50	1919-20
09	51.59	1900-01	39	41.46	1915-16	69	34.88	1921-22	99	25.49	1986-87
10	51.27	1895-96	40	41.13	1939-40	70	34.80	1975-76	100	24.64	1929-30
11	51.05	1973-74	41	41.11	1942-43	71	34.63	1887-88	101	23.95	1925-26
12	50.71	1899-00	42	40.96	1914-15	72	34.29	1912-13	102	23.20	1978-79
13	50.65	1970-71	43	40.86	1911-12	73	34.24	1888-89	103	22.83	1946-47
14	50.48	1926-27	44	40.59	1949-50	74	34.03	1965-66	104	22.39	1933-34
15	50.46	1892-93	45	40.52	1934-35	75	33.49	1935-36	105	21.01	1991-92
16	50.03	1896-97	46	40.13	1974-76	76	33.42	1958-59	106	20.73	1930-31
17	48.09	1981-82	47	40.05	1964-65	77	33.18	1959-60	107	20.59	1923-24
18	48.06	1901-02	48	39.90	1985-86	78	32.88	1907-08	108	19.17	1976-77
19	48.06	1957-58	49	39.49	1918-19	79	32.68	1954-55			
20	47.91	1952-53	50	39.42	1905-06	80	32.45	1910-11			
21	47.89	1940-41	51	39.30	1945-46	81	32.24	1948-49			
22	47.55	1894-95	52	39.21	1909-10	82	32.20	1987-88			
23	47.28	1951-52	53	38.36	1913-14	83	31.03	1904-05			
24	46.72	1950-51	54	38.13	1969-70	84	30.71	1961-62			
25	46.00	1920-21	55	38.03	1971-72	85	30.48	1927-28			
26	45.37	1955-56	56	37.90	1956-57	86	30.39	1936-37			
27	45.29	1968-69	57	37.67	1963-64	87	30.28	1980-81			
28	45.05	1960-61	58	37.17	1891-92	88	30.20	1916-17			
29	44.01	1983-84	59	36.59	1979-80	89	29.52	1967-68			
30	43.96	1992-93	60	36.57	1890-91	90	29.48	1938-39			

EUREKA, CA - NWS

Daily Average and Record Rainfall in Inches
1887 Through 1996

Dt	January Daily Average	January Daily Record	January Year of Record	February Daily Average	February Daily Record	February Year of Record
01	0.17	1.56	1948	0.27	4.45	1915
02	0.25	1.62	1888	0.20	1.64	1909
03	0.17	3.35	1907	0.28	4.81	1890
04	0.22	1.82	1901	0.24	2.30	1890
05	0.20	2.20	1948	0.17	1.79	1897
06	0.18	2.11	1964	0.18	1.82	1960
07	0.21	1.59	1915	0.25	2.64	1938
08	0.19	1.45	1968	0.17	1.68	1922
09	0.18	1.97	1995	0.17	3.61	1902
10	0.16	1.11	1899	0.22	2.01	1961
11	0.15	1.32	1959	0.18	1.73	1902
12	0.29	3.72	1890	0.20	1.77	1895
13	0.31	2.22	1913	0.25	4.20	1945
14	0.28	2.68	1894	0.18	4.84	1959
15	0.25	2.20	1890	0.19	3.65	1904
16	0.24	2.24	1919	0.23	2.19	1912
17	0.23	3.70	1953	0.21	1.83	1986
18	0.26	1.84	1953	0.20	2.33	1910
19	0.27	1.93	1887	0.22	2.35	1927
20	0.18	1.78	1969	0.26	3.22	1921
21	0.26	4.96	1903	0.19	2.05	1948
22	0.22	3.21	1981	0.17	1.52	1891
23	0.21	2.24	1970	0.15	1.36	1891
24	0.20	2.51	1912	0.23	1.76	1917
25	0.19	3.76	1912	0.13	1.01	1976
26	0.17	2.44	1983	0.14	1.59	1957
27	0.20	1.88	1967	0.14	1.48	1976
28	0.19	1.75	1958	0.19	3.17	1899
29	0.21	1.81	1890	0.23	1.42	1908
30	0.20	3.91	1888			
31	0.19	1.74	1992			
	Daily Average	0.21		Daily Average	0.20	
	Monthly Max	18.26 in 1890		Monthly Max	19.49 in 1902	
	Monthly Min	0.66 in 1985		Monthly Min	0.50 in 1923	

* Last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Rainfall in Inches
1887 Through 1996

Dt	March Daily Average	March Daily Record	March Year of Record	April Daily Average	April Daily Record	April Year of Record
01	0.18	1.30	1982	0.11	1.06	1927
02	0.19	2.31	1972	0.13	1.45	1925
03	0.16	1.42	1904	0.12	0.97	1919
04	0.17	2.82	1890	0.12	1.54	1911
05	0.16	1.32	1912	0.16	2.01	1963
06	0.13	1.21	1966	0.14	1.33	1898
07	0.18	3.59	1904	0.10	1.14	1945
08	0.18	1.97	1902	0.10	0.79	1889
09	0.16	1.17	1983	0.14	1.27	1887
10	0.16	1.54	1904	0.12	1.06	1979
11	0.18	1.72	1957	0.07	1.01	1900
12	0.24	2.81	1939	0.14	2.32	1963
13	0.14	1.28	1980	0.14	2.87	1896
14	0.14	1.60	1899	0.12	1.14	1937
15	0.20	2.26	1949	0.11	1.56	1965
16	0.13	1.18	1938	0.11	1.01	1992
17	0.21	3.36	1907	0.07	0.99	1957
18	0.21	1.98	1975	0.09	2.30	1925
19	0.15	1.74	1973	0.13	1.78	1904
20	0.16	1.66	1895	0.09	1.74	1980
21	0.15	1.76	1893	0.07	1.74	1961
22	0.21	1.83	1904	0.06	1.46	1983
23	0.22	1.64	1937	0.11	1.44	1896
24	0.15	1.26	1899	0.07	0.96	1983
25	0.15	1.28	1905	0.07	0.71	1892
26	0.16	2.02	1940	0.06	1.15	1894
27	0.16	2.46	1934	0.08	1.08	1962
28	0.15	2.26	1914	0.08	1.25	1912
29	0.19	2.43	1974	0.06	0.75	1912
30	0.20	1.94	1941	0.10	0.86	1912
31	0.12	1.43	1928			

	March	April
Daily Average	0.17	0.10
Monthly Max	19.05 in 1904	11.13 in 1896
Monthly Min	0.07 in 1926	0.24 in 1909

* Last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Rainfall in Inches
1887 Through 1996

Dt	Daily Average	May Daily Record	Year of Record	Daily Average	June Daily Record	Year of Record
01	0.10	1.36	1921	0.05	1.07	1988
02	0.07	0.86	1986	0.02	0.55	1988
03	0.07	1.24	1896	0.02	0.77	1888
04	0.05	0.83	1889	0.02	0.43	1954
05	0.08	1.37	1889	0.03	0.61	1953
06	0.07	0.80	1889	0.04	0.78	1914
07	0.08	1.16	1889	0.03	1.52	1920
08	0.06	0.58	1970	0.02	0.26	1942
09	0.06	0.73	1887	0.03	0.71	1972
10	0.07	0.85	1892	0.02	0.39	1983
11	0.07	1.15	1896	0.03	1.48	1887
12	0.04	0.67	1945	0.03	0.38	1888
13	0.02	0.47	1945	0.03	0.62	1992
14	0.05	1.12	1944	0.06	1.55	1888
15	0.05	1.40	1892	0.04	1.23	1929
16	0.06	0.96	1945	0.02	0.54	1921
17	0.07	1.31	1957	0.02	0.59	1941
18	0.07	1.08	1953	0.03	0.82	1944
19	0.04	0.56	1925	0.02	0.48	1891
20	0.05	0.67	1893	0.01	0.20	1897
21	0.05	0.90	1990	0.02	1.26	1900
22	0.05	0.88	1958	0.02	0.45	1923
23	0.04	0.69	1960	0.02	0.51	1914
24	0.05	1.04	1942	0.01	0.26	1914
25	0.07	1.18	1960	0.02	1.07	1971
26	0.08	1.53	1895	0.02	0.63	1927
27	0.05	1.14	1895	0.01	0.37	1952
28	0.05	0.74	1895	0.02	0.41	1992*
29	0.03	0.40	1948	0.01	0.40	1916
30	0.07	2.15	1943	0.01	0.26	1921
31	0.08	2.05	1943			
	Daily Average	0.06		Daily Average		0.02
	Monthly Max	7.27 in 1889		Monthly Max	4.66 in 1888	
	Monthly Min	0.02 in 1929		Monthly Min	0.00 in 1960*	

* Last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Rainfall in Inches
1887 Through 1996

Dt	Daily Average	July Daily Record	Year of Record	Daily Average	August Daily Record	Year of Record
01	0.01	0.89	1983	0.00	0.06	1976
02	0.00	0.10	1895	0.00	0.01	1953*
03	0.00	0.14	1939	0.00	0.09	1962
04	0.01	0.41	1909	0.00	0.06	1943
05	0.00	0.22	1948	0.01	0.29	1974
06	0.00	0.17	1915	0.00	0.24	1891
07	0.00	0.04	1974	0.01	0.89	1962
08	0.01	0.22	1964	0.03	2.61	1907
09	0.01	0.30	1979	0.00	0.02	1916
10	0.00	0.41	1891	0.00	0.05	1892
11	0.01	0.38	1888	0.00	0.04	1892
12	0.00	0.06	1888	0.00	0.06	1945
13	0.00	0.23	1957	0.01	0.40	1976
14	0.01	0.34	1904	0.01	0.30	1976
15	0.01	0.42	1916	0.00	0.15	1903
16	0.02	0.83	1991	0.00	0.09	1924
17	0.00	0.11	1976	0.01	0.63	1976
18	0.00	0.10	1987	0.02	0.88	1924
19	0.00	0.05	1903	0.01	0.41	1968
20	0.00	0.07	1985	0.00	0.37	1968
21	0.00	0.09	1964	0.00	0.14	1971
22	0.01	0.32	1993	0.01	0.24	1925
23	0.00	0.05	1949	0.00	0.02	1973
24	0.00	0.02	1913	0.01	0.51	1978
25	0.00	0.02	1913	0.01	0.89	1968
26	0.01	0.97	1947	0.01	0.19	1953
27	0.00	0.23	1947	0.01	0.58	1954
28	0.00	0.06	1975	0.01	0.58	1954
29	0.00	0.02	1976*	0.02	1.43	1983
30	0.00	0.05	1985	0.03	1.57	1983
31	0.00	0.27	1964	0.01	0.37	1896

Daily Average	0.00	Daily Average	0.01
Monthly Max	1.34 in 1916	Monthly Max	3.42 in 1983
Monthly Min	0.00 in 1981*	Monthly Min	0.00 in 1994*

* Last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Rainfall in Inches
1887 Through 1996

	September			October		
Dt	Daily Average	Daily Record	Year of Record	Daily Average	Daily Record	Year of Record
01	0.02	0.89	1979	0.06	2.28	1937
02	0.01	0.39	1912	0.06	0.92	1922
03	0.01	0.45	1912	0.07	1.39	1950
04	0.02	0.92	1978	0.04	0.91	1900
05	0.02	0.94	1912	0.06	0.92	1923
06	0.02	0.52	1947	0.06	1.27	1957
07	0.01	0.55	1925	0.07	2.31	1889
08	0.02	0.81	1930	0.07	1.54	1893
09	0.02	0.91	1978	0.12	2.67	1962
10	0.02	0.61	1893	0.12	1.68	1984
11	0.04	2.44	1895	0.08	1.12	1968
12	0.02	0.52	1895	0.03	0.77	1957
13	0.04	0.75	1955	0.04	1.03	1908
14	0.03	1.09	1935	0.08	2.79	1908
15	0.02	1.17	1896	0.09	1.97	1947
16	0.04	1.09	1948	0.05	0.99	1914
17	0.04	1.07	1967	0.05	0.92	1920
18	0.06	1.45	1977	0.06	0.97	1953
19	0.02	0.67	1973	0.09	1.88	1899
20	0.01	0.35	1893	0.09	1.89	1947
21	0.03	0.68	1945	0.08	1.27	1973
22	0.04	0.98	1973	0.13	1.72	1985
23	0.04	0.89	1901	0.11	1.49	1951
24	0.02	0.57	1904	0.09	1.73	1979
25	0.03	1.01	1923	0.12	2.83	1975
26	0.04	1.02	1957	0.11	1.20	1921
27	0.02	0.66	1938	0.10	1.58	1950
28	0.04	0.72	1977	0.12	1.90	1950
29	0.06	1.52	1901	0.17	5.04	1950
30	0.05	0.75	1897	0.11	2.31	1944
31				0.11	1.25	1934
	Daily Average	0.03		Daily Average	0.09	
	Monthly Max	4.26 in 1901		Monthly Max	13.04 in 1950	
	Monthly Min	0.00 in 1988*		Monthly Min	0.00 in 1917	

* Last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Rainfall in Inches
1887 Through 1996

	November			December		
Dt	Daily Average	Daily Record	Year of Record	Daily Average	Daily Record	Year of Record
01	0.11	1.14	1907	0.25	2.46	1893
02	0.11	1.62	1988	0.26	3.17	1980
03	0.15	1.45	1918	0.22	2.21	1970
04	0.15	1.60	1903	0.24	2.41	1952
05	0.10	1.90	1912	0.23	1.62	1922
06	0.10	1.53	1979	0.24	2.73	1952
07	0.13	1.15	1900	0.19	2.74	1993
08	0.20	2.46	1964	0.21	2.41	1939
09	0.23	2.69	1902	0.20	2.25	1902
10	0.15	2.78	1983	0.25	3.77	1939
11	0.20	1.89	1926	0.22	2.95	1935
12	0.14	1.94	1984	0.19	1.39	1956
13	0.25	1.93	1967	0.17	1.54	1888
14	0.16	2.42	1934	0.16	1.58	1929
15	0.20	2.59	1966	0.14	1.39	1968
16	0.23	2.67	1900	0.20	2.84	1982
17	0.18	1.81	1982	0.17	1.84	1941
18	0.13	1.88	1946	0.14	0.97	1890
19	0.29	3.27	1924	0.22	3.36	1981
20	0.18	2.20	1909	0.22	2.50	1894
21	0.15	1.28	1953	0.21	2.15	1964
22	0.19	1.90	1988	0.21	2.34	1892
23	0.23	2.16	1960	0.21	1.77	1928
24	0.18	2.46	1970	0.20	1.54	1940
25	0.18	1.56	1916	0.14	1.31	1907
26	0.16	2.86	1899	0.19	1.68	1931
27	0.25	3.70	1893	0.23	2.22	1891
28	0.17	1.82	1932	0.21	2.67	1896
29	0.24	4.05	1926	0.19	2.64	1904
30	0.22	2.16	1892	0.26	3.00	1952
31				0.15	1.21	1939

Daily Average	0.18	Daily Average	0.20
Monthly Max	16.58 in 1973	Monthly Max	14.13 in 1983
Monthly Min	0.00 in 1929	Monthly Min	0.52 in 1976

* Last of several occurrences

C. Snowfall and Hail

Eureka has received snow on rare occasions, and because it is so rare, normals cannot be established for any of the winter months.

The record storm amount of 6.9 inches occurred in 1907, January 13 - 15.

On the 13th of January that year, the greatest daily total was established with 3.4 inches. That 3.4 inches is also the greatest depth on the ground as measured at 4 AM Pacific Standard Time. The solid precipitation that falls in Eureka is generally small hail or ice pellets. This generally occurs after the passage of a moderate to strong cold front, with its cold and unstable airmass, generally during the winter months.

As these occurrences are also rare in the Eureka area, normals for these phenomena are not established.

Some other snowfalls of note...

- Jan 1, 1893 received 1.5 inches
- Mar 1 & 2, 1896 totaled 2.9 inches
- Mar 12, 1906 had 1.8 inches
- Jan 28 & 29, 1916 received 1.4 inches
- Jan of 1932 received a total of 1.6 inches
- Jan 19,1935 caught 3.0 inches
- Jan 1950 saw a total of 2.8 inches
- Feb 17, 1952 received 1.0 inch
- Jan 26 & 27, 1972 combined for 1.6 inches
- Dec 7, 1972 totaled 1.9 inches
- Dec 23, 1983 saw 1.0 inch
- Feb 4 & 5, 1989 saw a total of 3.5 inches

All other snow events have been less than one inch, and the majority of those have been reported just as a "Trace."

Eureka has never reported a "White Christmas."

IV. TEMPERATURE SUMMARY

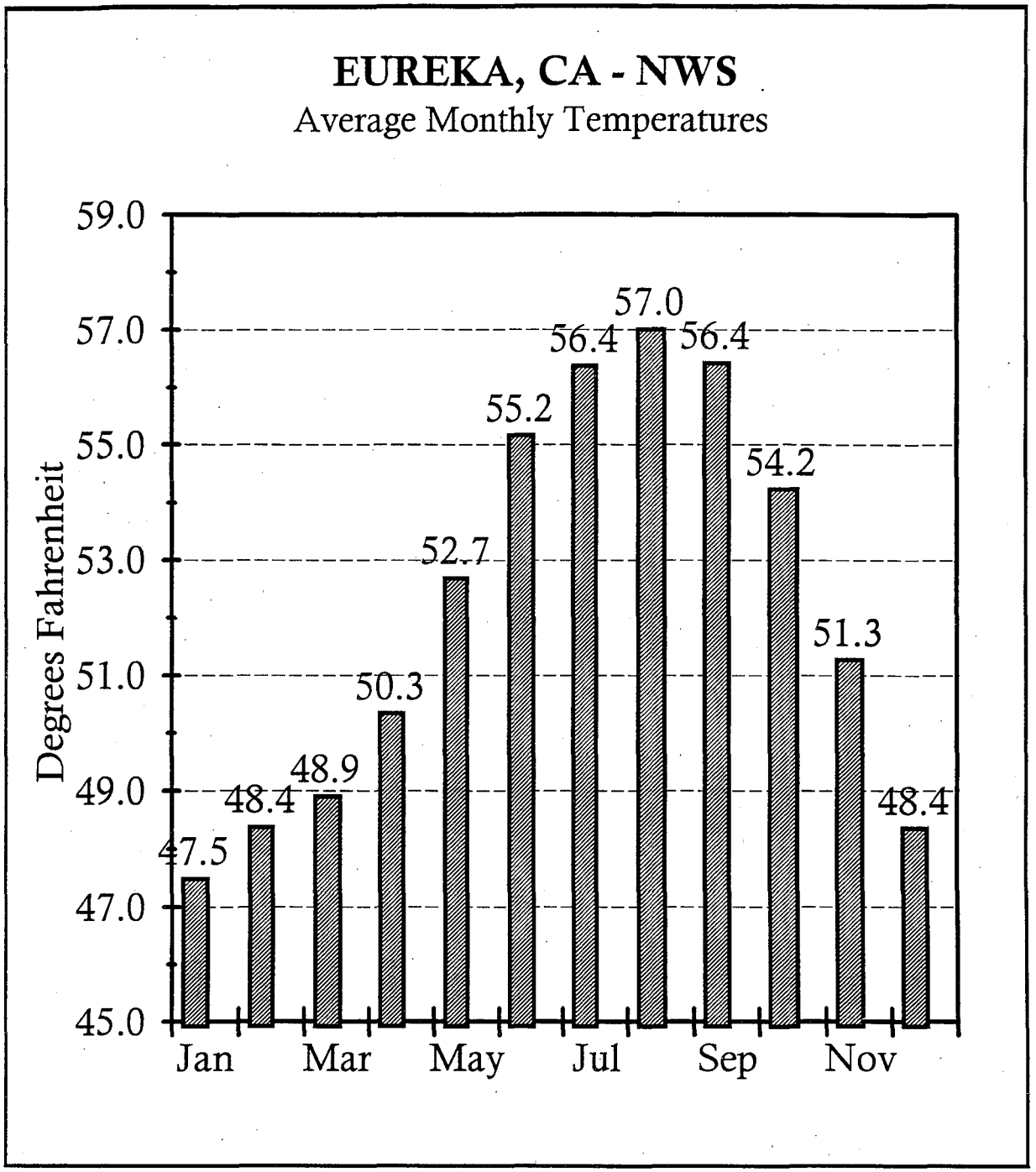
Temperatures in Eureka and much of the surrounding bay area, are clement throughout the year, experiencing relatively little change in the daily and seasonal ranges.

In the summer months, the daily average range of temperatures is as little as 9 degrees, but with fog and stratus covering the city, the daily range can be as low as 2 degrees.

In the winter months, the daily average range of temperatures is just a little larger with a 12 degree spread in values. However, during the winter, the range is as much as 40 degrees.

These moderate temperatures are due greatly to the proximity of the Pacific Ocean and Humboldt Bay, with their warming effects in the winter and cooling effects in the summer, illustrating the Mediterranean nature of the region.

Annually, the temperature range is only 9.5 degrees Fahrenheit as shown in the chart on the next page. Local area temperatures show a much greater range than does Eureka's as depicted on the



following page. All three sites are considered coastal with Fortuna being about 15 miles south of Eureka in the Eel River Valley, and the Arcata airport about 13 miles north overlooking the Pacific Ocean.

Average Monthly Temperatures

	Arcata	Eureka	Fortuna
Jan	47.4	47.4	50.2
Feb	49.4	48.3	51.7
Mar	49.9	48.9	53.5
Apr	51.3	50.3	55.6
May	53.5	52.7	58.6
Jun	56.7	55.1	61.7
Jul	58.0	56.3	63.3
Aug	58.4	57.0	64.2
Sep	55.9	56.4	62.8
Oct	55.1	54.2	59.8
Nov	50.5	51.3	53.9
Dec	46.3	48.3	49.7
Annual	52.7	52.2	57.1

Temperatures vary greatly in the Humboldt Bay region, but since the National Weather Service has had just the three locations, the following temperatures can be regarded as representative for much of the city surrounding the bay.

The overall average annual temperature for Eureka is 52.2 degrees Fahrenheit, with the record annual maximum average of 55.6 degrees occurring in 1983. The record average minimum reading is 49.8 degrees which was set in 1911.

The average and maximum temperature is 57.7 degrees Fahrenheit. The record annual maximum average temperature of 62.3 degrees was also set in 1983, with coldest average maximum temperature of 55.0 degrees being recorded in 1911.

The average annual minimum temperatures are 46.6 degrees Fahrenheit. The record annual minimum average temperature of 44.6 degrees was set back in 1887, while the warmest average minimum temperature was 49.2 degrees set in 1941.

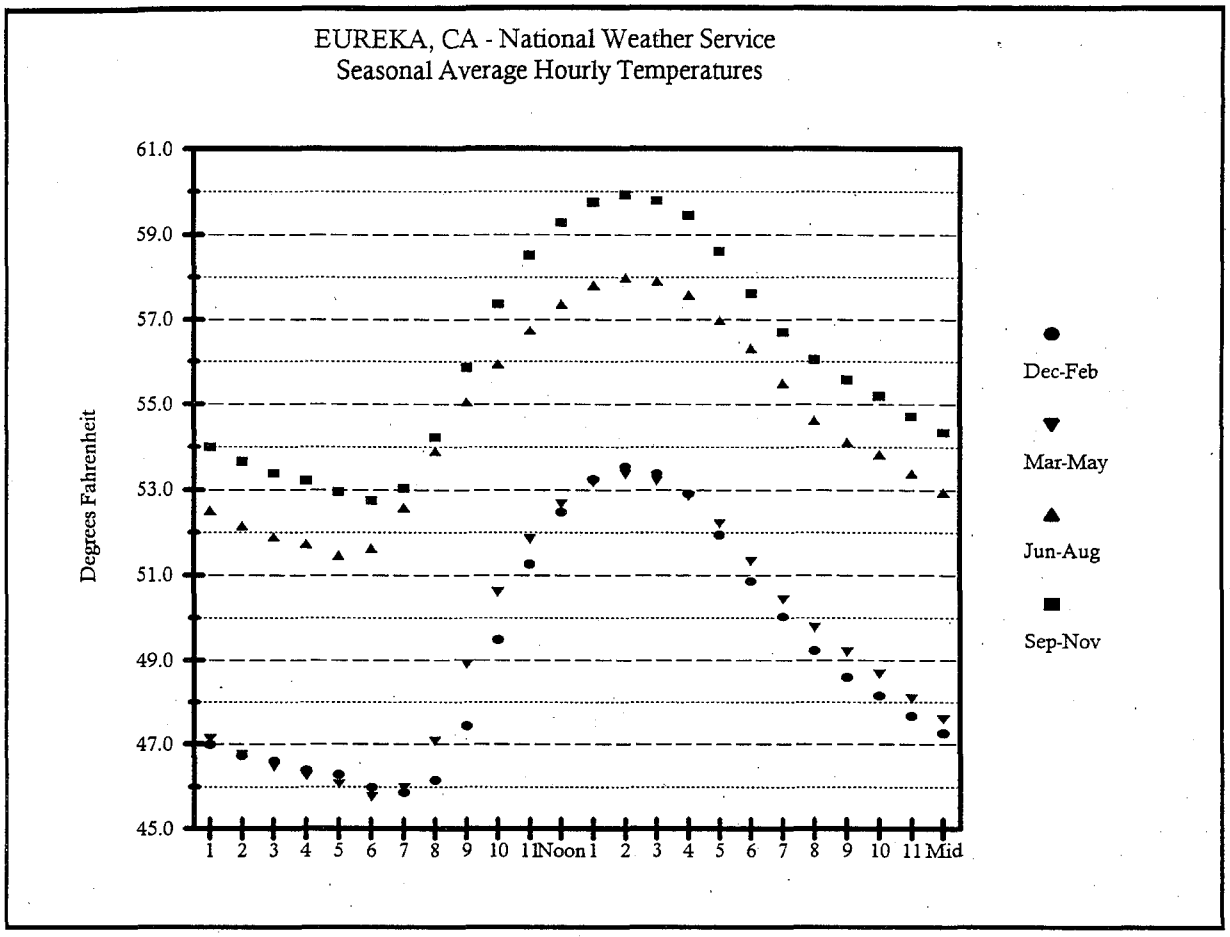
One of the largest one-hour temperature jumps occurred on the 4th of December 1949.

The jump between 9 AM with a reading of 48 degrees, and 10 AM, with a reading of 65 degrees, totaled 17 degrees.

By far, the largest drop in a one-hour period happened on the 13th of May 1939. The noon reading was 84 degrees (which is the daily record maximum for that date), while at 1 PM, it was but 51 degrees for a drop of 33 degrees.

The climates just 5 to 15 miles inland are more temperate and mountain in nature, experiencing a much greater divergence in temperatures from day to night and from season to season.

The following graph depicts the average hourly temperatures for the four seasons. Hourly temperature recordings began in 1913, using thermographs with the data being entered on the early morning shift, as the office was not manned 24 hours a day.



Seasonally, the average hourly temperatures show very little change from the winter season to spring. Summer average hourly temperatures warm up by five to six degrees with the warmest hourly average temperatures occurring in the autumn months.

Normally, the daily maximum temperatures occur at about 2 PM to 3 PM, the mornings minimums being reached at about 5 AM to 6 AM.

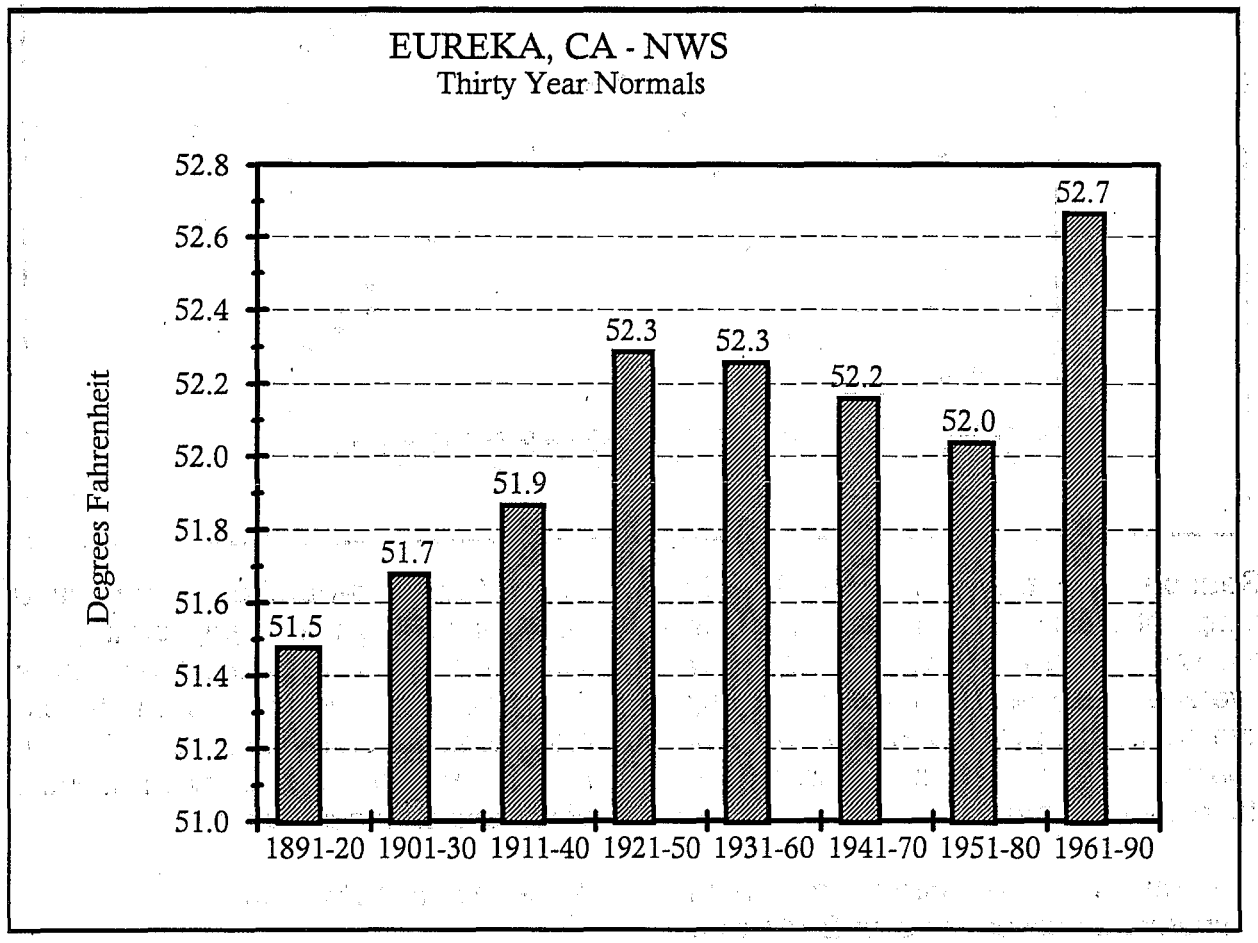
During the summer months, the warmer nighttime temperatures are generally due to the insulation effect of the coastal low clouds and fog that is most prevalent at that time of year. Warm southwest flows from the mid-Pacific bring mild temperatures to the region during the winter months. It is during these times that Eureka has set much of the record high temperatures and record high minimum temperatures during the months of November through March.

A. Temperature Normals

The 30-year normal average temperatures also show a great variation in values, as does the rainfall data. The last 30-year period ending in 1990, shows a definite warming trend over the previous 30-year normals as depicted in the following graph.

It may be suggested that there is a climatic change taking place, for whatever reason, causing the warming of the later periods. The warming trend, which shows up graphically in the 1961 to 1990 period, has continued through the mid-90s.

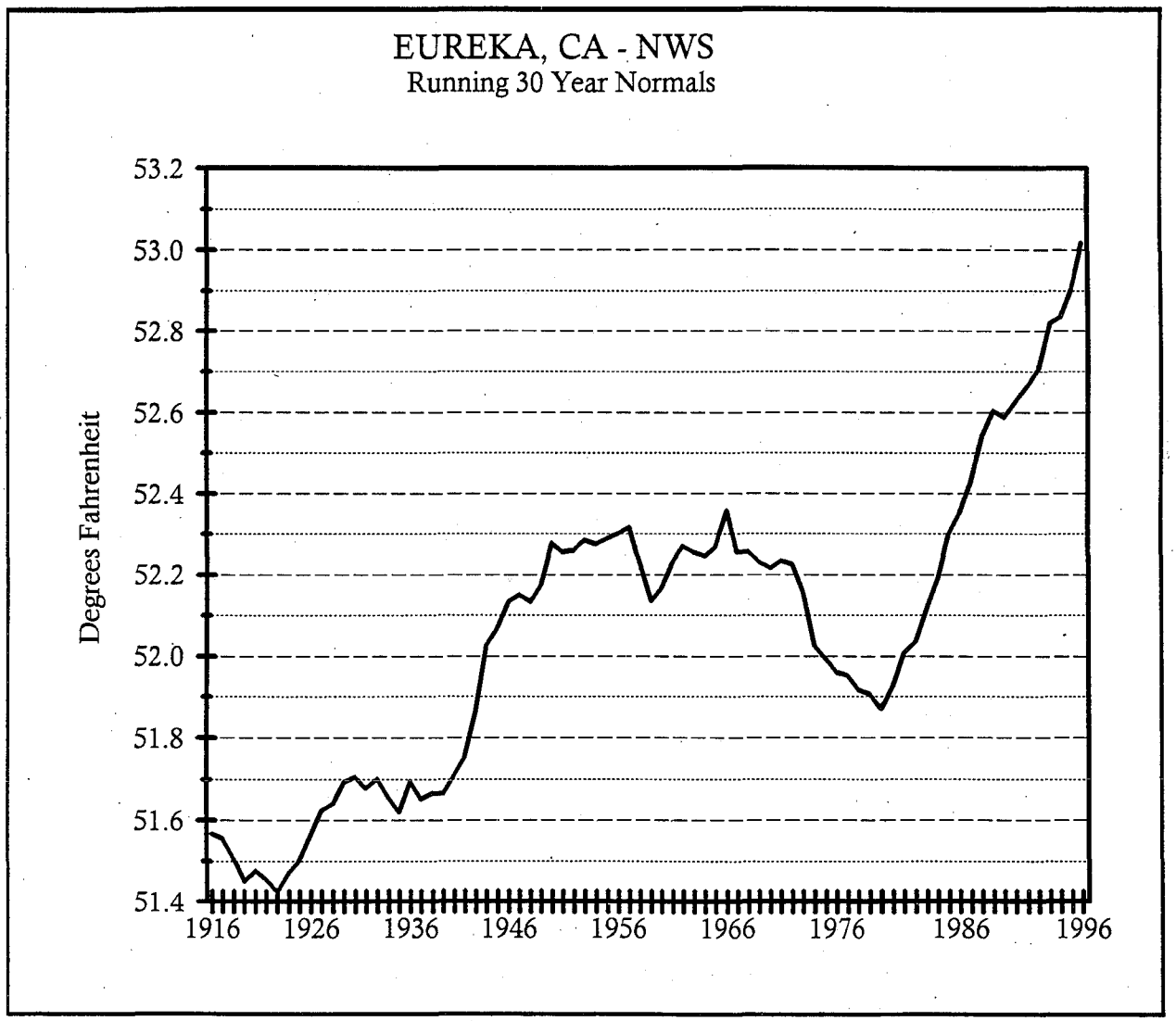
To the west, across the narrowest portion of the bay, near the center of the north spit, are two pulp mills. With the prevailing north to northwest winds, the temperatures of Eureka are not affected by these mills.

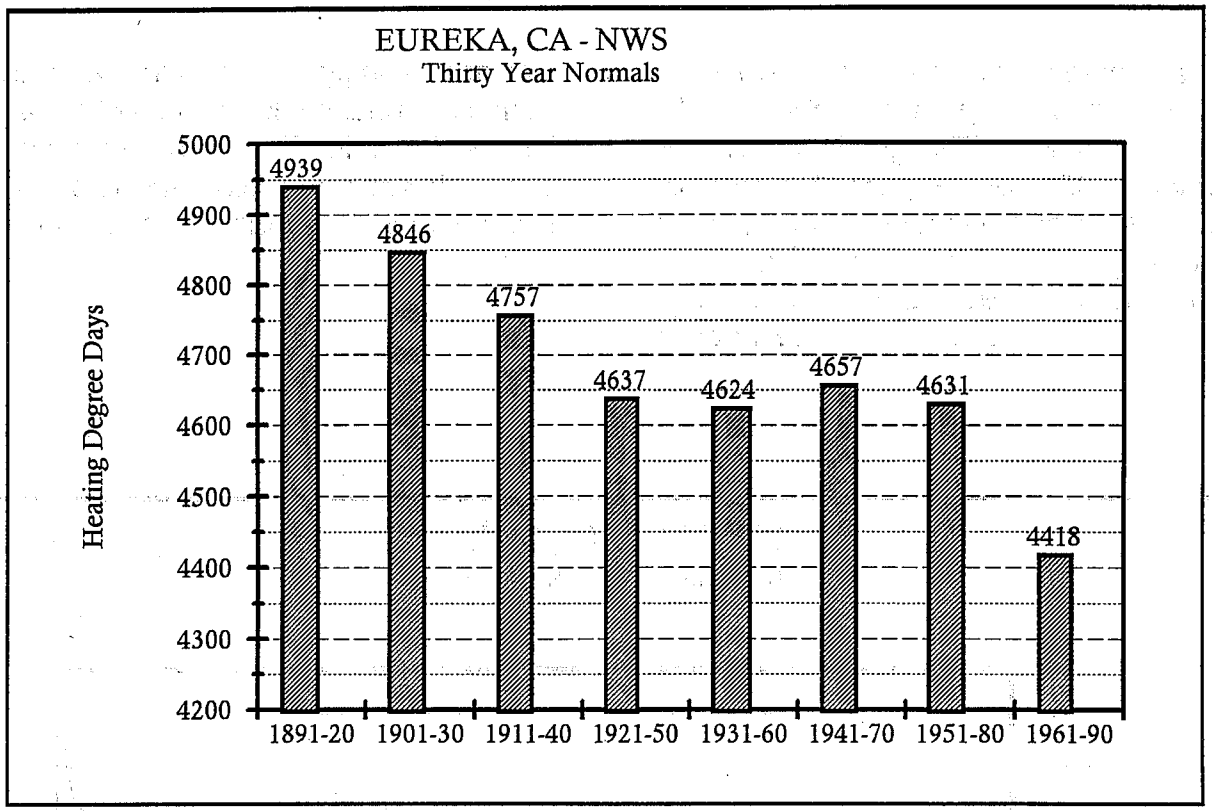


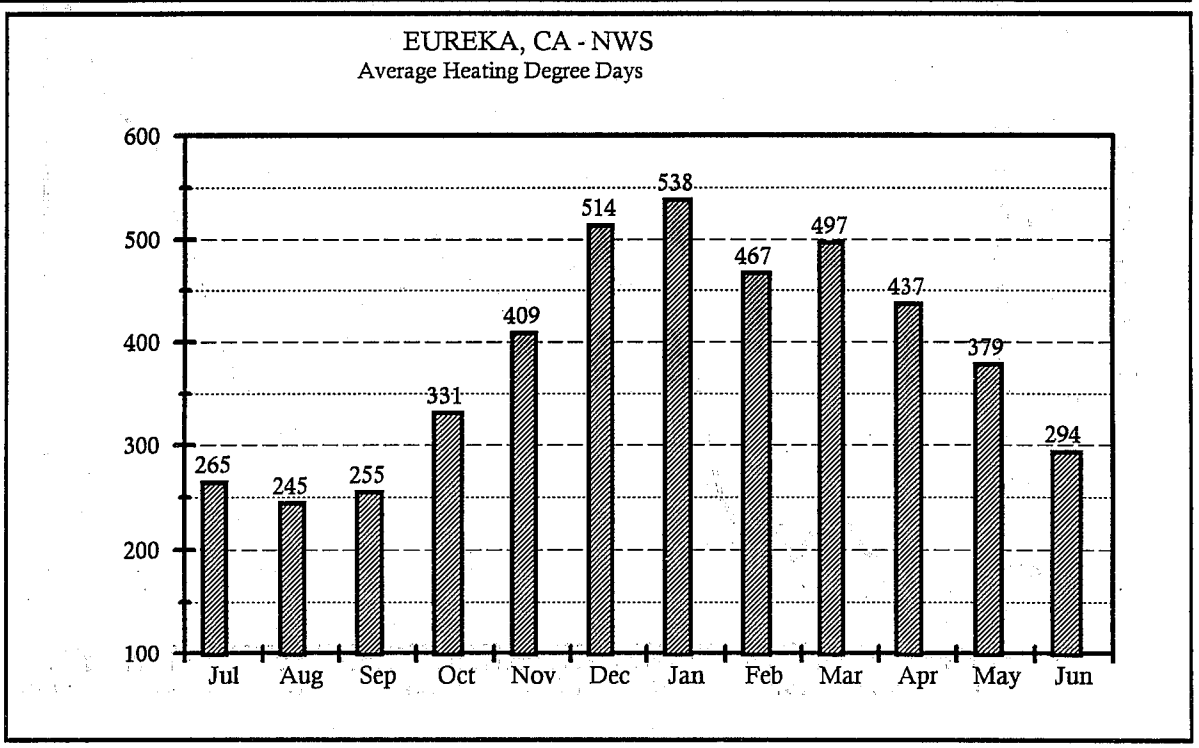
There has never been any "heat island", as such, in the Eureka area. The exposure is such that to the north, across the bay, is the north spit with small communities and no heavy industry.

The temperature variations have been quite large in the past as shown on the following page. The graph depicts the running 30-year average temperature normals, with the first point representing the 30-year normal based on the years 1887 through 1916, then 1888 through 1917, and onto the period 1967 through 1996.

Correspondingly, the drop in the annual number of heating degree days has been just as dramatic. The graph on the next page, shows how rapidly the drop is in the number of annual heating degree days.



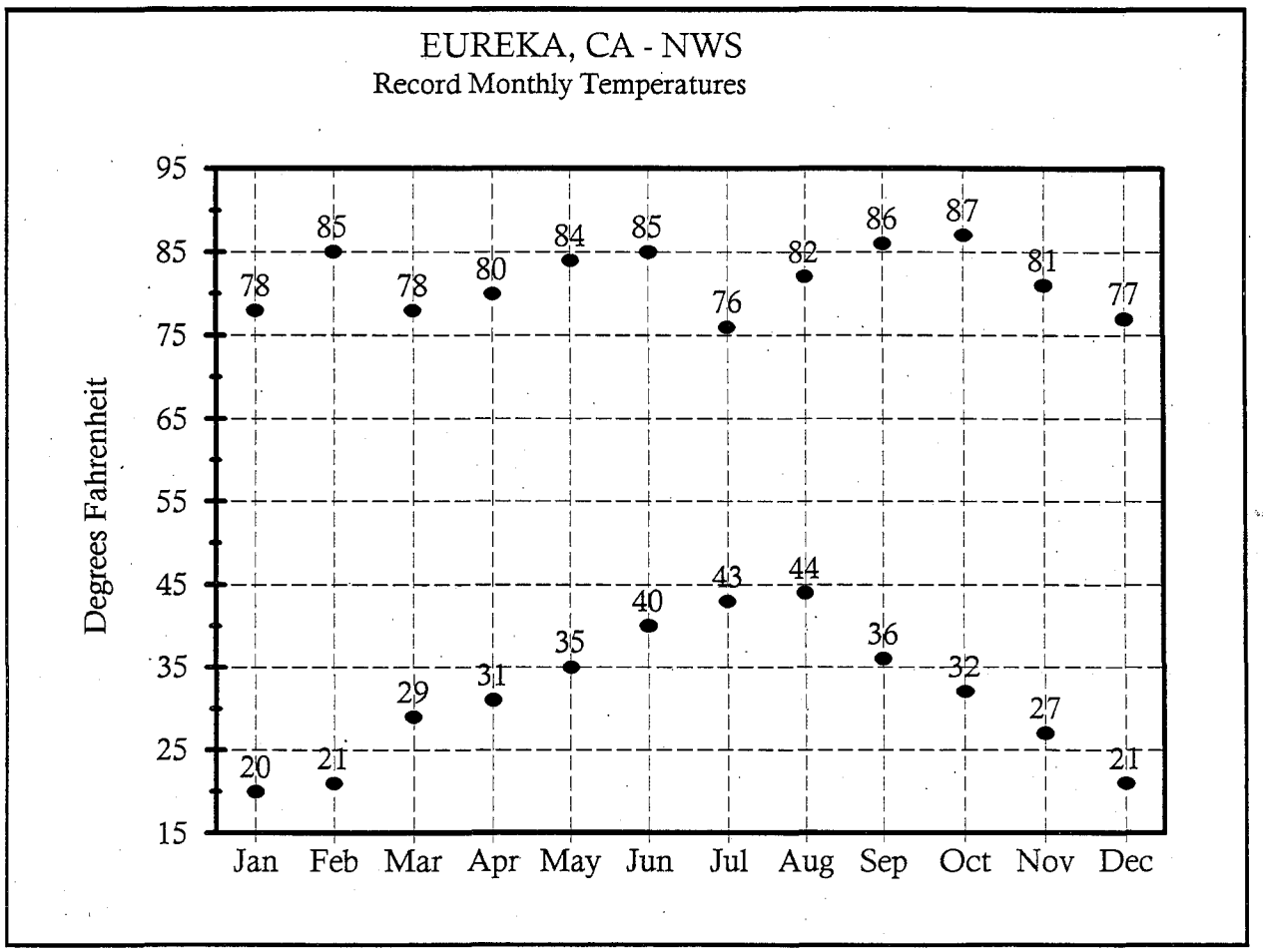

EUREKA, CA - NWS
Thirty Year Normals
Heating Degree Days
5000
4900
4800
4700
4600
4500
4400
4300
4200
4939
4846
4757
4637
4624
4657
4631
4418
1891-20
1901-30
1911-40
1921-50
1931-60
1941-70
1951-80
1961-90


EUREKA, CA - NWS
Average Heating Degree Days
600
500
400
300
200
100
265
245
255
331
409
514
538
467
497
437
379
294
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun

Eureka's average cooling degree days are less than 2! In the later periods beginning around the early 1980's, Eureka has seen more cooling degree days than at any other time in its history.

B. Temperature Records and Averages

The chart below illustrates the monthly temperature records.



The monthly temperature records, listing the daily averages, along with the daily record maximum, record low maximum, daily record minimum, and record high minimum temperatures, follow on pages 32 through 43.

The average monthly temperature records and averages are contained on pages 44 through 50.

EUREKA, CA - NWS

January
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	53.2	67	1928*	42	1924	40.8	28	1942	59	1928
02	53.1	66	1915	38	1950	40.4	29	1924	55	1902
03	53.4	63	1984*	41	1950	40.8	26	1950	54	1889
04	53.3	67	1986*	43	1919*	40.7	28	1910	60	1914
05	52.5	67	1914	41	1937*	40.6	28	1890	59	1914
06	53.3	69	1958	39	1888	40.6	27	1888	57	1948
07	54.3	67	1986*	40	1888	41.2	26	1888	55	1978
08	53.9	75	1943	39	1888	40.7	25	1937	56	1953
09	53.3	70	1919	41	1949	41.3	27	1888	55	1959
10	54.0	70	1895	43	1930	40.8	28	1949	53	1979*
11	53.6	71	1983	41	1930	40.5	27	1949*	54	1973*
12	54.5	78	1986	42	1930*	41.3	28	1949	56	1973
13	54.2	71	1986	40	1907	41.7	30	1949	55	1974*
14	53.2	65	1988	36	1888	42.3	20	1888	57	1905
15	53.1	67	1923	39	1888	41.8	23	1888	53	1909
16	53.4	70	1985	39	1888	41.7	27	1917*	55	1986*
17	53.5	67	1981*	43	1943	40.7	25	1888	56	1919
18	53.7	73	1981	40	1922	41.6	26	1943	63	1981
19	53.3	70	1981	41	1935	40.7	25	1922	54	1909
20	53.5	69	1981*	39	1937	40.7	26	1937	58	1981
21	53.9	75	1981	40	1962	41.5	25	1937	57	1981
22	54.3	70	1968	42	1949	41.5	29	1962	59	1970
23	54.0	65	1959*	43	1949	41.4	29	1969*	54	1970*
24	53.4	72	1992	41	1950	41.2	28	1949	55	1960
25	54.4	71	1889	40	1957	41.5	27	1887	56	1940
26	54.2	77	1888	38	1972	41.4	30	1957*	55	1888
27	53.3	73	1940	41	1922	41.2	28	1957	54	1967
28	53.8	70	1940	39	1916	41.2	29	1980	58	1940
29	54.3	70	1935	42	1969	41.7	28	1957	55	1986
30	53.8	69	1986	42	1917	41.6	28	1951	57	1986*
31	53.7	68	1991	40	1950	41.2	27	1923	56	1963
	Record Max			78	1986	Record Min			20	1888
	Record Lo Max			36	1888	Record Hi Min			63	1981
	Average Max			53.6		Average Min			41.2	

* Denotes last of several occurrences

EUREKA, CA - NWS

February
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	54.1	71	1958	43	1950	41.2	27	1950	62	1991
02	54.3	70	1898	40	1899	41.4	28	1979	62	1948
03	54.1	72	1963	38	1935	42.0	24	1979	56	1991*
04	54.6	78	1993	37	1899	42.6	24	1899	56	1941
05	54.1	73	1963	40	1899*	42.6	25	1899	55	1958*
06	54.9	69	1987	42	1909	42.1	27	1989	56	1960*
07	54.0	80	1987	42	1909	41.7	27	1989	54	1934*
08	53.9	71	1987	33	1900	41.7	27	1887	56	1919
09	53.9	70	1928	44	1894	42.0	28	1887	56	1961
10	54.3	68	1987	45	1959*	42.5	30	1894	53	1983*
11	54.5	72	1934	44	1949	42.2	29	1948	56	1947
12	54.5	72	1971	44	1949	42.0	28	1949	56	1987*
13	53.7	70	1943	42	1990	41.8	27	1903	56	1982
14	53.9	69	1943	44	1990*	42.1	27	1990	59	1986
15	55.1	68	1968*	43	1956	42.5	30	1911	59	1902
16	55.2	78	1943	43	1956	43.1	28	1889	57	1902
17	54.7	85	1930	42	1952	42.5	28	1889	57	1968*
18	54.3	70	1968	43	1917	42.0	31	1900*	55	1986*
19	54.4	72	1902	44	1897	42.1	28	1955*	55	1992
20	54.4	72	1964	43	1887	42.1	26	1887	52	1968*
21	54.5	70	1981	43	1887	42.3	31	1975*	54	1936
22	54.6	69	1981	46	1919	42.2	28	1887	57	1983
23	54.6	66	1958	45	1969*	42.1	32	1974*	54	1901
24	54.5	71	1991	44	1913	42.3	31	1913	56	1980
25	54.3	71	1992	44	1890	41.9	32	1918*	59	1980
26	54.8	71	1932	40	1890	42.4	32	1962	63	1980
27	54.8	70	1985	42	1955	42.8	27	1962*	56	1941*
28	54.8	72	1938	45	1971	42.6	32	1917*	54	1901
29	53.1	65	1988	45	1916*	42.4	31	1888	50	1928

Record Max	85 1930	Record Min	24 1899
Record Lo Max	33 1900	Record Hi Min	63 1980
Average Max	54.4	Average Min	42.2

* Denotes last of several occurrences

EUREKA, CA - NWS

March
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	54.5	72	1925	43	1966*	42.5	29	1929	52	1986*
02	55.3	68	1930	43	1896	42.8	30	1917	52	1972*
03	54.5	69	1987*	45	1894	42.7	29	1896	57	1987
04	54.8	76	1937	45	1918	42.6	31	1923	54	1987
05	54.1	75	1901	45	1956*	42.6	31	1955	55	1989
06	54.6	70	1608	46	1956*	42.7	32	1918*	58	1904
07	55.4	77	1905	45	1918	42.7	34	1964*	53	1986*
08	55.2	72	1934	45	1935*	42.8	33	1935	57	1983
09	54.5	71	1941*	44	1951	43.2	33	1888	55	1972
10	54.2	68	1989*	44	1922	42.9	30	1951	55	1989
11	54.4	68	1989	46	1950*	42.8	31	1890	52	1989*
12	54.5	70	1905	45	1906	42.8	32	1954*	58	1905
13	54.0	73	1926	45	1898	42.3	32	1952	54	1961
14	54.3	65	1926	45	1906	42.4	32	1923	53	1905
15	54.3	66	1940	45	1906	42.4	31	1895	55	1905
16	54.6	71	1959	47	1971*	42.7	32	1898	54	1921
17	54.8	71	1939	47	1911	43.3	32	1982*	52	1932*
18	55.0	73	1914	48	1953*	42.9	34	1898	52	1949*
19	55.4	78	1914	45	1894	42.7	35	1991*	51	1900
20	54.7	65	1958*	42	1909	42.7	34	1985*	54	1931
21	54.5	72	1968	45	1917	43.0	30	1897	53	1928
22	54.6	69	1915*	43	1904	43.0	30	1898	53	1928*
23	54.3	66	1896	44	1913	43.4	34	1898	56	1896
24	54.7	71	1969	44	1907	43.0	32	1913	54	1896
25	54.8	71	1969	43	1907	43.2	33	1924*	53	1974
26	55.3	75	1895	47	1907*	43.2	33	1972*	53	1992*
27	55.5	78	1930	49	1985*	43.2	32	1898	58	1934
28	55.5	74	1923	47	1967	43.4	32	1982*	58	1934
29	55.2	71	1987*	47	1936*	43.6	33	1897	56	1906
30	55.1	70	1987	44	1936	43.7	32	1897	53	1934
31	55.5	76	1987	47	1920	43.6	31	1896	54	1931

Record Max	78 1930*	Record Min	29 1929*
Record Lo Max	36 1888	Record Hi Min	63 1981
Average Max	54.7	Average Min	42.9

* Denotes last of several occurrences

EUREKA, CA - NWS

April
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	54.6	69	1915	48	1898	43.8	34	1976*	57	1915
02	55.0	69	1933	49	1964*	44.0	34	1976*	54	1992
03	55.3	78	1966	46	1921	44.2	34	1918	54	1954
04	55.7	75	1972	47	1895	44.0	34	1895	55	1972
05	55.7	69	1985	45	1929	44.1	31	1895	53	1963
06	55.5	69	1983	48	1929*	43.9	32	1929	52	1902
07	55.9	72	1928	45	1953	43.8	34	1929*	54	1926
08	56.2	70	1904	46	1922	44.1	33	1893	53	1926*
09	55.8	80	1989	47	1896	44.5	35	1933*	54	1992*
10	55.8	74	1904	46	1965	44.4	35	1903	54	1992
11	56.0	75	1904	46	1912	44.4	34	1909	56	1992
12	56.0	74	1947	47	1911	44.8	34	1911	55	1992
13	56.1	78	1947	48	1921	44.7	34	1911	55	1937
14	55.6	70	1947*	47	1917	44.5	35	1933*	56	1948
15	55.6	70	1925	48	1976*	44.7	34	1917	56	1925
16	55.2	75	1936	49	1968*	45.2	34	1975*	58	1992
17	55.2	67	1983	48	1966	44.8	34	1922	53	1919*
18	56.3	73	1918	49	1987*	44.5	35	1967	56	1965
19	55.8	79	1918	47	1955	44.7	34	1896	55	1965
20	56.2	75	1982	49	1971*	45.2	36	1970	53	1989
21	56.0	79	1982	48	1961	45.8	35	1971	56	1889
22	55.9	75	1982	48	1964	45.6	37	1968*	52	1940*
23	55.8	68	1888	49	1933	45.1	38	1960*	51	1987*
24	55.7	68	1913	50	1901*	45.2	37	1960*	53	1936
25	56.2	72	1897	50	1975*	45.0	37	1949*	52	1889
26	56.1	73	1891	48	1955*	44.9	35	1901	53	1979
27	55.9	68	1992	49	1970*	45.6	34	1955	55	1979
28	56.2	73	1992	50	1971*	45.6	37	1975*	54	1992
29	56.2	69	1992*	50	1968*	45.7	38	1967*	55	1992
30	56.2	66	1958	49	1899	45.9	37	1972*	54	1940
	Record Max			80	1989	Record Min			31	1895
	Record Lo Max			45	1929	Record Hi Min			58	1992
	Average Max			55.8		Average Min			44.7	

* Denotes last of several occurrences

EUREKA, CA - NWS

May
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	56.7	79	1940	49	1899	45.8	35	1887	54	1931
02	56.9	69	1918	50	1966*	45.9	36	1894	55	1936
03	57.2	73	1989	51	1959*	46.7	39	1950*	55	1989
04	56.9	76	1990	50	1975	46.9	39	1975	58	1891
05	56.9	70	1902	46	1964	46.8	40	1984*	56	1989*
06	57.3	78	1949	49	1933	46.7	37	1964	56	1902
07	57.2	82	1987	50	1945	46.8	38	1950	57	1900
08	56.9	74	1923	50	1894	47.0	39	1977*	55	1987
09	57.0	72	1988	50	1917	47.0	37	1983*	55	1915
10	57.2	83	1941	51	1917	46.9	38	1896	54	1987*
11	57.0	71	1960	50	1894	47.2	36	1887	55	1960
12	57.5	70	1941	50	1899	47.3	38	1896	59	1902
13	57.7	84	1939	50	1935*	47.8	40	1958*	57	1936
14	57.3	69	1993	50	1899*	47.8	39	1917	55	1907
15	57.7	73	1922	50	1899	47.7	41	1985*	54	1987
16	57.9	77	1956	51	1894	47.6	36	1894	53	1974*
17	57.7	72	1910	51	1974	48.0	41	1971*	55	1926
18	57.5	78	1993	50	1991	47.6	40	1974	55	1889
19	58.0	72	1942	49	1922	47.8	42	1982*	56	1926
20	57.8	72	1942	50	1909	48.3	40	1976	55	1926
21	57.3	73	1988	51	1946*	48.4	41	1918	55	1942
22	58.0	74	1985	51	1938*	48.4	40	1986	55	1926
23	57.7	67	1985*	51	1916	48.2	41	1935*	55	1985*
24	58.2	78	1890	52	1917*	48.8	42	1922*	56	1981
25	58.1	72	1986	51	1966*	48.6	38	1920	55	1934
26	58.1	75	1947	53	1943*	48.9	42	1973*	56	1958*
27	58.1	70	1988*	53	1965*	48.5	41	1929	55	1990*
28	58.2	75	1887	52	1971*	48.5	41	1977	55	1934
29	58.5	77	1993	42	1969	49.1	42	1979	55	1934*
30	58.2	70	1940*	51	1908	49.0	42	1898*	55	1969*
31	58.9	81	1970	52	1971*	49.4	42	1920	56	1940
	Record Max			84	1939	Record Min			35	1887
	Record Lo Max			46	1964	Record Hi Min			59	1902
	Average Max			57.6		Average Min			47.7	

* Denotes last of several occurrences

EUREKA, CA - NWS

June
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	58.8	72	1970	52	1911*	49.2	42	1920	57	1947*
02	58.7	71	1979	51	1908	49.0	42	1929	55	1960
03	58.9	75	1918	51	1965	48.8	41	1966*	55	1960*
04	59.6	75	1898	51	1965	49.4	42	1991	56	1964
05	59.3	77	1935	52	1887	49.8	43	1991*	57	1958
06	59.0	85	1903	51	1911	49.8	40	1899	57	1990
07	59.2	81	1903	53	1976*	49.9	42	1899*	60	1903
08	59.3	68	1988	53	1943*	49.9	44	1975	56	1981*
09	59.5	73	1993	53	1911	50.1	44	1897*	57	1958
10	59.1	78	1986	53	1974*	49.9	41	1916	57	1958
11	59.4	69	1936*	54	1917*	50.1	42	1894	56	1988*
12	59.0	66	1978	52	1911	50.3	41	1917	59	1888
13	59.5	74	1936	51	1955	50.3	43	1952	58	1936
14	60.2	75	1898	53	1911	50.3	45	1991*	59	1888
15	58.9	72	1936	54	1977*	50.7	42	1895	61	1936
16	60.0	74	1945*	53	1977	50.5	42	1895	60	1936
17	60.1	85	1945	54	1916*	50.4	42	1895	55	1992*
18	59.8	70	1945	54	1991*	50.2	43	1893	57	1986
19	60.1	69	1937	54	1991	50.7	44	1911*	58	1958
20	60.0	70	1900	54	1976*	50.8	46	1960*	58	1937
21	59.9	69	1941	52	1911	50.9	43	1916	57	1958*
22	60.0	69	1941	54	1975*	50.7	44	1923	57	1936*
23	60.2	70	1941	53	1965	50.9	45	1920*	57	1958*
24	60.7	80	1925	53	1965	51.0	44	1953*	59	1958
25	60.8	81	1982	55	1965*	51.3	43	1887	60	1973
26	60.7	71	1984*	55	1965*	51.3	40	1887	57	1973*
27	60.2	69	1990	54	1910*	51.4	41	1893	59	1992
28	60.3	72	1992	55	1920	51.2	45	1897*	58	1992
29	61.0	72	1942	53	1965	51.3	45	1949	57	1992*
30	60.4	72	1942	53	1965	51.5	45	1985	57	1937*
	Record Max			85	1945*	Record Min			40	1899*
	Record Lo Max			51	1965*	Record Hi Min			61	1936
	Average Max			59.8		Average Min			50.4	

* Denotes last of several occurrences

EUREKA, CA - NWS

July
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	60.5	73	1985	55	1965*	51.4	46	1973*	58	1958*
02	60.5	69	1983	53	1965*	51.5	47	1962*	57	1992*
03	60.6	76	1992	53	1965	51.5	46	1901	58	1992
04	60.6	76	1931	53	1919*	51.7	46	1921	58	1992
05	60.3	70	1983	54	1965	51.5	46	1977*	56	1990*
06	60.5	73	1954	55	1965*	51.5	46	1932*	57	1942*
07	60.7	72	1905	55	1914*	51.3	45	1924	58	1992*
08	61.0	75	1985	54	1932	51.6	46	1926*	59	1990*
09	60.8	76	1985	54	1932*	51.9	46	1894	58	1942
10	60.6	59	1990*	43	1954*	52.0	45	1887	58	1942
11	60.8	73	1990	53	1924	52.0	46	1950*	57	1987*
12	60.6	70	1988	55	1933*	52.1	45	1887	59	1947
13	60.7	73	1957	55	1912*	52.2	47	1887	58	1888
14	60.9	71	1947	55	1911	52.0	44	1887	57	1989*
15	61.1	68	1991*	54	1939	52.1	43	1887	58	1942
16	60.9	73	1888	54	1887	52.5	46	1887	60	1942
17	60.7	71	1989	56	1903*	52.0	46	1955*	59	1974
18	60.8	67	1992*	55	1887	51.8	46	1897*	59	1992
19	60.9	73	1990	55	1907*	52.2	46	1984	59	1992
20	60.5	69	1992*	54	1919*	52.0	46	1897	58	1992
21	61.0	69	1901	55	1960*	52.3	47	1962*	60	1992
22	60.9	71	1945	56	1933*	52.2	47	1962*	59	1993
23	60.8	66	1992*	55	1933*	52.2	46	1887	57	1987*
24	60.6	69	1994	54	1920	52.4	47	1896	58	1994
25	60.7	70	1984	55	1971	52.3	46	1978	57	1943*
26	60.8	70	1947	55	1954*	52.0	46	1919	58	1947*
27	60.3	70	1983	54	1921*	52.1	46	1914	61	1947
28	60.2	69	1987	53	1960*	52.3	48	1986*	58	1983*
29	60.3	68	1983	55	1954*	52.3	47	1904	59	1940
30	60.4	69	1947	54	1954	52.3	48	1945	59	1940
31	60.7	70	1896	54	1954*	52.3	49	1975*	60	1947
	Record Max			76	1992*	Record Min			43	1887
	Record Lo Max			53	1965*	Record Hi Min			61	1947
	Average Max			60.7		Average Min			52.0	

* Denotes last of several occurrences

EUREKA, CA - NWS

August
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	60.8	69	1993*	54	1953	52.4	48	1897	57	1985*
02	60.5	69	1993*	54	1922	52.6	48	1897	60	1947
03	60.8	70	1964	54	1922	52.5	48	1952*	59	1947
04	60.9	70	1983	55	1955*	52.3	48	1952*	57	1994*
05	60.8	71	1934	54	1955*	52.2	47	1955*	59	1934
06	60.8	71	1992*	55	1908	52.1	48	1955*	59	1934
07	61.0	82	1991	55	1980*	52.5	47	1975	62	1991
08	61.0	73	1991	54	1917	52.8	46	1895	59	1983
09	60.9	68	1993*	55	1955*	52.5	47	1922*	57	1992*
10	60.9	75	1970	55	1954	52.7	48	1931	58	1941
11	60.8	71	1985*	54	1893	52.7	48	1901	60	1915
12	61.1	76	1983	54	1975	52.6	47	1895*	58	1930*
13	61.4	70	1983	54	1975	52.8	46	1895	59	1896
14	61.3	70	1990	54	1917*	52.7	47	1928*	60	1994
15	61.0	69	1930	54	1955*	52.5	46	1910	59	1930
16	61.5	72	1990*	55	1931*	52.3	44	1935	59	1891
17	61.5	71	1923	54	1910	52.5	47	1946*	59	1990*
18	61.7	71	1986*	54	1955	52.5	46	1916	60	1926
19	61.2	70	1923	54	1955*	52.5	46	1947	60	1891
20	61.8	75	1964	54	1907	52.6	48	1980*	59	1994*
21	61.6	73	1971	53	1934	52.8	47	1910*	61	1923
22	61.9	72	1891	55	1916*	52.6	46	1933	59	1923
23	61.9	72	1950	54	1928	52.8	47	1973	60	1923
24	61.9	72	1978*	53	1933	52.7	46	1910	60	1977*
25	61.7	70	1965	54	1980*	52.5	47	1993*	61	1968
26	61.9	77	1894	55	1955*	53.1	46	1908*	61	1990
27	62.5	79	1894	54	1955	52.8	45	1908*	63	1894
28	61.8	72	1991*	53	1955	52.7	46	1895	61	1991
29	62.1	72	1991*	54	1928	52.6	47	1897	60	1991
30	62.1	82	1968	53	1899	52.5	47	1908	60	1968
31	62.2	72	1896	54	1951*	52.3	45	1890	59	1894
	Record Max			82	1991*	Record Min			44	1935
	Record Lo Max			53	1955*	Record Hi Min			63	1894
	Average Max			61.4		Average Min			52.6	

* Denotes last of several occurrences

EUREKA, CA - NWS

September
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	61.8	75	1979	55	1951	52.2	45	1973*	60	1941
02	61.5	75	1979	53	1909*	52.3	46	1913*	62	1979
03	61.8	73	1991	53	1910	52.1	46	1973	60	1979*
04	61.9	76	1975	53	1909	52.1	46	1914*	59	1927
05	61.8	72	1979	53	1898	52.1	43	1892	59	1927*
06	61.8	85	1958	53	1898	52.0	44	1901	58	1990*
07	62.3	73	1979	54	1892	51.5	45	1895	58	1958*
08	62.3	75	1969*	53	1890	51.6	44	1910	62	1979
09	61.8	76	1976*	55	1955*	51.1	45	1920*	60	1958
10	61.9	75	1922	53	1890	51.2	44	1889	58	1990*
11	61.9	81	1924	54	1977	51.2	44	1889	58	1990*
12	61.5	85	1979	54	1933*	51.1	41	1889	60	1963
13	61.7	75	1979	53	1933	50.9	40	1889	60	1940
14	61.9	78	1952	52	1910	50.9	42	1889	58	1979*
15	62.4	74	1909*	54	1969*	50.8	39	1895	59	1957
16	62.1	75	1927	52	1887	51.0	44	1969	58	1981
17	61.8	82	1897	54	1901*	51.1	44	1965	62	1914
18	61.8	76	1946	52	1899	50.5	42	1988*	59	1990
19	61.9	80	1984	53	1899	50.9	43	1908	60	1973
20	62.0	86	1983	52	1944	50.5	42	1924	60	1939
21	61.9	85	1939	51	1890	50.0	39	1895	60	1921
22	61.3	74	1939	52	1951	50.0	36	1895	57	1983*
23	61.3	76	1946	53	1887	50.0	42	1913	60	1990
24	61.6	83	1964	54	1965*	50.3	43	1984	59	1990
25	61.5	78	1970	52	1913	50.1	41	1934	58	1990*
26	61.8	83	1936	51	1955	50.7	42	1955	62	1957
27	61.7	75	1970*	51	1899	50.4	42	1986	58	1990
28	61.4	79	1945	52	1960	50.1	44	1974*	57	1990
29	61.2	77	1966	51	1916	49.8	44	1961*	57	1966*
30	61.0	80	1992	52	1934	49.5	41	1946	58	1951

Record Max	86 1983	Record Min	36 1895
Record Lo Max	51 1955*	Record Hi Min	62 1979*
Average Max	61.8	Average Min	50.9

* Denotes last of several occurrences

EUREKA, CA - NWS

October
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	60.7	77	1902	52	1936	49.7	40	1893	60	1951
02	60.7	80	1986	53	1936*	49.2	41	1891	57	1951
03	61.0	76	1991*	53	1945*	49.1	40	1890	49	1948
04	61.8	82	1917	52	1932*	49.1	41	1916	58	1917
05	61.1	84	1987*	52	1921*	48.9	38	1916	56	1920*
06	61.7	80	1992	51	1915	49.4	40	1915	60	1960
07	61.3	76	1992*	52	1921*	49.1	41	1970*	56	1893
08	60.7	73	1957	52	1917*	49.6	39	1949	57	1947*
09	60.7	77	1982*	52	1917*	49.4	39	1985	57	1963*
10	61.6	82	1991	53	1933*	49.4	38	1924	62	1904
11	60.4	79	1939	51	1972*	49.1	38	1924	57	1993
12	60.5	76	1976	52	1952*	48.9	40	1912	57	1984
13	60.0	79	1978	48	1912	48.2	40	1985*	56	1921
14	60.7	73	1963*	51	1917*	48.5	39	1985	60	1962
15	60.5	75	1926	50	1909	48.0	39	1890	58	1947
16	60.1	77	1960	50	1970*	47.7	40	1934	57	1926
17	59.9	74	1967	50	1916	48.0	38	1993*	58	1947*
18	59.7	77	1964	50	1949	47.4	37	1908	57	1958
19	60.0	78	1913	49	1949	47.7	34	1949	58	1950
20	60.4	75	1925*	49	1916	48.1	35	1949	57	1992
21	60.3	72	1925*	48	1916	47.9	36	1908	61	1982
22	60.0	75	1965	51	1955*	48.0	37	1935	59	1982
23	59.4	80	1965	49	1949*	47.6	37	1935	58	1977
24	59.9	74	1986	50	1913*	47.9	38	1971*	59	1889
25	60.2	79	1986	51	1899	47.5	38	1919	58	1986
26	59.9	87	1993	49	1936	47.3	38	1970*	56	1986
27	59.3	81	1993	49	1935*	47.3	35	1919	57	1891
28	58.6	77	1944	48	1923*	46.9	33	1971	57	1987
29	58.9	73	1939	48	1935	46.7	32	1971	62	1944
30	59.1	73	1949	48	1935*	46.8	35	1935	58	1983
31	59.0	74	1966	51	1890*	46.8	34	1935	58	1924
	Record Max			87	1993	Record Min			32	1971
	Record Lo Max			48	1935*	Record Hi Min			62	1944*
	Average Max			60.3		Average Min			48.2	

* Denotes last of several occurrences

EUREKA, CA - NWS

November
Maximum & Minimum Temperatures
1887 Through 1996

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	59.7	72	1986	49	1935	46.7	38	1984	61	1924
02	59.0	75	1986	44	1935	46.5	31	1935	59	1983
03	60.0	77	1929*	46	1935	46.8	29	1935	62	1891
04	59.0	72	1891*	50	1890	46.0	33	1935	59	1962
05	58.5	74	1934	51	1920*	46.0	36	1971*	58	1963
06	58.1	71	1980*	50	1930*	45.9	35	1920	58	1958
07	59.1	70	1987*	50	1908	46.0	34	1948	56	1980*
08	58.9	69	1987*	49	1935*	46.3	32	1919	59	1973
09	58.3	77	1950	48	1933	46.1	36	1982	58	1899
10	57.9	70	1981*	46	1911	45.9	36	1982	57	1973
11	58.1	81	1904	47	1985	45.2	31	1985	55	1984*
12	58.5	73	1967*	46	1978	45.1	31	1985	59	1904
13	58.3	76	1933	44	1919	45.0	32	1978	59	1941
14	57.2	71	1970	47	1955	44.5	31	1978	62	1896
15	57.5	71	1965	45	1955	44.5	30	1964*	56	1927*
16	57.6	74	1895	48	1958	44.8	32	1964*	59	1896
17	57.6	71	1951	49	1953*	44.6	33	1975	58	1920
18	57.5	71	1912	46	1933	44.3	31	1975	58	1966*
19	57.2	78	1987	46	1977*	44.0	30	1977	58	1926
20	56.5	73	1926	47	1946	44.1	34	1977*	58	1926
21	57.1	70	1930*	47	1936	43.8	34	1985*	58	1926
22	57.4	74	1930	49	1931	44.5	30	1931	59	1909
23	57.1	71	1930	47	1985	44.4	32	1895	58	1970
24	56.4	67	1974	47	1936	43.9	31	1993	56	1970
25	55.9	70	1977	46	1961	43.8	33	1993	54	1977*
26	56.2	73	1959*	45	1896	43.4	34	1985*	57	1899
27	56.1	68	1943*	41	1905	43.3	27	1896	58	1899
28	56.4	70	1901	47	1906*	43.6	30	1896	58	1941*
29	56.6	70	1941	44	1929	44.2	29	1896	57	1941
30	56.4	72	1988	46	1967	44.4	31	1985*	57	1966*

Record Max	81 1904	Record Min	27 1896
Record Lo Max	41 1905	Record Hi Min	62 1896*
Average Max	57.7	Average Min	44.9

* Denotes last of several occurrences

EUREKA, CA - NWS

December
Maximum & Minimum Temperatures
1886 Through 1995

Dt	Avg Max	Hi Max	Year	Lo Max	Year	Avg Min	Lo Min	Year	Hi Min	Year
01	56.2	68	1939	46	1935	43.9	32	1923	57	1901
02	55.9	70	1907	47	1983*	44.1	34	1897	57	1987
03	56.1	71	1979	44	1909	43.2	32	1909	62	1979
04	55.9	69	1979	44	1909	42.7	32	1948*	54	1989
05	55.0	67	1934	42	1972	43.1	30	1972	55	1970
06	55.4	66	1934	44	1972	42.8	32	1956*	54	1970
07	55.0	65	1979	40	1972	42.3	28	1978	56	1939
08	55.6	66	1979*	34	1972	42.4	25	1972	59	1902
09	54.8	66	1981	37	1972	42.8	21	1972	59	1937
10	55.7	69	1973	38	1932	42.1	25	1932	59	1937
11	55.0	69	1973	38	1932	41.7	24	1932	55	1966
12	54.6	70	1944	40	1919	42.0	22	1932	57	1888
13	54.4	67	1929	45	1948*	41.3	26	1919	59	1929
14	54.3	70	1891	45	1932	41.4	29	1926	57	1903
15	55.0	70	1891	46	1948*	41.7	29	1932	56	1903
16	54.5	66	1950	44	1924	41.9	29	1965	55	1888
17	54.9	72	1981*	39	1924	42.1	29	1924	58	1969
18	54.6	69	1979	41	1924	41.8	24	1924	56	1941
19	54.5	65	1937	40	1968	42.1	28	1978	56	1969*
20	54.5	71	1977	37	1990	42.1	29	1968	58	1940
21	53.9	67	1940	34	1990	41.7	23	1990	59	1955
22	54.2	65	1964	40	1990	41.2	22	1990	59	1964
23	54.0	68	1993	40	1983	41.8	27	1990	56	1919
24	54.1	66	1980*	42	1990	41.5	28	1990	58	1980
25	54.1	68	1980	41	1916	41.2	30	1924	56	1902
26	54.2	75	1980	44	1985*	41.6	30	1988	59	1917
27	54.1	67	1917	46	1988*	41.7	30	1954	56	1917
28	53.5	63	1937	42	1911	41.5	32	1955	56	1945*
29	53.6	65	1979*	43	1978	41.1	30	1955*	57	1983
30	53.3	77	1963	43	1964	40.8	27	1978	54	1939
31	53.0	70	1886	42	1964	40.1	28	1918	54	1939
	Record Max			77	1963	Record Min			21	1972
	Record Lo Max			34	1972	Record Hi Min			62	1979
	Average Max			54.6		Average Min			42.0	

* Denotes last of several occurrences

EUREKA, CA - NWS

	January Average Temperatures				February Average Temperatures			
	1887 Through 1996							
Dt	Avg	Max	Yr(s)	Min Yr(s)	Avg	Max	Yr(s)	Min Yr(s)
01	47.3	63	1928	36 1924	47.8	61	1991	35 1950
02	47.0	58	1902	35 1950	48.1	63	1963	36 1899
03	47.4	58	1889	34 1950	48.0	64	1963	37 1989*
04	47.3	64	1914	36 1910	48.9	68	1993	31 1899
05	46.8	63	1914	35 1894*	48.6	62	1963	33 1899
06	47.2	61	1948	33 1888	49.1	60	1960	36 1887
07	48.0	61	1978	33 1888	48.0	62	1987	38 1989*
08	47.6	60	1986*	34 1937*	48.1	61	1987*	36 1939
09	47.6	58	1959*	35 1888	48.0	59	1961	38 1923
10	47.7	60	1895	36 1949*	48.6	59	1987	38 1894
11	47.3	59	1959*	34 1930	48.7	61	1947	40 1949
12	48.2	60	1980*	38 1950*	48.6	61	1971	37 1949
13	48.1	60	1986*	37 1907	48.0	60	1981	36 1949
14	48.0	60	1905	28 1888	48.0	59	1986*	36 1990
15	47.7	58	1974*	31 1888	49.0	64	1902	39 1990*
16	47.8	59	1986	35 1888	49.4	65	1943	38 1956*
17	47.4	60	1971	36 1922*	49.1	67	1930	39 1952*
18	47.8	68	1981	35 1943	48.5	62	1968	39 1917*
19	47.2	61	1981	35 1922	48.5	60	1982	40 1897
20	47.3	64	1981	33 1937	48.5	60	1982	36 1887
21	47.9	66	1981	34 1962	48.7	60	1905	38 1894
22	48.2	63	1970	38 1962	48.6	61	1983*	38 1887
23	48.0	60	1905	36 1949	48.6	59	1901	40 1913
24	47.6	60	1960	36 1949*	48.7	62	1980	38 1913
25	48.3	60	1940*	38 1957*	48.3	63	1980	40 1971*
26	48.0	66	1888	35 1972	48.9	67	1980	36 1962
27	47.5	62	1940	36 1957	49.0	59	1988*	36 1962
28	47.7	64	1940	36 1916	48.9	61	1988*	40 1917
29	48.2	60	1940*	37 1980*	48.0	57	1928	40 1916*
30	47.9	63	1986*	37 1923*				
31	47.6	61	1963*	34 1950				
	High Average			68 1981	High Average			67 1980*
	Low Average			28 1888	Low Average			31 1899
	Monthly Average			47.6	Monthly Average			46.9

* Denotes last of several occurrences

EUREKA, CA - NWS

	March Average Temperatures				April Average Temperatures			
	1887 Through 1996							
Dt	Avg	Max	Yr(s)	Min Yr(s)	Avg	Max	Yr(s)	Min Yr(s)
01	48.7	59	1925	38 1896	49.3	63	1915	42 1976*
02	48.8	58	1987	38 1966*	49.5	60	1914	43 1976*
03	48.9	63	1987	38 1896	49.9	62	1966	41 1921
04	49.0	62	1987	39 1918	50.0	65	1972	40 1895
05	48.6	62	1901	40 1956	50.0	58	1974*	40 1929
06	48.9	61	1904	40 1956	49.8	58	1902	40 1929
07	49.3	64	1905	40 1918	49.9	62	1926	40 1953*
08	49.2	64	1983	39 1935	50.2	60	1926	41 1933
09	49.1	61	1972*	39 1951	50.2	66	1989	42 1953*
10	48.8	62	1989	39 1951*	50.2	62	1904	42 1903
11	48.9	60	1989	40 1950*	50.3	64	1904	42 1922*
12	48.9	64	1905	40 1917*	50.5	62	1992	40 1911
13	48.4	60	1926	40 1952	50.5	66	1947	42 1911
14	48.6	59	1905	40 1913*	50.2	62	1948	42 1917
15	48.6	59	1940	39 1906	50.2	63	1925	41 1917
16	48.9	59	1921	40 1898	50.5	62	1992*	42 1917
17	49.3	61	1939	40 1898	50.1	58	1908	42 1975
18	49.2	61	1978	42 1898	50.4	60	1989*	42 1922
19	49.3	64	1914	40 1894	50.4	66	1918	43 1912
20	48.9	58	1958*	39 1909	50.8	60	1931	44 1970*
21	48.9	60	1928	38 1897	50.9	64	1982	42 1961
22	49.1	61	1896	40 1904*	50.8	62	1982	44 1964
23	49.1	61	1896	40 1913	50.6	58	1888	45 1974*
24	49.1	58	1989*	39 1913	50.7	59	1992	45 1974*
25	49.3	60	1974	40 1907	50.7	60	1897	45 1975
26	49.5	63	1895	41 1972*	50.7	60	1992*	42 1955*
27	49.7	65	1930	43 1907*	50.9	61	1992*	42 1955
28	49.8	62	1930	42 1967	51.0	64	1992	44 1967*
29	49.8	62	1906	40 1897	51.1	62	1992	45 1954*
30	49.7	59	1987	40 1936	51.3	60	1940	45 1972*
31	49.8	63	1987	40 1917				
	High Average			65 1930	High Average			66 1989*
	Low Average			38 1966*	Low Average			40 1929
	Monthly Average			49.0	Monthly Average			50.3

* Denotes last of several occurrences

EUREKA, CA - NWS

	May Average Temperatures				June Average Temperatures			
	1887 Through 1996							
Dt	Avg	Max	Yr(s)	Min Yr(s)	Avg	Max	Yr(s)	Min Yr(s)
01	51.3	65	1940	44 1899	54.1	63	1888	48 1973*
02	51.4	62	1936	45 1950*	54.0	61	1988*	48 1908
03	51.9	64	1989	45 1950	54.0	62	1987*	48 1917*
04	51.8	64	1990	45 1975	54.6	64	1964	49 1991*
05	51.8	62	1989*	44 1964	54.6	66	1935	49 1914*
06	52.0	64	1949*	44 1964	54.5	68	1903	46 1899
07	51.9	68	1987	45 1950*	54.6	70	1903	49 1899
08	51.9	63	1987	46 1922*	54.7	61	1981	50 1919*
09	51.9	63	1988	45 1887	54.9	61	1958	50 1955*
10	52.1	68	1941	45 1887	54.6	65	1986	48 1916
11	52.1	63	1960	44 1887	54.8	62	1936*	50 1952*
12	52.4	61	1941	46 1909*	54.8	62	1936*	49 1901
13	52.8	67	1939	48 1909*	55.0	66	1936	49 1955
14	52.5	62	1993	47 1917*	55.3	66	1936	50 1911*
15	52.7	60	1922*	46 1899	55.4	66	1936	48 1895
16	52.8	64	1956	44 1894	55.4	67	1936	48 1895
17	52.9	60	1910	47 1974	55.4	68	1945	50 1949*
18	52.6	66	1993	47 1974*	55.2	62	1986	49 1911
19	52.9	64	1993*	48 1950*	55.5	63	1937	50 1911
20	53.0	63	1993*	48 1909*	55.5	64	1937	51 1955
21	52.8	64	1988	47 1960	55.6	62	1941	50 1916*
22	53.2	62	1985*	48 1909	55.4	61	1986*	50 1904*
23	52.9	61	1985	46 1916	55.8	63	1941	50 1920
24	53.5	65	1890	48 1918	55.9	66	1925	50 1920
25	53.3	63	1986	47 1920	56.2	68	1982	49 1887
26	53.5	62	1947	49 1920*	56.1	63	1982	47 1887
27	53.3	63	1988	48 1929*	56.0	63	1992	50 1887
28	53.4	62	1993*	49 1977*	55.8	65	1992	51 1898*
29	53.8	67	1993	49 1979*	56.2	63	1992	51 1949
30	53.6	62	1993*	49 1971*	56.1	64	1942*	51 1887
31	54.1	66	1970	49 1908				
	High Average			68 1987*	High Average			70 1903
	Low Average			44 1964*	Low Average			46 1899
	Monthly Average			52.6	Monthly Average			55.2

* Denotes last of several occurrences

EUREKA, CA - NWS

	July Average Temperatures				August Average Temperatures			
	1887 Through 1996							
Dt	Avg	Max	Yr(s)	Min Yr(s)	Avg	Max	Yr(s)	Min Yr(s)
01	56.3	64	1942	52 1973*	56.9	63	1983*	53 1969*
02	56.3	62	1992*	51 1898	56.8	63	1983*	52 1978*
03	56.3	67	1992	51 1965	56.8	64	1947	53 1978*
04	56.4	65	1931	51 1919*	56.9	64	1983	53 1955*
05	56.1	63	1990*	52 1965*	56.7	65	1934	51 1955
06	56.0	62	1992*	51 1914	56.7	64	1992	52 1908
07	56.2	63	1992*	52 1938*	57.0	72	1991	52 1921*
08	56.5	65	1905	51 1918*	57.1	65	1991	51 1917
09	56.6	66	1985	52 1970*	56.9	62	1992*	51 1895
10	56.5	63	1942	51 1912*	57.0	64	1983*	53 1901*
11	56.6	65	1990	51 1924*	57.0	63	1992*	52 1917*
12	56.6	64	1947	51 1887	57.1	66	1983	52 1975*
13	56.8	64	1982*	52 1912*	57.4	64	1994*	52 1975
14	56.7	64	1947	50 1887	57.3	63	1990	52 1917*
15	56.8	62	1958*	50 1887	57.0	64	1930	52 1955*
16	56.9	64	1984*	50 1887	57.1	64	1984	51 1935
17	56.6	65	1989*	51 1887	57.2	64	1990*	52 1910
18	56.5	63	1992	51 1887	57.3	65	1891	52 1955*
19	56.8	65	1990	52 1919*	57.1	65	1891	51 1955
20	56.4	64	1992	51 1917*	57.4	66	1972	52 1907
21	56.8	64	1992	52 1962*	57.4	67	1971	51 1934
22	56.8	65	1945	52 1962	57.5	64	1923*	52 1933*
23	56.7	62	1987	52 19421*	57.6	64	1950	51 1917
24	56.8	62	1992	52 1960*	57.5	65	1968	51 1933
25	56.7	63	1983	52 1971	57.3	65	1965	51 1910
26	56.5	64	1947	52 1933*	57.7	67	1968	51 1908
27	56.3	63	1947	52 1924*	57.8	71	1894	51 1955*
28	56.4	63	1983	52 1921	57.5	67	1979	51 1955
29	56.4	64	1940	52 1921*	57.7	66	1991*	52 1944*
30	56.5	64	1947	52 1954*	57.5	71	1968	51 1928
31	56.6	64	1947	52 1954	57.5	65	1991*	52 1951*
	High Average			67 1992	High Average			72 1991
	Low Average			50 1887	Low Average			51 1955*
	Monthly Average			56.5	Monthly Average			57.2

* Denotes last of several occurrences

EUREKA, CA - NWS

	September Average Temperatures				October Average Temperatures			
	1887 Through 1996							
Dt	Avg	Max	Yr(s)	Min Yr(s)	Avg	Max	Yr(s)	Min Yr(s)
01	57.2	66	1979	53 1969*	55.2	63	1952*	47 1954
02	57.2	69	1979	51 1908	55.0	68	1980	49 1916
03	57.3	66	1913	52 1973*	55.1	63	1991*	49 1908*
04	57.2	66	1913	51 1973	55.5	70	1917	49 1916
05	57.2	65	1979	51 1898	55.0	69	1987	47 1913
06	57.2	70	1958	51 1898	55.5	66	1987*	46 1915
07	57.2	65	1979*	52 1950*	55.1	64	1943	48 1909*
08	57.2	67	1979	51 1890	55.1	63	1957	47 1949
09	56.7	68	1956	52 1948*	55.0	63	1983*	49 1968*
10	56.7	64	1922	51 1948*	55.4	69	1991	46 1924
11	56.7	66	1963	50 1889	54.6	66	1939	47 1924
12	56.5	71	1979	49 1889	54.7	65	1901	47 1912
13	56.5	67	1979	49 1889	54.0	66	1978	46 1912*
14	56.6	65	1952	48 1910	54.0	66	1924	46 1889
15	56.8	64	1888	50 1970	53.9	66	1926	47 1934*
16	56.9	63	1971*	50 1887	53.9	65	1960*	47 1971*
17	56.7	69	1914	50 1887	53.9	64	1940	46 1908*
18	56.4	65	1977	50 1909*	53.5	64	1947*	44 1949
19	56.7	69	1984	51 1971*	53.7	65	1950	42 1949
20	56.5	70	1983	49 1944	54.2	63	1904	44 1949
21	56.2	73	1939	48 1895	54.0	65	1982	45 1908
22	55.8	65	1939	48 1887	54.0	67	1982	47 1961*
23	55.8	66	1946	49 1887	53.5	68	1965	46 1975*
24	56.1	68	1964	51 1988*	53.8	66	1986	45 1971*
25	56.1	64	1954*	48 1908	53.7	69	1986	46 1919
26	56.5	67	1936	47 1955	53.4	70	1993	46 1970*
27	56.3	65	1958	50 1935	53.2	63	1987*	43 1919
28	56.0	65	1889	50 1970	52.7	65	1944	41 1971
29	55.8	67	1966	49 1970	52.7	67	1944	41 1971
30	55.4	63	1953	50 1950*	52.8	65	1934	42 1935
31					52.8	62	1966*	44 1935
	High Average			73 1939	High Average			70 1993*
	Low Average			47 1955	Low Average			41 1971
	Monthly Average			56.6	Monthly Average			54.2

* Denotes last of several occurrences

EUREKA, CA - NWS

	November Average Temperatures				December Average Temperatures			
	1887 Through 1996							
Dt	Avg	Max	Yr(s)	Min Yr(s)	Avg	Max	Yr(s)	Min Yr(s)
01	53.1	65	1924	47 1951*	50.3	61	1901	43 1935
02	52.7	63	1983	38 1935	50.2	60	1987*	43 1976
03	53.3	67	1891	38 1935	49.9	67	1979	38 1909
04	52.4	65	1891	42 1935	49.6	60	1989*	38 1909
05	52.2	65	1934	44 1961*	49.3	58	1982*	36 1972
06	51.9	64	1980	42 1961	49.3	58	1973*	39 1972*
07	52.5	63	1987	43 1948	48.9	60	1939	36 1972
08	52.5	63	1987*	42 1961*	49.1	62	1902	30 1972
09	52.2	63	1950	44 1915	48.9	62	1937	29 1972
10	51.9	63	1981	42 1985*	49.0	64	1937	32 1932
11	51.6	65	1904	40 1985*	48.6	59	1966	31 1932
12	51.8	66	1904	40 1978	48.6	61	1966*	33 1932
13	51.6	63	1941*	40 1978	48.0	63	1929	36 1919
14	50.9	66	1896	41 1964*	48.1	62	1962	38 1932*
15	51.0	62	1965*	38 1955	48.5	59	1950*	39 1948
16	51.2	62	1908*	34 1961	48.5	59	1950*	39 1984*
17	51.0	62	1888	36 1961	48.8	61	1931	34 1924
18	50.9	64	1966	40 1977	48.6	60	1979	33 1924
19	50.6	65	1987	38 1977	48.7	60	1950*	36 1968
20	50.3	66	1926	36 1961	48.6	60	1972*	34 1990
21	50.4	63	1926	35 1961	48.1	62	1955	29 1990
22	51.0	62	1926	43 1931	48.0	62	1964	31 1990
23	50.9	60	1970*	43 1966*	48.1	60	1919	35 1990
24	50.1	60	1950	41 1961	48.1	62	1980	37 1990
25	49.9	62	1977	40 1961	47.9	61	1980*	38 1916*
26	49.7	62	1904	41 1985*	48.2	63	1980	38 1988
27	49.6	60	1901*	36 1896	48.1	62	1917	40 1966*
28	50.0	64	1941*	39 1896	47.8	59	1945*	38 1911
29	50.4	64	1941	41 1929*	47.7	61	1983	38 1990
30	50.3	61	1925	42 1967*	47.2	63	1963	36 1978*
31					46.7	59	1939*	37 1964*
	High Average			67 1891	High Average			67 1979
	Low Average			34 1961	Low Average			29 1972
	Monthly Average			51.3	Monthly Average			48.6

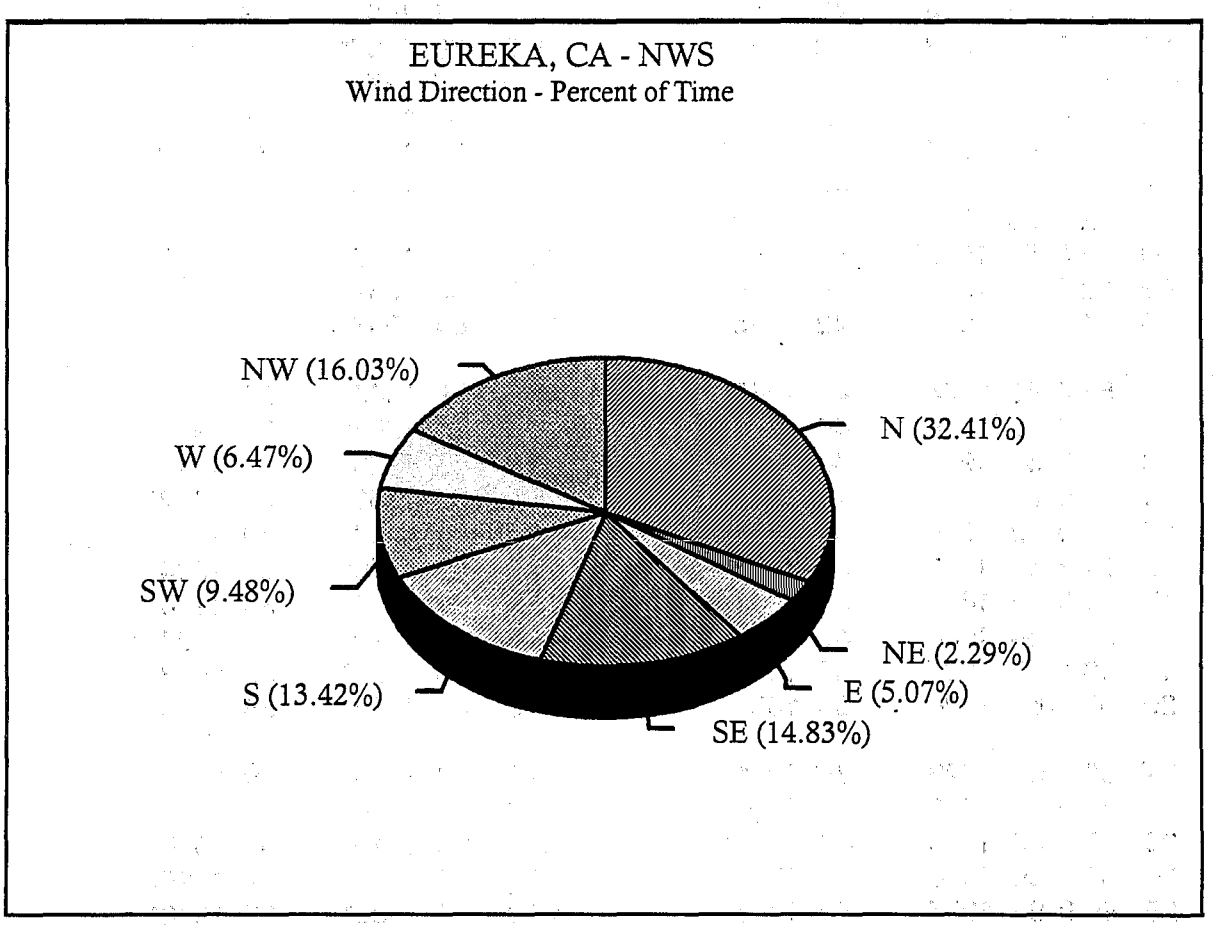
* Denotes last of several occurrences

V. WIND SUMMARY

As may be expected, the wind direction and speeds in Eureka are governed by the seasonal location of the eastern Pacific high-pressure system and the low-pressure systems that bring the winter storms to the northwest coast.

influenced by low-pressure systems that originate in the Gulf of Alaska.

The graph below depicts the directional distribution based on the period 1905 through 1996.



For about three quarters of the year, Eureka and the immediate coastal strip experience prevailing winds from the north to northwest as the semi-permanent high pressure settles over the Pacific Ocean to the west of Eureka.

During the winter quarter however, the winds are generally from the south to southeast as the weather is largely

The lack of an easterly wind component is representative of the hills surrounding the region, blocking the east winds from reaching the coast. Most of the time the east winds that do occur, take place during the late night and early morning hours.

Eureka's highest daily wind speed was a blustery 38.2 miles per hour for the 24-hour period on the 29th of April 1915.

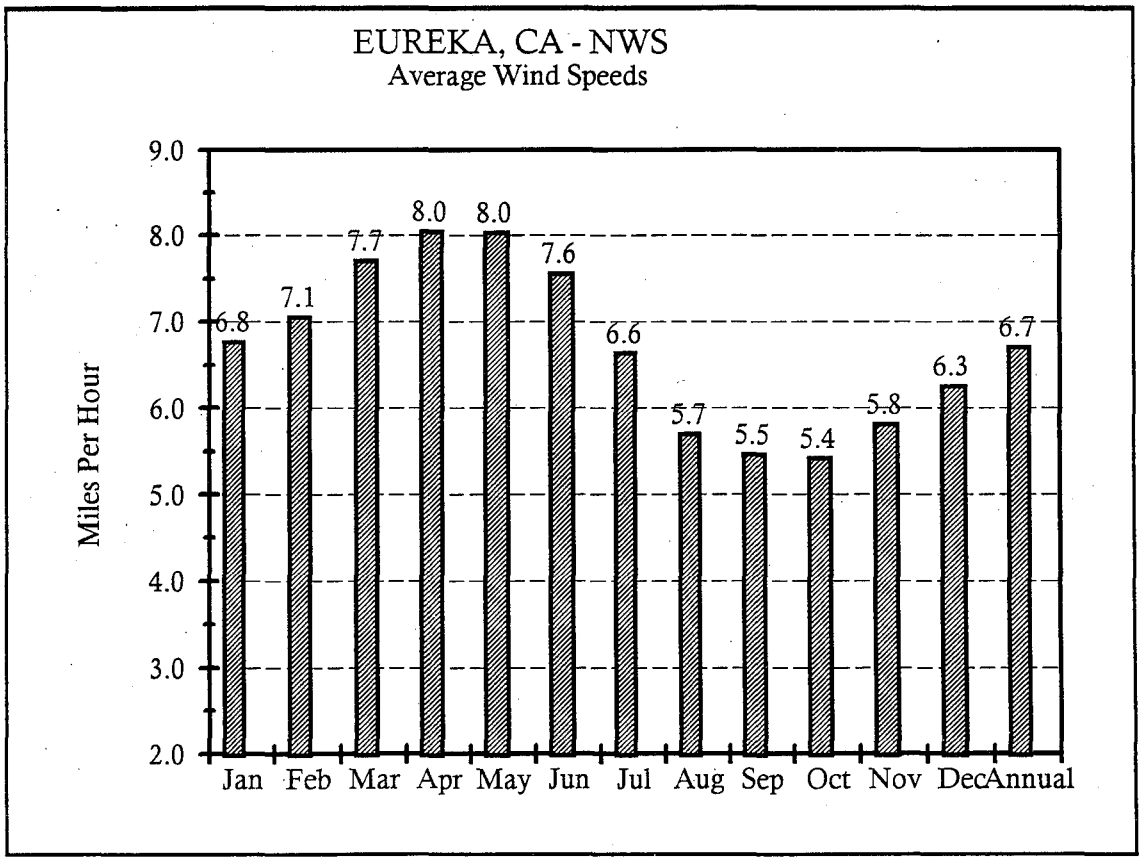
That day experienced the record gust for the month with 62 miles per hour being reported and a record fastest mile of 58 miles.

At the opposite end of the spectrum, the lightest daily average wind speed of just 0.3 mile per hour occurred on 28th of November back in 1889. Eureka may not be the windiest city on the coast but neither has it ever reported a completely calm day. The calm winds that Eureka would normally experience are generally after sunset to near sunrise.

Over the near shore waters, winds are lighter than those to the west of a line drawn from Patrick's Point to the north, to Cape Mendocino to the southwest.

Before the opening of the Eureka office, the Cape Mendocino station reported a gust of 144 miles per hour on January 20, 1886. In a four-year span from 1883 through 1886, the Cape Mendocino station experienced twelve occasions when the winds gusted to 100 miles per hour or greater.

The spring season brings the highest daily average wind speeds to the region when the daily average wind speeds reach 8.0 miles per hour during the months of April and May, while October comes in with the lowest daily values of a 5.4 miles per hour reading.



A. Record Winds

Month	Highest Daily Average	Year	Fastest Mile	Year	Peak Gust	Year
Jan	28.8	1918	59	1914	69	1981
Feb	28.5	1889	50	1960	60	1902
Mar	32.2	1923	48	1953	60	1898
Apr	38.2	1915	58	1971	62	1915
May	27.4	1896	43	1896	60	1894
Jun	23.1	1901	39	1892	60	1899
Jul	28.3	1921	39	1921	60	1897
Aug	21.5	1907	36	1918	42	1918
Sep	31.0	1908	44	1965	50	1914
Oct	24.2	1908	56	1962	50	1924
Nov	26.8	1919	55	1981	69	1981
Dec	29.6	1911	51	1952	60	1982
Annual	38.2	1915	59	1914	69	1981

Eureka's peak gust of 69 miles per hour has been recorded twice, both in 1981. The first occurred on the 21st of January and the second on the 13th of November. The fastest mile, 59 miles per hour, was recorded on the 25th of January 1914.

In a program change, the daily peak gusts were not recorded in the years 1950 through 1977, therefore the fastest mile may have a higher value than the peak gust for a particular date.

A triple register was used in the figuring of the fastest mile beginning in 1914 and lasting through 1994.

The following pages show the daily average wind speeds, maximum daily average records, the fastest mile (FM) and peak gusts (PG).

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
January 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	7.0	20.3	1899	1.7	1893	39	1914	48	1894
02	6.8	18.5	1965	2.0	1914	40	1914	52	1982
03	6.6	18.5	1895	2.1	1924	43	1982	63	1982
04	6.6	22.8	1913	1.9	1903	42	1978	46	1992
05	6.4	17.2	1920	1.8	1899	37	1920	52	1992
06	6.1	18.2	1956	1.7	1993	37	1924	46	1922
07	6.6	17.3	1956	1.6	1925	43	1990	47	1990
08	6.5	17.0	1956	1.6	1894	40	1924	48	1909
09	6.4	25.2	1921	2.0	1925	43	1921	50	1899
10	5.9	17.8	1963	1.6	1894	34	1927	37	1927
11	6.3	20.2	1913	1.7	1931	50	1914	60	1914
12	6.9	22.5	1980	1.8	1922*	42	1980*	48	1980
13	7.0	23.0	1888	1.8	1896	44	1979	52	1979
14	7.4	19.6	1908	1.9	1892	44	1918	48	1018
15	7.2	20.5	1974	1.8	1887	43	1974	64	1986
16	6.7	17.8	1907	1.3	1887	45	1914	53	1914
17	6.8	18.4	1913	1.6	1887	54	1955	66	1898
18	6.8	18.2	1937	1.6	1891	43	1974	44	1983
19	6.9	19.8	1937	2.0	1901	42	1981	58	1981
20	6.9	19.4	1843	1.9	1930	35	1974	55	1993
21	6.6	24.4	1943	1.9	1924	40	1943	69	1981
22	6.6	24.4	1916	1.3	1887	42	1916	48	1916
23	7.0	19.9	1965	2.0	1922	42	1965	46	1898
24	6.6	16.9	1967	2.3	1893	39	1992	47	1942
25	7.8	28.8	1918	2.4	1900	59	1914	66	1914
26	6.9	25.0	1896	1.5	1887	39	1956	43	1983
27	6.9	17.5	1950	1.5	1931	43	1916	55	1992
28	6.7	18.2	1947	0.5	1887	35	1927	41	1983
29	6.7	18.9	1909	1.7	1887	43	1983	63	1983
30	6.2	14.8	1892	1.4	1887	28	1975	46	1992
31	7.3	21.8	1919	2.3	1931	38	1963*	45	1910
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	6.7	28.8	1918	0.5	1887	59	1914	69	1981

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
February 1887 thru 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	6.8	25.1	1909	2.3	1906	44	1960	46	1986
02	6.8	19.5	1971	1.8	1931	39	1971*	45	1915
03	6.5	17.2	1932	1.7	1931	40	1990	46	1990
04	6.8	17.9	1945	1.5	1922	41	1926	44	1926*
05	7.2	21.5	1921	2.0	1924	42	1921	50	1921
06	7.3	19.5	1905	1.9	1921	50	1918	54	1918
07	6.8	21.4	1920	1.6	1892	45	1978	48	1903
08	7.0	23.8	1960	2.0	1899	48	1960	52	1983
09	6.0	20.2	1965	0.9	1931	42	1983	58	1983
10	6.3	16.7	1978	1.3	1921	47	1925	50	1925
11	6.5	19.3	1964	1.9	1931*	44	1923	50	1923
12	7.1	19.3	1954	2.0	1931	41	1954	47	1990
13	7.1	28.5	1889	2.6	1899	38	1967	48	1889
14	6.8	24.1	1928	2.0	1952	39	1921	47	1987
15	6.9	20.5	1956	2.0	1905	42	1959	51	1982
16	7.0	21.8	1917	1.6	1901	44	1917	52	1894
17	6.9	20.7	1955	1.6	1901	41	1986	53	1980
18	6.5	15.4	1888	1.8	1892	37	1958*	44	1927
19	7.3	18.8	1959	1.2	1889	35	1969	48	1908
20	7.2	21.6	1909	1.9	1889	44	1956	47	1914
21	7.5	20.8	1909	2.0	1923	42	1988	55	1891
22	7.0	20.0	1925	2.5	1892	40	1925	46	1925
23	7.1	20.0	1912	2.3	1894	35	1931	45	1902
24	7.5	17.7	1957	2.8	1916*	43	1958	41	1980
25	7.4	23.1	1902	2,2	1889	38	1971	60	1902
26	7.2	19.0	1918	2.0	1901	38	1918	44	1918
27	6.3	18.6	1888	2.8	1890	34	1974	45	1888
28	6.8	21.3	1953	2.3	1925	41	1953	48	1982
29	7.3	15.5	1931	2.7	1980	34	1952	50	1896
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	6.9	28.5	1889	0.9	1931	50	1960	6-	1902

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
March 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	7.0	17.1	1952	1.7	1926	44	1985	52	1894
02	7.9	32.2	1923	1.6	1931	46	1923	60	1894
03	7.4	24.4	1923	2.2	1903	43	1923	46	1923
04	7.4	24.5	1981	1.9	1903	42	1966	51	1987
05	7.0	17.0	1917	2.4	1899	36	1956	39	1981
06	6.4	15.0	1919	2.5	1906	34	1919	42	1902
07	6.3	24.8	1974	2.3	1890	24	1919	42	1902
08	7.0	13.5	1966	2.6	1914	33	1923	54	1890
09	7.7	23.2	1909	2.4	1903	34	1953	60	1898
10	7.3	23.5	1898	2.4	1902	39	1987	59	1904
11	7.7	25.8	1913	2.5	1910	40	1918	50	1918
12	7.5	19.5	1974	2.0	1900	37	1968	40	1889
13	7.2	20.2	1960	2.6	1900	36	1924	48	1902
14	7.5	16.5	1924	2.5	1900	35	1991	40	1888
15	7.1	20.2	1924	3.2	1902	38	1967	37	1922
16	7.2	16.5	1924	2.4	1890*	37	1984	42	1894
17	7.4	23.8	1924	2.0	1901	48	1918	56	1918
18	7.8	19.1	1964	2.8	1916	33	1964	54	1894
19	7.3	18.5	1912	2.0	1901	48	1953	48	1888
20	7.7	28.2	1923	2.8	1904	45	1923	56	1923
21	7.5	25.3	1936	2.7	1901	35	1923	44	1980
22	7.6	26.7	1891	2.3	1990	34	1967	48	1891
23	7.7	19.8	1914	2.4	1990	36	1994	48	1994
24	7.7	19.7	1888	3.2	1894	32	1963	40	1888
25	8.2	31.0	1975	2.5	1985	46	1975	48	1902
26	7.8	23.9	1921	3.0	1904	37	1921	44	1915
27	7.4	19.8	1981	2.3	1921	40	1963	46	1981
28	8.0	21.0	1897	2.8	1990	38	1970	60	1897
29	7.7	19.0	1912	2.9	1901	47	1974	54	1892
30	8.0	22.8	1896	2.8	1924	36	1920	60	1891
31	9.1	25.5	1906	2.8	1905*	38	1975	51	1980
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	7.5	32.2	1923	1.6	1931	48	1953	60	1898*

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
April 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	8.2	24.2	1918	3.0	1899	37	1918	42	1918*
02	8.8	25.3	1898	3.1	1990	34	1958	46	1982
03	8.4	26.3	1921	3.8	1990	41	1921	48	1921
04	8.5	24.2	1921	3.0	1926	41	1921	45	1921*
05	8.3	24.9	1922	3.0	1926	39	1961	45	1919
06	8..0	23.6	1981	2.1	1930	35	1963	47	1981
07	7.5	22.5	1908	2.3	1990	33	1919	41	1908
08	7.6	17.5	1900	2.4	1899	37	1918	42	1918
09	8.0	22.9	1887	2.4	1990	33	1984	48	1891
10	8/0	20.3	1909	2.8	1990	38	1991	44	1890
11	8.4	24.1	1890	2.7	1990	35	1965	54	1890
12	7.8	22.7	1890	2.7	1925	40	1968	44	1890
13	8.5	21.4	1910	3.5	1897	39	1970	31	1939*
14	8.2	21.4	1940	2.9	1923	33	1965	54	18892
15	8.1	22.0	1941	2.8	1994	32	1903	335	1892
16	8.5	21.3	1964	2.7	1900	36	1964	40	1896*
17	8.3	24.1	1891	2.7	1972	40	1972	42	1920
18	8.0	19.7	1907	2.1	1897	36	1896	38	1907*
19	7.9	21.3	1952	3.6	1958	36	1972	39	1907
20	7.4	21.8	1914	3.2	1918	38	1914	42	1900
21	8.2	22.0	1899	2.9	1931	34	1925	48	1899
22	8.1	24.1	1899	2.3	1990	31	1931	44	1899
23	7.5	14.4	1973	2.4	1990	33	1986	40	1900
24	7.4	21.0	1971	3.5	1898	42	1971	33	1978
25	7.8	28.1	1900	2.4	1895	38	1914	60	1900
26	8.1	23.9	1905	2.6	1931	38	1966	40	1898
27	8.2	26.2	1908	3.1	1990	35	1965	46	1908
28	8.8	26.0	1906	2.8	1990	37	1917*	47	1898
29	8.9	38.2	1915	3.0	1931	58	1915	62	1915
30	8.6	27.4	1915	3.5	1931	43	1915	51	1915
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	8.0	38.2	1915	2.1	1897	58	1915	62	1915

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
May 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	8.2	21.8	1894	3.3	1929	38	1990	42	1990
02	7.5	17.0	1912	3.1	1898	29	1978	41	1912
03	8.2	21.7	1905	2.6	1899	34	1969	40	1892
04	8.7	24.4	1904	3.1	1978	35	1978	53	1982
05	8.0	18.9	1898	3.6	1931	36	1978	41	1909
06	8.6	27.4	1896	3.3	1907	40	1978	42	1912
07	8.2	19.0	1891	3.4	1920	35	1990	52	1891
08	8.3	21.9	1893	3.8	1979	36	1961	41	1982
09	8.1	20.0	1895	3.1	1901	37	1979	60	1894
10	7.9	19.2	1916	3.4	1906	37	1916	41	1916
11	7.9	24.3	1908	3.1	1895	39	1916	46	1916
12	7.9	19.6	1908	3.1	1921	43	1960	48	1916
13	8.1	18.7	1899	2.9	1931	28	1959	40	1896
14	8.4	24.0	1896	3.1	1931	36	1976	46	1896
15	7.5	17.0	1899	3.4	1931	36	1922	40	1903
16	7.8	19.6	1903	3.7	1894	33	1971	38	1938
17	8.2	22.5	1902	3.5	1894	38	1991	40	1982
18	8.2	25.9	1902	3.1	1978	39	1972	50	1902
19	8.6	24.2	1902	2.3	1978	36	1991	45	1990*
20	8.6	21.0	1905	3.5	1894	34	1975	40	1891
21	8.6	19.3	1955	3.1	1896	40	1955	41	1990
22	8.4	18.4	1906	3.7	1958	34	1917	38	1917
23	7.8	21.4	1917	3.6	1888	30	1915	40	1893
24	7.5	19.5	1893	3.8	1993	33	1918	48	1893
25	7.7	24.3	1908	3.2	1888	30	1960	45	1900
26	7.6	24.3	1908	3.5	1891	33	1982	45	1982
27	7.5	17.4	1956	3.3	1901	33	1921	45	1982
28	7.9	19.3	1915	3.5	1910	37	1979	40	1890
29	8.5	21.1	1919	3.5	1904	41	1979	42	1893
30	8.0	19.3	1895	3.5	1905	36	1920	39	1918
31	8.0	19.3	1895	3.5	1905	36	1920	39	1918

Avg	Max	Year	Min	Year	FM	Year	PG	Year
8.0	27.4	1896	2.3	1978	43	1896	60	1894

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
June 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	7.8	20.3	1899	1.7	1893	30	1933	40	1899
02	7.4	21.9	1915	2.0	1893	38	1915	43	1915
03	7.3	21.3	1915	2.2	1903	37	1915	38	1915
04	6.9	16.2	1889	1.9	1903	34	1916	51	1891
05	6.8	17.3	1963	1.8	1899	29	1963	60	1899
06	7.5	18.8	1963	2.2	1897	35	1924	40	1899
07	7.3	14.7	1979	1.7	1893	32	1979	44	1895
08	6.9	19.4	1944	1.6	1894	28	1964	40	1895
09	6.8	17.5	1899	2.2	1900	28	1916	40	1895
10	7.2	16.0	1947	1.6	1963	30	1963	31	1902
11	7.3	15.5	1906	2.3	1894	26	1966	41	1891
12	7.4	19.2	1970	2.3	1895	36	1896	38	1896
13	7.2	14.0	1945	2.0	1898	32	1970	38	1990
14	7.1	18.5	1984	2.0	1898	32	1945	36	1890
15	7.6	13.6	1905	2.7	1898	24	1945*	42	1890
16	7.9	18.4	1949	1.6	1900	39	1949	38	1902
17	7.1	15.5	1894	1.6	1900	27	1953	32	1990
18	7.2	16.5	1906	2.9	1893	31	1988	40	1988
19	7.1	15.6	1916	2.0	1901	28	1951*	40	1898
20	7.4	20.1	1947	2.5	1893	34	1960	40	1899
21	7.7	17.8	1906	2.2	1989	28	1920	48	1892
22	7.5	16.6	1920	2.3	1899	29	1920	54	1892
23	7.4	15.6	1909	2.0	1893	26	1920	40	1909*
24	7.0	15.3	1903	2.3	1893	28	1920	31	1980*
25	7.4	23.1	1901	2.4	1900	29	1920	33	1920
26	7.6	17.5	1896	2.0	1900	37	1920	44	1920
27	7.7	16.4	1891	2.8	1898	31	1916	40	1898*
28	7.3	14.8	1927	2.3	1894	31	1927	37	1981
29	7.1	15.1	1911	2.0	1900	31	1989	41	1989
30	7.4	17.5	1899	2.5	1896	38	1916	42	1916
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	7.3	23.1	1901	1.6	1900	39	1892	60	1899

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
July 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	7.7	19.6	1921	3.9	1929	34	1921	40	1892
02	7.3	28.3	1921	4.0	1907	39	1921	40	1921
03	7.1	16.0	1908	4.0	1922	29	1921	40	1903
04	7.1	13.0	1888	3.4	1931	35	1986	35	1993
05	7.4	15.3	1900	4.1	1920	31	1986	47	1908
06	6.9	13.7	1909	2.4	1898	28	1971	40	1892
07	6.8	14.1	1981	2.9	1903	30	1981	39	1981
08	6.4	15.6	1974	3.1	1980	26	1974	38	1987
09	6.8	15.1	1915	3.4	1889	29	1979	36	1989
10	6.6	17.7	1913	3.3	1889	32	1987	32	1987
11	7.2	17.3	1943	4.1	1906	32	1986*	44	1891
12	6.9	14.6	1915	4.0	1898	28	1969	38	1909
13	6.8	14.8	1898	3.7	1898	26	1915	31	1981
14	6.6	14.4	1915	3.6	1923	29	1915	38	1888
15	6.7	14.9	1908	3.6	1920	28	1924	35	1990
16	6.6	15.9	1909	3.3	1898	29	1957	37	1987
17	6.8	18.6	1897	3.8	1889	27	1916	60	1897
18	6.6	14.4	1916	3.7	1889	33	1916	45	1897
19	6.3	11.1	1966	3.8	1908	23	1968	30	1901
20	6.2	12.7	1954	4.2	1912	26	1924	29	1989
21	6.5	14.0	1954	3.0	1903	30	1954	35	1989
22	6.2	10.3	1963	2.9	1903	24	1984	30	1899*
23	6.2	10.3	1992	3.1	1894	21	1990*	30	1893
24	6.4	12.3	1966	3.5	1894	29	1993	36	1993
25	6.4	12.1	1909	2.8	1924	29	1993	37	1993
26	6.4	12.3	1918	4.0	1924	26	1918	29	1918*
27	6.3	15.4	1948	3.2	1980	27	1948	30	1904
28	6.4	17.1	1904	3.6	1898	27	1948*	33	1904
29	6.0	11.2	1932	3.3	1929	22	1950	39	1904
30	6.2	12.4	1897	3.5	1930	30	1950	30	1897
31	6.1	10.1	1899	4.1	1889	24	1917	35	1987
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	6.6	28.3	1921	2.4	1898	39	1921	60	1897

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
August 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	6.0	10,8	1982	3.9	1895	24	1918*	31	1982
02	5.9	9.9	1886	3.0	1888	24	1989	30	1900
03	6.0	21.5	1909	3.6	1905	18	1954	36	1909
04	6.0	12.6	1923	2.6	1930	25	1969	40	1900
05	6.0	13.0	1909	3.3	1930	24	1918	31	1909
06	6.0	15.7	1909	2.4	1898	25	1925	32	1909
07	5.8	11.3	1975	3.1	1909	28	1975	30	1891*
08	5.6	9.5	1918	2.7	1909	30	1985	24	1913*
09	5.5	9.6	1940	3.0	1899	18	1918	24	1909
10	5.8	20.3	1909	3.8	1888	24	1985	37	1909
11	5.7	10.1	1909	2.7	1926	20	1983	26	1985*
12	5.6	9.4	1932	2.9	1892	23	1985	26	1908
13	5.6	13.9	1906	2.8	1892	24	1918	29	1990
14	5.7	10.0	1906	2.5	1894	28	1989	34	1906
15	5.9	22.0	1976	2.5	1924	29	1960	37	1910
16	5.9	11.2	1972	3.2	1899	28	1972	30	1990*
17	5.5	14.2	1913	3.2	1941*	32	1978	35	1978
18	5.6	11.0	1980	2.9	1891	30	1920	36	1980
19	5.8	19.7	1909	2.9	1914	36	1918	42	1918
20	5.8	12.5	1909	2.9	1894	28	1972*	30	1918
21	5.6	10.7	1909	3.2	1978	24	1971	36	1909
22	5.4	13.1	1899	2.3	1930	27	1971	40	1899
23	5.6	13.6	1909	2.5	1915	26	1925	33	1978*
24	5.7	16.5	1893	2.4	1903	35	1989	40	1900
25	5.7	11.2	1976	2.2	1888	26	1993	37	1993*
26	5.9	17.4	1907	2.6	1894	31	1990	39	1990
27	5.6	12.4	1907	3.1	1888	27	1975	40	1892
28	5.6	19.3	1909	2.7	1920	29	1964	32	1909
29	5.6	13.4	1909	3.2	1922	28	1964	34	1909
30	5.7	13.0	1943	2.8	1912	30	1943	36	1981
31	5.4	10.3	1926	2.5	1892	29	1926	31	1926
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	5.7	21.5	1907	2.2	1888	36	1918	42	1918

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
September 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	5.7	11.1	1896	2.7	1930*	32	1973	40	1890
02	5.6	15.7	1961	2.8	1953	34	1961	34	1901
03	5.6	12.8	1913	3.1	1892	29	1969	30	1894
04	5.2	14.7	1887	2.9	1967	26	1941	27	1941
05	5.4	14.7	1887	2.9	1953	23	1963	30	1895
06	5.5	14.8	1894	2.0	1925	29	1976	38	1894
07	5.6	16.3	1941	2.7	1931	35	1941	44	1941
08	5.5	12.9	1934	2.5	1925	32	1927	40	1903
09	5.5	16.9	1916	2.0	1888	34	1916	38	1903
10	5.8	16.9	1903	2.4	1922	30	1982	41	1982
11	5.5	26.2	1903	2.5	1922	34	1974	48	1903
12	5.5	18.3	1927	2.2	1892	31	1914	40	1909
13	5.3	11.1	1970	1.7	1892	30	1970	36	1982
14	5.5	13.8	1944	2.4	1890	30	1944	36	1889
15	5.3	16.3	1906	2.5	1922	27	1927	42	1906
16	5.3	16.4	1965	1.8	1899	35	1065*	38	1945
17	6.0	19.5	1914	1.4	1899	39	1920	43	1914
18	5.6	15.2	1977	2.2	1899	44	1914	50	1914
19	5.7	13.0	1924	1.7	1889	28	1957	31	1919
20	5.8	20.1	1900	2.8	1928	35	1919	40	1919*
21	5.8	17.1	1909	2.4	1902	34	1960	44	1900
22	5.5	14.7	1913	2.5	1899	32	1931	45	1888
23	5.3	21.1	1900	2.2	1922	28	1958	43	1908
24	5.4	31.0	1908	2.5	1931	31	1914	48	1903
25	5.0	12.8	1992	2.0	1899	31	1992	44	1908
26	5.2	17.2	1916	1.9	1892	39	1916	44	1916
27	5.2	13.8	1982	2.2	1887	28	1959	32	1898
28	5.4	21.8	1902	2.3	1931	38	1921	48	1902
29	5.3	16.8	1927	2.3	1888	27	1959*	40	1891
30	5.3	15.7	1927	2.6	1923	34	1959	33	1927
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	5.5	31.0	1908	1.4	1889	44	1914	50	1914

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
October 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	5.3	13.3	1941	2.6	1896	30	1985	40	1891
02	6.2	24.2	1908	1.9	1889	45	1967	40	1893
03	5.6	15.1	1913	2.0	1889	36	1914	40	1914*
04	5.6	22.9	1912	2.1	1892	35	1974	42	1906
05	5.0	18.0	1912	1.6	1924	30	1950*	38	1912
06	5.3	15.8	1990	2.1	1891	30	1954	40	1990
07	5.5	16.9	1923	2.2	1891	33	1923	40	1889*
08	5.8	13.3	1919	2.0	1888	34	1919	40	1890
09	5.5	15.5	1919	2.1	1888	36	1960	40	1890
10	5.7	20.9	1928	2.2	1922	34	1969	34	1969*
11	5.5	21.3	1928	2.4	1887	39	1962	42	1928
12	5.3	15.7	1962	2.0	1889	56	1962	36	1893
13	5.1	14.6	1934	1.9	1929	47	1988	54	1988
14	5.3	18.6	1924	2.3	1903	35	1924	38	1924
15	5.1	14.9	1947	2.0	1929	32	1924	38	1924
16	5.2	14.3	1914	2.4	1930*	33	1914	35	1914
17	5.2	17.4	1919	1.5	1891	34	1917	37	19198
18	5.5	18.3	1906	1.8	1891	33	1969	44	1990
19	5.4	17.7	1906	1.8	1924	32	1971	34	1906*
20	5.6	16.2	1953	2.0	1887	32	1974	40	1888
21	5.4	18.7	1982	1.7	1917	34	1982	49	1982
22	5.7	14.7	1900	1.8	1929	38	1989	40	1912*
23	5.6	15.8	1954	2.2	1901	34	1973	36	1894
24	5.1	16.8	1912	2.0	1888	34	1979	44	1979
25	5.0	14.2	1975	1.6	1888	35	1921	43	1982
26	5.2	20,4	1950	1.6	1923	43	1950	31	1981
27	5.3	14.6	1971	1.6	1888	38	1961	37	1917
28	5.8	17.1	1929*	1.6	1888	40	1924	50	1924
29	5.7	16.5	1959	2.1	1931	37	1950	38	1992
30	5.6	19.1	1924	1.8	1931*	35	1924	44	1990
31	5.5	16.0	1924	2.0	1931	28	1924	30	1980
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	5.4	24.2	1908	1.5	1891	56	1962	50	1924

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
November 1887 through 1996

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	5.3	14.9	1924	1.7	1890	32	1984	35	1980
02	5.3	14.1	1935	1.5	1888	34	1960	36	1891
03	5.7	22.9	1960	1.4	1889	37	1960	34	1903
04	5.5	15.7	1938	1.1	1889	30	1969	40	1905
05	5.6	16.3	1973	1.9	1925	33	1973	38	1890
06	5.5	15.4	1903	1.5	1888	30	1966	36	1890
07	5.9	17.8	1909	1.9	1896	35	1977	48	1898
08	5.8	19.3	1946	1.6	1959	36	1966	39	1992
09	6.1	23.3	1978	1.2	1889	37	1975	47	1978
10	6.2	21.2	1978	2.0	1921*	40	1983	46	1926
11	6.1	15.8	1915	1.6	1891	38	1926	43	1926
12	5.8	15.0	1971	2.0	1893	37	1983	40	1981
13	6.4	18.5	1881	1.6	1929	55	1981	69	1981
14	6.1	14.8	1904	1.2	1889	36	1968	41	1981
15	6.1	15.8	1925	1.8	1889	37	1981	49	1981
16	5.5	12.5	1925	2.0	1929*	40	1983	40	1893
17	5.9	14.5	1897	2.3	1891	42	1965	41	1981
18	6.5	14.7	1951	1.9	1929	34	1982	51	1982
19	6.1	14.1	1966	1.8	1889	31	1963	40	1902
20	6.0	16.7	1905	2.0	1928*	34	1926	40	1899
21	6.1	17.5	1977	1.8	1891	40	1977	40	1920
22	5.9	17.4	1946	2.5	1930*	40	1979	55	1979
23	5.7	15.5	1953	1.6	1891	22	1984	36	1981
24	5.6	15.5	1960	2.3	1888	38	1986	40	1893
25	6.0	18.7	1951	1.7	1930	45	1926	50	1926
26	6.0	26.8	1919	1.8	1924	42	1919	47	1919
27	6.1	22.0	1918	1.1	1891	41	1918	54	1892
28	5.8	16.8	1926	0.3	1889	33	1975	54	1982
29	6.0	14.0	1917	1.1	1889	38	1991	40	1926*
30	6.2	19.0	1914	1.7	1889	38	1914	45	1982
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	6.7	26.8	1919	0.3	1889	55	1981	69	1981

* Denotes last of several occurrences

EUREKA, CA - NWS

Daily Average and Record Winds in Miles Per Hour
December 1886 through 1995

Date	Avg	Max	Year	Min	Year	FM	Year	PG	Year
01	6.7	18.3	1921	2.3	1900	48	1921	50	1921
02	6.5	18.5	1909	2.0	1897	42	1921	50	1890
03	6.3	17.8	1890	2.0	1930	34	1983	56	1890
04	6.5	21.1	1943	1.6	1888	45	1951	47	1943
05	6.4	22.5	1943	1.8	1889	36	1967	39	1978*
06	7.0	29.6	1911	1.8	1928	51	1952	50	1927
07	6.1	18.6	1926	2.1	1901	43	1952	40	1899*
08	6.4	18.7	1915	1.9	1898	33	1918	44	1993
09	6.3	17.2	1937	2.2	1931*	39	1981	49	1981
10	6.6	23.4	1979	1.9	1890	46	1919	51	1993
11	6.1	18.6	1969	1.7	1889	43	1973	45	1920
12	6.4	20.0	1895	1.5	1893	39	1975	37	1981*
13	6.0	14.9	1993	0.9	1889	32	1927	44	1993
14	5.5	15.7	1982	1.9	1889	37	1977	47	1912
15	6.2	19.1	1982	1.9	1893	48	1970	47	1982
16	6.3	18.6	1967	1.7	1889	40	1967	44	1982
17	6.2	18.1	1926	2.0	1892	42	1931	60	1931
18	6.1	19.4	1981	1.9	1899	46	1981	51	1981
19	6.3	16.1	1940	2.1	1888	34	1969	54	1990
20	6.8	19.2	1924	1.6	1896	47	1977	46	1990
21	6.9	19.4	1955	1.8	1930*	42	1982	60	1982
22	6.4	28.8	1964	1.8	1890	42	1964	41	1982
23	6.6	20.6	1968	1.7	1899	40	1916	60	1891
24	6.6	24.4	1904	1.9	1899	45	1963	60	1892
25	6.1	20.1	1955	2.2	1899	35	1955*	40	1892
26	6.6	17.6	1891	1.6	1890	34	1955	54	1891
27	6.4	23.0	1965	1.6	1930*	38	1965	50	1891
28	6.4	16.8	1974	1.9	1900	38	1915	48	1905
29	6.6	15.9	1904	2.2	1897	29	1951	44	1979
30	6.6	16.4	1905	1.8	1888	49	1922	60	1922
31	6.6	16.0	1927	1.9	1921	32	1955	45	1891
	Avg	Max	Year	Min	Year	FM	Year	PG	Year
	6.4	29.6	1911	0.9	1889	51	1952	60	1982*

* Denotes last of several occurrences

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)
174 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. Tresté Huse, July 1995. (PB96-107024)
232 Fog Climatology at Spokane, Washington. Paul Frisbie, July 1995. (PB96-106604)
233 Storm Relative Isentropic Motion Associated with Cold Fronts in Northern Utah. Kevin B. Baker, Kathleen A. Hadley, and Lawrence B. Dunn, July 1995. (PB96-106596)
234 Some Climatological and Synoptic Aspects of Severe Weather Development in the Northwestern United States. Eric C. Evenson and Robert H. Johns, October 1995. (PB96-112958)
235 Climate of Las Vegas, Nevada. Paul H. Skrbac and Scott Cordero, December 1995. (PB96-135553)
236 Climate of Astoria, Oregon. Mark A. McInerney, January 1996.
237 The 6 July 1995 Severe Weather Events in the Northwestern United States: Recent Examples of SSWEs. Eric C. Evenson, April 1996.
238 Significant Weather Patterns Affecting West Central Montana. Joe Lester, May 1996. (PB96-178751)
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. (First Revision - January 1998 - Andrew S. Gorelow and Edwin C. Clark - PB98-123250)
248 Climate of Eugene, Oregon. Clinton C. D. Rockey, April 1997. (PB97-155303)
249 Climate of Tucson, Arizona. John R. Glueck, October 1997.
250 Northwest Oregon Daily Extremes and Normans. Clinton C. D. Rockey, October 1997.
251 A Composite Study Examining Five Heavy Snowfall Patterns for South-Central Montana. Jonathan D. Van Ausdall and Thomas W. Humphrey. February 1998.

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