



NOAA TECHNICAL MEMORANDUM  
NWS WR-236

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CLIMATE OF ASTORIA, OREGON

Mark A. McInerney  
National Weather Service Office  
Astoria, Oregon

January 1996

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**U.S. DEPARTMENT OF  
COMMERCE**

/ National Oceanic and  
Atmospheric Administration

/ National Weather  
Service



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## TABLE OF CONTENTS

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ABSTRACT .....	1
I. Geographical and Climatological Summary .....	1
II. ASOS .....	2
III. Climatological Summary By Months. ....	2

## LIST OF TABLES

---

Station Location . . . . .	8
<b>Wind</b>	
- Extreme Monthly Peak Gust Maximums . . . . .	10
- Mean Wind Speed and Prevailing Direction . . . . .	10
- Fastest One Minute Wind Observations . . . . .	11
- Strongest Wind Gusts . . . . .	12
<b>Sky Cover and Visibility</b>	
- Sunrise and Sunset Times . . . . .	13
- Average Number of Clear, Partly Cloudy, Cloudy, and Dense Fog Days by Month . . . . .	14
- Consecutive Days Containing Fog . . . . .	14
- Greatest Number of Consecutive Days Containing Dense Fog . . . .	15
<b>Precipitation</b>	
- Longest Periods Without Measurable Precipitation . . . . .	15
- Days of Rainfall Greater Than, 0.50, 1.00, 1.50, 2.00 Inches . . . . .	16
- Extreme Monthly Maximum and Minimum Precipitation . . . . .	17
- Greatest Daily Precipitation . . . . .	17
- Probability of Monthly Precipitation . . . . .	18
- Precipitation Quintiles . . . . .	18
- Monthly Precipitation Averages . . . . .	19
- Frozen Precipitation Extremes . . . . .	21
- Mean Number of Days Precipitation is 0. 0 1 Inch or More, and Frozen Precipitation 1.0 Inch or More . . . . .	21
- Snowfall Totals By Month . . . . .	22
<b>Temperature</b>	
- Normal and Extreme Daily Maximum, Minimum Temperatures by Month . . . . .	23
- Normal Monthly Temperatures . . . . .	24
- Normal Heating and Cooling Degree Days . . . . .	24
- Cooling Degree Days By Month . . . . .	24
- Heating Degree Days By Month . . . . .	25
- Mean Number of Days Per Month With Maximum Temperatures, 90 Degrees or Higher, 32 Degrees or Lower . . . . .	26

- Mean Number of Days Per Month With Minimum Temperatures,  
32 Degrees or Below, 0 Degrees or Below . . . . . 26
- Greatest Number of Consecutive Days Maximum Temperatures Were  
Greater Than 90 Degrees . . . . . 27
- Greatest Number of Consecutive Days Minimum Temperatures  
Were Less than 32 Degrees . . . . . 27
- Daily Maximum Temperature Averages by Month . . . . . 28
- Daily Minimum Temperature Averages by Month . . . . . 29
- Monthly Temperature Averages . . . . . 30

**Miscellaneous Data**

- Daily Normals For Temperature, Heating and Cooling, and  
Precipitation . . . . . 32
- Daily Records For Maximum and Minimum Temperatures,  
and Peak Gusts . . . . . 36
- Annual Normals, Means, and Extremes . . . . . 48

## LIST OF FIGURES

---

Figure 1.	ASOS Location Map . . . . .	2
Figure 2.	Map of Astoria and Surroundings With Station Locations . . . . .	9
Figure 3.	Wind Scale . . . . .	11
Figure 4.	Annual Precipitation Totals . . . . .	20
Figure 5.	Maximum and Minimum Annual Temperature Averages . . . . .	31



# CLIMATE OF ASTORIA, OREGON

Mark A. McInerney

## ABSTRACT

*This publication was written to summarize basic climatological data for Astoria, Oregon and surrounding areas. The purpose is to bring information together for both the public and for weather forecasters. Most data was obtained from surface observations collected between 1953 through 1994.*

## I. Geographical and Climatological Summary<sup>1</sup>

Astoria is boarded by low mountains on the north, east, and south. To the west of Astoria, the area is open to the Pacific Ocean at the mouth of the Columbia River. North of the station, 8 to 10 miles, the Washington hills rise to 1,000 to 1,200 feet. Maximum visibility is 19 miles north-northeast to the Willapa Hills. Two to four miles east-northeastward, the Astoria hills rise to 600 feet. Four to 14 miles to the east-southeast rise other ridges of the Coast Ranges. The most prominent landmark, Saddle Mountain at 3,283 feet high is to the southeast of Astoria. Forest covers most of the uplands. From Seaside northward to the south bank of the Columbia are 18 miles of sandy beaches, and a 2 to 3 mile wide stretch of sand dunes.

The National Weather Service Office was established on January 15, 1953 at Clatsop County Airport. On February 11, 1976 the Weather Service Office was moved 400 feet south of the previous location at an elevation of 8 feet. Before this, climate data was recorded at various places around the downtown Astoria area. The airport sits on the south bank of the Columbia estuary and

west of Young's Bay on the flood plain or "tide flats". Low dikes prevent flooding and increase the bog-like characteristics of the area. When the air temperature falls below the water temperature, fog forms rather easily or rolls in from the ocean, river, or bay. This usually begins from late afternoon to early morning, and may persist well into the following day.

During the summer, sea breezes commonly blow eastward up the river and limit the diurnal rise in temperature. Cold air in the winter occasionally flows westward down the Columbia river from the interior and cause the temperature to be lower than other points along the coast.

The most common weather hazards critical to aviation are fog and gales. Even with moderate surface velocities, wind and turbulence at 800 feet may be severe enough to upset a heavy plane. Wind and wave may combine to produce a wave formation referred to as a breaker or sometimes called a widow-maker, capable of swamping a boat. Heavy rains inundate lowlands, and high tides aggravated by gales may push seawater across highways or up beaches. Rains may cause earthslides, mostly in highway cuts. Lightning strikes are rare. Showers of ice pellets may briefly whiten the ground during many months. Occasionally in the winter there may be rather brief periods of freezing temperatures, with snow or ice.

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<sup>1</sup> Local Climatological Data, Annual Summary, Astoria, Oregon, pg. 7

The climate is generally healthful, except for dampness and a lack of sunshine in winter. Heat waves are uncommon and usually brief. Soil leaching necessitates supplementary mineral diets for both animals and plants.

## II. ASOS

The Automated Surface Observing System (ASOS) was installed at the Clatsop County Airport in June of 1992. It was commissioned on March 1, 1993, nine months after the installation date. The atmospheric parameters measured by ASOS are; temperature, dew point, wind speed and direction, visibility, weather conditions, precipitation, cloud cover and atmospheric pressure -- for ASOS location see Fig. 1.

## III. Climatological Summary By Months.

### January

January is generally the coldest month in Astoria's climate. The average daily maximum temperature is 47.8 degrees Fahrenheit. The average daily minimum is 35.9 degrees with a monthly average of 41.9. The warmest temperature recorded was 67 degrees which occurred in 1986, and the coldest temperature recorded was 11 degrees in 1980.

Due to the mild temperatures, precipitation is generally in the form of rain. As part of the rainy season, January, on average, receives approximately 10.00 inches of rain. The greatest amount of rain recorded for the month was 18.94 inches occurring in 1954. This amount is the second largest rainfall total on record for any given month. The lowest amount was 0.69 inches

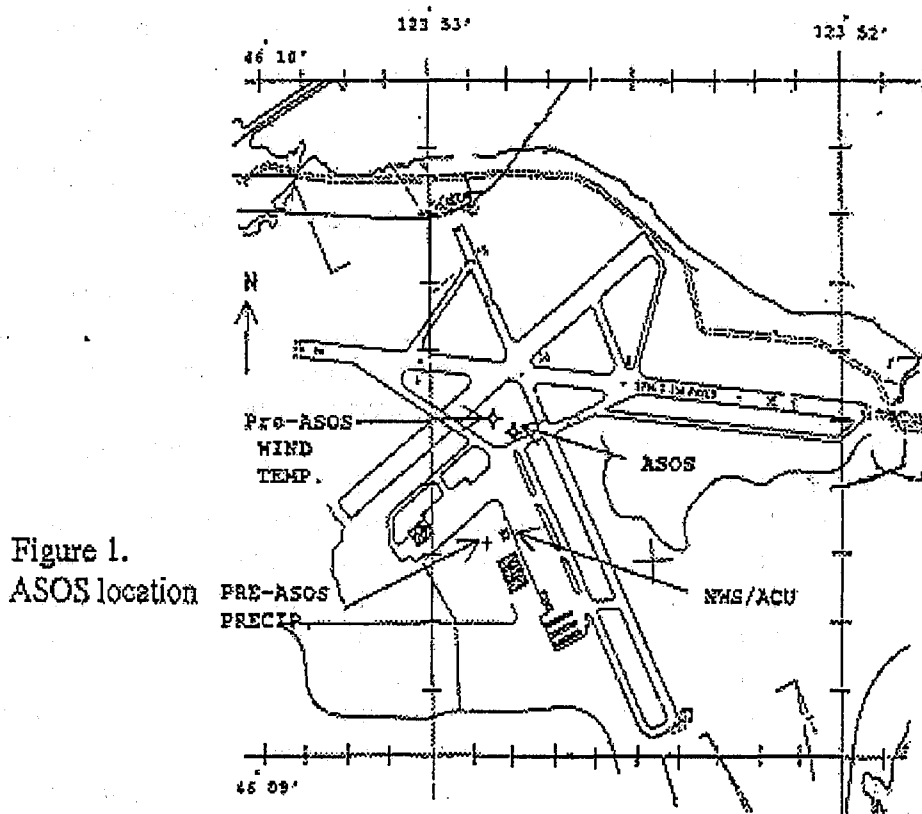


Figure 1.  
ASOS location

observed in 1985. The greatest amount of rain that fell within one day was 5.14 inches occurring on the 9th in 1990. The greatest amount of snowfall for January was 26.3 inches in 1969 with the maximum 24 hour snow amount of 10.8 inches which occurred in 1971. This 24 hour amount was also the greatest all time 24 hour snowfall total. Precipitation in the form of snow does not occur very often. Ice pellets are among the more common form of frozen precipitation.

Due to the great number of strong winter storms, powerful winds are usually observed during the month of January. The average wind speed for January is 9.2 mph and the prevailing direction is from the east. The fastest one minute mile observed was 55 mph from the south occurring in 1971, which is also the all time fastest one minute mile on record. The strongest peak gust for the month was 80 mph.

Since a large number of storms move through the area, cloud cover is generally expected. The month of January is the second cloudiest month behind December. The average sky cover consists of partly cloudy to cloudy conditions recorded as 27.9 average days out of the month, thus leaving only 3.1 days with clear conditions.

## February

Temperatures for the month of February rise slightly, but as mentioned earlier the yearly temperature is generally moderate. The normal high temperature is 51, normal low is 37.3 with a normal monthly temperature of 44.2 degrees. The highest daily temperature recorded occurred in 1968 at 72 degrees. The lowest recorded daily temperature was 9 degrees which occurred in 1989. This low temperature is also the all time second coldest day on record for Astoria.

Statistically, February is not part of the peak rainy season, although heavy amounts of rain are not uncommon during this month. The normal rainfall is 7.59 inches with a highest monthly maximum of 21.89 inches in 1961. This amount is also the all time greatest rainfall amount for any given month on record. During the last 40 years, the greatest amount of snowfall occurred in 1962 with a total of 4.0 inches. This amount all fell within a 24-hour period, thus making it the highest 24-hour snow total for February.

## March

The normal temperature for the month of March is 45.7 degrees. The highest daily temperature recorded is 73 degrees set in 1979 and the lowest is 22 degrees set in 1971.

Out of the 31 days in March, on the average, 22.9 of them are categorized as cloudy, 5.3 as partly cloudy and 2.8 as clear. This ties November for the second cloudiest month of the year, after December.

The normal precipitation amount for the month is 7.07 inches. The highest monthly maximum is 13.47 inches, which occurred in 1956 and the lowest 0.93 set in 1965. The greatest amount of precipitation that fell within a 24 hour period was 2.66 inches in 1956.

## April

Generally, April is a month of significant rainfall amounts. Although April has a high normal monthly rainfall of 4.60 inches, it is generally not the rainiest month. The highest monthly maximum rainfall amount for April was set in 1991 with 9.47 inches observed. The lowest monthly minimum amount fell in 1956 with 1.33 inches officially recorded. The greatest daily amount fell on the 4th in 1991 with a total of 2.73 inches. Snow has been

known to fall during April, although measurable amounts remain small. Generally if snow occurs, a trace is all that is recorded. The greatest snowfall for April was recorded as 1.1 inches in 1975.

The normal daily maximum temperature is 56 degrees and the minimum is 40.3 degrees. The highest and lowest daily temperatures on record are 73 and 29 degrees respectively. The normal temperature for the month is 48.2 degrees.

Sky conditions, on average, contain 3.0 clear, 5.9 partly cloudy, and 21.0 cloudy days for the month of April. This month contains considerably less fog than the winter months, although this weather hazard does occasionally occur. In fact 26 consecutive days containing fog were observed between April 13 through May 8 in 1993. This is the second longest stretch of all time for fog like conditions on record.

## May

Temperatures for May rise slightly, but tend to stay cool. The monthly normal is 52.5 degrees and the normal daily maximum is 60.1 degrees. Eighty-seven degrees is the highest daily maximum set in 1985 and 30 degrees is the lowest set in 1954. The normal daily minimum is 44.8 degrees.

Precipitation totals for May indicate the beginning of a trend toward drier months. The typical rainfall amount is around 3.02 inches. The greatest monthly precipitation amount recorded was 6.60 inches in 1960 and the lowest 0.37 inches occurring in 1982. On May 31, 1968 1.74 inches of precipitation fell to give it the greatest amount of precipitation for one day.

## June

June is relatively a dry month in Astoria with a normal monthly precipitation total of around 2.40

inches. This amount ranks third when compared to the months of January and February. The greatest monthly precipitation maximum is 5.48 inches occurring in 1954. The lowest monthly minimum is 0.55 inches set in 1992. On June 1, 1958 2.07 inches of rain fell in one day giving it the greatest recorded amount for a day in June. The normal for that particular day was 0.09 inches.

Temperatures, as expected, continue to remain moderate. The monthly normal is 56.9, which is 4.4 degrees higher than the month of May. In a relative comparison to all the other monthly normals, this is the greatest temperature increase between any other months of the year. The greatest daily maximum temperature recorded for the month is 93 degrees set in 1955 and the lowest on record is 37 degrees set in 1980.

Sky cover for June remains on the cloudy side with average skies containing cloudy to partly cloudy conditions for 26.7 days out of the month. This only leaves 3.3 days that remain clear. Fog is a rather common occurrence for June, although records only show on the average 1.5 days containing dense fog.

## July

July is typically the driest month in Astoria. The normal monthly precipitation total is 1.15 inches. In comparison to December, the month of greatest precipitation, there is a 9.4 inch difference between the two monthly normals. The highest monthly maximum total is only 4.39 inches. In regards to monthly maximums, this amount is also the lowest monthly maximum on record for all time. The lowest monthly minimum for July is 0.01 inches. This is not only the lowest for the month, but is also the all time lowest rainfall amount on record. The greatest daily precipitation amount of 1.72 inches fell on the 7th in 1976. The normal daily total for that day was 0.05 inches.

The normal monthly temperature increases approximately 3.1 degrees from the previous month of June, thus giving a normal of 60.0 degrees. The highest daily temperature maximum for July is 100 degrees set on the 11th in 1961 which is also the all time high temperature on record for the Astoria airport. The lowest daily minimum temperature recorded for the month was 39 degrees set on the 7th in 1971, which is 13.4 degrees below its normal of 52.4.

Although July has typically less rainfall, cloud cover is still dominate. In a typical July, the skies contain only 5.8 clear days and around 25 days that are cloudy to partly cloudy. Dense fog amounts increase slightly to an average 2.1 days per month.

## August

August contains the highest monthly normal temperature of all other months with 60.7 degrees. The normal daily maximum is 68.8 degrees and has a highest daily maximum temperature of 96 degrees, set in 1981. The normal daily minimum is 52.6 and the lowest is 39 degrees set on the 19th in 1973.

August is a month of very little precipitation. The normal amount is 1.33 inches which is only 0.18 inches greater than the driest month of July. The lowest monthly precipitation amount that fell was 0.08 inches occurring in 1960.

Sky condition averages do not improve very much from July. Skies remain cloudy to partly cloudy for most of the month with the combined average number at 24.9 days. According to recorded weather data, fog is a regular occurrence for the month of August. The average number of dense fog days is only 4.2, but its not uncommon to have persistent conditions reported for a number of days. In fact, on the 3rd through the 17th of August in 1977, just over two weeks of fog like conditions

were observed. At the end of August, beginning on the 23 through September 6 in 1980, 16 consecutive days of fog conditions were recorded.

## September

Compared to any other month September, on the average, contains the most days of clear sky conditions at 8.1. Unfortunately there are still around 22 days containing cloudy to partly cloudy conditions. Fog also continues to remain a factor through this month. The average number of days containing dense fog is 5.7, which is the second greatest amount out of the year.

Precipitation remains low with a monthly normal of 2.91 inches. The greatest amount of precipitation recorded in one day was 2.41 inches which occurs on the 30th in 1953. This amount was only under the monthly normal by a half inch and was over the daily normal, of 0.13 inches, by 2.28 inches.

Temperatures remain pleasant with a normal daily maximum of 67.8 degrees. The greatest recorded daily maximum was obtained in 1972 at 95 degrees set on the 2nd and the lowest daily minimum was 33 degrees set on the 18th in 1983. The normal daily minimum is 49 degrees.

## October

According to statistical data, the end of October is the beginning of the rainy season in Astoria. The normal monthly total is 5.73 inches, with a record monthly maximum of 12.56 inches set in 1975. The lowest monthly amount recorded was 0.52 inches set in 1987. October 28, 1982 is the record for greatest daily precipitation event. The amount was 3.52 inches which is 3.27 above the normal 0.25 inches for that day. Normally, precipitation in October in the form of rain, but on a rare occasion snow is observed. The monthly snowfall average is only a trace.

Temperatures drop slightly with a monthly normal of 58.4 degrees. The highest daily maximum temperature was 85 degrees which occurred on the 2nd in 1987. The normal daily maximum is 61.1 degrees. The normal daily minimum is 44.0 degrees with the lowest daily minimum occurring on the 28th in 1971 at 26 degrees.

With the rainy season at hand, strong winds usually accompany the large storms that move over the Pacific Ocean. The greatest wind gust ever recorded occurred in 1962, 96 mph from the southwesterly direction. The prevailing wind direction for October is generally from the southeast with a mean wind speed of 7.5 mph.

With a greater contrast in air and ground temperatures, fog becomes an even larger problem than previous months. In fact, October is known as the month reporting the greatest number of dense fog events. Just under 25 percent of the month dense fog, measured at 1/4 mile or less visibility, was reported. From October 10 through the 27 of 1985, eighteen consecutive days reported fog. During that same period, 8 of those days were consecutively observed reporting dense fog. On another occasion, from October 23 into November 8 of 1992, seventeen consecutive fog days were observed.

In correlation to the increased rainfall, cloudy sky conditions tend to increase as well. The average number of days that remain clear are only 5.3 and leaving the majority of the month under cloudy to partly cloudy conditions.

## November

With the start of November brings the normal beginning to the rainy season. The monthly precipitation normal increases to 4.32 inches, raising the monthly normal to 10.05 inches. In 1983, 16.75 inches of precipitation fell giving it the

highest maximum amount for the month. The minimum occurred in 1976 with 1.45 inches. The greatest amount of rainfall, 3.10 inches, for one day was observed on the 30th of 1975. Snow is more likely to be observed, although remain rare. The monthly snowfall average is 0.02 inches. In 1985, 4.6 inches of snow was reported, the greatest snowfall for the month of November.

The prevailing wind direction for the month is from the southeast and the mean velocity is around 8.7 mph. Although the prevailing winds are from the southeast, the strongest winds generally blow from the south or southwest. For example, the second fastest all time wind gust recorded occurred in this month at a speed of 85 mph from the southwest.

With winter approaching temperatures drop slightly, but continue to remain moderate with a normal of 46.9 degrees. The highest daily maximum is 71 degrees set in 1970 with a normal daily maximum of 53.5. Minimum daily temperatures usually remain around 40 degrees. The lowest daily minimum of 15 degrees occurred on the 14th in 1955.

As might be expected, November is one of the top three months containing the greatest cloud cover. On the average, 27.2 days are either cloudy or partly cloudy. Having only 2.8 days of clear conditions makes November one of the least likely months to see clear skies. Fog conditions for the month remain rather high. On five separate occasions the amount of consecutive days containing fog greater than or equal to 15 days were observed. On two of the occurrences 18 consecutive days were recorded.

## December

On average, December is the rainiest month, with 10.55 inches reported. The highest monthly

maximum amount is only two tenths of an inch greater than the monthly normal, which was 10.57 inches occurring in 1955. The lowest monthly precipitation amount fell in 1985 with 2.67 inches observed. On the 26th in 1974, 3.59 inches of rain fell within that day making it the second greatest amount of rainfall to occur in one day. December is the mostly likely month for snow to fall in Astoria. Snowfall amounts remain low with a mean of only 1.1 inches. The greatest snowfall amount occurred in 1964 with 19.0 inches. Rain is the dominate precipitation type for December. The normal temperature is 42.4 degrees. The highest daily maximum occurred on the 26th in 1980 at 64 degrees. The lowest daily minimum recorded was 6 degrees set on the 21st in 1990. This 6 degree temperature was also the lowest all time temperature recorded at the Astoria Regional Airport.

Sky conditions continue on the cloudy side with only an average number of clear days around 2.7. This leaves just over 28 days or approximately 92 percent of the month under cloudy to partly cloudy sky conditions.

# STATION LOCATION

ASTORIA, OREGON

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE							AUTOMATIC OBSERVING EQUIPMENT *	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS	
						SEA LEVEL	GROUND									HYGROMETER
							GROUND TEMPERATURE	WIND INSTRUMENTS	EXTERIOR THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET				
<u>COOPERATIVE</u>																
1 Pythian Building	12/1/83	2/28/97	NA	46° 11'	123°50'	15	60	39							Third order station.	
2 Savings Bank Building	11/9/10	7/18/16	Unk	46° 11'	123°50'	16	10	64							Top of building 60 feet above ground.	
3 530 Bond Street	7/19/16	11/26/17	Unk	46° 11'	123°50'	24	11								Roof of one-story building.	
4 Kinney Building 510 Commercial Street	1/15/18	5/11/19	Unk	46° 11'	123°50'	36	12								Instruments on 3rd story balcony	
5 Exchange St., near 12th	6/26/30	8/1/42	Unk	46° 11'	123°50'	10	18	14							Instruments were located in vacant city lot.	
6 212 Harrison Avenue	11/5/45	1/1/61	app. 0.5 mi. W	46° 11'	123°50'	220	22									
<u>AIRPORT</u>																
7 Clatsop Airport 3 miles SW of Post Office Building	11/15/46	1/15/53	NA	46° 09'	123°53'		67	5	4		4	4			SAIRS station.	
8 Clatsop County Airport	1/15/53	2/11/76	No Change	46° 09'	123°53'	8	46 c20	6	5		a4	4	b4		Weather Bureau Station established. a - Shielded 11/18/60. b - Commissioned 545 feet NE of thermometer site 10/7/64. c - Effective 10/7/64.	
9 National Weather Service Building Clatsop County Airport+ + - Port of Astoria Airport effective 7/24/84.	2/11/76	Present	400 ft. S	46° 09'	123°53'	8	c20	5	5	NA	5	5	4 d4 c4 f4	NA	d - Not moved 2/11/76. e - Type change 10/25/79. f - Type change 10/4/85.	



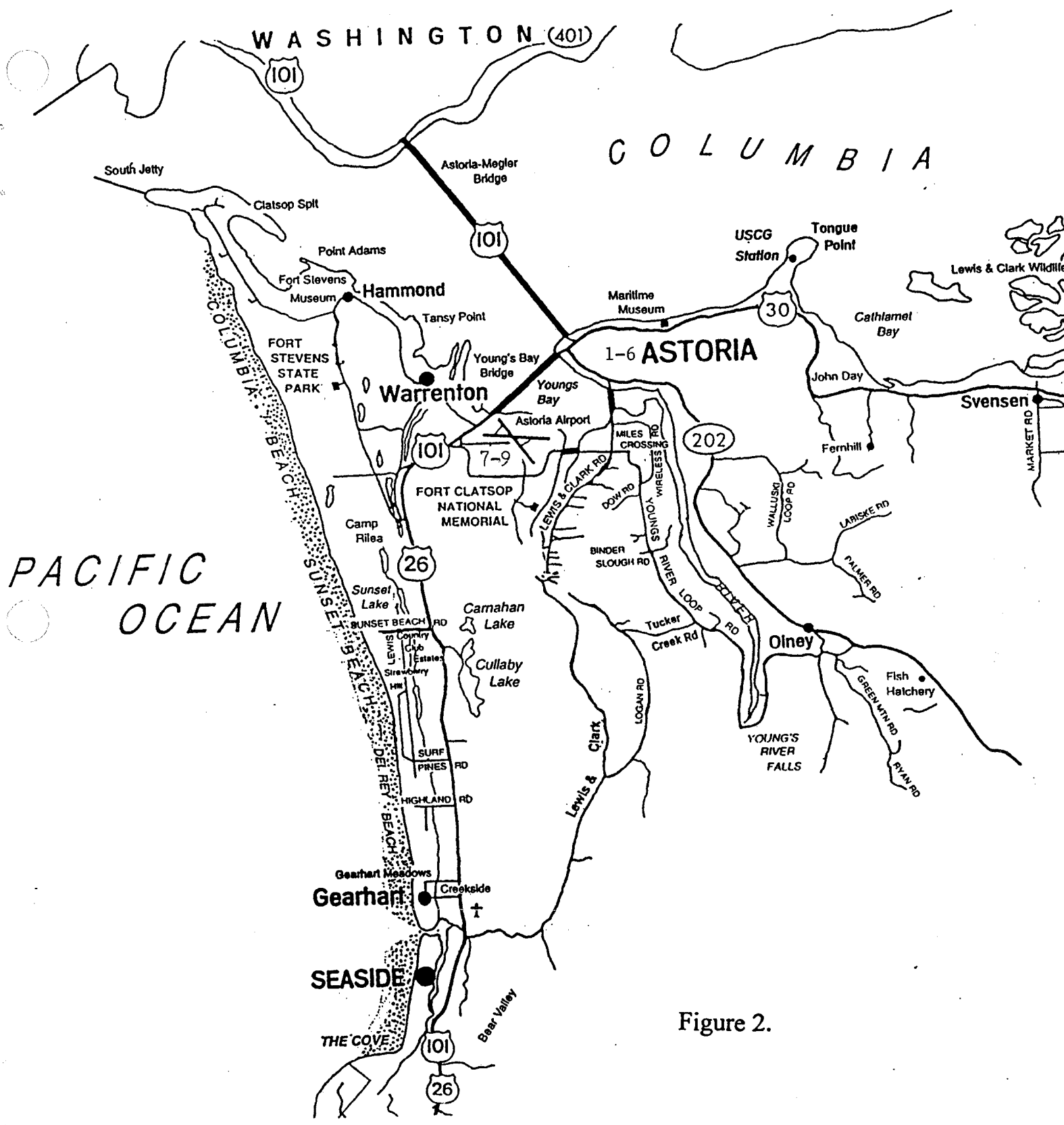


Figure 2.

EXTREME MONTHLY PEAK GUST MAXIMUMS  
(1953-1994)

<u>MONTH</u>	<u>DIR</u>	<u>VEL MPH</u>	<u>YEAR</u>
JANUARY	S	80	M
FEBRUARY	SE	76	M
MARCH	SW	83	M
APRIL	W	71	M
MAY	SE	61	M
JUNE	SW	44	M
JULY	W	45	1979
AUGUST	S	46	1991
SEPTEMBER	SW	60	M
OCTOBER	SW	96	1962
NOVEMBER	SW	85	M
DECEMBER	S	79	1982

MEAN WIND SPEED & PREVAILING DIRECTION

<u>MONTH</u>	<u>SPEED (MPH)</u>	<u>DIRECTION THROUGH 1963</u>
JANUARY	9.2	EAST
FEBRUARY	9.0	EAST-SOUTHEAST
MARCH	8.8	SOUTHEAST
APRIL	8.7	WEST-NORTHWEST
MAY	8.5	NORTHWEST
JUNE	8.6	NORTHWEST
JULY	8.7	NORTHWEST
AUGUST	8.1	NORTHWEST
SEPTEMBER	7.5	SOUTHEAST
OCTOBER	7.5	SOUTHEAST
NOVEMBER	8.7	SOUTHEAST
DECEMBER	9.0	EAST-SOUTHEAST
YEAR	8.5	SOUTHEAST

**M - MISSING DATA**

**FASTEST ONE MINUTE WIND OBSERVATIONS  
(1953-1993)**

<u>MONTH</u>	<u>DIRECTION</u>	<u>SPEED (MPH)</u>	<u>YEAR</u>
JANUARY	170	55	1971
FEBRUARY	190	47	1979
MARCH	190	44	1964
APRIL	200	52	1964
MAY	220	37	1975
JUNE	230	29	1993
JULY	190	29	1988
AUGUST	200	30	1991
SEPTEMBER	200	35	1959
OCTOBER	200	44	1962
NOVEMBER	200	46	1962
DECEMBER	250	52	1961

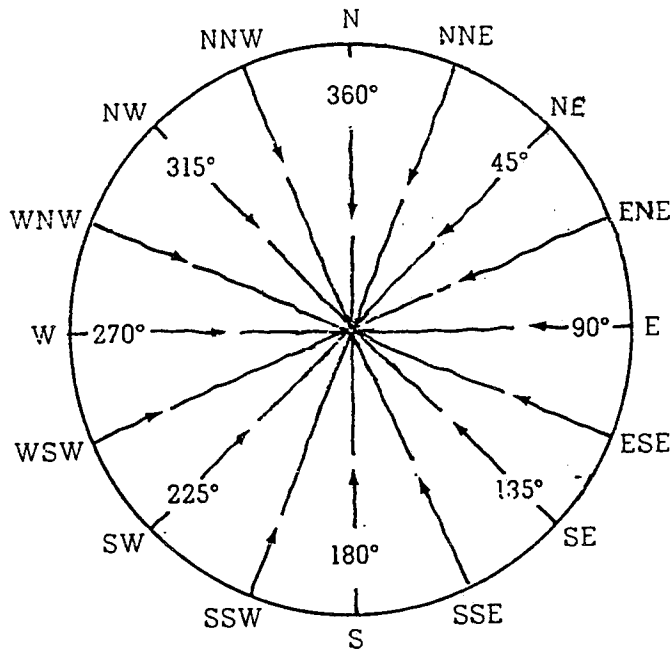


Figure 3.

**WIND DIRECTION**

Ahrews, Donald, 1991: *Meteorology Today*, West Publishing Company, 4th edition, p.279.

***GREATEST OCCURRENCE***

STRONGEST WIND GUSTS OF 50 KNOTS OR GREATER  
1985 - 1995

<u>YEAR</u>	<u>DAY</u>	<u>VEL/DIR</u>	<u>YEAR</u>	<u>DAY</u>	<u>VEL/DIR</u>	<u>YEAR</u>	<u>DAY</u>	<u>VEL/DIR</u>
1985	FEB 11	59 S	1989	JAN 16	51 S	1993	JAN 20	73 S
	MAR 23	62 S		FEB 17	51 S		DEC 8	61 S
				MAR 5	55 S		DEC 9	72 S
1986	JAN 16	75 SW		MAR 9	67 S		DEC 10	56 SW
	FEB 15	58 S		DEC 3	55 S		DEC 11	55 W
	MAR 7	64 S		DEC 4	56 S		DEC 31	51 S
	NOV 23	62 S						
	DEC 29	53 S	1990	JAN 6	62 S	1994	MAR 20	58 SW
				JAN 9	64 S		OCT 26	63 S
1987	JAN 28	62 SW		JAN 28	58 SW		OCT 31	67 S
	JAN 31	69 S		FEB 2	55 S		NOV 16	54 NW
	FEB 1	70 S		NOV 23	53 S		NOV 29	53 S
	FEB 22	52 NW		NOV 24	59 S		NOV 30	56 S
	MAR 3	60 SW		DEC 3	51 S		DEC 15	56 S
	NOV 30	55 S		DEC 4	64 S		DEC 17	59 S
	DEC 1	67 S		DEC 18	51 W		DEC 19	67 S
	DEC 2	60 S					DEC 20	54 S
	DEC 3	51 S	1991	JAN 12	56 S		DEC 25	51 S
	DEC 5	58 S		FEB 3	58 S		DEC 26	59 S
	DEC 9	61 SW		FEB 4	59 S		DEC 27	62 S
				MAR 3	59 S			
1988	JAN 10	51 S		APR 3	52 S	1995	JAN 30	52 S
	JAN 13	53 S		APR 4	54 S		JAN 31	51 S
	JAN 14	71 S		NOV 16	66 S		FEB 17	52 S
	FEB 12	52 W		NOV 19	61 S		FEB 18	55 S
	MAR 22	66 S		DEC 5	56 S		MAR 9	60 S
	MAR 23	52 W					MAR 20	55 SE
	APR 2	63 S	1992	JAN 23	59 S			
	SEP 25	56 S		JAN 27	59 S			
	NOV 2	62 S		JAN 31	67 S			
	NOV 5	54 S		FEB 21	53 S			
	NOV 11	51 S		APR 16	52 S			
	NOV 12	60 S		NOV 21	53 S			
	DEC 29	56 SW		DEC 10	56 SW			
	DEC 30	58 S						

## SUNRISE AND SUNSET AT ASTORIA, OREGON PACIFIC STANDARD TIME

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

13

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

AVERAGE NUMBER OF CLEAR, PARTLY CLOUDY, CLOUDY AND  
DENSE FOG DAYS BY MONTH  
(1953-1993)

<u>MONTH</u>	<u>CLEAR</u>	<u>PARTLY CLOUDY</u>	<u>CLOUDY</u>	<u>DENSE FOG</u>
JANUARY	3.0	3.7	24.2	3.7
FEBRUARY	3.4	3.3	21.5	3.0
MARCH	2.8	5.3	22.9	2.7
APRIL	3.0	5.9	21.0	2.2
MAY	3.1	8.2	19.7	1.5
JUNE	3.3	7.4	19.3	1.4
JULY	5.8	9.8	15.3	2.1
AUGUST	6.2	9.6	15.3	4.2
SEPTEMBER	8.1	7.5	14.5	5.7
OCTOBER	5.3	6.7	19.0	6.9
NOVEMBER	2.8	4.9	22.3	4.1
DECEMBER	2.7	4.2	24.2	3.9

CONSECUTIVE DAYS CONTAINING FOG  
15 DAYS OR GREATER  
(1954-1994)

15 Days	August 03 - August 17, 1977
15 Days	February 09 - February 23, 1991
15 Days	November 04 - November 20, 1991
15 Days	December 13 - December 27, 1994
16 Days	February 04 - February 19, 1972
16 Days	January 09 - January 24, 1975
16 Days	August 23 - September 06, 1980
16 Days	February 21 - March 08, 1986
17 Days	December 11 - December 27, 1980
17 Days	November 05 - November 22, 1993
17 Days	November 4 - November 20, 1991
17 Days	October 23 - November 08, 1992
18 Days	October 10 - October 27, 1985
18 Days	November 02 - November 19, 1990
18 Days	November 6 - November 22, 1993
19 Days	November 11 - November 29, 1986
20 Days	March 22 - April 10, 1993
23 Days	November 18 - December 11, 1994
26 Days	April 13 - May 8, 1993
32 Days	December 29, 1993 - January 29, 1994
32 Days	October 16 - November 16, 1994

GREATEST NUMBER OF CONSECUTIVE DAYS CONTAINING DENSE FOG\*\*  
5 DAYS OR GREATER FROM 1954 - 1994

<u>DURATION</u>	<u>DATE</u>
5 DAYS	FEBRUARY 5 - FEBRUARY 9, 1956
5 DAYS	DECEMBER 3 - DECEMBER 7, 1959
5 DAYS	FEBRUARY 19 - FEBRUARY 23, 1978
5 DAYS	SEPTEMBER 28 - OCTOBER 2, 1993
6 DAYS	NOVEMBER 19 - NOVEMBER 24, 1980
6 DAYS	OCTOBER 5 - OCTOBER 10, 1988
7 DAYS	DECEMBER 17 - DECEMBER 23, 1962
8 DAYS	OCTOBER 12 - OCTOBER 19, 1974

LONGEST PERIODS WITHOUT MEASURABLE PRECIPITATION (INCHES)  
21 DAYS OR GREATER (3 WEEKS)  
(1954-1994)

<u>DURATION</u>	<u>DATE</u>
21 DAYS	JUNE 28 - JULY 18, 1967
21 DAYS	SEPTEMBER 10 - SEPTEMBER 30, 1974
21 DAYS	SEPTEMBER 12 - OCTOBER 2, 1993
22 DAYS	JULY 10 - JULY 31, 1956
22 DAYS	AUGUST 8 - AUGUST 29, 1993
23 DAYS	JULY 2 - JULY 24, 1970
23 DAYS	DECEMBER 8 - DECEMBER 30, 1985
24 DAYS	JULY 30 - AUGUST 22, 1977
25 DAYS	JUNE 30 - JUNE 24, 1984
26 DAYS	JULY 23 - AUGUST 17, 1963
27 DAYS	JULY 23 - AUGUST 18, 1974
27 DAYS	SEPTEMBER 1 - OCTOBER 27, 1975
27 DAYS	JULY 11 - AUGUST 7, 1980
32 DAYS	JULY 12 - AUGUST 12, 1979
33 DAYS	JULY 13 - AUGUST 14, 1988
34 DAYS	SEPTEMBER 26 - OCTOBER 29, 1987
35 DAYS	JUNE 26 - JULY 30, 1960
36 DAYS	AUGUST 8 - SEPTEMBER 12, 1955
45 DAYS	JUNE 15 - JULY 30, 1985

\*\* DENSE FOG - VISIBILITY 1/4 MILE OR LESS

LONGEST CONSECUTIVE DAYS OF RAINFALL GREATER THAN .50 INCH  
5 DAYS OR GREATER FOR 1954 - 1994

<u>DURATION</u>	<u>DATE</u>	<u>DURATION</u>	<u>DATE</u>	
5 DAYS	FEB 28 - MAR 3, 1956	6 DAYS	JAN 2 - JAN 7, 1956	
	NOV 3 - NOV 7, 1958		DEC 16 - DEC 21, 1957	
	NOV 9 - NOV 13, 1958		NOV 29 - DEC 4, 1966	
	JAN 26 - JAN 30, 1965		NOV 28 - DEC 3, 1967	
	JAN 16 - JAN 20, 1970		NOV 10 - NOV 15, 1973	
	JAN 12 - JAN 16, 1971		NOV 12 - NOV 17, 1983	
	DEC 11 - DEC 15, 1973		JAN 4 - JAN 9, 1990	
	NOV 17 - NOV 21, 1974			
	JAN 12 - JAN 16, 1975		7 DAYS	JAN 6 - JAN 12, 1959
	OCT 25 - OCT 29, 1975			DEC 26 - JAN 1, 1966
	JAN 3 - JAN 7, 1983			
	FEB 9 - FEB 13, 1983			
	NOV 20 - NOV 24, 1986			
	FEB 7 - FEB 11, 1990			

LONGEST CONSECUTIVE DAYS OF RAINFALL GREATER THAN 1.00 INCHES  
3 DAYS OR GREATER FOR 1954 - 1994

<u>DURATION</u>	<u>DATE</u>	<u>DURATION</u>	<u>DATE</u>
3 DAYS	MAR 6 - MAR 8, 1957	5 DAYS	JAN 2 - JAN 6, 1954
	DEC 28 - DEC 30, 1970		JAN 2 - JAN 6, 1956
	JAN 18 - JAN 20, 1972		JAN 3 - JAN 7, 1983
4 DAYS	FEB 18 - FEB 21, 1961		
	JAN 12 - JAN 15, 1975		
	OCT 26 - OCT 29, 1975		
	NOV 30 - DEC 3, 1975		
	DEC 12 - DEC 15, 1977		

LONGEST CONSECUTIVE DAYS OF RAINFALL GREATER THAN 1.50 AND 2.00 INCHES  
1954 - 1994

1.50 INCH  
3 DAYS OR GREATER

2.00 INCH  
2 DAYS OR GREATER

<u>DURATION</u>	<u>DATE</u>	<u>DURATION</u>	<u>DATE</u>
3 DAYS	JAN 12 - JAN 14, 1975	2 DAYS	JAN 24 - JAN 25, 1964
	JAN 5 - JAN 7, 1983		JAN 22 - JAN 23, 1982
	DEC 2 - DEC 4, 1989		



EXTREME MONTHLY MAXIMUM AND MINIMUM PRECIPITATION  
(INCHES)  
(Records for 1953-1993)

<u>MONTH</u>	<u>NORMAL MONTHLY TOTAL</u>	<u>HIGHEST MONTHLY MAXIMUM</u>	<u>YEAR</u>	<u>LOWEST MONTHLY MINIMUM</u>	<u>YEAR</u>
JANUARY	10.00	18.94	1954	0.69	1985
FEBRUARY	7.59	<b>21.89</b>	<b>1961</b>	1.35	1993
MARCH	7.07	13.47	1956	0.93	1965
APRIL	4.60	9.47	1991	1.33	1956
MAY	3.02	6.60	1960	0.37	1982
JUNE	2.40	5.48	1954	0.55	1992
JULY	1.15	4.39	1983	<b>0.01</b>	<b>1960</b>
AUGUST	1.33	5.22	1968	0.08	1970
SEPTEMBER	2.91	6.93	1978	0.04	1975
OCTOBER	5.73	12.56	1975	0.52	1987
NOVEMBER	10.05	16.75	1983	1.45	1976
DECEMBER	10.55	10.57	1955	2.67	1985

GREATEST DAILY PRECIPITATION  
(INCHES)  
(MIDNIGHT TO MIDNIGHT FOR 1953-1993)

<u>DATE</u>	<u>GREATEST DAILY AMOUNT</u>	<u>NORMAL DAILY TOTAL</u>
<b>JANUARY 09, 1990</b>	<b>4.53</b>	0.33
FEBRUARY 21, 1954	3.33	0.26
MARCH 07, 1956	2.50	0.25
APRIL 04, 1991	2.73	0.18
MAY 31, 1968	1.74	0.09
JUNE 01, 1958	2.07	0.09
JULY 07, 1976	1.72	0.05
AUGUST 02, 1956	1.64	0.03
SEPTEMBER 30, 1953	2.41	0.13
OCTOBER 28, 1982	3.52	0.25
NOVEMBER 30, 1975	3.10	0.36
DECEMBER 26, 1974	3.59	0.33

**GREATEST OR LEAST AMOUNT RECORDED**

PROBABILITY THAT THE MONTHLY PRECIPITATION WILL BE  
EQUAL TO OR LESS THAN THE INDICATED AMOUNT

MONTHLY PRECIPITATION (INCHES)

PROB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
.005	1.07	1.76	1.68	1.40	0.52	0.27	0.01	0.02	0.08	0.41	2.40	2.62	41.52
.010	1.39	2.07	1.97	1.59	0.64	0.35	0.02	0.03	0.12	0.56	2.81	3.06	43.55
.050	2.65	3.12	2.95	2.22	1.05	0.65	0.09	0.11	0.36	1.21	4.20	4.52	49.43
.100	3.60	3.81	3.59	2.61	1.34	0.88	0.16	0.20	0.59	1.74	5.12	5.47	52.78
.200	5.04	4.79	4.50	3.16	1.75	1.23	0.31	0.37	1.00	2.58	6.40	6.80	57.03
.300	6.32	5.60	5.24	3.59	2.10	1.53	0.47	0.56	1.40	3.35	7.46	7.89	60.24
.400	7.57	6.36	5.94	4.00	2.43	1.83	0.65	0.76	1.83	4.11	8.45	8.92	63.08
.500	8.88	7.13	6.65	4.40	2.78	2.14	0.85	1.00	2.31	4.93	9.45	9.95	65.81
.600	10.34	7.96	7.41	4.83	3.15	2.49	1.10	1.27	2.87	5.86	10.53	11.06	68.62
.700	12.07	8.91	8.29	5.32	3.59	2.89	1.40	1.62	3.55	6.97	11.78	12.33	71.71
.800	14.33	10.12	9.40	5.94	4.15	3.43	1.83	2.11	4.48	8.43	13.35	13.95	75.45
.900	17.88	11.97	11.09	6.86	5.02	4.26	2.54	2.92	6.01	10.77	15.75	16.40	80.84
.950	21.20	13.66	12.63	7.69	5.81	5.04	3.25	3.71	7.49	12.98	17.93	18.62	85.47
.990	28.40	17.20	15.87	9.42	7.51	6.73	4.87	5.54	10.83	17.85	22.51	23.29	94.63
.995	31.37	18.63	17.17	10.11	8.20	7.42	5.56	6.32	12.24	19.86	24.35	25.16	98.14

PRECIPITATION QUINTILES 1961-1990 (INCHES)

LVL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 <	0.69	2.60	0.93	1.65	0.37	0.65	0.05	0.08	0.04	0.52	1.45	2.67
1	0.69	2.60	0.93	1.65	0.37	0.65	0.05	0.08	0.04	0.52	1.45	2.67
	5.04	4.79	4.50	3.16	1.75	1.23	0.31	0.37	1.00	2.58	6.40	6.8
2	5.05	4.80	4.51	3.17	1.76	1.24	0.32	0.38	1.01	2.59	6.41	6.81
	7.57	6.36	5.94	4.00	2.43	1.83	0.65	0.76	1.83	4.11	8.45	8.92
3	7.58	6.37	5.95	4.01	2.44	1.84	0.66	0.77	1.84	4.12	8.46	8.93
	10.34	7.96	7.41	4.83	3.15	2.49	1.10	1.27	2.87	5.86	10.53	11.06
4	10.35	7.97	7.42	4.84	3.16	2.50	1.11	1.28	2.88	5.87	10.54	11.07
	14.33	10.12	9.40	5.94	4.15	3.43	1.83	2.11	4.48	8.43	13.35	13.95
5	14.34	10.13	9.41	5.95	4.16	3.44	1.84	2.12	4.49	8.44	13.36	13.96
	18.50	21.89	10.73	7.74	6.00	5.47	4.39	5.22	6.93	12.56	16.75	15.93
6 >	18.50	21.89	10.73	7.74	6.00	5.47	4.39	5.22	6.93	12.56	13.75	15.93

0 = LESS THAN 30 YEAR MINIMUM  
1 = FIRST QUINTILE  
2 = SECOND QUINTILE  
3 = THIRD QUINTILE

4 = FOURTH QUINTILE  
5 = FIFTH QUINTILE  
6 = MORE THAN 30 YEAR MAXIMUM

THESE VALUES WERE DETERMINED FROM THE INCOMPLETE GAMMA DISTRIBUTION

## MONTHLY PRECIPITATION AVERAGES (INCHES)

(1955-1993)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1955	5.96	6.33	8.64	8.04	1.62	2.73	3.42	0.10	3.57	12.24	14.64	16.57	83.86
1956	17.09	9.32	13.47	1.33	1.43	4.64	0.18	2.15	3.76	11.37	2.57	9.02	76.33
1957	4.76	6.90	9.73	3.94	2.82	3.31	1.63	1.34	0.82	5.43	7.68	11.97	60.33
1958	9.61	10.96	4.62	7.03	1.03	2.80	0.09	0.52	1.94	7.33	14.14	12.17	72.24
1959	13.24	8.04	7.88	4.40	3.45	3.77	0.91	0.92	5.56	6.48	11.40	8.36	74.41
1960	10.09	8.47	7.40	5.92	6.60	1.87	0.01	1.84	1.69	7.33	13.91	6.12	71.25
1961	9.03	21.89	10.69	5.47	2.90	1.10	0.50	1.30	1.45	7.32	8.34	10.40	80.39
1962	6.53	5.61	5.18	7.44	2.88	1.87	0.34	2.49	3.50	7.40	14.21	6.78	64.23
1963	4.76	6.44	6.13	5.76	1.91	1.80	1.52	1.20	2.20	9.58	13.16	9.12	63.58
1964	18.5	4.06	7.41	3.59	2.27	2.70	2.59	2.21	2.73	2.61	11.15	13.67	73.49
1965	16.59	6.77	0.93	5.47	2.74	0.75	0.46	1.95	0.51	3.97	11.82	11.78	63.74
1966	8.61	5.53	8.79	2.90	2.18	2.13	0.54	1.01	2.18	5.83	10.00	14.07	63.77
1967	14.95	6.07	8.38	5.52	1.37	1.14	0.22	0.19	3.07	11.06	5.94	9.04	66.95
1968	9.57	9.57	10.42	4.22	3.91	4.81	1.23	5.22	4.60	8.03	11.96	13.85	87.39
1969	12.02	5.67	3.16	3.84	3.92	3.63	0.56	0.62	6.55	5.28	5.77	11.69	62.71
1970	14.46	5.29	4.28	7.74	1.92	1.19	0.31	0.08	3.65	5.80	9.86	15.93	70.51
1971	16.69	6.67	9.96	4.09	2.30	2.97	1.55	1.14	4.65	6.34	9.08	13.83	79.27
1972	10.62	8.58	10.04	6.82	1.22	0.92	2.01	0.37	4.72	1.96	6.90	13.28	67.44
1973	5.72	2.60	5.71	2.38	3.16	4.26	0.07	0.46	4.19	5.92	14.93	15.75	65.15
1974	12.47	8.38	10.73	4.88	4.37	2.33	4.20	0.29	0.67	1.85	8.95	13.84	72.96
1975	15.21	8.03	5.66	3.90	2.41	1.99	0.22	2.82	0.04	12.56	12.28	15.66	80.78
1976	11.67	7.78	7.17	3.55	2.20	1.27	2.46	2.55	1.58	2.96	1.45	4.20	48.92
1977	3.20	5.22	9.74	1.65	6.00	1.36	0.44	3.85	5.44	4.38	12.37	14.34	67.99
1978	8.66	5.43	4.40	6.35	4.75	3.07	0.90	2.61	6.93	1.01	8.43	4.99	57.53
1979	3.83	11.76	4.52	4.38	4.19	1.82	0.92	0.81	4.35	8.46	7.87	13.18	66.09
1980	7.21	9.6	6.31	4.84	1.45	1.57	0.64	1.24	2.51	2.79	12.02	12.44	62.63
1981	2.63	8.69	5.80	7.30	2.97	5.47	1.06	0.62	2.77	8.67	10.66	11.8	68.44
1982	13.98	10.87	7.19	6.52	0.37	1.22	0.75	0.63	3.72	8.31	9.62	12.14	75.32
1983	13.52	8.66	8.84	4.26	3.59	4.53	4.39	1.14	1.83	1.87	16.75	9.44	78.82
1984	6.60	8.34	5.90	5.02	5.34	3.90	0.05	0.52	3.16	8.10	15.19	6.51	68.63
1985	0.69	4.09	7.00	2.95	1.90	3.09	0.78	1.11	3.23	8.11	5.96	2.67	40.89
1986	11.19	8.93	6.11	3.58	3.30	0.94	1.69	0.14	3.62	5.54	11.42	7.34	63.71
1987	10.38	5.08	8.52	3.02	3.97	0.65	1.10	0.16	0.95	0.52	4.33	8.85	47.53
1988	6.57	3.60	7.86	3.99	4.09	3.50	0.96	0.88	1.23	2.14	13.06	7.32	55.20
1989	8.20	6.61	10.09	2.27	3.01	2.58	1.64	0.84	0.50	5.30	6.73	7.40	55.17
1990	16.09	11.83	5.15	4.44	4.00	3.47	0.54	1.57	0.67	8.44	11.28	5.11	72.59
1991	6.76	8.57	5.65	9.47	2.68	1.86	0.33	2.31	0.07	2.44	10.53	6.60	57.27
1992	9.34	5.69	1.19	7.49	0.52	0.55	0.24	0.77	2.66	4.10	10.11	5.99	48.65
1993	6.27	1.35	6.93	9.01	4.74	3.70	1.81	0.57	0.12	2.23	6.68	9.59	53.00

# Annual Precipitation Totals (1954-1993)

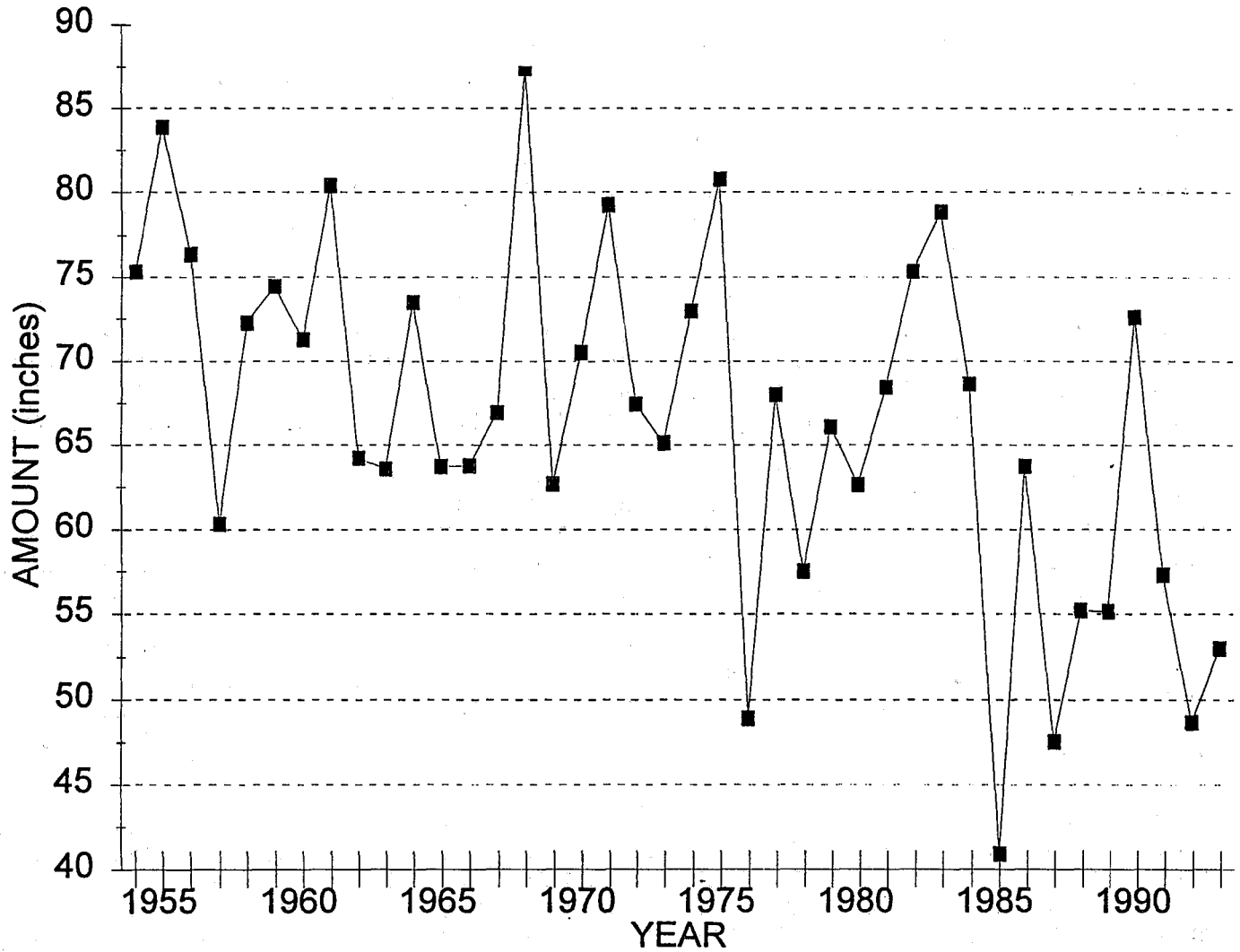


Figure 4.

FROZEN PRECIPITATION EXTREMES (INCHES)  
 SNOW, ICE PELLETS, HAIL  
 (Records for 1953-1993)

<u>MONTH</u>	<u>MAXIMUM MONTHLY</u>		<u>MAXIMUM IN 24 HOURS</u>	
	<u>AMOUNT</u>	<u>YEAR</u>	<u>AMOUNT</u>	<u>YEAR</u>
JANUARY	26.3	1969	10.8	1971
FEBRUARY	4.0	1962	4.0	1962
MARCH	6.7	1966	5.9	1960
APRIL	1.1	1975	1.0	1975
MAY	T	1991	T	1991
JUNE	T	1989	T	1989
JULY	0.0	0.0	0.0	0.0
AUGUST	0.0	0.0	0.0	0.0
SEPTEMBER	T	1972	T	1972
OCTOBER	T	1992	T	1992
NOVEMBER	4.6	1985	4.3	1985
DECEMBER	19.0	1964	7.2	1964

MEAN NUMBER OF DAYS...  
 (Records for 1953-1993)

<u>MONTH</u>	<u>PRECIPITATION</u>	<u>SNOW, ICE PELLETS, HAIL</u>
	<u>0.01 INCH OR MORE</u>	<u>1.0 INCHES OR MORE</u>
JANUARY	21.6	0.06
FEBRUARY	19.0	0.1
MARCH	20.3	0.3
APRIL	18.3	**
MAY	15.1	0.0
JUNE	12.7	0.0
JULY	7.7	0.0
AUGUST	7.8	0.0
SEPTEMBER	9.9	0.0
OCTOBER	15.6	0.0
NOVEMBER	20.4	0.1
DECEMBER	22.0	0.3

**\*\* - THE VALUE IS BETWEEN 0.0 AND 0.05  
 GREATEST AMOUNT RECORDED**

## SNOWFALL TOTALS BY MONTH FOR SEASONS 1952-53 TO 1993-94 (INCHES)

SEASON	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1952-53	-	-	-	-	-	-	-	0.0	T	0.0	0.0	0.0	-
1953-54	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0	1.0	0.0	0.0	0.0	7.4
1954-55	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	T	T	0.0	0.0	0.3
1955-56	0.0	0.0	0.0	0.0	2.2	0.2	1.1	0.7	2.9	0.0	0.0	0.0	7.1
1956-57	0.0	0.0	0.0	0.0	0.0	2.2	4.2	0.2	0.0	0.0	0.0	0.0	6.6
1957-58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958-59	0.0	0.0	0.0	0.0	0.0	0.0	1.1	T	T	0.0	0.0	0.0	1.1
1959-60	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	5.9	0.0	0.0	0.0	7.0
1960-61	0.0	0.0	0.0	0.0	T	0.0	0.0	T	0.4	0.0	0.0	0.0	0.4
1961-62	0.0	0.0	0.0	0.0	0.0	T	T	4.0	1.6	0.0	0.0	0.0	5.6
1962-63	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	T	0.0	0.0	0.3
1963-64	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	T
1964-65	0.0	0.0	0.0	0.0	T	19.0	10.7	0.0	0.0	0.0	0.0	0.0	29.7
1965-66	0.0	0.0	0.0	0.0	0.0	3.4	0.7	T	6.7	T	0.0	0.0	10.8
1966-67	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.7	T	0.0	0.0	0.7
1967-68	0.0	0.0	0.0	0.0	0.0	0.8	3.7	0.0	0.0	0.0	0.0	0.0	4.5
1968-69	0.0	0.0	0.0	0.0	0.0	4.5	26.3	1.0	0.0	0.0	0.0	0.0	31.8
1969-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	T
1970-71	0.0	0.0	0.0	T	T	1.8	16.1	0.2	1.5	0.2	T	0.0	19.8
1971-72	0.0	0.0	0.0	T	0.0	3.4	1.7	T	T	0.2	0.0	0.0	5.3
1972-73	0.0	0.0	T	0.0	0.0	5.4	T	0.0	T	T	T	0.0	5.4
1973-74	0.0	0.0	0.0	0.0	T	T	0.4	T	1.7	0.0	T	0.0	2.1
1974-75	0.0	0.0	0.0	0.0	T	T	0.3	0.2	T	1.1	T	0.0	1.6
1975-76	0.0	0.0	0.0	T	1.1	T	T	0.1	T	T	0.0	0.0	1.2
1976-77	0.0	0.0	0.0	0.0	0.0	T	T	T	T	0.0	T	0.0	T
1977-78	0.0	0.0	0.0	0.0	0.1	T	T	T	0.0	T	0.0	0.0	0.1
1978-79	0.0	0.0	0.0	T	0.1	2.5	0.3	T	T	T	0.0	0.0	2.9
1979-80	0.0	0.0	0.0	T	0.3	0.2	0.5	1.7	0.5	T	0.0	0.0	3.2
1980-81	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	T	0.0	0.0	T
1981-82	0.0	0.0	0.0	0.0	T	T	6.1	T	T	T	0.0	0.0	6.1
1982-83	0.0	0.0	0.0	0.0	T	0.0	T	0.0	T	T	T	0.0	T
1983-84	0.0	0.0	0.0	0.0	T	T	0.0	T	T	T	T	0.0	T
1984-85	0.0	0.0	0.0	T	T	T	0.0	1.1	T	T	T	0.0	1.1
1985-86	0.0	0.0	0.0	0.0	4.6	0.4	T	T	T	T	0.0	0.0	5.0
1986-87	0.0	0.0	0.0	0.0	T	0.0	T	0.0	T	T	0.0	0.0	T
1987-88	0.0	0.0	0.0	0.0	T	T	T	0.0	T	T	0.0	0.0	T
1988-89	0.0	0.0	0.0	0.0	T	T	T	1.5	T	T	T	T	1.5
1989-90	0.0	0.0	0.0	T	T	0.0	T	1.8	T	T	0.0	0.0	1.8
1990-91	0.0	0.0	0.0	0.0	T	1.4	0.0	0.0	T	T	T	0.0	1.4
1991-92	0.0	0.0	0.0	0.0	T	0.0	T	T	0.0	T	0.0	0.0	T
1992-93	0.0	0.0	0.0	T	0.0	T	5.2	3.4	0.0	0.0	0.0	0.0	8.6
1993-94	0.0	0.0	0.0	0.0	T	0.0	T	T	T	T	0.0	0.0	T

NORMAL AND EXTREME DAILY MAXIMUM, MINIMUM  
TEMPERATURES BY MONTH IN DEGREES  
FAHRENHEIT  
(Records for 1953-1993)

<u>MONTH</u>	<u>NORMAL DAILY MAXIMUM</u>	<u>HIGHEST DAILY MAXIMUM</u>	<u>YEAR</u>
JANUARY	47.8	67	1986
FEBRUARY	51.0	72	1968
MARCH	53.2	<b>73</b>	<b>1979</b>
APRIL	56.0	83	1987
MAY	60.1	87	1985
JUNE	64.1	93	1955
JULY	67.5	100	1961
AUGUST	68.8	96	1981
SEPTEMBER	67.8	95	1972
OCTOBER	61.1	<b>85</b>	<b>1987</b>
NOVEMBER	53.5	<b>71</b>	<b>1970</b>
DECEMBER	48.2	64	1980

<u>MONTH</u>	<u>NORMAL DAILY MINIMUM</u>	<u>LOWEST DAILY MINIMUM</u>	<u>YEAR</u>
JANUARY	35.9	<b>11</b>	<b>1980</b>
FEBRUARY	37.3	09	1989
MARCH	38.1	22	1971
APRIL	40.3	<b>29</b>	<b>1968</b>
MAY	44.8	30	1954
JUNE	49.5	37	1980
JULY	52.4	39	1971
AUGUST	52.6	39	1973
SEPTEMBER	49.0	33	1983
OCTOBER	44.0	26	1971
NOVEMBER	40.2	15	1955
DECEMBER	36.6	<b>06</b>	<b>1990</b>

**LAST OF SEVERAL OCCURRENCES**

## NORMAL MONTHLY TEMPERATURES (DEGREES FAHRENHEIT)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
41.9	44.2	45.7	48.2	52.5	56.9	60.0	60.7	58.4	52.6	46.9	42.4

## NORMAL HEATING AND COOLING DEGREE DAYS BASED ON 65 DEGREES FAHRENHEIT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
HEATING	716	582	598	504	388	243	157	141	201	384	543	701	5158
COOLING	0	0	0	0	0	0	0	8	0	0	0	0	8

## COOLING DEGREE DAY TOTALS BY MONTH 1969 - 1993

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1969	0	0	0	0	1	4	0	0	0	0	0	0	5
1970	0	0	0	0	0	7	0	0	1	0	0	0	8
1971	0	0	0	0	0	2	0	11	4	2	0	0	19
1972	0	0	0	0	0	1	19	23	16	0	0	0	59
1973	0	0	0	0	0	0	6	0	7	0	0	0	13
1974	0	0	0	0	0	0	5	11	13	0	0	0	29
1975	0	0	0	0	1	0	5	0	17	0	0	0	23
1976	0	0	0	0	0	3	4	8	8	1	0	0	24
1977	0	0	0	0	0	0	0	18	0	0	0	0	18
1978	0	0	0	0	0	0	6	8	0	0	0	0	14
1979	0	0	0	0	0	0	15	0	11	1	0	0	27
1980	0	0	0	0	0	0	13	0	7	8	0	0	28
1981	0	0	0	0	0	0	4	36	2	0	0	0	42
1982	0	0	0	0	0	6	0	4	1	1	0	0	12
1983	0	0	0	0	0	0	0	4	1	0	0	0	5
1984	0	0	0	0	0	0	3	1	5	0	0	0	9
1985	0	0	0	0	3	11	1	6	0	0	0	0	21
1986	0	0	0	0	2	0	0	5	0	0	0	0	7
1987	0	0	0	0	2	5	0	5	5	3	0	0	20
1988	0	0	0	0	0	0	10	3	6	0	0	0	19
1989	0	0	0	1	0	15	0	1	17	0	0	0	34
1990	0	0	0	0	0	5	5	12	10	0	0	0	32
1991	0	0	0	0	0	0	7	0	24	1	0	0	32
1992	0	0	0	0	0	6	1	18	1	0	0	0	26
1993	0	0	0	0	2	0	0	16	2	0	0	0	20



**HEATING DEGREE DAY TOTALS BY MONTH**  
1964 - 1993

SEASON	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1964-65	174	179	222	345	598	768	696	576	542	466	432	259	5257
1965-66	144	98	235	295	476	760	697	621	658	472	443	267	5166
1966-67	160	142	169	405	514	595	651	603	697	623	404	194	5157
1967-68	118	68	135	369	500	731	705	500	557	560	387	260	4890
1968-69	124	151	216	438	531	782	944	687	633	540	351	161	5558
1969-70	193	188	226	423	551	637	710	518	617	584	416	250	5313
1970-71	170	142	264	428	531	743	746	632	703	549	415	310	5633
1971-72	165	85	212	420	538	728	768	623	526	545	313	196	5119
1972-73	99	65	230	388	525	810	755	574	635	473	357	246	5157
1973-74	164	225	213	421	614	611	803	639	623	503	445	257	5518
1974-75	174	97	130	398	502	596	678	606	653	598	373	273	5078
1975-76	133	155	183	429	558	624	642	640	651	483	374	269	5141
1976-77	117	105	128	361	503	660	774	504	628	475	453	238	4946
1977-78	190	82	231	403	606	646	634	524	551	482	389	161	4908
1978-79	125	110	202	324	693	843	910	641	543	467	338	243	5439
1979-80	91	92	111	305	537	540	807	529	617	459	388	279	4755
1980-81	140	186	183	309	439	533	513	507	518	458	354	211	4351
1981-82	139	107	173	372	474	604	714	581	610	538	391	212	4915
1982-83	171	112	152	288	546	661	543	407	430	438	282	149	4179
1983-84	109	98	249	445	485	834	658	559	509	541	433	276	5196
1984-85	160	155	199	452	542	780	788	686	683	493	383	252	5573
1985-86	131	172	259	438	769	788	551	577	481	520	373	194	5253
1986-87	188	120	273	308	505	635	654	517	519	431	306	229	4685
1987-88	171	139	194	321	455	741	713	552	601	476	382	273	5018
1988-89	159	173	250	289	520	663	703	773	612	399	363	199	5103
1989-90	157	135	150	371	464	643	621	606	533	435	365	221	4701
1990-91	82	74	127	424	510	863	727	469	667	537	435	309	5224
1991-92	170	155	147	420	523	631	607	479	491	416	309	188	4536
1992-93	129	144	253	379	555	747	803	641	541	469	268	218	5147
1993-94	182	144	247	331	674	688	-	-	-	-	-	-	-

MEAN NUMBER OF DAYS PER MONTH WITH MAXIMUM TEMPERATURES.  
FOR 1953 - 1993 IN DEGREES FAHRENHEIT

<u>MONTH</u>	<u>90 degrees or higher</u>	<u>32 degrees or below</u>
JANUARY	0.0	0.6
FEBRUARY	0.0	0.1
MARCH	0.0	0.0
APRIL	0.0	0.0
MAY	0.0	0.0
JUNE	0.1	0.0
JULY	0.1	0.0
AUGUST	0.1	0.0
SEPTEMBER	0.1	0.0
OCTOBER	0.0	0.0
NOVEMBER	0.0	0.2
DECEMBER	0.0	0.7

MEAN NUMBER OF DAYS PER MONTH WITH MINIMUM TEMPERATURES  
FOR 1953 - 1993 IN DEGREES FAHRENHEIT

<u>MONTH</u>	<u>32 degrees or below</u>	<u>0 degrees or below</u>
JANUARY	9.6	0.0
FEBRUARY	6.6	0.0
MARCH	6.0	0.0
APRIL	1.9	0.0
MAY	0.1	0.0
JUNE	0.0	0.0
JULY	0.0	0.0
AUGUST	0.0	0.0
SEPTEMBER	0.0	0.0
OCTOBER	0.5	0.0
NOVEMBER	4.5	0.0
DECEMBER	8.2	0.0

GREATEST NUMBER OF CONSECUTIVE DAYS MAXIMUM TEMPERATURES WERE  
GREATER THAN 90 DEGREES FAHRENHEIT  
(1954-1993)

<u>DURATION</u>	<u>DATE</u>
2 DAYS	SEPTEMBER 1 - SEPTEMBER 2, 1972

\*\* NOTE: FROM 1954 - 1993 ONLY 14 OCCASIONS WERE RECORDED HAVING TEMPERATURES GREATER OR EQUAL TO 90 DEGREES FAHRENHEIT.

GREATEST NUMBER OF CONSECUTIVE DAYS MINIMUM TEMPERATURES WERE  
LESS THAN 32 DEGREES FAHRENHEIT FOR MORE THAN 7 DAYS.  
(1954-1993)

<u>DURATION</u>	<u>DATE</u>
8 DAYS	NOVEMBER 13 - NOVEMBER 20, 1964
8 DAYS	NOVEMBER 26 - DECEMBER 3, 1976
8 DAYS	DECEMBER 18 - DECEMBER 25, 1990
8 DAYS	JANUARY 6 - JANUARY 13, 1993
9 DAYS	MARCH 6 - MARCH 14, 1969
9 DAYS	DECEMBER 18 - DECEMBER 26, 1983
9 DAYS	DECEMBER 12 - DECEMBER 20, 1987
10 DAYS	JANUARY 25 - FEBRUARY 3, 1972
10 DAYS	FEBRUARY 1 - FEBRUARY 10, 1989
10 DAYS	DECEMBER 17 - DECEMBER 26, 1993
11 DAYS	JANUARY 24 - JANUARY 22, 1974
12 DAYS	DECEMBER 3 - DECEMBER 14, 1972
12 DAYS	DECEMBER 30, 1976 - JANUARY 10, 1977
13 DAYS	JANUARY 18 - JANUARY 30, 1963
13 DAYS	JANUARY 18 - JANUARY 30, 1969
14 DAYS	DECEMBER 25 - JANUARY 7, 1979
14 DAYS	JANUARY 21 - FEBRUARY 3, 1979
16 DAYS	JANUARY 15 - JANUARY 30, 1957
18 DAYS	JANUARY 21 - FEBRUARY 7, 1985

DAILY MAXIMUM AVERAGES BY MONTH  
FOR 1955 - 1993 IN DEGREES FAHRENHEIT

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1955	46.7	47.9	47.7	51.2	56.7	62.0	63.8	66.6	66.2	59.1	48.6	47.5	55.3
1956	47.0	43.6	49.3	56.8	61.9	61.3	68.5	67.0	66.5	57.9	53.4	48.4	56.8
1957	42.4	49.6	52.2	56.2	61.6	65.6	67.6	68.6	72.5	61.5	54.6	51.1	58.6
1958	51.8	55.5	53.3	56.7	63.7	67.4	70.5	71.1	68.5	64.4	53.3	53.2	60.8
1959	48.8	48.7	52.1	56.8	60.9	63.7	68.7	67.4	64	61.6	54.4	49.3	58.0
1960	45.9	50.7	51.9	56.6	58.4	64.0	67.7	66.4	67.6	61.2	53.6	50.2	57.9
1961	53.8	51.8	52.7	54.3	60.0	67.2	69.3	69.1	65.5	59.7	52.0	47.6	58.6
1962	47.1	50.5	50.9	55.6	56.6	62.1	65.0	68.3	67.1	61.1	55.1	51.5	57.6
1963	43.7	57.1	52.5	54.9	61.5	62.5	67.4	68.3	70.6	62.3	53.8	51.4	58.8
1964	49.2	50.8	51.3	53.3	57.3	62.0	66.4	67.4	65.8	63.2	51.6	45.3	57.0
1965	48.0	49.4	58.0	56.8	57.6	63.6	68.1	69.6	66.0	64.1	54.5	46.0	58.5
1966	47.9	49.1	51.4	56.7	59.4	65.1	67.2	70.7	68.8	60.2	54.3	50.1	58.4
1967	48.8	50.3	49.2	52.9	60.0	65.3	69.9	73.1	70.9	60.7	54.6	45.8	58.5
1968	47.7	55.8	53.6	53.9	59.9	63.9	69.1	68.2	66.2	58.4	53.4	45.0	57.9
1969	39.7	47.5	53.5	54.1	62.5	65.7	65.8	68.4	64.9	59.6	54.2	49.9	57.2
1970	47.7	55.4	54.0	52.7	60.3	65.3	67.4	69.3	65.8	59.3	53.6	46.3	58.1
1971	45.3	48.8	49.2	54.7	58.8	61.5	66.1	71.1	67.8	59.4	52.5	46.3	56.8
1972	44.9	49.3	54.1	54.5	62.3	65.3	71.5	73.8	67.4	61.9	53.8	43.9	58.6
1973	46.2	53.1	51.9	57.5	62.3	63.6	68.5	65.4	67.9	59.3	50.3	50.4	58.0
1974	44.6	47.7	51.2	55.2	57.5	63.1	67.5	68.5	71.2	62.0	54.2	50.5	57.8
1975	47.6	49.3	50.9	53.0	60.3	62.2	68.0	66.0	69.9	56.5	51.5	50.3	57.1
1976	50.2	49.3	50.7	56.9	60.5	63.2	69.0	68.0	69.1	61.8	56.3	49.9	58.7
1977	46.7	53.3	50.8	56.9	58.1	64.5	67.1	70.4	65.8	61.5	51.1	48.6	57.0
1978	49.0	51.7	55.9	56.4	61.0	67.8	68.3	68.8	65.5	64.6	49.6	43.9	58.5
1979	41.9	47.6	55.7	56.4	62.7	65.2	70.5	69.2	71.6	62.5	54.3	53.2	59.2
1980	45.8	52.6	51.2	58.8	59.1	62.2	67.2	64.6	66.6	65.1	56.9	53.0	58.6
1981	55.2	54.2	56.7	56.9	60.3	64.4	67.2	70.8	68.0	61.8	56.5	51.6	60.3
1982	46.9	50.1	52.8	55.1	60.1	64.4	66.4	69.7	68.8	63.7	53.8	49.6	58.5
1983	53.0	56.1	58.1	60.1	63.2	67.2	68.1	69.7	66.6	60.4	54.2	43.8	60.0
1984	49.6	52.4	55.5	54.4	58.1	61.1	67.8	69.7	67.6	57.5	53.0	45.8	57.7
1985	47.5	47.4	50.8	55.6	60.5	65.3	68.9	68.3	64.9	58.7	45.2	47.7	57.6
1986	54.2	50.5	57.3	55.8	60.6	66.7	65.4	68.5	64.2	62.4	54.1	50.3	59.2
1987	49.8	53.6	56.2	58.8	62.6	65.5	65.9	68.9	67.7	66.1	56.8	48.0	60.0
1988	48.0	53.6	54.0	56.6	60.5	64.5	68.6	67.9	66.4	62.6	53.4	49.6	58.8
1989	47.7	44.3	51.4	61.2	61.5	66.0	66.9	67.6	72.4	61.2	55.0	50.5	58.8
1990	50.4	50.1	55.2	57.6	60.1	64.7	70.1	70.3	69.5	59.7	54.4	42.6	58.7
1991	47.6	55.6	50.7	53.9	56.1	60.5	67.1	65.6	71.3	61.5	53.2	49.4	57.7
1992	50.7	56.0	58.0	58.6	64.6	65.8	68.0	69.6	65.6	60.9	53.0	45.8	59.7
1993	44.7	50.4	54.4	55.2	63.4	63.8	64.3	68.2	65.3	61.6	50.5	48.8	57.6

DAILY MINIMUM AVERAGES BY MONTH  
FOR 1955 - 1993 IN DEGREES FAHRENHEIT

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1955	35.3	34.6	35.0	35.8	41.8	48.5	51.8	50.0	47.2	45.2	37.1	35.5	41.5
1956	36.7	33.2	36.2	40.1	45.8	49.0	53.2	52.7	47.9	42.7	36.1	36.3	42.5
1957	29.3	35.2	39.0	41.4	46.7	49.9	50.3	51.7	51.4	44.7	37.2	38.9	43.0
1958	40.0	43.0	36.2	40.2	47.4	54.3	54.7	52.8	49.2	45.7	39.4	42.0	45.4
1959	38.6	37.2	37.8	42.0	43.5	49.9	51.9	50.2	48.7	45.6	38.7	35.0	43.3
1960	34.7	36.6	37.7	41.6	43.6	48.5	50.3	53.2	46.9	45.8	40.2	36.7	43.0
1961	40.8	41.3	38.8	40.7	45.2	50.1	54.4	53.5	47.2	42.3	35.4	37.0	43.9
1962	33.0	36.9	35.6	41.0	43.9	47.6	51.4	52.6	50.0	45.6	42.4	37.6	43.1
1963	30.1	42.2	37.5	41.1	44.5	49.1	53.1	53.8	51.7	47.5	41.7	37.5	44.2
1964	38.1	33.7	37.2	38.3	41.6	48.4	52.0	51.1	49.0	44.4	38.0	34.6	42.2
1965	36.6	39.0	36.3	41.7	44.1	48.7	52.3	53.7	47.9	46.5	43.1	34.6	43.7
1966	36.6	36.0	35.9	41.3	41.6	47.2	52.0	49.9	49.6	43.2	41.2	40.9	43.0
1967	38.7	36.0	35.2	35.1	43.4	51.2	52.2	52.5	50.0	45.1	41.5	36.6	43.1
1968	36.3	39.1	39.8	38.2	44.5	48.3	52.8	51.9	49.6	42.8	40.7	34.0	43.2
1969	28.8	33.1	35.1	39.5	44.4	53.4	51.3	48.9	49.5	42.3	38.7	38.3	41.9
1970	36.2	37.2	35.7	37.8	42.4	47.9	51.1	51.0	46.2	42.7	40.5	35.2	42.0
1971	36.1	35.6	34.8	38.2	43.9	47.7	52.7	53.6	47.9	43.1	41.1	36.1	42.6
1972	35.1	37.1	41.5	38.7	47.0	51.2	52.8	53.0	47.8	42.6	40.7	33.3	43.4
1973	34.7	35.5	36.8	40.3	44.4	49.5	50.8	49.7	47.9	43.0	38.2	39.9	42.6
1974	33.2	36.2	38.1	40.8	43.5	49.1	51.0	55.6	50.5	41.8	41.8	40.6	43.5
1975	38.1	36.9	36.6	36.8	45.2	49.0	53.3	53.4	48.4	45.3	40.8	39.0	43.6
1976	38.0	35.9	36.7	40.4	45.0	48.5	53.1	55.3	42.4	44.5	39.7	37.0	43.9
1977	33.0	40.2	38.3	40.8	42.2	49.1	50.2	54.9	48.2	41.9	38.1	39.2	43.0
1978	39.0	40.3	38.0	41.1	43.5	51.0	53.4	54.1	50.6	44.8	33.7	31.3	43.3
1979	28.7	35.9	38.9	41.9	44.9	48.3	54.2	54.4	51.2	47.4	39.4	41.5	43.9
1980	31.6	40.2	38.4	40.1	45.5	48.6	54.2	52.9	51.1	44.9	43.3	42.0	44.4
1981	41.1	39.0	39.4	42.1	46.4	51.0	53.6	54.0	50.1	43.6	41.5	38.9	45.1
1982	36.4	37.8	37.5	38.5	44.3	51.2	52.1	52.9	50.6	47.3	39.3	37.4	43.8
1983	41.5	44.3	43.6	40.2	48.2	52.4	54.3	53.6	46.4	40.4	43.0	31.9	45.0
1984	37.4	38.4	41.3	39.0	43.5	50.0	51.4	50.1	49.2	43.0	40.3	33.4	43.1
1985	31.0	33.1	34.7	41.1	44.4	48.3	52.3	50.5	47.4	42.6	33.1	30.8	41.7
1986	39.6	37.6	41.2	39.1	44.9	50.0	51.9	53.6	47.2	47.3	41.6	38.5	44.4
1987	37.5	39.0	39.8	42.0	47.0	49.2	52.5	51.9	49.0	42.9	42.3	33.7	43.9
1988	35.5	38.0	36.7	41.1	44.4	46.8	51.2	50.5	46.8	48.3	41.3	37.0	43.1
1989	36.5	29.8	38.7	41.7	44.7	51.3	52.6	53.3	48.3	44.3	43.3	37.5	43.5
1990	39.0	36.1	39.9	42.9	45.7	50.5	54.5	55.1	52.1	42.5	41.2	31.2	44.2
1991	35.0	40.4	35.8	39.7	45.4	48.4	52.0	53.8	49.9	40.9	41.3	39.5	43.5
1992	39.6	40.6	39.9	43.2	44.9	51.4	53.3	51.6	47.0	44.3	39.5	35.5	44.2
1993	33.0	33.3	40.3	43.1	49.0	51.2	53.6	53.1	47.9	46.6	34.0	36.5	43.5

**MONTHLY TEMPERATURE AVERAGES  
FOR 1955 - 1993 IN DEGREES FAHRENHEIT**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1955	41.0	41.3	41.4	43.5	49.3	55.3	57.8	58.3	56.7	52.2	42.9	41.5	48.4
1956	41.9	38.4	42.8	48.5	53.9	55.2	60.9	59.9	57.2	50.3	44.8	42.2	49.7
1957	35.9	42.2	45.6	48.8	54.2	57.8	59.0	60.2	62.0	53.1	45.9	45.0	50.8
1958	45.9	49.3	44.8	48.5	55.6	60.9	62.6	62.0	58.9	55.1	46.4	47.6	53.1
1959	43.7	43.0	45.0	49.4	52.2	56.8	60.3	58.8	56.4	53.6	46.6	42.2	50.7
1960	40.3	43.7	44.8	49.1	51.0	56.3	59.0	59.8	57.3	53.5	46.9	43.5	50.5
1961	47.3	46.6	45.8	47.5	52.6	58.7	61.9	61.3	56.4	51.0	43.7	42.3	51.3
1962	40.1	43.7	43.3	48.3	50.3	54.9	58.2	60.5	58.6	53.4	48.8	44.6	50.4
1963	36.9	49.7	45.0	48.0	53.0	55.8	60.3	61.1	61.2	54.9	47.8	44.5	51.5
1964	43.7	42.3	44.3	45.8	49.5	55.2	59.2	59.3	57.4	53.8	44.8	40.0	49.6
1965	42.3	44.2	47.2	49.3	50.9	56.2	60.2	61.7	57.0	55.3	48.8	40.3	51.1
1966	42.3	42.6	43.7	49.0	50.5	56.2	59.3	60.3	59.2	51.7	47.8	45.5	50.7
1967	43.8	43.2	42.2	44.0	51.7	58.3	61.1	62.8	60.5	52.9	48.1	41.2	50.8
1968	42.0	47.5	46.7	46.1	52.2	56.1	61.0	60.1	57.9	50.6	47.1	39.5	50.6
1969	34.3	40.3	44.3	46.8	53.5	59.6	58.6	58.7	57.2	51.0	46.0	44.1	49.6
1970	41.8	46.8	44.9	45.3	51.4	56.6	59.3	60.2	56.0	51.0	47.1	40.8	50.1
1971	40.7	42.2	42.0	46.5	51.4	54.6	59.4	62.4	57.9	51.3	46.8	41.2	49.7
1972	40.0	43.2	47.8	46.6	54.7	58.3	62.2	63.4	57.6	52.3	47.3	38.6	51.0
1973	40.5	44.3	44.4	48.9	53.4	56.6	59.7	57.6	57.9	51.2	44.3	45.2	50.3
1974	38.9	42.0	44.7	48.0	50.5	56.1	59.3	62.1	60.9	51.9	48.0	45.6	50.7
1975	42.9	43.1	43.8	44.9	52.8	55.6	60.7	59.7	59.2	50.9	46.2	44.7	50.4
1976	44.1	42.6	43.7	48.7	52.8	55.9	61.1	61.7	60.8	53.2	48.0	43.5	51.3
1977	39.9	46.8	44.6	48.9	50.2	56.8	58.7	62.7	57.0	51.7	44.6	43.9	50.5
1978	44.0	46.0	47.0	48.8	52.3	59.4	60.9	61.5	58.1	54.3	41.7	37.6	50.9
1979	35.3	41.8	47.3	49.2	53.8	56.8	62.4	61.8	61.4	55.0	46.9	47.4	51.6
1980	38.7	46.4	44.8	49.5	52.3	55.4	60.7	58.8	58.9	55.0	50.1	47.5	51.5
1981	48.2	46.6	48.1	49.5	53.4	57.7	60.4	62.4	59.1	52.7	49.0	45.3	52.7
1982	41.7	44.0	45.2	46.8	52.2	57.8	59.3	61.3	59.7	55.5	46.6	43.5	51.2
1983	47.3	50.2	50.9	50.2	55.7	59.8	61.2	61.7	56.6	50.4	48.6	37.9	52.5
1984	43.5	45.4	48.4	56.7	50.8	55.6	59.6	59.9	58.4	50.3	46.7	39.6	50.4
1985	39.3	40.3	42.8	48.4	52.5	56.8	60.6	59.4	56.2	50.7	39.2	39.3	49.7
1986	46.9	44.1	49.3	47.5	52.8	58.4	58.7	61.1	55.7	54.9	47.9	44.4	51.8
1987	43.7	46.3	48.0	50.4	55.0	57.4	59.2	60.4	58.4	54.4	49.6	40.9	52.0
1988	41.8	45.8	45.5	48.9	52.5	55.7	59.9	59.2	56.6	55.5	47.4	43.3	51.0
1989	42.1	37.1	45.1	51.5	53.1	58.7	59.8	60.5	60.4	52.8	49.2	44.0	51.2
1990	44.7	43.1	47.6	50.3	52.9	57.6	62.3	62.7	60.8	51.1	47.8	36.9	51.5
1991	41.3	48.0	43.3	46.8	50.8	45.5	59.6	59.7	60.6	51.2	47.3	44.5	50.6
1992	45.2	48.3	49.0	50.9	54.8	58.6	60.7	60.6	56.3	52.6	46.3	40.7	52.0
1993	38.9	41.9	47.4	49.2	56.2	57.5	59.0	60.7	56.6	54.1	42.3	42.7	50.5

MAXIMUM AND MINIMUM ANNUAL  
TEMPERATURE AVERAGES  
(1954-1993)

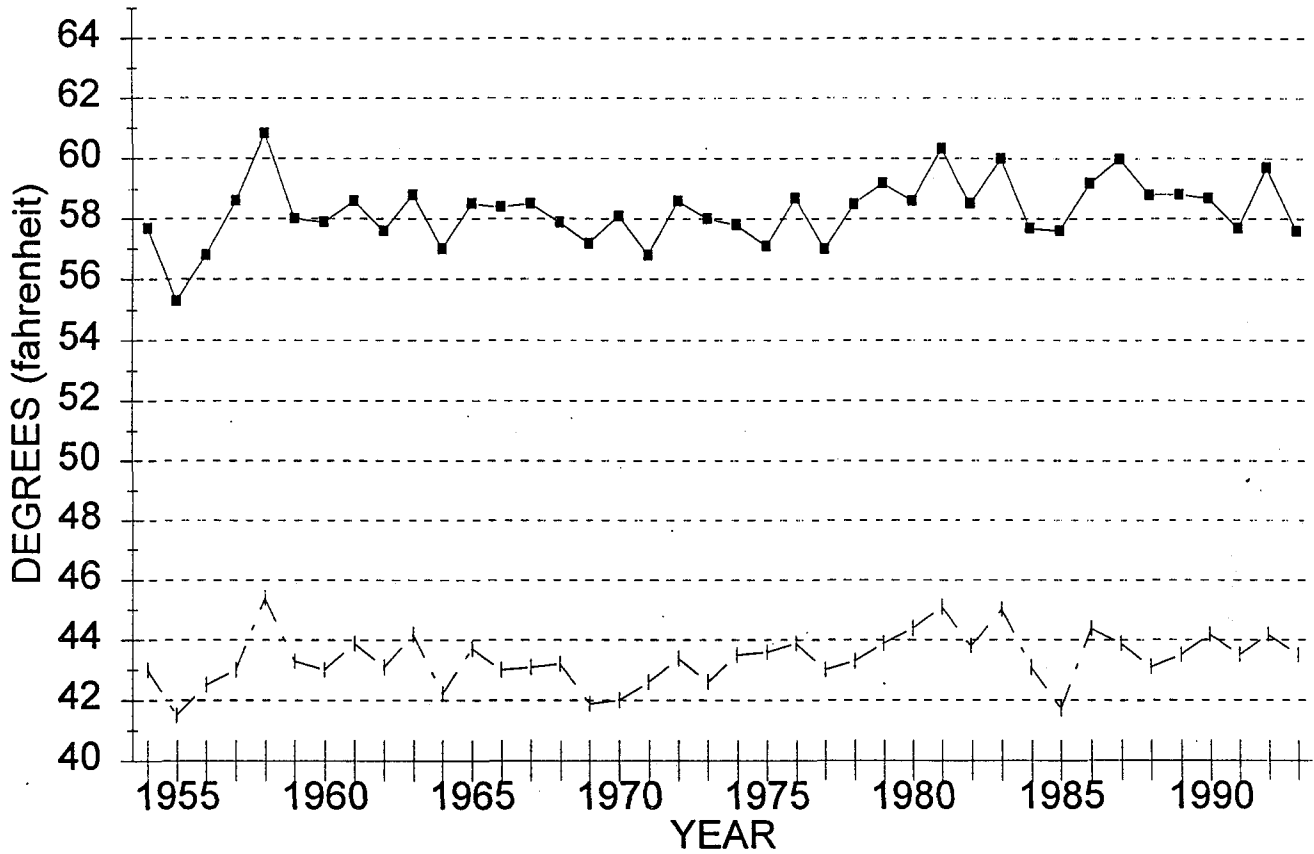


Figure 5.

—■— MAX TEMP —▲— MIN TEMP

# CLIMATOGRAPHY OF THE UNITED STATES NO. 84

## DAILY NORMALS OF TEMPERATURE, HEATING AND COOLING DEGREE DAYS, AND PRECIPITATION 1961-90

350328 ASTORIA WSO AP

LATITUDE: 46 09N

LONGITUDE: 123 53W

ELEVATION:

8 FT.

DAILY	DECEMBER						JANUARY						FEBRUARY					
	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	PCP	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	PCP	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	PCP
1	50	38	44	21	0	.36	47	36	41	24	0	.33	49	37	43	22	0	.30
2	50	38	44	21	0	.35	47	36	41	24	0	.34	50	37	43	22	0	.29
3	50	38	44	21	0	.35	47	36	41	24	0	.33	50	37	43	22	0	.29
4	50	38	44	21	0	.35	47	36	41	24	0	.33	50	37	43	22	0	.29
5	49	38	44	21	0	.35	47	35	41	24	0	.33	50	37	43	22	0	.29
6	49	37	43	22	0	.35	47	35	41	24	0	.33	50	37	44	21	0	.29
7	49	37	43	22	0	.35	47	35	41	24	0	.33	50	37	44	21	0	.28
8	49	37	43	22	0	.35	47	36	41	24	0	.33	50	37	44	21	0	.28
9	49	37	43	22	0	.34	47	36	42	23	0	.33	50	37	44	21	0	.28
10	49	37	43	22	0	.34	47	36	42	23	0	.33	51	37	44	21	0	.28
11	49	37	43	22	0	.34	47	36	42	23	0	.33	51	37	44	21	0	.28
12	48	37	43	22	0	.34	47	36	42	23	0	.33	51	37	44	21	0	.27
13	48	37	42	23	0	.34	47	36	42	23	0	.33	51	37	44	21	0	.27
14	48	37	42	23	0	.34	48	36	42	23	0	.33	51	37	44	21	0	.27
15	48	36	42	23	0	.34	48	36	42	23	0	.33	51	37	44	21	0	.27
16	48	36	42	23	0	.34	48	36	42	23	0	.33	51	37	44	21	0	.27
17	48	36	42	23	0	.34	48	36	42	23	0	.33	51	37	44	21	0	.27
18	48	36	42	23	0	.34	48	36	42	23	0	.32	52	37	45	20	0	.26
19	48	36	42	23	0	.34	48	36	42	23	0	.32	52	37	45	20	0	.26
20	48	36	42	23	0	.34	48	36	42	23	0	.32	52	37	45	20	0	.26
21	48	36	42	23	0	.34	48	36	42	23	0	.32	52	38	45	20	0	.26
22	48	36	42	23	0	.34	48	36	42	23	0	.32	52	38	45	20	0	.26
23	47	36	42	23	0	.34	48	36	42	23	0	.32	52	38	45	20	0	.26
24	47	36	42	23	0	.33	48	36	42	23	0	.32	52	38	45	20	0	.26
25	47	36	42	23	0	.33	49	36	42	23	0	.31	52	38	45	20	0	.25
26	47	36	42	23	0	.33	49	36	42	23	0	.31	52	38	45	20	0	.25
27	47	36	41	24	0	.33	49	36	43	22	0	.31	52	38	45	20	0	.25
28	47	36	41	24	0	.33	49	36	43	22	0	.31	52	38	45	20	0	.25
29	47	36	41	24	0	.33	49	36	43	22	0	.30						
30	47	36	41	24	0	.33	49	36	43	22	0	.30						
31	47	36	41	24	0	.33	49	36	43	22	0	.30						
MONTHLY	48.2	36.6	42.4	701	0	10.55	47.8	35.9	41.9	716	0	10.00	51.0	37.3	44.2	582	0	7.59
WINTER	49.0	36.6	42.8	1999	0	28.14	NOTES: DEGREE DAYS BASE TEMPERATURE = 65 DEG F; TEMPERATURE UNITS = DEG F; PRECIPITATION UNITS = INCHES; * = LESS THAN 1 BUT GREATER THAN 0											
ANNUAL	58.3	43.4	50.9	5158	8	66.40												

THE DAILY VALUES PRESENTED IN THESE TABLES ARE NOT SIMPLE MEANS OF OBSERVED VALUES. THEY ARE INTERPOLATED FROM THE MUCH LESS VARIABLE MONTHLY NORMALS BY USE OF THE NATURAL SPLINE FUNCTION. IN LEAP YEARS USE THE FEBRUARY 28TH VALUES FOR THE 29TH AND ADJUST THE DEGREE DAY MONTHLY TOTALS ACCORDINGLY. DAILY PRECIPITATION NORMALS WERE ALSO COMPUTED USING THE NATURAL SPLINE FUNCTION AND DO NOT EXHIBIT THE TYPICAL DAILY RANDOM PATTERNS. HOWEVER, THEY MAY BE USED TO COMPUTE NORMAL PRECIPITATION OVER TIME INTERVALS.



# CLIMATOGRAPHY OF THE UNITED STATES NO. 84

## DAILY NORMALS OF TEMPERATURE, HEATING AND COOLING DEGREE DAYS, AND PRECIPITATION 1961-90

350328 ASTORIA WSO AP

LATITUDE: 46 09N

LONGITUDE: 123 53W

ELEVATION:

8 FT.

DAILY	MARCH						APRIL						MAY						
	TEMPERATURE			DEG	DAY	PCP	TEMPERATURE			DEG	DAY	PCP	TEMPERATURE			DEG	DAY	PCP	
	MAX	MIN	AVG	HDD	CDD		MAX	MIN	AVG	HDD	CDD		MAX	MIN	AVG	HDD	CDD		
1	52	38	45	20	0	.25	54	39	47	18	0	.19	58	42	50	15	0	.12	
2	52	38	45	20	0	.25	54	39	47	18	0	.19	58	43	50	15	0	.11	
3	52	38	45	20	0	.25	55	39	47	18	0	.19	58	43	51	14	0	.11	
4	52	38	45	20	0	.25	55	39	47	18	0	.18	58	43	51	14	0	.11	
5	52	38	45	20	0	.25	55	39	47	18	0	.18	59	43	51	14	0	.11	
6	53	38	45	20	0	.25	55	39	47	18	0	.18	59	43	51	14	0	.11	
7	53	38	45	20	0	.25	55	39	47	18	0	.17	59	43	51	14	0	.11	
8	53	38	45	20	0	.24	55	39	47	18	0	.17	59	44	51	14	0	.10	
9	53	38	45	20	0	.24	55	40	47	18	0	.17	59	44	51	14	0	.10	
10	53	38	45	20	0	.24	55	40	47	18	0	.17	59	44	52	13	0	.10	
11	53	38	45	20	0	.24	55	40	48	17	0	.16	59	44	52	13	0	.10	
12	53	38	45	20	0	.24	56	40	48	17	0	.16	60	44	52	13	0	.10	
13	53	38	46	19	0	.24	56	40	48	17	0	.16	60	44	52	13	0	.10	
14	53	38	46	19	0	.23	56	40	48	17	0	.16	60	44	52	13	0	.10	
15	53	38	46	19	0	.23	56	40	48	17	0	.15	60	45	52	13	0	.10	
16	53	38	46	19	0	.23	56	40	48	17	0	.15	60	45	52	13	0	.09	
17	53	38	46	19	0	.23	56	40	48	17	0	.15	60	45	53	12	0	.09	
18	53	38	46	19	0	.23	56	40	48	17	0	.15	60	45	53	12	0	.09	
19	53	38	46	19	0	.22	56	41	49	16	0	.14	61	45	53	12	0	.09	
20	53	38	46	19	0	.22	56	41	49	16	0	.14	61	45	53	12	0	.09	
21	54	38	46	19	0	.22	57	41	49	16	0	.14	61	46	53	12	0	.09	
22	54	38	46	19	0	.22	57	41	49	16	0	.14	61	46	53	12	0	.09	
23	54	38	46	19	0	.22	57	41	49	16	0	.13	61	46	54	11	0	.09	
24	54	38	46	19	0	.21	57	41	49	16	0	.13	61	46	54	11	0	.09	
25	54	38	46	19	0	.21	57	41	49	16	0	.13	61	46	54	11	0	.09	
26	54	38	46	19	0	.21	57	42	49	16	0	.13	61	46	54	11	0	.09	
27	54	38	46	19	0	.21	57	42	50	15	0	.13	62	47	54	11	0	.09	
28	54	38	46	19	0	.20	58	42	50	15	0	.12	62	47	54	11	0	.09	
29	54	39	47	18	0	.20	58	42	50	15	0	.12	62	47	54	11	0	.09	
30	54	39	47	18	0	.20	58	42	50	15	0	.12	62	47	55	10	0	.09	
31	54	39	47	18	0	.19							62	47	55	10	0	.09	
MONTHLY	53.2	38.1	45.7	598	0	7.07	56.0	40.3	48.2	504	0	4.60	60.1	44.8	52.5	388	0	3.02	
SPRING	56.5	41.1	48.9	1490	0	14.69	NOTES: DEGREE DAYS BASE TEMPERATURE = 65 DEG F; TEMPERATURE UNITS = DEG F; PRECIPITATION UNITS = INCHES; * = LESS THAN 1 BUT GREATER THAN 0												
ANNUAL	58.3	43.4	50.9	5158	8	66.40													

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# CLIMATOGRAPHY OF THE UNITED STATES NO. 84

## DAILY NORMALS OF TEMPERATURE, HEATING AND COOLING DEGREE DAYS, AND PRECIPITATION 1961-90

350328 ASTORIA WSO AP

LATITUDE: 46 09N

LONGITUDE: 123 53W

ELEVATION:

8 FT.

DAILY	JUNE						JULY						AUGUST					
	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	PCP	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	PCP	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	PCP
1	62	47	55	10	0	.09	66	51	59	6	0	.06	68	53	61	4	0	.03
2	62	48	55	10	0	.09	66	51	59	6	0	.05	68	53	61	4	0	.03
3	62	48	55	10	0	.09	66	51	59	6	0	.05	68	53	61	4	0	.03
4	63	48	55	10	0	.09	67	52	59	6	0	.05	68	53	61	4	0	.03
5	63	48	56	9	0	.09	67	52	59	6	0	.05	68	53	61	4	0	.03
6	63	48	56	9	0	.09	67	52	59	6	0	.05	68	53	61	4	0	.03
7	63	48	56	9	0	.09	67	52	59	6	0	.05	69	53	61	4	0	.03
8	63	49	56	9	0	.09	67	52	59	6	0	.04	69	53	61	4	0	.03
9	63	49	56	9	0	.09	67	52	60	5	0	.04	69	53	61	4	0	.03
10	63	49	56	9	0	.09	67	52	60	5	0	.04	69	53	61	4	0	.03
11	64	49	56	9	0	.09	67	52	60	5	0	.04	69	53	61	4	0	.04
12	64	49	56	9	0	.09	67	52	60	5	0	.04	69	53	61	4	0	.04
13	64	49	57	8	0	.08	67	52	60	5	0	.04	69	53	61	4	0	.04
14	64	49	57	8	0	.08	68	52	60	5	0	.04	69	53	61	4	0	.04
15	64	50	57	8	0	.08	68	52	60	5	0	.03	69	53	61	5	1	.04
16	64	50	57	8	0	.08	68	52	60	5	0	.03	69	53	61	5	1	.04
17	64	50	57	8	0	.08	68	53	60	5	0	.03	69	53	61	5	1	.04
18	64	50	57	8	0	.08	68	53	60	5	0	.03	69	53	61	5	1	.04
19	65	50	57	8	0	.08	68	53	60	5	0	.03	69	53	61	5	1	.04
20	65	50	58	7	0	.08	68	53	60	5	0	.03	69	53	61	5	1	.05
21	65	50	58	7	0	.08	68	53	60	5	0	.03	69	52	61	5	1	.05
22	65	50	58	7	0	.07	68	53	60	5	0	.03	69	52	61	5	1	.05
23	65	50	58	7	0	.07	68	53	60	5	0	.03	69	52	60	5	0	.05
24	65	51	58	7	0	.07	68	53	60	5	0	.03	69	52	60	5	0	.05
25	65	51	58	7	0	.07	68	53	61	5	0	.03	69	52	60	5	0	.05
26	65	51	58	7	0	.07	68	53	61	4	0	.03	69	52	60	5	0	.06
27	66	51	58	7	0	.07	68	53	61	4	0	.03	69	52	60	5	0	.06
28	66	51	58	7	0	.06	68	53	61	4	0	.03	69	52	60	5	0	.06
29	66	51	59	6	0	.06	68	53	61	4	0	.03	69	52	60	5	0	.06
30	66	51	59	6	0	.06	68	53	61	4	0	.03	69	52	60	5	0	.06
31							68	53	61	4	0	.03	69	51	60	5	0	.07
MONTHLY	64.1	49.5	56.9	243	0	2.40	67.5	52.4	60.0	157	0	1.15	68.8	52.6	60.7	141	8	1.33
SUMMER	66.9	51.6	59.3	541	8	4.88	NOTES: DEGREE DAYS BASE TEMPERATURE = 65 DEG F; TEMPERATURE UNITS = DEG F; PRECIPITATION UNITS = INCHES; * = LESS THAN 1 BUT GREATER THAN 0											
ANNUAL	58.3	43.4	50.9	5158	8	66.40												

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# CLIMATOGRAPHY OF THE UNITED STATES NO. 84

## DAILY NORMALS OF TEMPERATURE, HEATING AND COOLING DEGREE DAYS, AND PRECIPITATION 1961-90

350328 ASTORIA WSO AP

LATITUDE: 46 09N

LONGITUDE: 123 53W

ELEVATION:

8 FT.

DAILY	SEPTEMBER						OCTOBER						NOVEMBER						
	TEMPERATURE			DEG	DAY	PCP	TEMPERATURE			DEG	DAY	PCP	TEMPERATURE			DEG	DAY	PCP	
MAX	MIN	AVG	HDD	CDD	MAX		MIN	AVG	HDD	CDD	MAX		MIN	AVG	HDD	CDD			
1	69	51	60	5	0	.07	65	46	56	9	0	.13	57	42	49	16	0	.27	
2	69	51	60	5	0	.07	65	46	55	10	0	.13	57	42	49	16	0	.28	
3	69	51	60	5	0	.07	65	46	55	10	0	.13	56	42	49	16	0	.29	
4	69	51	60	5	0	.07	64	46	55	10	0	.14	56	42	49	16	0	.29	
5	69	51	60	5	0	.08	64	46	55	10	0	.14	56	41	49	16	0	.30	
6	69	51	60	5	0	.08	64	46	55	10	0	.14	56	41	49	16	0	.30	
7	69	50	60	6	0	.08	63	45	54	11	0	.14	55	41	48	17	0	.31	
8	69	50	60	6	0	.08	63	45	54	11	0	.15	55	41	48	17	0	.32	
9	69	50	59	6	0	.08	63	45	54	11	0	.15	55	41	48	17	0	.32	
10	69	50	59	6	0	.09	63	45	54	11	0	.15	55	41	48	17	0	.33	
11	69	50	59	6	0	.09	62	45	54	11	0	.16	54	41	48	17	0	.33	
12	69	50	59	6	0	.09	62	45	53	12	0	.16	54	41	48	17	0	.33	
13	68	49	59	6	0	.09	62	44	53	12	0	.16	54	41	47	18	0	.34	
14	68	49	59	6	0	.09	62	44	53	12	0	.17	54	40	47	18	0	.34	
15	68	49	59	6	0	.10	61	44	53	12	0	.17	54	40	47	18	0	.34	
16	68	49	58	7	0	.10	61	44	53	12	0	.18	53	40	47	18	0	.35	
17	68	49	58	7	0	.10	61	44	52	13	0	.18	53	40	47	18	0	.35	
18	68	49	58	7	0	.10	61	44	52	13	0	.19	53	40	46	19	0	.35	
19	68	48	58	7	0	.10	60	43	52	13	0	.19	53	40	46	19	0	.35	
20	67	48	58	7	0	.11	60	43	52	13	0	.20	52	40	46	19	0	.36	
21	67	48	58	7	0	.11	60	43	52	13	0	.20	52	40	46	19	0	.36	
22	67	48	57	8	0	.11	60	43	51	14	0	.21	52	39	46	19	0	.36	
23	67	48	57	8	0	.11	59	43	51	14	0	.21	52	39	46	19	0	.36	
24	67	48	57	8	0	.11	59	43	51	14	0	.22	52	39	45	20	0	.36	
25	66	47	57	8	0	.12	59	43	51	14	0	.23	51	39	45	20	0	.36	
26	66	47	57	8	0	.12	58	43	51	14	0	.23	51	39	45	20	0	.36	
27	66	47	57	8	0	.12	58	42	50	15	0	.24	51	39	45	20	0	.36	
28	66	47	56	9	0	.12	58	42	50	15	0	.25	51	39	45	20	0	.36	
29	66	47	56	9	0	.12	58	42	50	15	0	.25	51	38	45	20	0	.36	
30	65	47	56	9	0	.13	57	42	50	15	0	.26	50	38	44	21	0	.36	
31							57	42	50	15	0	.27							
MONTHLY	67.8	49.0	58.4	201	0	2.91	61.1	44.0	52.6	384	0	5.73	53.5	40.2	46.9	543	0	10.05	
AUTUMN	60.9	44.4	52.7	1128	0	18.69	NOTES: DEGREE DAYS BASE TEMPERATURE = 65 DEG F; TEMPERATURE UNITS = DEG F; PRECIPITATION UNITS = INCHES; * = LESS THAN 1 BUT GREATER THAN 0												
ANNUAL	58.3	43.4	50.9	5158	8	66.40													

THE DAILY VALUES PRESENTED IN THESE TABLES ARE NOT SIMPLE MEANS OF OBSERVED VALUES. THEY ARE INTERPOLATED FROM THE MUCH LESS VARIABLE MONTHLY NORMALS BY USE OF THE NATURAL SPLINE FUNCTION. IN LEAP YEARS USE THE FEBRUARY 28TH VALUES FOR THE 29TH AND ADJUST THE DEGREE DAY MONTHLY TOTALS ACCORDINGLY. DAILY PRECIPITATION NORMALS WERE ALSO COMPUTED USING THE NATURAL SPLINE FUNCTION AND DO NOT EXHIBIT THE TYPICAL DAILY RANDOM PATTERNS. HOWEVER, THEY MAY BE USED TO COMPUTE NORMAL PRECIPITATION OVER TIME INTERVALS.

Calendar Day Records  
JANUARY 1953 THROUGH 1995

DAY	MAX		MIN		MAX		(PEAK GUST)		
	TEMP	YEAR	TEMP	YEAR	PCPN	YEAR	DIR	VEL MPH	YEAR
01	60	1981	14	1979	1.67	1964	SE	67	
02	61	1981	21	1974	1.65	1956	SW	56	
03	59	1984	17	1959	1.67	1956	SW	60	
04	59	1984	21	1974	2.11	1954	SW	56	
05	56	1981	16	1974	1.93	1983	S	63	
06	56	1981	15	1982	1.74	1983	S	62	1990
07	<b>67</b>	<b>1986</b>	15	1974	2.15	1983	S	70	
08	56	1981	16	1974	1.82	1971	W	62	
09	56	1961	15	1974	<b>4.53</b>	<b>1990</b>	S	64	1990
10	61	1986	16	1993	1.25	1991	SW	51	1988
11	58	1956	15	1963	0.94	1972	S	67	
12	61	1986	17	1963	1.77	1975	S	62	
13	58	1981	23	1963	2.88	1975	S	65	
14	59	1981	27	1971	2.04	1956	<b>SE</b>	<b>80</b>	
15	61	1965	24	1987	1.39	1956	<b>S</b>	<b>80</b>	
16	57	1958	20	1984	2.39	1982	SW	75	
17	60	1986	25	1987	1.26	1953	W	61	
18	61	1986	22	1957	1.73	1986	S	72	
19	63	1961	24	1969	2.23	1967	W	63	
20	65	1961	20	1962	1.69	1972	S	72	1993
21	61	1981	14	1962	3.33	1954	SE	65	
22	62	1981	17	1962	2.80	1953	SE	56	
23	60	1968	19	1969	3.84	1982	S	59	1992
24	57	1983	22	1969	2.33	1964	SW	60	
25	60	1986	18	1969	2.88	1971	S	56	
26	63	1983	16	1957	1.73	1970	SE	52	
27	60	1988	15	1957	1.68	1992	S	59	1992
28	59	1988	<b>11</b>	<b>1969</b>	2.51	1965	SW	62	1987
29	63	1960	<b>11</b>	<b>1980</b>	0.86	1965	SW	69	
30	63	1962	21	1980	1.03	1974	SW	69	
31	63	1976	19	1979	2.70	1987	S	69	1987

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
FEBRUARY 1953 THROUGH 1995

DAY	MAX	YEAR	MIN	YEAR	MAX	YEAR	(PEAK GUST)		
	TEMP		TEMP		PCPN		DIR	VEL	MPH
01	61	1991	21	1979	0.85	1980	S	70	1987
02	60	1962	14	1989	1.51	1963	S	60	
03	61	1992	11	1989	1.94	1968	S	60	
04	65	1984	13	1989	1.03	1965	SW	69	
05	60	1987	<b>09</b>	<b>1989</b>	0.84	1957	S	49	1990
06	65	1954	21	1989	1.86	1979	S	59	
07	66	1963	22	1989	1.56	1955	SW	53	
08	66	1987	21	1994	1.30	1958	SW	48	
09	65	1963	26	1982	2.72	1990	SE	55	
10	68	1963	24	1982	1.45	1990	S	50	
11	63	1983	26	1978	1.12	1975	SW	63	
12	66	1963	27	1959	1.80	1984	<b>SE</b>	<b>76</b>	
13	60	1981	25	1995	2.31	1994	SW	67	
14	60	1991	22	1990	1.44	1960	S	54	
15	62	1962	21	1956	<b>2.80</b>	<b>1970</b>	SE	59	
16	58	1957	20	1956	2.32	1989	SW	62	
17	62	1957	25	1985	1.52	1958	S	60	
18	67	1958	23	1955	1.67	1968	S	55	1955
19	62	1978	27	1955	2.45	1991	S	63	
20	62	1970	25	1955	2.30	1961	S	52	
21	68	1973	27	1957	1.85	1961	S	53	1992
22	64	1981	29	1988	1.33	1986	NW	52	1987
23	64	1988	27	1953	2.62	1986	S	70	
24	64	1970	23	1962	2.46	1961	S	52	
25	67	1992	24	1993	1.07	1963	SW	60	
26	71	1992	19	1962	1.55	1980	SE	53	
27	71	1968	21	1962	1.06	1972	S	62	
28	<b>72</b>	<b>1968</b>	22	1960	1.17	1974	SW	62	
29	65	1988	26	1960	0.92	1964	SW	64	

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
MARCH 1953 THROUGH 1995

DAY	MAX		MIN		MAX		(PEAK GUST)		
	TEMP	YEAR	TEMP	YEAR	PCPN	YEAR	DIR	VEL MPH	YEAR
01	63	1981	<b>22</b>	<b>1971</b>	1.65	1972	S	44	
02	70	1986	26	1985	1.42	1987	S	52	
03	67	1965	24	1989	1.68	1987	SW	60	1987
04	66	1965	27	1955	1.46	1979	S	55	
05	67	1965	26	1955	1.45	1972	SW	58	
06	66	1965	27	1956	1.55	1957	SE	47	
07	64	1982	25	1974	<b>2.50</b>	<b>1956</b>	S	64	1986
08	68	1953	27	1974	1.32	1957	S	55	
09	68	1979	27	1969	1.32	1995	S	67	1989
10	72	1965	25	1969	1.05	1971	S	59	
11	68	1965	28	1985	1.09	1991	<b>SW</b>	<b>83</b>	
12	67	1994	27	1962	0.83	1972	S	66	1980
13	<b>73</b>	<b>1979</b>	25	1969	1.15	1968	S	58	1983
14	65	1994	27	1969	1.11	1961	W	51	1980
15	61	1990	28	1988	1.24	1989	S	51	
16	65	1990	29	1977	1.09	1974	S	62	
17	67	1956	29	1971	0.90	1975	S	53	
18	64	1983	27	1971	1.12	1973	S	40	1984
19	68	1960	26	1965	0.57	1961	SE	48	
20	68	1968	28	1955	0.92	1966	SW	58	1994
21	66	1992	29	1971	0.92	1955	SW	47	
22	61	1978	28	1966	2.20	1993	S	66	1988
23	67	1979	29	1973	0.98	1985	S	62	1985
24	65	1960	27	1964	1.73	1988	SW	58	
25	68	1969	30	1993	1.22	1978	S	43	1988
26	72	1994	29	1991	1.34	1988	S	70	
27	<b>73</b>	<b>1994</b>	29	1991	2.05	1968	W	50	
28	70	1964	28	1987	1.94	1955	S	43	
29	<b>73</b>	<b>1964</b>	30	1973	1.26	1983	S	71	
30	68	1987	28	1954	1.31	1981	SW	43	1985
31	72	1987	30	1970	1.27	1959	S	44	

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
APRIL 1953 THROUGH 1994

DAY	MAX TEMP	YEAR	MIN TEMP	YEAR	MAX PCPN	YEAR	(PEAK GUST)		YEAR
							DIR	VEL MPH	
01	70	1992	<b>29</b>	<b>1953</b>	0.93	1961	S	38	
02	63	1987	30	1980	1.01	1954	S	63	1988
03	70	1966	30	1967	1.69	1991	S	52	1991
04	78	1966	30	1955	<b>2.73</b>	<b>1991</b>	S	54	1991
05	68	1960	30	1955	0.78	1963	S	55	
06	70	1985	32	1978	1.23	1962	SW	54	
07	67	1959	32	1988	1.00	1972	SW	41	1987
08	72	1959	30	1988	1.43	1993	S	44	1980
09	77	1959	32	1982	1.46	1971	S	46	
10	71	1990	31	1982	0.65	1955	SW	46	
11	69	1980	31	1991	1.21	1966	S	52	1982
12	76	1980	30	1968	1.16	1954	S	53	
13	76	1980	<b>29</b>	<b>1968</b>	0.61	1967	SE	53	
14	71	1981	31	1975	1.10	1968	SW	60	
15	68	1983	30	1967	1.20	1958	S	43	1984
16	69	1983	32	1970	1.19	1973	S	52	1992
17	81	1983	30	1967	0.80	1958	SW	39	1992
18	68	1982	31	1966	1.69	1970	SW	40	
19	74	1952	30	1967	2.42	1965	S	48	
20	83	1956	33	1987	0.67	1972	SW	37	
21	77	1982	31	1985	0.69	1978	NW	33	1987
22	64	1968	32	1960	1.00	1978	S	43	1985
23	70	1977	34	1992	0.90	1990	S	38	
24	71	1978	31	1986	0.89	1975	SW	49	
25	68	1992	<b>29</b>	<b>1955</b>	0.73	1990	S	38	1990
26	<b>83</b>	<b>1987</b>	31	1984	0.84	1962	W	41	1991
27	71	1983	30	1954	1.12	1962	<b>W</b>	<b>71</b>	
28	73	1989	32	1985	0.64	1959	SW	41	1982
29	78	1989	31	1975	0.70	1959	S	46	
30	71	1977	32	1986	0.61	1965	S	36	

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
MAY 1953 THROUGH 1994

DAY	MAX	YEAR	MIN	YEAR	MAX	YEAR	(PEAK GUST)		
	TEMP		TEMP		PCPN		DIR	VEL	MPH
01	70	1971	<b>30</b>	<b>1954</b>	0.83	1984	SW	47	
02	68	1971	35	1965	0.94	1975	<b>SE</b>	<b>61</b>	
03	81	1992	35	1980	0.85	1993	SW	48	
04	86	1953	33	1969	1.60	1979	S	35	
05	74	1994	35	1988	0.80	1966	S	38	
06	80	1987	31	1965	0.62	1988	NW	32	1990
07	83	1987	33	1985	1.09	1983	S	36	1991
08	75	1987	34	1990	0.73	1983	SW	37	
09	70	1960	35	1955	0.53	1961	NW	33	1990
10	76	1994	34	1967	0.64	1978	SE	35	
11	75	1988	35	1985	0.70	1987	S	35	
12	86	1959	31	1985	0.77	1978	SW	37	1986
13	84	1973	33	1958	0.76	1978	S	35	
14	72	1958	35	1964	0.93	1959	S	30	1983
15	76	1976	35	1985	0.51	1971	S	53	
16	<b>87</b>	<b>1985</b>	35	1986	0.72	1960	SW	45	
17	83	1958	33	1974	1.32	1989	W	39	1989
18	79	1961	36	1966	1.07	1953	S	39	
19	81	1978	37	1977	1.60	1960	NW	33	
20	83	1963	38	1975	1.18	1990	SW	38	
21	81	1969	36	1973	1.04	1990	SW	35	1990
22	81	1969	37	1960	0.54	1984	SW	33	
23	79	1993	34	1966	1.48	1973	SW	38	1989
24	84	1993	39	1966	0.93	1974	NW	36	1993
25	77	1979	34	1967	0.69	1977	S	36	
26	78	1972	37	1973	0.48	1977	SW	35	1988
27	78	1983	39	1984	0.91	1969	S	35	1988
28	76	1984	38	1973	0.41	1976	S	44	1994
29	76	1973	37	1966	1.25	1969	NW	37	1986
30	78	1986	39	1979	0.97	1987	S	45	1987
31	81	1978	35	1953	<b>1.74</b>	<b>1968</b>	S	33	

**INDICATES RECORD FOR THE MONTH**



Calendar Day Records  
JUNE 1953 THROUGH 1994

DAY	MAX		MIN		MAX		(PEAK GUST)		
	TEMP	YEAR	TEMP	YEAR	PCPN	YEAR	DIR	VEL MPH	YEAR
01	90	1970	38	1966	<b>2.07</b>	<b>1968</b>	S	41	
02	79	1970	39	1987	0.85	1962	S	41	1988
03	84	1987	38	1976	0.96	1974	SW	37	
04	89	1989	<b>37</b>	<b>1980</b>	1.34	1974	SW	40	1987
05	87	1958	40	1988	0.61	1981	SE	35	
06	73	1977	40	1962	1.48	1985	NW	32	1987
07	77	1955	42	1987	1.60	1988	N	30	
08	<b>93</b>	<b>1955</b>	40	1988	1.42	1981	SW	44	
09	73	1975	40	1977	0.69	1993	S	37	1992
10	73	1986	39	1973	0.64	1983	NW	33	1986
11	72	1985	40	1988	0.85	1959	S	32	1976
12	78	1986	41	1979	0.70	1973	<b>S</b>	<b>45</b>	<b>1994</b>
13	76	1983	41	1959	0.94	1957	SW	37	1986
14	79	1988	43	1976	0.94	1957	SW	39	1986
15	91	1966	41	1959	1.11	1954	SW	35	
16	87	1958	40	1955	0.73	1973	SW	32	1991
17	88	1985	41	1987	0.66	1964	SW	38	1983
18	91	1982	41	1991	0.60	1981	S	38	
19	71	1973	38	1955	1.07	1954	NW	31	1988
20	79	1973	43	1989	0.71	1991	NW	30	1992
21	89	1990	42	1956	0.63	1993	SW	30	1987
22	89	1992	41	1965	0.86	1969	NW	31	1992
23	85	1989	44	1987	0.67	1969	NW	35	1986
24	87	1989	41	1988	1.23	1973	SE	41	1971
25	78	1987	39	1966	0.53	1973	SW	40	
26	73	1986	41	1976	0.74	1984	S	33	1982
27	78	1978	42	1965	0.70	1966	S	31	1982
28	72	1967	40	1985	1.06	1955	NW	28	
29	80	1974	42	1966	0.50	1963	S	31	1979
30	75	1965	40	1985	1.05	1989	S	38	1989

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
JULY 1953 THROUGH 1994

DAY	MAX	YEAR	MIN	YEAR	MAX	YEAR	(PEAK GUST)		
	TEMP		TEMP		PCPN		DIR	VEL MPH	YEAR
01	88	1967	43	1985	0.56	1983	<b>W</b>	<b>45</b>	<b>1979</b>
02	88	1972	42	1955	0.28	1966	NW	31	
03	89	1972	43	1962	0.53	1980	S	32	1980
04	84	1975	45	1957	0.19	1963	S	37	1987
05	83	1960	44	1989	0.31	1961	SW	31	
06	83	1953	43	1977	0.48	1959	NW	35	1986
07	76	1977	<b>39</b>	<b>1971</b>	<b>1.72</b>	<b>1976</b>	NW	32	1988
08	86	1956	44	1982	0.88	1974	NW	31	1990
09	80	1985	47	1964	0.50	1974	S	37	1979
10	77	1990	44	1967	0.91	1986	S	35	
11	<b>100</b>	<b>1961</b>	45	1973	0.43	1968	NW	33	
12	79	1961	44	1971	1.10	1983	SW	41	1988
13	79	1973	44	1954	1.25	1983	S	31	1983
14	82	1958	42	1970	1.06	1957	NW	32	1987
15	86	1979	45	1974	0.38	1978	NW	33	1990
16	87	1979	44	1969	0.95	1974	W	31	1984
17	85	1972	46	1955	1.06	1974	NW	30	1988
18	88	1956	43	1986	0.31	1987	SW	30	
19	93	1988	42	1977	0.57	1983	NW	31	1986
20	82	1990	45	1977	0.53	1954	NW	31	1986
21	92	1980	44	1966	0.42	1993	SW	36	1982
22	85	1984	44	1977	0.40	1993	NW	31	
23	81	1965	44	1977	0.08	1957	NW	27	
24	80	1984	44	1973	0.20	1991	NW	32	
25	85	1988	48	1992	0.65	1955	NW	32	
26	81	1981	44	1969	0.80	1955	NW	36	1988
27	90	1958	46	1976	0.33	1983	NW	29	1980
28	81	1974	45	1954	0.13	1975	NW	30	1980
29	79	1990	44	1959	0.30	1955	NW	33	1988
30	92	1959	47	1986	0.78	1985	NW	30	1988
31	82	1968	46	1970	0.56	1964	NW	36	1986

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
AUGUST 1953 THROUGH 1994

DAY	MAX		MIN		MAX		(PEAK GUST)		
	TEMP	YEAR	TEMP	YEAR	PCPN	YEAR	DIR	VEL MPH	YEAR
01	75	1993	43	1987	0.42	1989	NW	36	1987
02	81	1993	45	1969	<b>1.64</b>	<b>1956</b>	NW	37	1986
03	87	1993	43	1969	0.36	1962	NW	32	1987
04	86	1990	43	1982	0.09	1962	SW	31	1990
05	76	1958	45	1982	0.09	1962	NW	28	
06	88	1972	44	1959	0.69	1992	S	32	1992
07	94	1978	48	1990	0.49	1985	S	37	
08	88	1981	45	1988	1.27	1994	S	39	1991
09	<b>96</b>	<b>1981</b>	44	1975	0.10	1964	NW	28	
10	88	1977	46	1970	0.25	1957	W	28	
11	95	1992	47	1966	0.45	1978	NW	29	1979
12	80	1977	43	1966	0.75	1965	SW	28	1989
13	86	1985	45	1955	0.76	1976	W	35	
14	77	1962	44	1984	0.25	1993	NW	30	
15	85	1967	45	1982	0.65	1976	NW	30	
16	87	1985	44	1973	0.52	1976	S	35	1984
17	74	1982	41	1973	0.36	1990	S	30	1980
18	80	1972	40	1973	0.58	1968	NW	31	1987
19	79	1967	<b>39</b>	<b>1973</b>	0.55	1965	NW	30	1984
20	89	1966	45	1984	0.12	1971	NW	31	1987
21	76	1988	42	1973	0.46	1960	NW	33	1987
22	88	1988	41	1987	0.31	1968	S	40	1993
23	82	1985	44	1959	1.50	1968	SE	30	
24	86	1964	45	1992	1.58	1953	S	43	
25	85	1967	43	1992	0.36	1977	S	31	
26	81	1986	42	1991	0.24	1953	NW	30	1992
27	85	1972	43	1955	1.09	1975	SW	31	1991
28	76	1978	42	1985	0.74	1983	E	37	1983
29	80	1976	42	1985	1.02	1977	<b>S</b>	<b>46</b>	<b>1991</b>
30	84	1968	46	1973	1.18	1954	S	32	1990
31	86	1972	43	1973	0.94	1961	SW	43	

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
SEPTEMBER 1953 THROUGH 1994

DAY	MAX	YEAR	MIN	YEAR	MAX	YEAR	(PEAK GUST)		YEAR
	TEMP		TEMP		PCPN		DIR	VEL MPH	
01	90	1972	38	1973	1.14	1971	S	46	
02	<b>95</b>	<b>1972</b>	41	1984	0.42	1977	S	36	
03	85	1953	39	1956	1.83	1979	SW	32	
04	92	1955	41	1956	1.68	1959	SW	48	
05	87	1975	43	1969	0.92	1984	SW	40	
06	90	1958	40	1992	1.13	1984	SW	43	
07	87	1958	38	1992	0.38	1964	S	37	1979
08	83	1960	40	1988	1.46	1979	NW	31	1988
09	85	1960	38	1970	1.15	1956	SE	36	
10	89	1973	38	1970	1.44	1962	S	48	
11	85	1975	37	1988	0.88	1982	NW	30	1986
12	86	1975	38	1986	0.43	1962	S	35	1985
13	91	1957	<b>33</b>	<b>1970</b>	0.54	1976	NW	40	
14	89	1967	37	1986	0.68	1987	S	38	1987
15	77	1991	38	1969	1.92	1955	W	30	1987
16	85	1994	41	1978	0.87	1969	SW	35	1985
17	86	1991	36	1965	1.26	1969	NW	29	1987
18	82	1991	38	1988	0.86	1978	S	40	1988
19	83	1974	36	1983	1.22	1973	S	38	1980
20	79	1953	40	1985	1.10	1969	S	48	
21	85	1994	39	1993	1.07	1972	SW	47	
22	89	1989	39	1956	0.71	1978	S	38	1992
23	82	1974	38	1993	1.21	1992	S	55	1986
24	85	1991	36	1970	0.98	1960	S	33	1988
25	80	1980	38	1972	0.53	1966	S	56	1988
26	85	1967	39	1972	0.75	1956	S	37	1988
27	82	1970	<b>33</b>	<b>1972</b>	0.70	1953	SW	46	
28	83	1989	<b>33</b>	<b>1983</b>	0.85	1981	<b>SW</b>	<b>60</b>	
29	84	1987	34	1983	0.55	1977	SW	32	1984
30	86	1987	34	1985	<b>2.41</b>	<b>1953</b>	S	50	

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
OCTOBER 1953 THROUGH 1994

DAY	MAX	YEAR	MIN	YEAR	MAX	YEAR	(PEAK GUST)		YEAR
	TEMP		TEMP		PCPN		DIR	VEL MPH	
01	77	1988	35	1983	1.74	1967	SW	41	
02	<b>85</b>	<b>1980</b>	34	1968	0.87	1967	S	39	
03	73	1966	34	1977	0.60	1975	S	48	1975
04	80	1980	33	1973	1.32	1955	S	52	
05	81	1964	34	1992	1.77	1981	SE	52	1981
06	<b>85</b>	<b>1987</b>	38	1970	1.42	1981	SW	46	
07	78	1976	32	1983	1.35	1958	SW	44	
08	81	1971	33	1985	2.80	1962	S	69	
09	78	1979	31	1985	1.43	1955	SW	40	
10	83	1991	34	1983	1.36	1959	SE	40	
11	78	1987	33	1969	0.49	1962	SW	56	
12	76	1982	34	1981	0.80	1957	<b>SW</b>	<b>96</b>	<b>1962</b>
13	79	1982	33	1966	0.71	1984	SW	44	1984
14	78	1978	35	1992	0.94	1990	S	38	
15	78	1954	32	1992	0.64	1968	S	41	1988
16	75	1960	33	1983	0.74	1956	SW	44	1991
17	76	1959	31	1984	1.60	1975	SW	40	
18	79	1978	33	1987	2.94	1958	S	53	
19	75	1964	35	1963	1.42	1966	S	65	1971
20	70	1964	35	1976	1.34	1985	S	45	1994
21	71	1965	33	1957	1.48	1966	SW	74	
22	75	1965	34	1961	1.39	1970	S	59	1982
23	77	1965	34	1991	1.01	1960	S	51	
24	73	1964	32	1954	1.77	1979	S	60	1977
25	68	1964	33	1970	2.23	1986	S	47	1994
26	66	1993	32	1978	2.41	1994	S	63	1994
27	69	1953	29	1971	1.85	1960	S	54	
28	72	1962	<b>26</b>	<b>1971</b>	<b>3.52</b>	<b>1982</b>	S	44	1982
29	72	1958	27	1971	1.38	1975	SW	47	
30	67	1954	29	1972	1.09	1986	S	47	1986
31	70	1954	34	1984	2.96	1994	S	67	1994

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
NOVEMBER 1953 THROUGH 1994

DAY	MAX	YEAR	MIN	YEAR	MAX	YEAR	(PEAK GUST)		
	TEMP		TEMP		PCPN		DIR	VEL MPH	YEAR
01	<b>71</b>	<b>1969</b>	29	1973	1.30	1977	S	59	1984
02	<b>71</b>	<b>1970</b>	30	1973	2.01	1955	SW	62	1988
03	68	1970	30	1957	2.59	1983	SE	75	
04	66	1980	29	1961	2.12	1969	W	46	
05	69	1987	29	1971	2.14	1988	S	54	1988
06	64	1980	30	1957	1.89	1980	S	59	1980
07	65	1980	30	1993	1.32	1968	SE	46	
08	65	1976	29	1977	2.53	1973	S	52	
09	64	1953	29	1978	1.77	1961	SE	54	
10	63	1976	29	1978	2.23	1984	SW	48	
11	63	1990	24	1978	1.89	1981	S	51	1988
12	63	1976	21	1955	2.16	1955	SW	51	
13	63	1974	21	1955	1.84	1966	S	55	1983
14	62	1979	<b>15</b>	<b>1955</b>	1.41	1981	SW	68	1981
15	60	1981	17	1955	1.27	1973	S	63	1981
16	65	1978	24	1955	1.46	1953	S	66	1991
17	63	1967	28	1994	<b>3.41</b>	<b>1959</b>	S	52	
18	59	1980	24	1994	2.19	1958	S	60	1986
19	64	1987	24	1977	2.51	1962	S	61	1991
20	63	1987	27	1961	2.37	1959	S	64	
21	66	1954	25	1985	2.32	1961	S	62	1980
22	60	1954	22	1985	2.35	1959	S	60	1988
23	62	1956	21	1985	2.73	1986	SW	62	1986
24	61	1956	19	1985	2.94	1990	S	67	
25	60	1956	25	1985	2.16	1972	<b>SW</b>	<b>85</b>	
26	59	1980	27	1985	2.31	1955	S	59	1986
27	61	1980	25	1976	1.59	1984	SW	51	
28	57	1989	27	1985	1.04	1971	SW	60	
29	60	1964	26	1985	1.33	1968	SW	55	
30	61	1958	24	1985	3.10	1975	S	56	1994

**INDICATES RECORD FOR THE MONTH**

Calendar Day Records  
DECEMBER 1953 THROUGH 1994

DAY	MAX		MIN		MAX		(PEAK GUST)		
	TEMP	YEAR	TEMP	YEAR	PCPN	YEAR	DIR	VEL MPH	YEAR
01	62	1958	22	1985	2.33	1979	S	67	1987
02	60	1958	27	1976	2.62	1977	S	60	1987
03	63	1979	28	1994	1.95	1975	S	67	1982
04	60	1981	24	1994	2.30	1989	S	64	1990
05	57	1987	24	1972	2.14	1981	S	65	
06	57	1987	16	1972	1.43	1970	S	54	
07	57	1962	10	1972	1.35	1975	SW	51	
08	60	1962	<b>06</b>	<b>1972</b>	1.45	1953	S	61	1993
09	61	1981	17	1972	1.92	1953	S	72	1993
10	62	1957	15	1972	1.99	1977	S	67	
11	57	1980	25	1972	2.91	1955	SE	65	
12	58	1960	12	1972	1.45	1973	S	69	
13	59	1969	11	1972	1.44	1977	SW	58	
14	62	1962	25	1967	1.62	1964	S	56	
15	62	1980	26	1965	1.41	1970	<b>S</b>	<b>79</b>	<b>1982</b>
16	61	1980	15	1964	1.67	1994	S	67	
17	60	1979	15	1964	2.39	1972	NW	72	
18	58	1979	25	1992	1.20	1955	SW	70	
19	57	1994	21	1990	1.98	1994	S	67	1994
20	57	1980	09	1990	1.73	1955	SW	77	
21	60	1980	<b>06</b>	<b>1990</b>	2.69	1955	SW	55	
22	58	1963	15	1983	1.60	1964	S	54	
23	58	1963	13	1983	2.28	1975	SW	52	
24	63	1963	18	1983	1.58	1973	SW	65	
25	63	1980	24	1987	1.72	1986	S	51	1994
26	<b>64</b>	<b>1980</b>	24	1985	<b>3.59</b>	<b>1974</b>	S	59	1994
27	58	1980	23	1985	1.16	1994	S	67	
28	60	1980	18	1978	1.29	1986	S	51	
29	60	1963	16	1990	2.70	1988	SW	61	
30	60	1980	19	1990	1.40	1954	S	58	1988
31	60	1963	11	1978	2.60	1968	W	56	

**INDICATES RECORD FOR THE MONTH**

## ANNUAL NORMALS, MEANS, AND EXTREMES

### Temperature (F)

Mean Annual Temperature	50.9
Mean Daily Maximum	58.9
Mean Daily Minimum	43.4
All-Time High Temperature	100 Jul 11, 1961
All-Time Low Temperature	06 Dec 8, 1990 & Dec 21, 1972

### Normal Degree Days (based on 65)

Heating	5158
Cooling	8

### Mean Number of Days

Sunrise to Sunset	
Clear	49.5
Partly Cloudy	76.5
Cloudy	239.2
Precipitation .01 Inch or More	190.3
Snow, Ice Pellets, Hail 1.0 Inch or More	1.4
Thunderstorms	7.1
Maximum	
90 degrees and above	0.5
32 degrees and below	1.5
Minimum	
32 degrees and below	37.4
0 degrees and below	0.0

### Precipitation (inches)

Water Equivalent	
Average Annual Normal	66.40
Maximum Monthly	21.89 Feb 1961
Minimum Monthly	0.01 Jul 1960
Maximum in 24 hours	5.14 Jan 1990
Snow, Ice Pellets, Hail	
Maximum Monthly	26.30 Jan 1969
Maximum in 24 hours	10.80 Jan 1971

### Wind

Mean Speed (mph)	8.5
Prevailing Direction	SE
Fastest 1 Minute (mph)	South 55, Jan 1971
Peak Gust (mph)	South 83, Dec 1993



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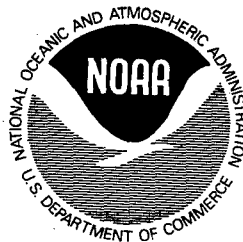
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