

# CLIMATOLOGICAL SUMMARY

CLIMATOGRAPHY OF THE UNITED STATES NO. 20 - 8

# FORT LAUDERDALE, FLORIDA

## (BAHIA MAR)

Latitude 26° 07' N.

Longitude 80° 07' W.

ELEVATION 7 FEET



Bahia Mar Yachting Center

Data Compiled  
From Official  
U. S. Weather  
Bureau Records

Prepared by  
Weather Bureau  
Office  
Miami, Florida  
  
In Cooperation  
With  
Bahia Mar  
Yachting Center  
Fort Lauderdale,  
Florida

## CLIMATE OF FORT LAUDERDALE, FLORIDA

Fort Lauderdale is the principal city and county seat of Broward County, located on the lower east coast of Florida. Except for a narrow strip of marshy land near the coast, the soil is sandy inland for six to nine miles westward to the edge of the Everglades. The entire area is generally flat. The Bahia Mar station is located at the Bahia Mar Yachting Center, and is three miles east of the Fort Lauderdale post office. Instruments are on the roof of a one-story building. The Atlantic Ocean is about one-quarter mile to the east, and the inland waterway is just west of the station.

The waters of the Atlantic temper the extremes of heat and cold. Daily maximum temperatures are usually one to three degrees lower at Bahia Mar than at the city station some three miles inland. Minimum readings are usually higher by a similar amount. Maximum readings of 90° or higher occur on only about half as many days at Bahia Mar as at the city station. On the other side of the ledger, a minimum of 32° has been recorded only once since records began at Bahia Mar in June 1950. Temperature data for Bahia Mar are representative of the ocean front in the area, but data from the city station are more representative for locations more than a mile inland.

Prevailing winds are southeasterly from March through October and northwest to east for the other months. Easterly components strengthen the definite maritime climatic feature in the area. Relative humidity varies from an average of 87% in the early morning to about 60% in the early afternoon. The percentage of possible sunshine ranges from about 60% in summer and fall to near 70% in the late winter and spring.

Aside from the inevitable local daily variation in rainfall, precipitation records of the two stations are comparable for monthly and annual amounts. Precipitation occurs during all seasons, but the five-month period from June through October is considered the rainy season and produces about 63% of the annual total. A relatively dry season from November through March accounts for only 22% of the total precipitation. Most of the rains are of short duration during the rainy season, coming as showers and thunderstorms. The average annual rainfall for the period of record is 56.36 inches. The wettest year was 1954 with 78.81, while the driest was 1951 with only 29.42 inches. The wettest month was September 1960 with 19.57 inches. Heavy rains are frequently associated with the passage of tropical storms, yet the greatest 24-hour rainfall occurred in December 1958, which was also the second wettest month during the period of record.

The area is subject to the hazards of tropical storms at irregular intervals, but the chances of hurricane force winds in any given year are estimated to be about one in seven. Winds of barely hurricane force (74 m.p.h. or higher) occurred in "Donna" in September 1960, the first since 1950.

Acknowledgement is made to the State Climatologist, U. S. Weather Bureau, Gainesville, Florida for data and historical information used in this summary, and to Leonard G. Pardue, Meteorologist at the Miami office, for guidance.

Compiled and edited by  
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Bahia Mar, Fort Lauderdale, Florida MEANS AND EXTREMES FOR PERIOD 1951-1962

Month	Temperature (°F)								** Mean degree days	Precipitation Totals (Inches)							Mean number of days					Month	
	Means				Extremes					Mean	Greatest daily	Year	Snow, Sleet				Precip. .10 inch or more 90° and above	Temperatures					
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean					Maximum monthly	Year	Greatest daily	Year		Precip. .10 inch or more 90° and above	32° and below	Max.			32° and below
																				32° and below	0° and below		
(a)	12	12	12	12	12	12	12	12	11	12	12		12	12		12		12	12	12	12	Jan.	
Jan.	74.8	59.7	67.3	83	1962+	37	1962+	60	1.89	2.0	1958	0	0	0	0	3	0	0	0	0	Feb.		
Feb.	76.2	61.7	69.0	86	1959+	37	1958	34	2.11	2.01	1954	0	0	0	0	4	0	0	0	0	Mar.		
Mar.	78.6	63.9	71.3	89	1957	42	1962	24	1.76	2.02	1958	0	0	0	0	3	0	0	0	0	Apr.		
Apr.	81.3	67.7	74.5	90	1961	50	1961+	1	3.63	5.00	1957	0	0	0	0	5	*	0	0	0	May		
May	84.6	71.5	78.1	92	1957	57	1960	0	4.75	3.67	1958	0	0	0	0	6	1	0	0	0	June		
June	86.9	73.7	80.3	94	1958	63	1951	0	6.44	4.06	1959	0	0	0	0	10	5	0	0	0	July		
July	89.0	76.0	82.5	94	1962+	67	1953	0	5.52	3.66	1954	0	0	0	0	10	12	0	0	0	Aug.		
Aug.	89.3	75.7	82.5	96	1954	68	1951	0	6.62	4.62	1953	0	0	0	0	10	14	0	0	0	Sept.		
Sept.	87.5	75.1	81.3	96	1958	67	1962	0	9.45	6.45	1960	0	0	0	0	11	6	0	0	0	Oct.		
Oct.	83.6	71.0	77.3	91	1962+	51	1957	1	7.65	3.54	1960	0	0	0	0	12	1	0	0	0	Nov.		
Nov.	79.9	66.3	73.1	90	1958	42	1959	8	3.24	5.42	1959	0	0	0	0	5	*	0	0	0	Dec.		
Dec.	76.1	61.4	68.8	86	1961+	31	1962	50	3.30	9.99	1958	0	0	0	0	4	0	0	*	0	Year		
Year	82.3	68.6	75.5	96	1958+	31	1962	178	56.36	9.99	1958	0	0	--	0	--	83	39	0	*	0	Year	

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

† Trace, an amount too small to measure.

\* Less than one half.

\*\* Base 65°F

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	66.6	66.2	71.1	73.8	76.2	79.9	81.7	83.5	82.7	78.2	71.7	73.0	75.4
1952	70.2	67.7	73.6	72.6	78.5	82.3	82.4	82.1	81.7	77.1	72.4	66.0	75.6
1953	67.9	69.2	72.7	73.5	79.1	78.9	82.1	81.3	79.3	73.3	72.4	69.7	75.0
1954	70.0	67.3	68.9	77.1	78.2	80.1	82.1	83.8	81.7	76.9	70.6	67.0	75.3
1955	66.3	69.5	73.3	75.5	77.9	79.6	81.7	83.1	82.0	77.2	73.5	69.7	75.8
1956	63.1	72.0	71.0	73.6	79.5	79.9	82.5	83.1	81.0	78.0	70.6	70.8	75.4
1957	70.6	73.2	71.6	76.8	79.7	81.7	83.3	82.3	82.8	76.9	76.0	68.8	77.0
1958	63.3	59.4	70.3	74.7	78.2	82.3	84.2	82.3	82.6	76.1	77.5	70.5	75.1
1959	66.1	74.2	70.4	74.7	78.3	79.9	81.1	80.3	78.9	79.7	74.0	68.3	75.5
1960	68.5	67.8	68.2	74.7	77.2	80.5	83.5	83.4	80.6	78.7	75.8	66.7	75.5
1961	65.2	70.7	74.2	74.2	77.2	80.6	83.4	82.2	81.1	77.1	73.4	70.4	75.8
1962	69.0	71.1	70.1	73.0	76.5	78.5	82.5	82.7	81.6	78.2	69.5	64.6	74.8
AVG.	67.3	69.0	71.3	74.5	78.1	80.3	82.5	82.5	81.3	77.3	73.1	68.8	75.5

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	0.10	2.15	0.88	1.65	4.41	2.11	3.31	4.35	1.65	7.66	0.67	0.48	29.42
1952	0.38	2.42	1.97	2.06	1.50	0.52	4.67	9.31	7.25	15.78	1.83	5.35	53.04
1953	4.57	2.48	0.30	2.01	3.55	4.83	10.10	9.82	12.03	17.25	3.86	3.97	74.77
1954	0.79	3.52	2.32	6.20	8.49	9.30	10.66	5.18	16.28	7.80	7.63	0.64	78.81
1955	1.21	0.90	1.52	2.05	1.86	9.92	2.61	2.36	7.75	4.71	0.24	4.68	39.81
1956	1.42	0.35	0.20	2.44	4.24	4.37	2.05	5.02	8.31	4.81	0.97	0.14	34.32
1957	0.18	5.85	1.83	13.95	6.30	3.73	6.10	13.13	8.06	6.47	2.38	2.34	70.32
1958	4.71	0.68	2.21	0.08	12.25	3.64	3.92	5.40	5.86	3.22	3.09	17.73	62.79
1959	2.68	3.37	6.16	1.37	3.29	12.99	5.82	6.48	11.50	7.45	12.12	2.31	75.54
1960	0.38	1.95	0.99	4.11	3.47	7.66	7.23	4.71	19.57	9.86	2.31	0.51	62.75
1961	4.28	0.71	0.65	1.76	6.92	6.22	2.05	6.45	3.22	4.46	1.50	0.40	38.62
1962	1.99	0.94	2.05	5.90	0.71	11.94	7.67	7.26	11.97	2.31	2.29	1.08	56.11
AVG.	1.89	2.11	1.76	3.63	4.75	6.44	5.52	6.62	9.45	7.65	3.24	3.30	56.36

NUMBER OF RAINY PERIODS OF SELECTED LENGTH TO EXPECT EACH YEAR

No. Days	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Exactly	1	1	1	1	1	1	1	1	2	1	1	1
Exactly Three	*	*	*	1	1	1	1	1	1	1	*	*
Four or More	*	*	*	*	1	1	1	2	1	1	1	*

\* Less than one in two years.

NUMBER OF DRY PERIODS OF SELECTED LENGTH TO EXPECT EACH YEAR

No. Days	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Exactly Two	*	*	1	*	*	1	1	2	2	1	*	*
Exactly Three	*	1	*	*	1	1	1	1	*	1	1	1
Four or More	2	2	3	2	1	2	2	1	1	2	2	2

\* Less than one in two years.

In the two tables above, a period is charged to the month in which it began.

AVERAGE MAXIMUM TEMPERATURES (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	72.8	72.8	77.3	80.5	84.0	86.1	86.6	89.0	87.9	83.3	79.0	79.4	81.6
1952	77.4	75.1	80.0	80.1	84.5	88.6	88.6	88.8	87.5	82.3	78.6	74.3	82.2
1953	73.1	76.0	79.6	79.7	84.6	86.6	87.4	88.1	86.1	80.2	77.3	75.1	81.2
1954	76.1	74.4	76.1	82.4	84.0	86.0	88.5	90.5	87.7	82.9	78.6	75.0	81.9
1955	75.2	75.5	79.7	82.2	84.4	85.6	87.6	89.7	87.6	83.2	79.8	76.3	82.2
1956	71.9	78.0	78.2	80.6	85.2	86.9	88.4	89.8	86.6	83.6	77.8	76.9	82.0
1957	78.3	79.4	79.7	81.9	85.5	87.7	90.2	88.4	88.4	84.1	83.7	76.8	83.7
1958	70.9	68.7	77.8	81.9	84.4	89.0	91.8	90.5	89.6	83.1	84.2	77.5	82.5
1959	74.2	81.0	78.1	82.0	84.2	87.1	88.5	87.5	86.3	86.7	80.1	74.8	82.5
1960	76.1	76.0	76.6	81.0	84.1	86.4	90.2	89.6	86.3	84.7	81.6	74.9	82.3
1961	73.4	77.4	81.6	81.9	84.9	87.1	89.9	89.3	87.9	83.7	81.2	78.5	83.1
1962	78.0	80.6	79.0	81.1	85.1	86.0	90.2	90.4	88.5	84.8	77.1	73.9	82.9
AVG.	74.8	76.2	78.6	81.3	84.6	86.9	89.0	89.3	87.5	83.6	79.9	76.1	82.3

AVERAGE MINIMUM TEMPERATURES (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	60.3	59.6	64.9	67.1	68.4	73.6	76.7	77.9	77.4	73.1	64.3	66.6	69.2
1952	63.0	60.2	67.2	65.0	72.5	75.9	76.1	75.3	75.9	71.8	66.2	57.7	68.9
1953	62.7	62.3	65.8	67.3	73.5	71.1	76.7	74.5	72.4	66.3	67.5	64.3	68.7
1954	63.9	60.1	61.6	71.8	72.4	74.1	75.6	77.1	75.7	70.9	62.6	59.0	68.7
1955	57.4	63.4	66.9	68.8	71.4	73.5	75.8	76.4	76.4	71.1	67.1	63.0	69.3
1956	54.3	65.9	63.8	66.6	73.8	72.8	76.5	75.4	76.3	72.4	63.4	64.7	68.8
1957	62.9	66.9	63.5	71.7	73.8	75.7	76.3	77.1	76.1	69.7	68.3	60.8	70.2
1958	55.6	50.0	62.8	67.4	71.9	75.6	76.5	75.5	74.1	69.1	70.8	63.4	67.7
1959	57.9	67.4	62.7	67.4	72.3	72.7	73.7	71.4	73.1	72.7	67.9	61.7	68.4
1960	60.8	59.6	59.7	68.3	70.2	74.5	76.7	74.9	77.2	72.6	69.9	58.5	68.6
1961	57.0	63.9	66.7	66.5	69.4	74.1	76.9	74.3	75.1	70.5	65.6	62.3	68.5
1962	60.0	61.5	61.1	64.9	67.8	70.9	74.8	74.6	74.9	71.5	61.9	55.5	66.6
AVG.	59.7	61.7	63.9	67.7	71.5	73.7	76.0	75.1	75.7	71.0	66.3	61.4	68.6

MONTHLY MAXIMUM TEMPERATURES (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	79	80	81	84	90	90	90	92	90	87	--	82	92
1952	81	80	86	89	90	91	91	91	90	87	85	79	91
1953	--	82	82	85	87	90	90	90	90	85	82	81	90
1954	82	81	84	86	87	90	91	96	92	88	84	81	96
1955	82	81	85	87	87	91	90	95	90	87	83	82	95
1956	78	86	85	88	88	90	90	94	90	89	83	82	94
1957	83	85	89	88	92	93	93	92	91	90	89	84	93
1958	82	82	83	88	89	94	94	94	96	91	90	86	96
1959	81	86	85	88	87	92	93	90	90	91	88	80	93
1960	83	83	84	86	89	90	93	92	92	88	86	82	93
1961	80	85	86	90	90	91	92	92	90	88	85	86	92
1962	83	85	88	86	90	90	94	94	92	91	85	83	94

MONTHLY MINIMUM TEMPERATURES (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	37	38	51	53	59	63	73	68	71	64	--	51	37
1952	44	46	46	50	61	70	72	70	72	58	49	38	38
1953	--	50	48	55	61	66	67	70	69	52	47	45	--
1954	44	48	47	62	64	67	70	72	70	59	55	39	39
1955	41	40	50	57	62	68	71	72	72	61	48	46	40
1956	38	50	48	53	67	67	70	71	72	67	43	44	38
1957	52	55	47	65	68	70	73	69	72	51	59	33	33
1958	37	37	46	58	63	71	71	71	70	59	64	48	37
1959	40	57	44	54	66	68	69	69	69	60	42	47	40
1960	37	44	44	54	57	68	70	71	70	69	57	37	37
1961	38	46	47	50	62	69	73	69	68	54	53	36	36
1962	37	47	42	53	59	65	68	70	67	63	45	31	31