

# Climate Summary Report

## Carefree Ranch Weather Station

Carefree, Arizona

Period of Record: Calendar Years 1996-2024

Date of Station Installation: 07/15/1985

Weather Sensor Installation: 11/02/1987



**State:** Arizona

**County:** Maricopa

**Latitude:** 33° 51' 08.3" (33.8523)

**Longitude:** 111° 51' 49.1" (-111.8635)

**TRS:** T6N-R5E-Section 20

**Location:** 2.5 mi. NE of Sky Ranch Airport

**Time Zone:** MST – all year

**Data Repeater:** Direct

**Elevation:** 2,980 ft. msl

**Owner:** Flood Control District of Maricopa County

**NWS CWA/Zone #:** Phoenix, 24

**Archived:** Yes, from date of sensor installation

**Site Description:** on top of small hill, Soil type – sand/gravel

**Obstructions:** None

\* For information on annual and monthly rainfall totals at Carefree Ranch refer to [http://alert.fcd.maricopa.gov/alert/Rain/FOPR/21000\\_FOPR.xlsx](http://alert.fcd.maricopa.gov/alert/Rain/FOPR/21000_FOPR.xlsx).

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Flood Control District of Maricopa County

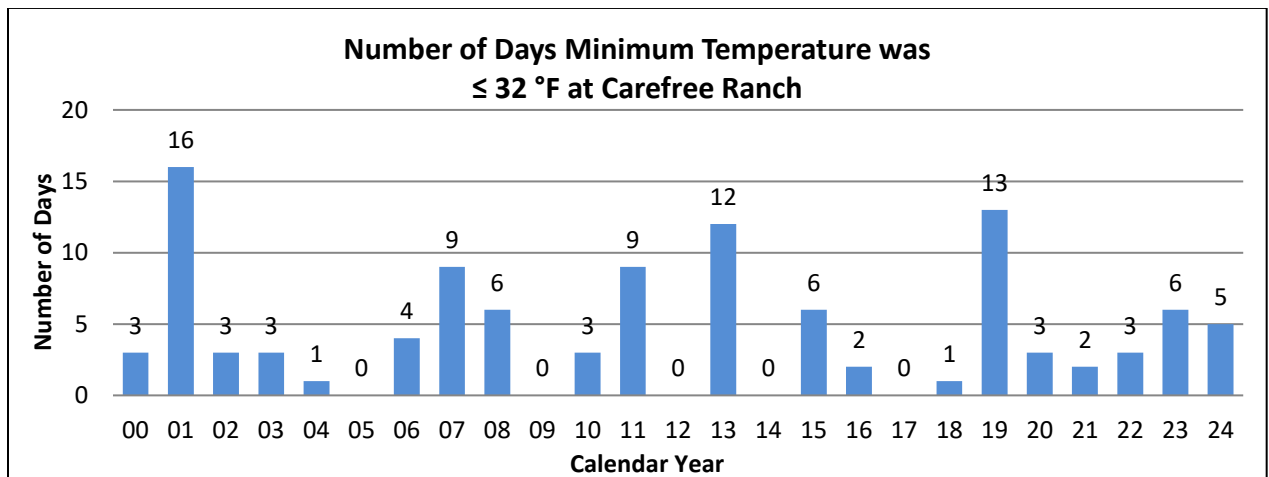
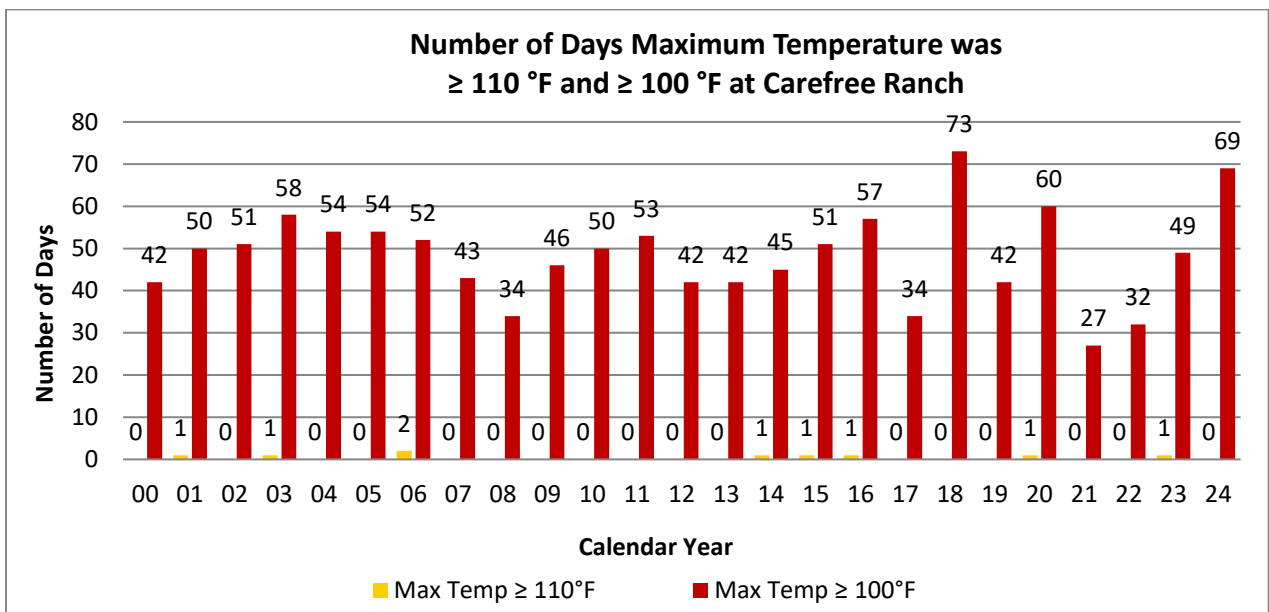
## Carefree Ranch Weather Station 1996-2024

### All-Time Records\*

Temperature	High	115°F	6/19/2016
	Low	19°F	2/3/2011
Wind	Peak Wind Gust	46 MPH	7/30/2018
Dewpoint	Maximum Dewpoint	83°F	8/26/1997

\*Most recent date of occurrence observed.

### Temperature Statistics



## Carefree Ranch Weather Station Annual Statistics

Year	Maximum Temp		Minimum Temp		Mean Temp	Maximum Dewpoint		Peak Wind	
	°F	Date*	°F	Date*	°F	°F	Date*	MPH	Date*
2024	108	7/5	29	1/8	70.6	67	8/18	40	7/21
2023	110	7/15	29	2/15	70.2	68	8/16	35	5/1
2022	107	7/11	30	2/24	69.7	74	8/23	34	10/3
2021	108	6/16	31	1/25	69.7	73	7/24	43	8/18
2020	110	7/30	31	2/6	70.5	68	8/30	35	1/20
2019	107	8/5	26	2/23	67.8	71	7/31	38	10/25
2018	109	7/24	31	12/28	74.6	83	7/14	46	7/30
2017	106	9/1	42	1/25	74.3	81	7/24	40	7/16
2016	115	6/19	31	2/2	72.6	78	8/3	31	12/24
2015	110	8/15	28	1/1	71.2	72	8/25	33	1/22
2014	110	8/29	33	12/31	71.7	81	9/8	41	2/20
2013	110	6/29	24	1/14	69.3	76	7/26	34	4/8
2012	108	8/13	33	12/31	70.7	78	8/21	40	3/18
2011	108	8/24	19	2/3	68.2	74	7/31	36	7/24
2010	107	7/15	23	12/31	68.7	79	7/29	35	12/30
2009	107	8/28	33	12/9	69.7	70	8/13	36	10/26
2008	107	6/20	27	12/27	68.5	79	7/4	40	8/7
2007	108	7/4	21	1/14	69.3	72	7/24	42	10/21
2006	111	7/21	28	12/20	70.2	79	7/27	44	10/5
2005	109	7/12	34	12/17	70.0	79	8/8	34	4/23
2004	109	7/12	32	11/30	70.0	75	9/19	37	8/10
2003	110	7/14	25	12/28	69.9	75	7/30	36	10/25
2002	107	7/2	26	1/31	69.0	73	7/24	36	9/10
2001	113	7/2	29	1/17	68.5	79	7/25	36	8/4
2000	107	7/28	31	3/7	68.7	71	8/27	34	6/29

\*Latest date of occurrence observed.

## Carefree Ranch Weather Station Monthly Statistics

Month	Maximum Temp		Mean Temp <sup>1</sup>	Minimum Temp		Peak Wind		Avg Wind (mph) <sup>2</sup>
	°F	Date*	°F	°F	Date*	MPH	Date*	MPH
January	84	1/31/2003	75.3	5	1/9/1993	41	1/15/1998	4.0
February	85	2/26/2016	77.3	19	2/3/2011	41	2/20/2014	4.0
March	94	3/16/2007	83.1	27	3/14/1990	40	3/18/2012	4.3
April	98	4/20/1994	91.5	31	4/2/1999	39	4/29/2014	5.2
May	104	5/22/2005	98.0	40	5/7/1995	35	5/1/2023	4.8
June	115	6/19/2016	105.8	47	6/7/1993	40	6/7/2006	4.2
July	113	7/2/2001	107.5	62	7/2/1992	46	7/30/2018	4.1
August	112	8/3/1994	107.0	59	8/24/1992	43	8/18/2021	3.7
September	107	9/4/2014	102.9	53	9/22/1988	36	9/10/2002	3.8
October	104	10/4/1988	95.7	36	10/29/2009	44	10/5/2007	4.3
November	92	11/3/2009	83.8	28	11/30/2006	40	11/24/2007	4.2
December	82	12/10/2004	75.7	19	12/22/1990	38	12/7/2009	3.8

<sup>1</sup>The daily mean temperature is calculated by averaging each day's 15-minute values (96 if all are received). The monthly mean temperature is calculated by averaging all temperatures in that month (96 \* # of days). The mean temperature for each month is calculated by averaging the monthly mean temperatures from all years.

<sup>2</sup>Average daily wind speed is calculated by dividing the number of hours in a day into the recorded miles of wind run. Monthly average wind speed is calculated by averaging all daily average wind speeds in that month. The average wind speed for each month is calculated by averaging the monthly average wind speeds from all years.

\*Most recent date of occurrence observed.

**Equipment operates in the NWS ALERT Format. Transmission to the Flood Control District of Maricopa County via VHF radio.**

Sensor	ID #	Data Begins	Type	Manufacturer	Model	Height AGL (ft)	Units	Frequency of Data
Rain	21000	03/09/00 06/30/92-03/09/93 10/01/87-06/30/92 Prior to 10/01/87	Tipping Bucket	Hydrolynx	5050P	10.5	mm	Variable
Temperature	21001	11/02/87	Transducer, Radiation Shield	Hydrolynx	2048, 4550	9.9	deg F/C	15 minutes
Relative Humidity	21002	03/25/94	Polymer film, Radiation Shield	Hydrolynx	2048, 4550	9.9	%	15 minutes
Dewpoint (calculated)	21016	07/08/94	---	---	---	---	deg F	15 minutes
Wind Speed	21004	11/02/87	3-cup	Hydrolynx	5050WS	10.5	mph	15 minutes
Wind Direction	21005	05/01/01	Pointer	Hydrolynx	5050WD	10.3	deg	15 minutes
Peak Wind	21006	03/25/94	---	---	---	---	mph	15 minutes
Solar Radiation	21011	03/25/94	Silicon photovoltaic cell	Hydrolynx	4015	10.6	watt/sqm	30 minutes

