

Climate Summary Report

South Mountain Fan Weather Station

Phoenix, Arizona

Period of Record: Calendar Years 1996-2024

Date of Station Installation: 06/09/1993

Weather Sensors Installation: 06/09/1993



State: Arizona

County: Maricopa

Latitude: 33° 18' 54.7" (33.3152)

Longitude: 112°08' 01.3" (-112.1336)

TRS: T1S-R2E-Section 26

Location: Alignments of Ray Road and 35th Ave in South Mtn. Park

Time Zone: MST – all year

Data Repeater: Direct

Elevation: 1,285 ft. msl

Owner: Flood Control District of Maricopa County

NWS CWA/Zone #: Phoenix, 23

Archived: Yes, from date of sensor installation

Site Description: flat ground next to wash, Soil type –rocks/shrubs

Obstructions: No obstructions

* For information on annual and monthly rainfall totals at South Mountain Fan refer to http://alert.fcd.maricopa.gov/alert/Rain/FOPR/70500_FOPR.xlsx.

Flood Control District of Maricopa County

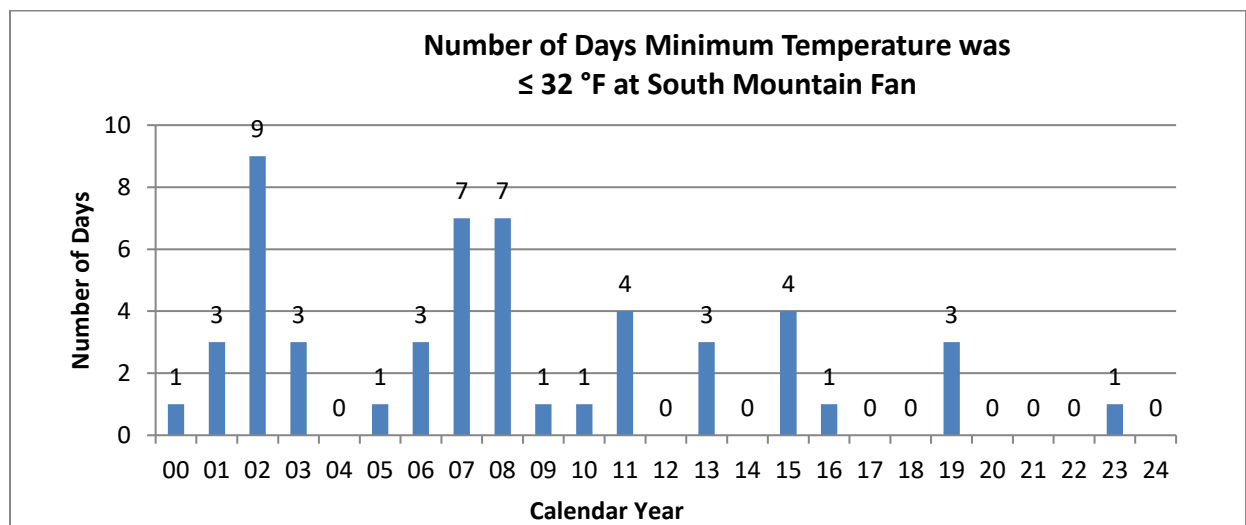
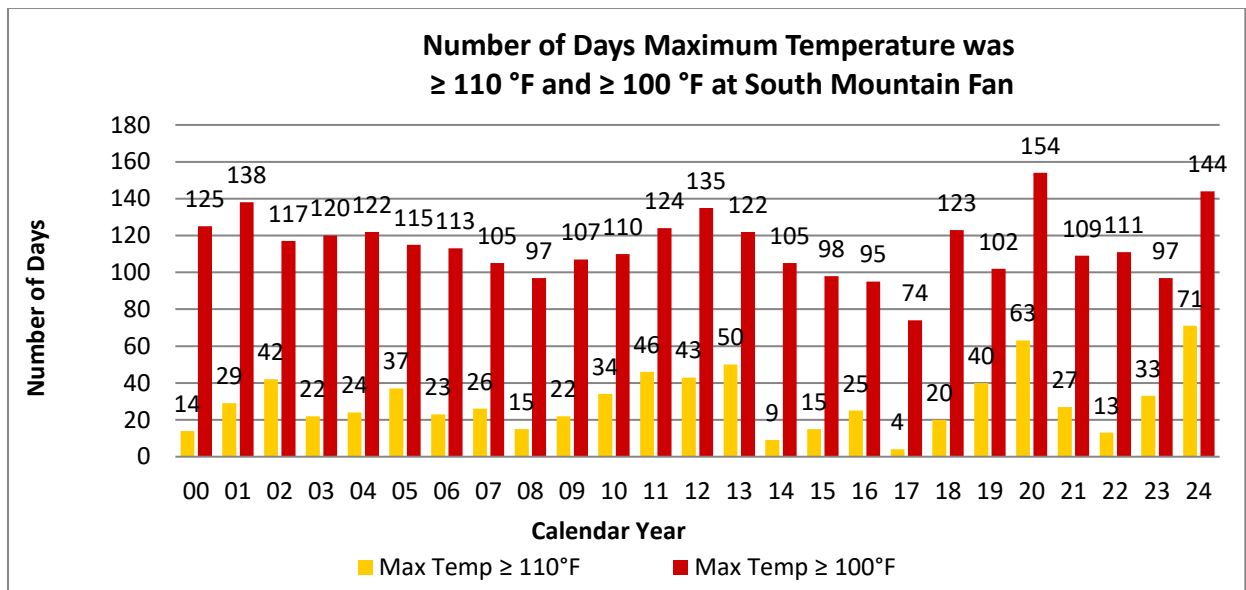
South Mountain Fan Weather Station 1996-2024

All-Time Records*

Temperature	High	121°F	7/2/2001
	Low	24°F	12/3/1999
Wind	Peak Wind Gust	49 MPH	8/16/2021
Dewpoint	Maximum Dewpoint	89°F	9/7/2004

*Most recent date of occurrence observed.

Temperature Statistics



South Mountain Fan Weather Station Annual Statistics

Year	Maximum Temp		Minimum Temp		Mean Temp	Maximum Dewpoint			Peak Wind	
	°F	Date(s) ¹	°F	Date(s) ¹	°F	°F	°F	Date(s) ¹	°F	
2024	119	7/5	33	1/9	79.3	78	7/1	32	7/21	
2023	116	7/19	32	1/24	75.4	73	9/1	27	2/22	
2022	114	7/11	35	12/15	76.5	78	8/9	35	6/26	
2021	118	6/18	39	1/27	78.3	83	8/14	49	8/16	
2020	118	7/30	36	2/6	79.7	71	8/29	33	8/30	
2019	117	8/5	31	1/2	75.7	75	9/23	32	9/23	
2018	118	7/24	34	12/29	77.1	76	10/2	36	8/8	
2017	112	6/20	35	1/26	77.3	79	7/24	39	4/28	
2016	118	6/19	32	2/3	76.8	74	8/5	34	5/17	
2015	114	8/15	31	1/2	76.3	73	9/21	46	8/7	
2014	115	7/24	33	12/29	77.8	80	8/12	36	7/3	
2013	120	6/29	28	1/15	77.7	81	8/31	36	4/8	
2012	119	8/8	36	12/28	78.7	84	7/29	35	7/29	
2011	120	7/2	26	2/3	76.1	79	8/3	46	5/18	
2010	114	7/2	28	12/31	74.8	79	8/23	31	12/30	
2009	114	7/12	31	12/25	74.8	71	8/13	39	7/20	
2008	114	6/20	31	12/28	73.6	74	11/25	43	7/3	
2007	115	7/5	28	1/15	75.1	74	8/1	31	7/30	
2006	117	7/22	32	12/21	75.7	75	7/27	39	8/21	
2005	119	7/17	32	12/17	75.7	83	8/11	33	7/17	
2004	114	8/8	33	12/25	75.2	89	9/7	31	7/26	
2003	116	8/10	29	12/29	74.1	79	9/9	31	4/5	
2002	114	9/4	27	1/31	74.7	81	7/23	34	7/9	
2001	121	7/2	31	12/16	74.5	79	7/31	31	8/7	
2000	114	7/19	29	1/3	73.9	70	7/31	26	8/22	

*Latest date of occurrence observed.

South Mountain Fan Weather Station Monthly Statistics

Month	Maximum Temp		Mean Temp ¹	Minimum Temp		Peak Wind		Avg Wind (mph) ²
	°F	Date(s) ³	°F	°F	Date(s) ³	MPH	°F	Date(s) ³
January	86	1/31/2003	56.2	27	1/31/2002	47	1/3/1998	1.4
February	98	2/13/1997	59.4	26	2/3/2011	34	2/1/2016	1.6
March	101	3/20/1997	66.3	31	3/3/2002	38	3/26/2009	2.0
April	108	4/22/2012	73.5	35	4/3/1998	39	4/27/2015	2.5
May	113	5/31/2012	82.9	45	5/14/1998	46	5/18/2011	2.5
June	120	6/29/2013	93.1	55	6/7/1997	41	6/9/2011	2.6
July	125	7/28/1995	96.4	68	7/10/2008	45	7/25/2011	2.7
August	119	8/8/2012	94.7	63	8/3/1998	49	8/16/2021	2.2
September	117	9/5/2020	89.7	48	9/14/1996	40	9/19/1999	1.8
October	113	10/1/2024	77.4	39	10/26/1997	33	10/6/1993	1.6
November	100	11/5/2020	64.9	27	11/22/2003	30	11/20/2019	1.4
December	89	12/13/1996	55.5	24	12/3/1999	31	12/30/2010	1.3

¹The 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.

²Average 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	70500	06/09/93	Tipping Bucket	Hydrolynx	5050P	12.2	mm	Variable
Temperature	70501	06/09/93	Probe, Radiation Shield	Vaisala, Hydrolynx	HMP155, 4550	12.1	deg F/C	15 minutes
Relative Humidity	70502	06/09/93	Probe, Radiation Shield	Vaisala, Hydrolynx	HMP155, 4550	12.1	%	15 minutes
Dewpoint (calculated)	70516	07/08/94	---	---	---	---	deg F	15 minutes
Wind Speed	70504	06/09/93	3-cup	Hydrolynx	5050WS	13.3	mph	15 minutes
Wind Direction	70505	05/01/01	Pointer	Hydrolynx	5050WD	13.4	deg	15 minutes
Peak Wind	70506	06/30/93	---	---	---	---	mph	15 minutes
Solar Radiation	70511	02/01/94	Silicon photovoltaic cell	Hydrolynx	4015	13.1	watt/sqm	30 minutes
Barometric Pressure	70503	02/24/94	Solid state	Hydrolynx	1522	4.7	mb, inHg	30 minutes

