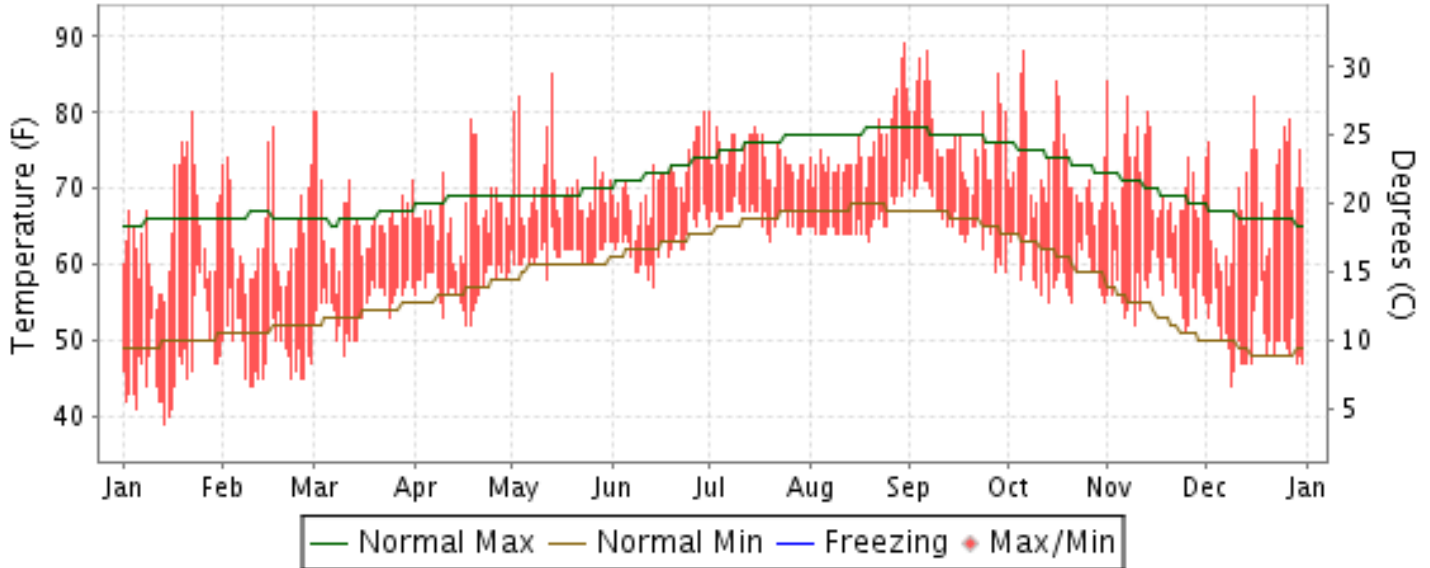


# 2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

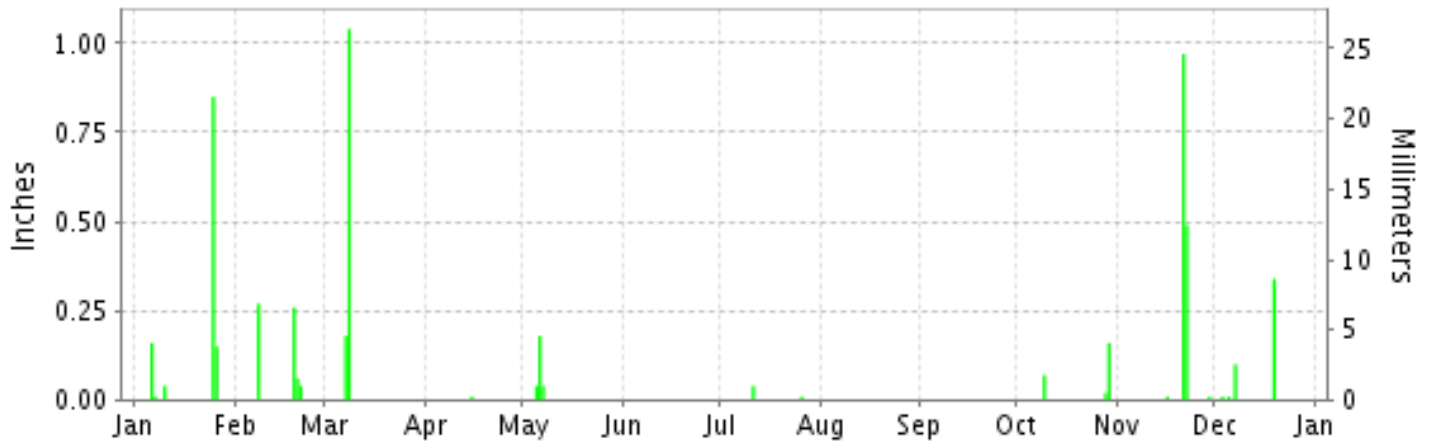
ISSN 0198-0971

## SAN DIEGO, CALIFORNIA (KSAN)

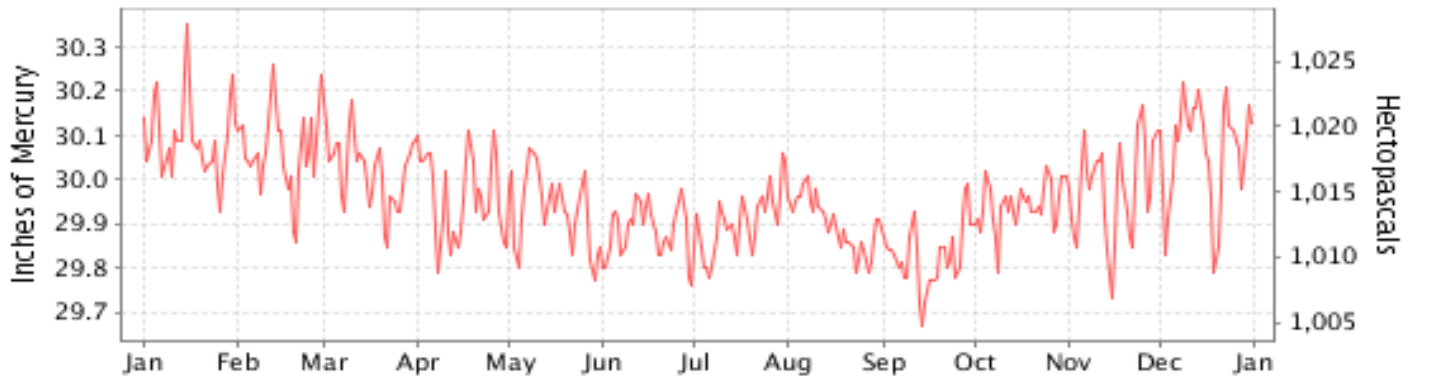
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2013

## SAN DIEGO (KSAN)

LATITUDE:  
32° 44'N

LONGITUDE:  
117° 10'W

ELEVATION (FT):  
GRND: 15 BARO: 81

TIME ZONE:  
PACIFIC (UTC -8)

WBAN: 23188

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	64.5	64.0	65.9	66.8	70.4	70.7	74.4	75.7	77.3	72.5	71.0	68.5	70.1	
	HIGHEST DAILY MAXIMUM	80	78	80	79	85	80	80	89	88	88	84	82	89	
	DATE OF OCCURRENCE	22	16	02+	18	13	29	01	30	06	06	01	16	AUG 30	
	MEAN DAILY MINIMUM	47.1	48.6	54.3	56.8	61.3	62.5	66.2	65.6	65.7	59.5	56.7	50.2	57.9	
	LOWEST DAILY MINIMUM	39	44	48	52	58	57	63	63	59	55	51	44	39	
	DATE OF OCCURRENCE	14	10+	10	18+	12	14	20	19	30+	31+	25	09	JAN 14	
	AVERAGE DRY BULB	55.8	56.3	60.1	61.8	65.9	66.6	70.3	70.7	71.5	66.0	63.9	59.4	64.0	
	MEAN WET BULB	46.5	48.3	53.2	54.6	58.4	60.5	63.9	63.5	64.0	57.9	55.2	49.1	56.3	
	MEAN DEW POINT	35.1	39.0	47.2	48.3	53.5	56.5	60.4	59.4	59.5	51.2	47.7	37.5	49.6	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	276	237	148	93	14	15	0	0	0	22	48	170	1023	
	COOLING DEGREE DAYS	0	1	3	3	47	70	170	185	200	59	23	4	765	
RH	MEAN (PERCENT)	51	57	68	65	68	73	74	71	69	64	60	50	64	
	HOUR 04 LST	59	62	74	71	73	79	79	79	77	71	65	57	71	
	HOUR 10 LST	38	45	59	57	60	66	68	63	59	52	47	36	54	
	HOUR 16 LST	47	52	64	61	65	67	69	64	63	62	59	50	60	
	HOUR 22 LST	59	63	74	71	72	78	78	77	78	70	69	58	71	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	1	1	3	1	0	0	0	0	1	2	3	1	13	
	THUNDERSTORMS	0	0	0	0	0	0	1	0	0	0	1	0	2	
PR	MEAN STATION PRESS. (IN.)	30.10	30.06	30.02	29.96	29.94	29.89	29.90	29.90	29.83	29.94	29.98	30.06	29.97	
	MEAN SEA-LEVEL PRESS. (IN.)	30.13	30.10	30.06	30.00	29.97	29.92	29.94	29.93	29.86	29.97	30.01	30.09	30.00	
WINDS	RESULTANT SPEED (MPH)	1.8	2.6	2.9	3.5	4.5	3.7	4.2	4.1	3.6	2.8	1.4	1.4	2.8	
	RES. DIR. (TENS OF DEGS.)	29	28	27	25	22	25	28	29	29	28	25	27	27	
	MEAN SPEED (MPH)	3.8	4.6	5.1	6.7	7.1	6.5	5.9	5.7	5.8	5.1	4.0	3.7	5.3	
	PREVAIL.DIR.(TENS OF DEGS.)	30	31	30	18	18	20	30	30	30	30	18	30	30	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	26	26	22	24	23	20	17	17	18	25	20	21	26	
	DIR. (TENS OF DEGS.)	27	28	27	28	17	19	28	30	33	24	14	23	28	
	DATE OF OCCURRENCE	10	20	09	08	06	30	24	21	27	09	22	07	FEB 20	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	36	38	26	30	29	26	21	25	23	31	24	25	38	
DIR. (TENS OF DEGS.)	28	23	27	25	17	20	29	22	30	24	16	06	23		
DATE OF OCCURRENCE	10	20	09	08	06	30	30	02	27	09	15	17	FEB 20		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	1.21	0.63	1.22	0.01	0.26	0.00	0.05	T	T	0.25	1.48	0.46	5.57	
	GREATEST 24-HOUR (IN.)	0.92	0.32	1.09	0.01	0.22	0.00	0.04	T	T	0.18	1.38	0.34	1.38	
	DATE OF OCCURRENCE	25-26	19-20	07-08	15	06-07		11	26	06	28-29	21-22	19	NOV 21-22	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	5	4	2	1	3	0	2	0	0	3	4	4	28	
PRECIPITATION 0.10	3	2	2	0	1	0	0	0	0	1	2	2	13		
PRECIPITATION 1.00	0	0	1	0	0	0	0	0	0	0	0	0	1		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0															

# NORMALS, MEANS, AND EXTREMES SAN DIEGO (KSAN)

**LATITUDE:** 32° 44'N      **LONGITUDE:** 117° 10'W      **ELEVATION (FT):** GRND: 15 BARO: 81      **TIME ZONE:** PACIFIC (UTC -8)      **WBAN: 23188**

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	65.1	65.0	65.6	67.5	68.5	70.8	74.6	76.4	75.9	72.8	69.0	64.7	69.7	
	MEAN DAILY MAXIMUM	87	65.1	64.0	66.0	67.1	68.6	70.4	75.1	76.5	75.5	73.3	69.5	66.0	69.8	
	HIGHEST DAILY MAXIMUM	73	88	90	93	98	96	101	99	98	111	107	100	88	111	
	YEAR OF OCCURRENCE		1953	1995	1988	2009	1953	1979	2006	1955	1963	1961	2010	1963	SEP 1963	
	MEAN OF EXTREME MAXS.	87	78.5	78.3	79.3	81.1	79.3	80.8	83.4	85.5	90.4	88.0	83.5	77.8	82.2	
	NORMAL DAILY MINIMUM	30	49.0	50.7	53.2	55.9	59.4	62.0	65.4	66.7	65.2	60.6	53.6	48.4	57.5	
	MEAN DAILY MINIMUM	87	48.3	48.8	52.1	54.4	58.1	60.5	64.6	65.9	63.7	59.7	52.7	48.8	56.5	
	LOWEST DAILY MINIMUM	73	29	36	39	41	48	51	55	57	51	43	38	34	29	
	YEAR OF OCCURRENCE		1949	1949	1971	1945	1967	1967	1948	1944	1948	1971	1964	1987	JAN 1949	
	MEAN OF EXTREME MINS.	87	40.7	43.6	45.8	49.3	53.7	57.7	61.5	62.7	59.8	53.1	45.5	41.0	51.2	
	NORMAL DRY BULB	30	57.1	57.9	59.4	61.7	64.0	66.4	70.0	71.6	70.6	66.7	61.3	56.5	63.6	
	MEAN DRY BULB	87	56.7	56.4	59.1	60.8	63.4	65.6	69.8	71.2	69.6	66.5	61.2	57.4	63.1	
	MEAN WET BULB	30	48.4	49.9	51.8	53.9	57.0	59.7	63.3	64.5	63.4	58.7	53.0	48.3	56.0	
	MEAN DEW POINT	30	46.2	47.6	49.9	52.1	55.5	58.3	62.1	63.4	62.1	57.3	50.2	45.3	54.2	
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.4	0.3	0.1	0.0	1.3
	MAXIMUM <= 32	30	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	0.0
MINIMUM <= 32	30	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	0.0	
MINIMUM <= 0	30	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	0.0	
H/C	NORMAL HEATING DEG. DAYS	30	248	203	178	113	58	18	1	0	1	19	124	262	1225	
	NORMAL COOLING DEG. DAYS	30	2	3	5	14	25	60	156	203	168	71	13	0	720	
RH	NORMAL (PERCENT)	30	67	69	70	69	73	75	76	76	75	72	67	65	71	
	HOURLY 04 LST	30	73	76	77	77	79	82	83	83	82	78	73	71	78	
	HOURLY 10 LST	30	58	61	62	61	66	69	70	70	67	63	55	54	63	
	HOURLY 16 LST	30	59	61	62	60	65	67	67	67	67	66	61	58	63	
	HOURLY 22 LST	30	73	74	74	74	77	79	81	81	79	77	73	71	76	
S	PERCENT POSSIBLE SUNSHINE	56	72	71	70	68	59	58	68	70	69	68	75	73	68	
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	2.2	1.9	1.1	0.5	0.3	0.4	0.2	0.3	1.3	2.8	2.7	3.0	16.7	
	THUNDERSTORMS	66	0.2	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	2.7	
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)	56	4.1	4.2	4.2	4.2	4.6	4.4	3.6	3.2	3.2	3.5	3.3	3.7	3.9	
	MIDNIGHT-MIDNIGHT (OKTAS)	32	3.9	4.4	4.5	4.1	5.1	5.0	4.3	4.0	4.0	3.8	3.4	3.5	4.2	
	MEAN NO. DAYS WITH: CLEAR	56	12.3	10.1	10.8	10.3	8.5	9.3	12.7	15.1	15.0	13.7	14.7	13.6	146.1	
	PARTLY CLOUDY	56	7.6	7.6	9.5	10.0	11.3	11.8	12.8	11.5	9.5	9.7	8.0	7.7	117.0	
	CLOUDY	56	11.1	10.5	10.7	9.7	11.2	9.0	5.0	4.4	5.5	7.6	7.3	9.6	101.6	
PR	MEAN STATION PRESSURE(IN)	30	30.06	30.03	30.00	29.97	29.93	29.89	29.90	29.89	29.87	29.93	30.01	30.05	29.96	
	MEAN SEA-LEVEL PRES. (IN)	30	30.09	30.06	30.03	30.00	29.96	29.92	29.93	29.92	29.90	29.96	30.04	30.08	29.99	
WINDS	MEAN SPEED (MPH)	30	5.4	6.3	6.9	7.4	7.5	7.4	7.2	7.0	6.8	6.0	5.3	5.1	6.5	
	PREVAIL.DIR(TENS OF DEGS)	35	31	31	30	30	30	30	30	30	30	31	31	31	30	
	MAXIMUM 2-MINUTE: SPEED (MPH)	17	35	38	38	32	26	23	21	20	22	30	35	46	46	
	DIR. (TENS OF DEGS)		26	17	25	26	17	25	30	30	29	27	33	18	18	
	YEAR OF OCCURRENCE		2010	1998	2000	1999	1998	2000	2006	2007	2003	2004	2004	2004	DEC 2004	
	MAXIMUM 3-SECOND SPEED (MPH)	17	47	46	45	38	32	26	24	26	25	39	45	58	58	
	DIR. (TENS OF DEGS)		18	14	25	30	18	20	33	30	18	20	31	17	17	
YEAR OF OCCURRENCE		2010	2001	2000	2012	1998	2013	2012	2007	2007	2004	2004	2004	DEC 2004		
PRECIPITATION	NORMAL (IN)	30	1.98	2.27	1.81	0.78	0.12	0.07	0.03	0.02	0.15	0.57	1.01	1.53	10.34	
	MAXIMUM MONTHLY (IN)	73	9.09	7.65	6.96	3.71	1.79	0.87	0.24	2.13	1.90	4.98	5.82	7.60	9.09	
	YEAR OF OCCURRENCE		1993	1998	1991	1988	1977	1990	1991	1977	1963	2004	1965	1943	JAN 1993	
	MINIMUM MONTHLY (IN)	73	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	
	YEAR OF OCCURRENCE		1976	1967	1997	1993	1952	1981	1982	1981	1979	1967	1980	2000	MAR 1997	
	MAXIMUM IN 24 HOURS (IN)	73	2.65	2.61	2.40	1.98	1.50	0.82	0.23	2.13	1.00	2.71	2.44	3.07	3.07	
	YEAR OF OCCURRENCE		1978	1979	1952	1988	1977	1990	1991	2013	1986	2004	1944	1945	DEC 1945	
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	6.7	7.1	6.5	4.0	1.4	0.8	0.7	0.4	1.2	2.8	4.1	5.8	41.5	
PRECIPITATION >= 1.00	30	0.4	0.6	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	2.0		
SNOWFALL	NORMAL (IN)	30	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	
	MAXIMUM MONTHLY (IN)	59	T	0.0	T	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	T	
	YEAR OF OCCURRENCE		1949		1985	1999							1985	1967	APR 1999	
	MAXIMUM IN 24 HOURS (IN)	59	T	0.0	T	T	0.0	0.0	0.0	0.0	0.0	0.0	T	T	T	
	YEAR OF OCCURRENCE		1949		1985	1999							1985	1967	APR 1999	
	MAXIMUM SNOW DEPTH (IN)	51	0	0	0	0	0	0	0	0	0	0	0	0	0	
YEAR OF OCCURRENCE																
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	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		

**PRECIPITATION (inches) 2013 SAN DIEGO (KSAN)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	0.46	0.09	0.04	0.62	0.00	0.04	0.19	0.06	T	0.29	2.37	4.55	8.71
1985	0.52	0.77	0.58	0.32	T	T	0.00	T	0.20	0.29	4.92	1.06	8.66
1986	0.75	2.59	3.12	1.17	0.00	T	0.01	0.00	1.04	1.39	1.16	0.95	12.18
1987	1.68	1.53	1.04	0.78	0.03	T	0.03	0.01	0.70	1.74	1.33	2.73	11.60
1988	0.89	1.37	0.59	3.71	0.08	0.00	T	T	T	T	1.39	2.23	10.26
1989	0.42	0.70	0.69	0.12	0.04	0.06	0.00	T	0.23	0.47	0.09	1.01	3.83
1990	2.52	1.13	0.25	0.76	0.51	0.87	T	0.01	T	T	0.65	0.59	7.29
1991	1.06	2.46	6.96	0.05	0.01	T	0.24	0.01	0.28	0.69	0.05	1.70	13.51
1992	1.81	3.34	4.42	0.28	0.07	0.04	0.03	0.05	0.00	0.18	0.03	2.56	12.81
1993	9.09	4.73	1.22	0.00	0.01	0.41	0.03	T	T	0.22	0.77	0.78	17.26
1994	0.70	2.75	3.67	0.93	0.07	T	0.03	0.01	T	0.01	0.46	0.80	9.43
1995	8.06	1.93	3.81	0.96	0.59	0.46	0.05	0.00	T	T	0.30	0.88	17.04
1996	1.52	0.88	1.10	0.36	0.02	0.00	.09	T	.03	.94	1.70	.63	7.27
1997	3.02	0.31	0.00	0.28	T	T	T	0.00	0.85	0.02	1.17	1.35	7.00
1998	2.68	7.65	2.21	1.11	0.64	0.10	0.20	T	0.03	0.08	0.69	0.66	16.05
1999	1.54	0.70	1.09	1.62	0.06	0.04	T	0.00	0.02	0.00	0.04	0.32	5.43
2000	0.17	3.67	1.00	0.54	T	T	0.00	0.01	T	1.24	0.26	0.01	6.90
2001	3.28	2.38	0.63	0.76	0.01	0.00	T	0.00	0.00	0.00	0.95	0.46	8.47
2002	0.32	0.17	0.46	0.63	T	T	0.00	T	0.31	0.04	0.32	1.98	4.23
2003	0.02	4.88	1.36	1.41	0.30	T	T	0.00	T	T	0.60	0.61	9.18
2004	0.34	2.81	0.22	0.60	T	0.00	0.00	0.00	T	4.98	0.33	4.01	13.29
2005	4.49	5.83	2.12	0.59	0.12	0.02	0.01	T	0.10	0.46	0.12	0.25	14.11
2006	0.36	1.11	1.36	0.88	0.77	T	0.04	0.01	0.00	0.76	0.15	0.71	6.15
2007	0.51	1.12	0.09	0.46	T	0.00	0.00	0.00	0.05	0.37	0.97	0.80	4.37
2008	3.34	1.21	0.26	T	0.23	0.02	0.00	T	T	0.18	2.49	3.38	11.11
2009	0.08	2.63	0.18	0.14	0.04	0.03	0.00	T	T	T	0.12	2.28	5.50
2010	3.38	2.28	0.68	1.78	0.01	0.02	0.02	0.00	0.03	2.18	0.88	5.00	16.26
2011	0.30	2.10	1.46	0.26	0.36	0.03	0.00	0.00	0.13	0.46	3.12	0.86	9.08
2012	0.40	1.19	0.97	0.88	0.02	T	T	T	T	0.70	0.29	2.19	6.64
2013	1.21	0.63	1.22	0.01	0.26	0.00	0.05	T	T	0.25	1.48	0.46	5.57
POR= 87 YRS	1.93	2.03	1.65	0.74	0.19	0.06	0.02	0.07	0.17	0.48	1.03	1.71	10.08

WBAN : 23188

**AVERAGE TEMPERATURE (°F) 2013 SAN DIEGO (KSAN)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	61.2	60.2	63.7	64.3	68.1	69.9	77.2	76.6	78.9	68.5	61.4	56.7	67.2
1985	57.0	57.2	58.9	63.6	64.8	69.0	75.3	72.4	69.8	67.9	60.1	58.0	64.5
1986	61.0	58.9	60.5	62.8	64.6	67.4	69.6	71.8	66.9	65.5	62.8	57.6	64.1
1987	55.4	58.0	59.1	63.4	64.7	65.8	67.1	69.9	69.9	69.5	61.8	53.9	63.2
1988	56.7	59.9	61.6	62.4	63.9	64.9	70.4	71.0	70.0	66.7	60.1	56.0	63.6
1989	54.7	56.7	59.8	65.6	63.7	66.0	70.1	71.0	70.4	66.3	63.1	58.7	63.8
1990	56.6	55.2	58.7	63.2	64.3	69.0	72.3	71.6	71.7	68.6	62.7	55.6	64.1
1991	57.4	59.4	56.5	61.7	62.1	64.1	67.4	68.9	69.4	68.0	62.3	57.3	62.9
1992	57.4	61.1	60.4	67.0	68.0	68.1	71.8	74.9	72.4	68.2	62.6	55.3	65.6
1993	56.9	58.0	61.3	63.8	66.0	68.6	69.8	70.2	69.0	67.3	61.6	57.0	64.1
1994	57.9	56.5	60.4	61.0	62.1	68.1	69.5	74.0	72.5	66.8	56.4	55.8	63.4
1995	56.9	61.4	60.4	61.5	62.0	64.8	69.0	71.9	71.5	67.1	63.2	58.3	64.0
1996	57.6	58.8	60.1	64.6	66.8	67.8	70.0	72.8	70.6	64.3	61.6	57.8	64.4
1997	58.0	58.4	61.6	62.5	68.7	67.5	69.3	72.9	75.2	68.7	64.0	57.4	65.4
1998	58.2	57.3	59.3	59.6	62.8	65.7	68.8	72.8	70.3	65.7	59.7	55.4	63.0
1999	57.5	57.8	58.3	58.9	60.5	62.8	68.5	68.0	67.0	68.8	60.5	57.8	62.2
2000	58.2	59.0	58.1	62.4	64.6	68.2	69.2	72.0	70.5	65.1	58.4	58.1	63.7
2001	54.7	54.9	58.9	58.5	63.7	67.6	69.0	69.6	68.2	66.3	61.4	55.5	62.4
2002	55.7	57.5	57.7	59.6	61.9	64.7	67.8	68.9	70.1	64.2	63.4	56.8	62.4
2003	61.7	59.0	60.3	59.9	62.4	64.2	70.0	72.7	69.9	67.7	60.8	56.9	63.8
2004	56.9	56.7	62.6	64.4	68.5	67.8	72.1	70.8	72.6	65.4	60.1	57.8	64.6
2005	58.8	59.8	61.0	61.8	65.5	66.4	70.0	71.0	68.5	65.9	62.8	58.5	64.2
2006	57.0	58.3	57.2	61.9	64.7	70.8	76.3	73.1	70.2	65.8	63.4	56.5	64.6
2007	54.1	57.5	59.9	59.9	63.0	65.3	69.8	73.3	69.6	66.7	61.2	54.2	62.9
2008	54.4	55.6	58.9	61.8	63.4	66.9	69.6	72.2	71.2	69.0	64.6	56.6	63.7
2009	59.9	57.9	59.5	62.6	64.1	66.2	70.7	72.4	72.1	65.6	61.2	56.7	64.1
2010	58.3	58.3	60.3	60.1	62.2	63.8	65.9	68.0	68.8	67.9	62.3	58.8	62.9
2011	60.2	57.6	60.9	63.6	64.7	65.5	70.0	69.1	68.8	65.6	60.3	55.6	63.5
2012	58.2	57.9	58.2	61.1	63.8	65.2	68.7	73.7	74.8	69.1	62.3	57.4	64.2
2013	55.8	56.3	60.1	61.8	65.9	66.6	70.3	70.7	71.5	66.0	63.9	59.4	64.0
POR= 87 YRS	56.7	56.4	59.1	60.8	63.4	65.6	69.8	71.2	69.6	66.5	61.2	57.4	63.1

**HEATING DEGREE DAYS (base 65°F) 2013 SAN DIEGO (KSN)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0	0	0	4	104	250	238	219	183	60	18	2	1078
1985-86	0	0	0	3	145	211	118	173	132	85	29	0	896
1986-87	0	0	7	10	66	223	291	197	178	72	21	6	1071
1987-88	0	0	0	0	98	338	250	147	125	85	53	22	1118
1988-89	0	0	0	4	141	275	313	237	158	37	40	14	1219
1989-90	0	0	1	13	67	188	252	268	185	52	39	1	1066
1990-91	0	0	0	3	88	284	227	152	254	104	96	28	1236
1991-92	0	0	0	24	96	231	228	115	136	8	1	0	839
1992-93	0	0	0	0	84	294	240	191	111	44	7	6	977
1993-94	0	0	0	4	103	242	214	235	147	116	85	1	1147
1994-95	0	0	0	12	249	276	242	106	136	105	87	24	1237
1995-96	0	0	0	3	49	200	223	171	146	54	6	0	852
1996-97	0	0	0	45	115	216	217	185	124	81	0	1	984
1997-98	0	0	0	2	65	227	203	208	172	155	69	9	1110
1998-99	1	0	0	13	152	293	224	198	200	189	132	64	1466
1999-00	4	0	3	3	130	217	212	171	206	82	23	0	1051
2000-01	0	0	0	27	191	208	314	281	183	191	39	5	1439
2001-02	0	0	0	4	107	289	283	208	219	154	101	18	1383
2002-03	0	0	1	36	63	248	117	163	151	150	82	33	1044
2003-04	0	0	0	5	122	243	247	236	99	43	0	0	995
2004-05	0	0	0	30	142	218	193	139	118	101	19	0	960
2005-06	0	0	0	21	79	197	240	183	233	86	19	0	1058
2006-07	0	0	0	11	68	255	332	208	159	147	76	25	1281
2007-08	0	0	0	22	122	326	321	265	186	142	79	19	1482
2008-09	0	0	0	12	55	255	161	198	170	102	38	1	992
2009-10	0	0	0	27	111	251	200	182	149	143	84	34	1181
2010-11	18	1	3	4	132	192	149	201	127	59	37	10	933
2011-12	0	0	0	22	142	286	207	200	206	111	35	21	1230
2012-13	0	0	0	4	90	226	276	237	148	93	14	15	1103
2013-	0	0	0	22	48	170							

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**COOLING DEGREE DAYS (base 65°F) 2013 SAN DIEGO (KSN)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	13	0	15	31	107	156	387	366	422	119	4	0	1620
1985	0	7	0	22	19	128	325	235	153	104	6	0	999
1986	2	11	4	29	23	78	152	218	73	31	9	0	630
1987	0	6	5	29	17	35	71	158	154	147	10	0	632
1988	0	5	28	16	25	26	176	193	161	64	0	5	699
1989	0	13	2	63	5	48	165	193	168	58	17	0	732
1990	0	0	2	6	21	127	233	211	209	123	25	0	957
1991	0	0	0	9	11	10	80	130	138	122	21	0	521
1992	0	12	1	72	99	100	216	313	228	106	20	0	1167
1993	0	0	4	12	47	119	155	170	126	81	8	0	722
1994	0	0	10	3	1	100	146	289	231	76	0	0	856
1995	0	14	1	8	1	27	133	223	199	75	2	0	683
1996	0	0	4	53	70	92	164	251	175	30	19	0	858
1997	6	4	23	12	119	83	138	252	314	123	40	2	1116
1998	0	0	1	0	6	34	127	250	167	40	0	0	625
1999	0	0	0	14	0	5	118	100	69	126	3	0	435
2000	8	5	0	8	19	101	137	226	170	39	0	1	714
2001	0	3	2	5	4	90	132	149	102	53	4	0	544
2002	0	5	0	0	9	16	94	125	157	18	23	0	447
2003	20	0	11	3	8	18	161	246	153	98	2	0	720
2004	0	0	32	30	115	92	226	186	235	48	2	1	967
2005	8	0	3	12	40	47	159	196	112	52	20	3	652
2006	2	1	0	0	18	181	357	257	163	46	29	0	1054
2007	0	4	10	0	21	40	159	264	142	83	14	0	737
2008	0	0	5	49	39	84	150	229	190	144	48	0	938
2009	11	4	7	37	16	41	181	236	219	50	5	0	807
2010	0	0	13	4	2	6	51	100	124	101	56	7	464
2011	6	2	7	26	34	31	162	133	119	47	6	0	573
2012	3	0	2	3	3	32	121	278	300	141	16	0	899
2013	0	1	3	3	47	70	170	185	200	59	23	4	765

## SNOWFALL (inches) 2013 SAN DIEGO (KSAN)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1976-77	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
1977-78	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
1978-79	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
1979-80	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
1980-81	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
1981-82	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
1982-83	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
1983-84	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
1984-85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1985-86	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
1986-87	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
1987-88	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
1988-89	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
1989-90	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
1990-91	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
1991-92	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
1992-93	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
1993-94	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
1994-95	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
1995-96	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
1996-97	0.0												
1997-98				0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	
1998-99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
1999-00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2000-01													
2001-02													
2002-03													
2003-04													
2004-05													
2005-													
POR= 72 YRS	0.0	0.1	0.0	0.0	T	0.0	0.0	0.0	T	T	0.0	0.0	0.1

WBAN : 23188

### REFERENCE NOTES :

PAGE 1:  
THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).

PAGE 2 AND 3:

H/C INDICATES HEATING AND COOLING DEGREE DAYS.

RH INDICATES RELATIVE HUMIDITY

W/O INDICATES WEATHER AND OBSTRUCTIONS

S INDICATES SUNSHINE.

PR INDICATES PRESSURE.

CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).

GENERAL:

T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE.

+ INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES.

BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM.

PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH.

POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING.

WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED.

0.\* OR \* INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05.

CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET

CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.

GENERAL CONTINUED:

WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH.

RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION.

AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2.

SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN

PRECIPITATION, INCLUDING HAIL.

A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F.

DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR.

DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY.

WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.

ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.

STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED STATION HISTORY INFORMATION GO TO "Historical Observing Metadata Repository", URL IS:

<http://www.ncdc.noaa.gov/homr/>

SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.

### NOTE:

The "Period of Record:(POR)" for all "averages" is based on "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.

# 2013 SAN DIEGO CALIFORNIA (KSAN)

The city of San Diego is located on San Diego Bay in the southwest corner of southern California. The prevailing winds and weather are tempered by the Pacific Ocean, with the result that summers are cool and winters warm in comparison with other places along the same general latitude. Temperatures of freezing or below have rarely occurred at the station since the record began in 1871, but hot weather, 90 degrees or above, is more frequent.

Dry easterly winds sometimes blow in the vicinity for several days at a time, bringing temperatures in the 90s and at times even in the 100s in the eastern sections of the city and outlying suburbs. At the National Weather Service station itself, however, there have been relatively few days on which 100 degrees or higher was reached.

As these hot winds are predominant in the fall, highest temperatures occur in the months of September and October. Records show that over 60 percent of the days with 90 degrees or higher have occurred in these two months. High temperatures are almost invariably accompanied by very low relative humidities, which often drop below 20 percent and occasionally below 10 percent.

A marked feature of the climate is the wide variation in temperature within short distances. In nearby valleys daytimes are much warmer in summer and nights noticeably cooler in winter, and freezing occurs much more frequently than in the city. Although records show unusually small daily temperature ranges, only about 15 degrees between the highest and lowest readings, a few miles inland these ranges increase to 30 degrees or more.

Strong winds and gales associated with Pacific, or tropical storms, are infrequent due to the latitude.

The seasonal rainfall is about 10 inches in the city, but increases with elevation and distance from the coast. In the mountains to the north and east the average is between 20 and 40 inches, depending on slope and elevation. Most of the precipitation falls in winter, except in the mountains where there is an occasional thunderstorm. Eighty-five percent of the rainfall occurs from November through March, but wide variations take place in monthly and seasonal totals. Infrequent measurable amounts of hail occur in San Diego, but snow is practically unknown at the Weather Service Office location. In each occurrence of snowfall only a trace was recorded officially, but in some locations amounts up to or slightly exceeding a half-inch fell, and remained on the ground for an hour or more.

As on the rest of the Pacific Coast, a dominant characteristic of spring and summer is the nighttime and early morning cloudiness. Low clouds form regularly and frequently extend inland over the coastal valleys and foothills, but they usually dissipate during the morning and the afternoons are generally clear.

Considerable fog occurs along the coast, but the amount decreases with distance inland. The fall and winter months are usually the foggiest. Thunderstorms are rare, averaging about three a year in the city. Visibilities are good as a rule. The sunshine is plentiful for a marine location, with a marked increase toward the interior.

# Station History

SAN DIEGO, CA

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
SAN DIEGO LINDBERGH MUNICIPAL AP	1929-07-01	1931-01-01	32° 43'	-117° 10'			AIRWAYS
SAN DIEGO LINDBERGH FIELD	1973-01-01	1996-08-01	32° 43'	-117° 10'	13		COOP,WXSVC
SAN DIEGO LINDBERGH FIELD	1996-08-01	2011-01-01	32° 44'	-117° 10'	15		ASOS,COOP
SAN DIEGO LINDBERGH MUNICIPAL AP	1932-01-01	1932-08-19	32° 43'	-117° 10'	36		AIRWAYS,COOP
SAN DIEGO LINDBERGH FIELD	2011-01-01	Present	32° 44'	-117° 10'	15		ASOS,COOP
SAN DIEGO LINDBERGH MUNICIPAL AP	1931-01-01	1932-01-01	32° 43'	-117° 10'	30		AIRWAYS,COOP
SAN DIEGO LINDBERGH FIELD	1932-08-19	1969-01-01	32° 43'	-117° 10'	36		AIRWAYS,COOP
SAN DIEGO LINDBERGH FIELD	1969-01-01	1973-01-01	32° 43'	-117° 10'	13		AIRWAYS,COOP

# Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
TEMP	1993-11-16	1995-07-01	DAILY	2400	MXMN		ROOF
PRECIP	1996-07-01	1996-08-01	DAILY	2400	TB	RCRD	ROOF
PRECIP	1996-07-01	1996-08-01	HOURLY	2400			
PRECIP	1982-01-01	1993-11-16	DAILY	2400	UNIV	RCRD	ROOF
PRECIP	1982-01-01	1993-11-16	HOURLY	2400			
PRECIP	1929-07-01	1982-01-01	DAILY	2400	UNIV	RCRD	ROOF
TEMP	1929-07-01	1982-01-01	DAILY	2400			
PRECIP	1995-07-01	1996-07-01	DAILY	2400	UNIV	RCRD	ROOF
PRECIP	1996-08-01	2011-01-01	HOURLY	2400	TB	RCRD	
PRECIP	1993-11-16	1995-07-01	DAILY	2400	UNIV	RCRD	ROOF
PRECIP	1995-07-01	1996-07-01	HOURLY	2400	UNIV	RCRD	ROOF
TEMP	1996-08-01	2011-01-01	DAILY	2400	HYGR		
PRECIP	1993-11-16	1995-07-01	HOURLY	2400			
TEMP	1996-07-01	1996-08-01	DAILY	2400	HYGR		ROOF
PRECIP	1996-08-01	2011-01-01	DAILY	2400			
TEMP	2011-01-01	Present	DAILY	2400	ATEMP		
TEMP	1995-07-01	1996-07-01	DAILY	2400	MXMN		ROOF
PRECIP	2011-01-01	Present	DAILY	2400	FPCPNX		
TEMP	1982-01-01	1993-11-16	DAILY	2400			
PRECIP	2011-01-01	Present	HOURLY	2400	AHTB	RCRD;HTD	

\* For explanation of codes and abbreviations see Station Metadata link below.

Other Station Information can be found at:

ASOS Implementation by NWS: <http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm>

Station Metadata website: <http://www.ncdc.noaa.gov/homr>

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2

Fax Number : (828) 271-4876

TDD : (828) 271-4010

Email : [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

NOAA/National Climatic Data Center

Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

Visit our Web Site for other weather data: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)