

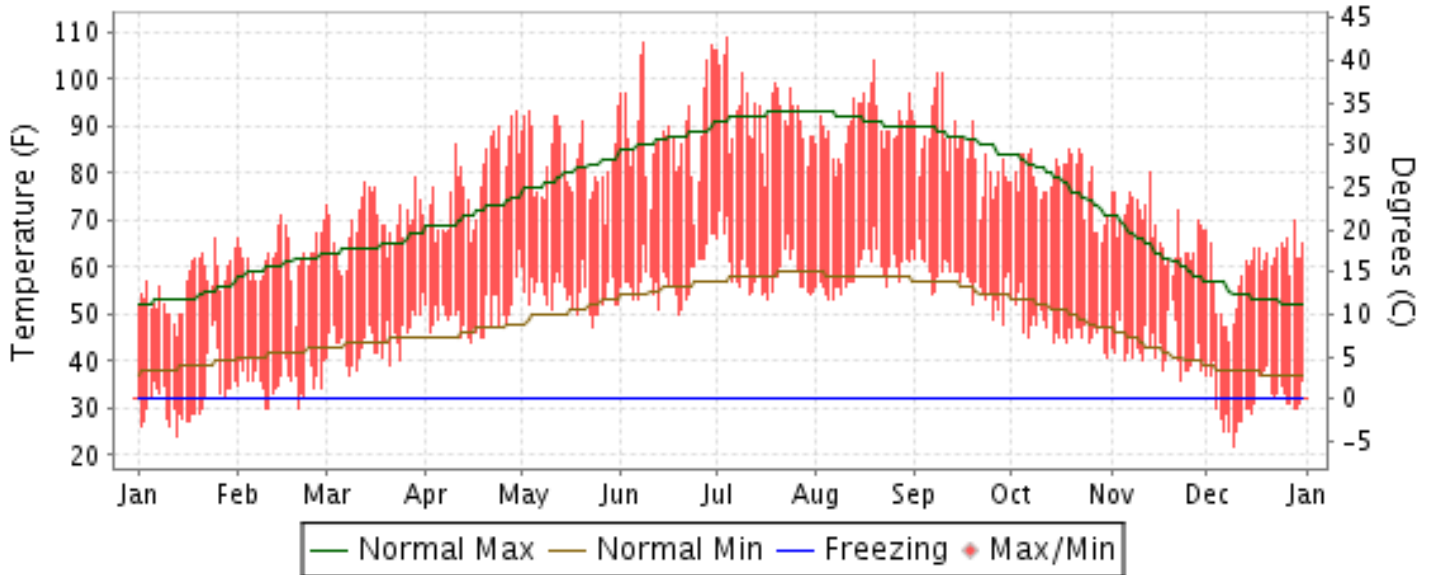


# 2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

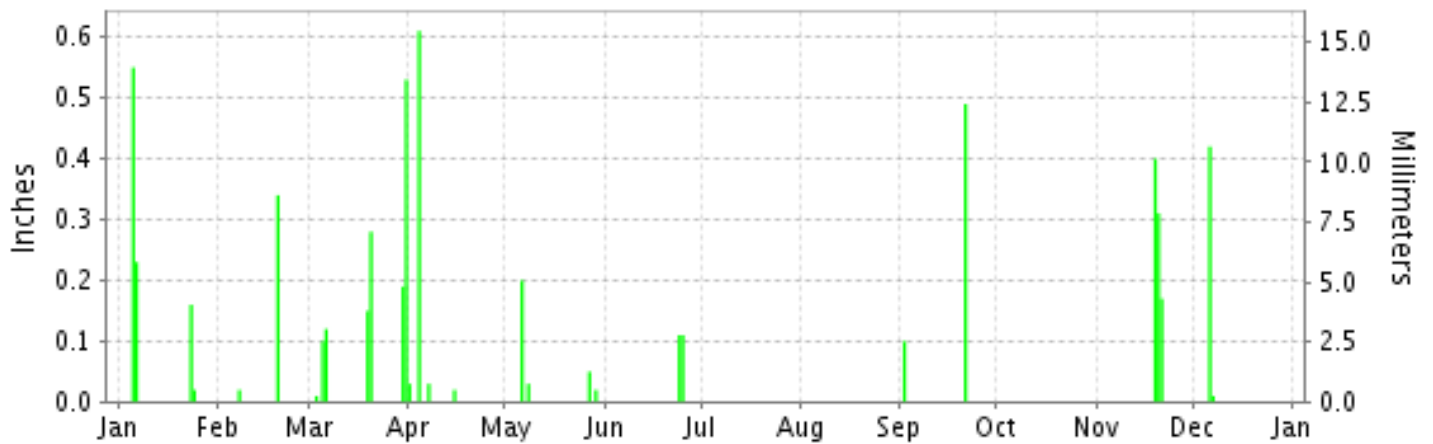
ISSN 0198-0963

## SACRAMENTO, CALIFORNIA (KSAC)

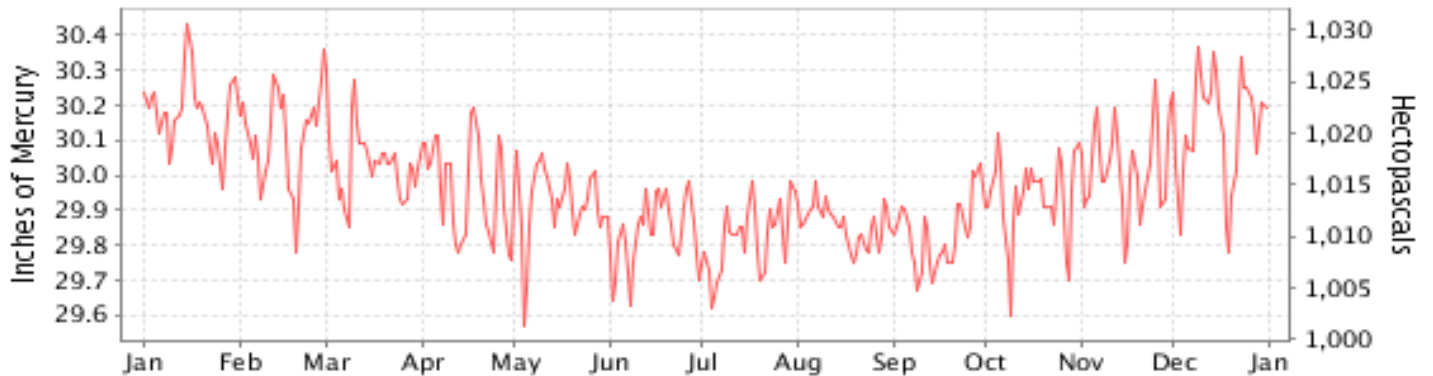
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



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CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2013

## SACRAMENTO (KSAC)

LATITUDE:  
38° 30'N

LONGITUDE:  
121° 29'W

ELEVATION (FT):  
GRND: 15 BARO: 41

TIME ZONE:  
PACIFIC (UTC -8)

WBAN: 23232

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	55.8	62.3	69.4	77.9	82.6	89.2	93.1	90.5	85.2	78.2	68.3	59.1	76.0	
	HIGHEST DAILY MAXIMUM	66	71	79	93	94	108	109	104	101	85	80	70	109	
	DATE OF OCCURRENCE	25	15	29	29	31	08	04	19	09+	22+	13	28	JUL 04	
	MEAN DAILY MINIMUM	32.4	35.9	44.5	49.7	54.3	57.6	59.3	59.0	57.0	47.3	42.8	31.5	47.6	
	LOWEST DAILY MINIMUM	24	30	37	44	47	50	53	53	48	41	36	22	22	
	DATE OF OCCURRENCE	13	20+	08	15	23	19	17	06+	28	31	23	09	DEC 09	
	AVERAGE DRY BULB	44.1	49.1	56.9	63.8	68.4	73.4	76.2	74.7	71.1	62.8	55.6	45.3	61.8	
	MEAN WET BULB	39.4	42.7	49.5	52.4	55.1	60.0	60.9	61.0	58.9	50.8	47.6	38.6	51.4	
	MEAN DEW POINT	34.3	35.7	42.3	41.2	43.7	50.7	51.5	53.0	50.6	40.4	40.3	31.7	43.0	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	3	8	12	21	17	7	0	0	0	0	68
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM <= 32°	19	4	0	0	0	0	0	0	0	0	0	19	42		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	640	438	240	83	13	0	0	0	5	73	275	602	2369	
	COOLING DEGREE DAYS	0	0	0	58	130	257	353	310	198	13	0	0	1319	
RH	MEAN (PERCENT)	74	65	63	51	48	52	50	56	56	53	65	67	58	
	HOUR 04 LST	88	83	81	71	68	76	75	80	76	74	81	86	78	
	HOUR 10 LST	65	59	54	39	36	39	39	45	42	36	50	52	46	
	HOUR 16 LST	55	42	42	33	28	32	26	29	35	30	49	46	37	
	HOUR 22 LST	83	73	71	61	60	63	59	68	68	66	76	79	69	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	7	4	1	0	0	0	0	0	0	0	1	3	16	
	THUNDERSTORMS	0	0	1	0	0	0	0	0	2	0	0	0	3	
PR	MEAN STATION PRESS. (IN.)	30.18	30.11	30.04	29.96	29.92	29.83	29.82	29.86	29.83	29.93	30.03	30.14	29.97	
	MEAN SEA-LEVEL PRESS. (IN.)	30.20	30.14	30.06	29.99	29.95	29.86	29.85	29.89	29.86	29.97	30.05	30.17	30.00	
WINDS	RESULTANT SPEED (MPH)	1.4	1.5	1.9	4.0	3.2	4.6	6.2	5.4	2.9	1.8	2.1	1.5	2.1	
	RES. DIR. (TENS OF DEGS.)	32	30	25	30	24	22	20	20	22	31	33	33	25	
	MEAN SPEED (MPH)	2.7	4.3	4.8	7.7	7.2	6.6	7.1	6.4	6.1	4.0	3.9	2.8	5.3	
	PREVAIL.DIR.(TENS OF DEGS.)	32	33	22	33	22	22	20	20	20	33	34	33	20	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	20	25	30	37	28	29	22	20	23	31	30	24	37	
	DIR. (TENS OF DEGS.)	32	33	33	34	34	22	23	23	35	34	36	33	34	
	DATE OF OCCURRENCE	29	26	22	08	01	09	22	24	26	03	22	19	APR 08	
	MAXIMUM 3-SECOND WIND:														
SPEED (MPH)	25	33	38	47	36	41	31	26	30	41	39	37	47		
DIR. (TENS OF DEGS.)	32	35	31	34	32	23	24	19	32	22	33	31	34		
DATE OF OCCURRENCE	26	26	22	08	01	09	22	06	25	27	21	19	APR 08		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.96	0.36	1.38	0.69	0.30	0.22	T	T	0.59	0.00	0.88	0.43	5.81	
	GREATEST 24-HOUR (IN.)	0.78	0.34	0.71	0.61	0.20	0.22	T	T	0.49	0.00	0.66	0.43	0.78	
	DATE OF OCCURRENCE	05-06	19	30-31	04	06	24-25	22	17	21		19-20	06-07	JAN 05-06	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	4	2	7	4	4	2	0	0	2	0	3	2	30	
PRECIPITATION 0.10	3	1	6	1	1	2	0	0	2	0	3	1	20		
PRECIPITATION 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
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 SACRAMENTO (KSAC)

**LATITUDE:** 38° 30'N      **LONGITUDE:** 121° 29'W      **ELEVATION (FT):** GRND: 15 BARO: 41      **TIME ZONE:** PACIFIC (UTC -8)      **WBAN: 23232**

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	53.8	60.3	65.1	71.1	79.9	87.1	92.1	91.2	87.2	77.6	63.8	53.9	73.6
	MEAN DAILY MAXIMUM	72	53.6	59.4	64.7	71.3	79.8	87.3	92.6	91.4	87.6	77.7	63.3	53.9	73.6
	HIGHEST DAILY MAXIMUM	63	74	76	88	95	105	115	114	110	108	104	87	73	115
	YEAR OF OCCURRENCE		2009	2011	1988	2004	1984	1961	1972	1996	1988	2001	1960	2011	JUN 1961
	MEAN OF EXTREME MAXS.	72	63.5	69.9	76.6	85.8	95.5	103.0	105.0	103.4	100.2	91.6	76.4	64.2	86.3
	NORMAL DAILY MINIMUM	30	38.8	41.4	44.1	46.2	51.1	55.8	58.4	58.0	55.7	50.2	42.8	38.4	48.4
	MEAN DAILY MINIMUM	72	37.8	40.6	43.1	46.0	50.7	55.4	58.2	57.8	55.8	50.2	42.4	38.1	48.0
	LOWEST DAILY MINIMUM	63	21	23	26	31	36	41	48	49	42	36	26	18	18
	YEAR OF OCCURRENCE		2007	1989	1971	1999	1974	1990	1983	1978	2007	2002	1993	1990	DEC 1990
	MEAN OF EXTREME MINS.	72	27.8	31.3	34.1	37.7	42.3	48.2	52.5	52.4	48.8	41.3	32.4	28.1	39.7
	NORMAL DRY BULB	30	46.3	50.8	54.6	58.7	65.5	71.4	75.2	74.6	71.4	63.9	53.3	46.2	61.0
	MEAN DRY BULB	72	45.7	50.0	53.9	58.7	65.3	71.4	75.4	74.7	71.7	63.9	52.8	46.0	60.8
	MEAN WET BULB	30	43.7	46.2	48.7	50.1	53.6	57.2	59.8	58.9	56.9	52.8	47.4	42.8	51.5
	MEAN DEW POINT	30	42.4	44.3	46.6	47.5	50.3	53.8	56.6	55.9	53.8	49.5	45.1	41.4	48.9
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.4	4.9	10.8	19.0	17.6	11.7	2.1	0.0	0.0	66.5
	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
MINIMUM <= 32	30	4.6	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.4	13.0	
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	
H/C	NORMAL HEATING DEG. DAYS	30	580	396	323	205	72	9	1	1	8	88	352	584	2619
	NORMAL COOLING DEG. DAYS	30	0	0	1	15	87	203	318	298	202	53	1	0	1178
RH	NORMAL (PERCENT)	30	84	78	74	66	61	56	55	57	58	64	76	83	68
	HOURLY 04 LST	30	90	89	87	82	81	79	78	79	79	81	87	90	84
	HOURLY 10 LST	30	85	78	70	57	50	47	48	50	51	56	72	83	62
	HOURLY 16 LST	30	70	60	54	43	37	31	30	30	31	37	55	67	45
	HOURLY 22 LST	30	87	83	79	73	69	65	63	64	66	71	81	86	74
S	PERCENT POSSIBLE SUNSHINE	47	48	65	74	82	90	94	97	96	93	86	66	49	78
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	10.0	4.7	1.5	0.3	0.1	0.0	0.0	0.0	0.1	0.9	5.0	9.2	31.8
	THUNDERSTORMS	66	0.3	0.5	0.7	0.5	0.3	0.3	0.2	0.2	0.4	0.3	0.2	0.2	4.1
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)	50	5.7	5.0	4.5	3.8	2.9	1.8	0.9	1.1	1.5	2.6	4.5	5.5	3.3
	MIDNIGHT-MIDNIGHT (OKTAS)	31	5.3	4.6	3.9	3.3	2.3	1.7	0.8	1.0	1.2	2.1	3.9	4.8	2.9
	MEAN NO. DAYS WITH: CLEAR	50	6.5	7.6	9.9	11.9	16.9	21.7	26.9	25.1	23.2	18.9	9.8	7.6	186.0
	PARTLY CLOUDY	50	5.9	7.0	8.7	9.6	8.6	5.9	3.2	4.1	4.2	6.0	7.4	5.8	76.4
	CLOUDY	50	18.7	13.6	12.4	8.4	5.5	2.4	1.0	1.3	2.1	5.4	12.4	17.0	100.2
PR	MEAN STATION PRESSURE(IN)	30	30.10	30.03	30.00	29.97	29.91	29.85	29.85	29.85	29.85	29.93	30.05	30.09	29.96
	MEAN SEA-LEVEL PRES. (IN)	30	30.13	30.06	30.03	30.00	29.93	29.88	29.87	29.87	29.88	29.96	30.08	30.12	29.98
WINDS	MEAN SPEED (MPH)	30	5.3	6.2	6.9	7.3	7.8	8.2	7.7	7.2	6.0	5.4	4.8	5.4	6.5
	PREVAIL.DIR(TENS OF DEGS)	33	15	15	15	22	22	22	21	21	21	21	34	15	21
	MAXIMUM 2-MINUTE: SPEED (MPH)	15	38	37	36	37	38	32	26	26	36	36	38	38	38
	DIR. (TENS OF DEGS)		14	33	32	34	33	33	23	22	32	35	15	14	14
	YEAR OF OCCURRENCE		2006	2008	2000	2013	2001	2012	2012	2007	2006	2000	2001	2003	JAN 2006
	MAXIMUM 3-SECOND SPEED (MPH)	15	58	53	48	47	46	52	77	45	48	49	62	53	77
	DIR. (TENS OF DEGS)		15	15	15	34	33	16	32	27	32	32	21	14	32
	YEAR OF OCCURRENCE		2008	2006	2011	2013	2001	2012	2012	2011	2006	2010	2007	2003	JUL 2012
PRECIPITATION	NORMAL (IN)	30	3.64	3.47	2.75	1.15	0.68	0.21	0.00	0.05	0.29	0.95	2.08	3.25	18.52
	MAXIMUM MONTHLY (IN)	74	9.69	9.95	8.13	4.76	3.13	1.50	0.79	0.65	2.78	7.51	7.41	12.64	12.64
	YEAR OF OCCURRENCE		1995	1998	1995	1941	1948	2011	1974	1976	1989	1962	1970	1955	DEC 1955
	MINIMUM MONTHLY (IN)	74	0.05	0.15	0.05	0.00	T	0.00	0.00	0.00	0.00	0.00	T	0.00	0.00
	YEAR OF OCCURRENCE		2007	1964	2008	1949	2012	1981	1983	1982	1980	1966	1995	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	74	3.41	3.01	2.30	2.22	1.73	1.21	0.78	0.65	1.79	5.59	2.95	3.64	5.59
	YEAR OF OCCURRENCE		1967	1986	1982	1958	2002	1993	1974	1965	1989	1962	1970	1955	OCT 1962
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	10.3	9.4	9.1	4.9	3.2	1.2	0.0	0.3	1.3	3.6	6.9	9.9	60.1
	PRECIPITATION >= 1.00	30	0.7	0.8	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.4	0.7	3.3
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)	50	T	2.0	T	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T	2.0
	YEAR OF OCCURRENCE		1974	1976	1982		1994							1995	FEB 1976
	MAXIMUM IN 24 HOURS (IN)	50	T	2.0	T	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T	2.0
	YEAR OF OCCURRENCE		1974	1976	1982		1994							1995	FEB 1976
	MAXIMUM SNOW DEPTH (IN)	48	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 SACRAMENTO (KSAC)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	0.16	1.22	1.35	0.34	0.01	0.10	T	0.01	0.07	1.39	3.61	1.23	9.49
1985	0.66	1.52	2.01	T	0.01	0.15	T	0.06	0.56	0.53	3.72	2.34	11.56
1986	3.67	8.60	3.20	0.91	0.07	0.00	0.00	0.00	0.60	0.19	0.14	0.76	18.14
1987	2.29	3.23	3.05	0.20	T	T	0.00	0.00	0.00	1.28	2.53	3.25	15.83
1988	2.96	0.99	0.17	1.58	0.89	0.19	0.00	0.00	0.00	0.19	1.68	2.73	11.38
1989	0.71	1.25	6.29	0.31	0.06	0.43	0.00	0.20	2.78	1.76	1.32	0.00	15.11
1990	4.97	2.91	0.93	0.73	2.10	0.00	T	0.00	0.00	0.09	0.43	1.60	13.76
1991	0.36	3.10	6.14	0.29	0.25	0.53	T	0.14	0.04	1.25	0.19	1.60	13.89
1992	1.39	5.47	2.05	0.92	T	0.15	0.00	T	0.00	1.31	0.28	4.94	16.51
1993	8.63	4.94	2.39	0.63	1.14	1.26	0.00	0.00	0.00	0.47	2.28	1.75	23.49
1994	2.12	3.15	0.05	0.67	1.68	0.00	0.00	0.00				2.68	
1995	9.69	0.20	8.13	1.46	1.06	0.47	0.00	0.00	0.00	T	T	5.49	26.50
1996	4.16	5.49	1.73	1.25	0.79	0.00	0.00	T	T	.67	1.97	6.39	22.45
1997	9.05	0.28	0.34	0.18	0.35	0.59	0.00	0.32	0.16	0.82	4.56	2.91	19.56
1998	6.40	9.95	2.47	1.05	2.98	0.58	0.00	0.00	0.23	0.76	2.84	0.58	27.84
1999	2.63	4.45	1.50	0.89	0.07	0.03	0.00	T	0.00	0.18	1.63	0.06	11.44
2000	6.49	8.49	2.03	1.39	1.17	0.04	0.00	T	0.09	1.62	0.68	0.59	22.59
2001	3.75	4.57	2.04	1.50	T	0.08	T	0.00	0.50	0.36	2.43	6.27	21.50
2002	2.19	1.13	2.87	0.12	2.07	0.00	0.00	0.00	0.00	0.00	2.34	6.26	16.98
2003	1.29	1.29	1.87	2.53	1.17	0.00	T	0.57	T	0.04	1.52	4.23	14.51
2004	2.11	5.01	0.48	0.09	0.17	0.00	0.00	0.00	0.16	2.71	2.69	4.14	17.56
2005	3.83	2.33	3.30	0.84	1.23	0.66	T	0.00	T	0.15	0.85	8.98	22.17
2006	2.53	2.09	5.29	3.27	0.30	0.00	T	0.00	0.00	0.16	1.12	3.01	17.77
2007	0.05	4.44	0.35	1.34	0.41	0.00	0.01	0.00	0.06	1.05	0.85	3.17	11.73
2008	6.67	1.81	0.05	T	0.04	0.00	0.00	0.00	0.00	0.84	2.38	1.51	13.30
2009	1.41	5.07	2.09	1.46	1.01	0.56	T	0.00	0.14	3.24	0.26	3.64	18.88
2010	4.79	2.29	2.98	2.65	0.75	0.00	0.00	0.00	0.01	1.43	2.39	5.55	22.84
2011	1.67	3.39	6.95	0.06	1.02	1.50	0.00	0.00	0.01	1.33	0.74	0.27	16.94
2012	2.43	0.92	4.06	2.42	T	0.03	0.03	T	T	1.14	3.97	6.15	21.15
2013	0.96	0.36	1.38	0.69	0.30	0.22	T	T	0.59	0.00	0.88	0.43	5.81
POR= 72 YRS	3.57	3.02	2.50	1.22	0.54	0.17	0.03	0.05	0.26	0.95	2.09	3.03	17.43

WBAN : 23232

**AVERAGE TEMPERATURE (°F) 2013 SACRAMENTO (KSAC)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	48.2	50.2	58.1	58.7	70.0	71.7	78.3	75.3	75.5	62.8	53.6	45.1	62.3
1985	42.4	51.4	50.8	61.5	63.2	75.1	77.0	72.9	68.5	63.3	49.8	42.6	59.9
1986	51.4	54.7	58.8	58.4	65.5	71.6	75.0	75.2	66.2	64.8	55.5	45.7	61.9
1987	44.9	51.3	53.8	62.7	69.1	72.4	71.8	74.9	71.8	67.6	53.4	47.2	61.7
1988	48.0	54.2	58.0	60.9	64.7	72.9	80.4	75.9	72.5	66.5	53.8	46.2	62.8
1989	44.1	47.1	55.6	63.2	65.8	71.7	76.2	73.8	69.6	62.4	54.3	44.3	60.7
1990	47.5	48.6	55.4	63.4	65.5	72.4	77.7	76.6	74.0	66.6	53.0	41.0	61.8
1991	47.3	55.0	51.0	58.0	63.3	70.2	77.1	73.2	74.8	68.8	55.9	46.3	61.7
1992	43.6	54.1	56.2	62.1	70.6	70.9	75.3	77.0	72.4	66.6	53.4	44.1	62.2
1993	45.2	49.5	57.9	58.4	64.6	71.7	74.3	74.1	71.5	65.0	51.5	44.3	60.7
1994	47.0	48.8	56.7	60.1	65.3	71.6	74.0	75.2	71.7		47.6	43.7	
1995	51.3	52.1	53.0	57.7	63.1	69.0	74.2	75.1	72.3		59.3	51.1	
1996	48.2	54.3	56.7	61.1	67.0	73.3	78.7	78.3	71.0	63.9	55.0	51.1	63.2
1997	48.3	52.7	57.9	62.4	71.9	72.9	76.5	75.9	75.1	64.1	56.9	46.2	63.4
1998	49.7	50.4	55.1	57.5	58.7	67.0	74.8	76.8	72.6	61.3	52.5	42.5	59.9
1999	44.7	48.1	50.8	57.4	62.8	69.9	72.0	73.0	72.3	65.1	54.6	46.8	59.8
2000	48.8	51.4	55.5	60.7	65.7	73.2	72.1	74.0	71.2	61.9	48.6	47.0	60.8
2001	45.8	48.8	57.2	55.9	71.7	73.4	73.4	74.5	71.1	65.8	55.9	48.8	61.9
2002	44.8	50.7	52.5	58.2	64.1	72.1	75.8	73.6	72.8	62.6	54.5	49.8	61.0
2003	50.7	50.2	55.8	54.3	65.2	72.5	79.3	75.1	73.7	66.5	51.3	49.1	62.0
2004	46.9	50.8	59.8	62.5	66.9	72.3	75.1	75.6	72.1	62.2	51.2	46.7	61.8
2005	45.6	52.4	56.2	57.2	65.0	69.2	78.8	76.3	68.9	63.3	54.6	49.3	61.4
2006	48.1	50.9	49.7	57.4	67.1	74.2	79.1	72.9	70.0	60.8	53.4	46.3	60.8
2007	43.8	50.7	57.8	60.1	66.3	71.8	75.3	75.5	68.6	61.2	55.1	45.7	61.0
2008	45.9	49.2	54.3	57.6	67.0	72.4	75.2	76.0	72.2	64.3	55.5	44.0	61.1
2009	47.4	50.9	54.4	59.5	68.7	71.2	75.4	75.0	74.9	62.2	52.8	45.3	61.5
2010	48.3	52.1	53.7	55.5	61.5	72.5	73.9	72.0	72.6	64.6	52.4	50.0	60.8
2011	46.2	48.2	53.3	58.1	61.8	69.2	74.7	74.4	74.5	64.5	51.5	45.6	60.2
2012	47.8	51.3	52.9	59.4	67.0	71.1	74.5	75.9	72.9	64.9	55.4	47.2	61.7
2013	44.1	49.1	56.9	63.8	68.4	73.4	76.2	74.7	71.1	62.8	55.6	45.3	61.8
POR= 72 YRS	45.7	50.0	53.9	58.7	65.3	71.4	75.4	74.7	71.7	63.9	52.8	46.0	60.8

**HEATING DEGREE DAYS (base 65°F) 2013 SACRAMENTO (KSAC)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0	0	0	115	335	611	693	377	433	122	89	11	2786
1985-86	0	2	15	95	450	689	411	284	192	200	73	0	2411
1986-87	0	0	53	47	277	593	614	377	340	95	37	0	2433
1987-88	1	0	0	11	339	544	522	307	212	138	94	27	2195
1988-89	0	0	3	38	329	576	640	496	285	106	50	3	2526
1989-90	0	0	11	107	316	634	536	453	289	71	53	6	2476
1990-91	0	0	0	24	356	739	543	274	427	205	104	6	2678
1991-92	0	0	0	82	267	572	657	310	265	104	0	9	2266
1992-93	0	0	0	24	340	643	605	426	214	202	55	21	2530
1993-94	0	0	5	33	399	634	550	449	248	147	48	1	2514
1994-95	0	0	0		515	654	415	354	364	210	105	26	
1995-96	0	0	0		166	421	513	302	250	154	21	1	
1996-97	0	0	0	121	294	423	511	336	214	104	7	1	2011
1997-98	0	0	0	56	248	577	465	404	299	233	190	13	2485
1998-99	0	0	8	113	367	689	621	465	431	239	92	29	3054
1999-00	1	0	0	57	303	556	496	389	291	138	83	2	2316
2000-01	0	4	5	123	484	551	588	445	240	276	4	0	2720
2001-02	0	0	0	44	264	496	616	393	380	200	78	0	2471
2002-03	0	0	2	114	310	466	435	408	278	314	85	1	2413
2003-04	0	0	0	33	402	486	552	404	163	116	16	1	2173
2004-05	0	0	13	141	407	563	592	346	266	227	63	20	2638
2005-06	0	0	4	75	304	481	518	385	468	234	31	4	2504
2006-07	0	0	10	131	338	574	623	395	219	161	43	4	2498
2007-08	0	0	28	121	291	587	583	452	326	236	36	0	2660
2008-09	0	0	3	49	277	645	537	389	321	193	23	2	2439
2009-10	0	0	2	101	359	604	510	357	343	276	122	1	2675
2010-11	0	0	0	84	370	458	574	467	355	199	116	38	2661
2011-12	0	0	0	63	396	591	524	392	368	195	36	18	2583
2012-13	0	0	0	68	285	547	640	438	240	83	13	0	2314
2013-	0	0	5	73	275	602							

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**COOLING DEGREE DAYS (base 65°F) 2013 SACRAMENTO (KSAC)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	6	183	216	419	327	320	57	0	0	1528
1985	0	0	0	22	41	319	380	254	128	48	0	0	1192
1986	0	0	10	9	95	207	315	321	95	47	0	0	1099
1987	0	0	0	34	171	234	220	314	212	100	0	0	1285
1988	0	0	5	22	88	269	484	346	233	92	0	0	1539
1989	0	0	1	60	83	211	354	280	158	32	0	0	1179
1990	0	0	0	33	75	236	399	367	276	82	0	0	1468
1991	0	0	0	3	54	171	379	261	300	208	0	0	1376
1992	0	0	0	23	180	193	330	381	231	81	0	0	1419
1993	0	0	1	9	49	227	294	291	207	38	0	0	1116
1994	0	0	0	9	67	205	285	320	209		0	0	
1995	0	0	0	0	54	152	294	322	228		0	0	
1996	0	0	0	42	91	258	430	422	187	96	0	0	1526
1997	0	0	1	31	227	244	362	348	312	33	11	0	1569
1998	0	0	0	12	2	78	311	371	241	8	0	0	1023
1999	0	0	0	17	30	184	225	253	225	69	0	0	1003
2000	0	0	2	15	111	255	227	290	198	32	0	0	1130
2001	0	0	4	9	219	259	266	300	190	75	0	0	1322
2002	0	0	1	4	57	220	341	270	245	48	0	0	1186
2003	0	0	0	0	97	237	451	323	267	86	0	0	1461
2004	0	0	8	47	82	226	320	337	234	61	0	0	1315
2005	0	0	1	0	71	155	435	359	127	29	0	0	1177
2006	0	0	0	11	100	284	445	253	167	7	0	0	1267
2007	0	0	2	20	91	213	324	329	144	8	0	0	1131
2008	0	0	0	21	107	230	322	350	225	33	0	0	1288
2009	0	0	0	36	145	193	329	316	303	22	0	0	1344
2010	0	0	0	1	22	232	285	226	235	76	2	0	1079
2011	0	0	2	1	24	172	309	298	294	53	0	0	1153
2012	0	0	0	37	103	211	305	345	245	72	0	0	1318
2013	0	0	0	58	130	257	353	310	198	13	0	0	1319

**SNOWFALL (inches) 2013 SACRAMENTO (KSAC)**

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	T	0.0	0.0	0.0	T
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	0.0	0.0	0.0	0.0	0.0
1985-86	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
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	T	0.0	0.0	0.0	0.0	0.0	0.0	T
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	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1993-94	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	T	0.0	T
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	T	0.0	T	0.0	0.0	0.0	0.0	T
1996-97	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
1997-98	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
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-05													
2005-													
POR= 50 YRS	0.0	0.0	0.0	0.0	0.0	T	0.0	T	T	0.0	T	0.0	T

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**REFERENCE NOTES :**

<p>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).</p> <p>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).</p> <p>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.</p> <p>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</p>	<p>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: <a href="http://www.ncdc.noaa.gov/homr/">http://www.ncdc.noaa.gov/homr/</a> SNOWFALL STOPPED MONTH &amp; YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p><b>NOTE:</b> 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.</p>
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# 2013 SACRAMENTO CALIFORNIA (KSAC)

Sacramento, and the lower Sacramento Valley, has a mild climate with abundant sunshine most of the year. A nearly cloud-free sky prevails throughout the summer months, and in much of the spring and fall. The summers are usually dry with warm to hot afternoons and mostly mild nights. The rainy season generally is November through March. About 75 percent of the annual precipitation occurs then, but measurable rain falls only on an average of nine days per month during that period. The shielding effect of mountains to the north, east, and west usually modifies winter storms. The Sierra Nevada snow fields, only 70 miles east of Sacramento, usually provide an adequate water supply during the dry season, and an important recreational area in winter. Heavy snowfall and torrential rains frequently fall on the western Sierra slopes, and may produce flood conditions along the Sacramento River and its tributaries. In the valley, however, excessive rainfall as well as damaging winds are rare.

The prevailing wind at Sacramento is southerly every month but November, when it is northerly. Topographic effects, the north-south alignment of the valley, the coast range, and the Sierra Nevada strongly influence the wind flow in the valley. A sea level gap in the coast range permits cool, oceanic air to flow, occasionally, into the valley during the summer season with a marked lowering of temperature through the Sacramento-San Joaquin River Delta to the capital. In the spring and fall, a large north-to-south pressure gradient develops over the northern part of the state. Air flowing over the Siskiyou mountains to the north warms and dries as it descends to the valley floor. This gusty, blustery north wind is a local variation of the chinook. It apparently carries a form of pollen which may cause allergic responses by susceptible individuals.

As is well known, relative humidity has a marked influence on the reactions of plants and animals to temperature. The extremely low relative humidity that ordinarily accompanies high temperatures in this valley should be considered when comparing temperatures here with those of cities in more humid regions. The extreme hot spells, with temperatures exceeding 100 degrees, are usually caused by air flow from a sub-tropical high pressure area that brings light to nearly calm winds and humidities below 20 percent.

Thunderstorms are few in number, usually mild in character, and occur mainly in the spring. An occasional thunderstorm may drift over the valley from the Sierra Nevada in the summer. Snow falls so rarely, and in such small amounts, that its occurrence may be disregarded as a climatic feature. Heavy fog occurs mostly in midwinter, never in summer, and seldom in spring or autumn. An occasional winter fog, under stagnant atmospheric conditions, may continue for several days. Light and moderate fogs are more frequent, and may come anytime during the wet, cold season. The fog is the radiational cooling type, and is usually confined to the early morning hours.

Sacramento is the geographical center of the great interior valley of California that reaches from Red Bluff in the north to Bakersville in the south. This predominantly agricultural region produces an extremely wide and abundant variety of fruits, grains, and vegetables ranging from the semi-tropical to the hardier varieties.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is December 1 and the average last occurrence in the spring is February 14.

# Station History

SACRAMENTO, CA

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
SACRAMENTO EXECUTIVE AP	1973-01-01	1974-01-01	38° 31'	-121° 30'	17		COOP, WXSVC
SACRAMENTO EXECUTIVE AP	1982-01-01	1998-04-15	38° 31'	-121° 30'	18		COOP
SACRAMENTO MUNICIPAL AP	1930-06-30	1948-01-01	38° 31'	-121° 30'			AIRWAYS
SACRAMENTO MUNICIPAL AP	1948-01-01	1956-01-01	38° 31'	-121° 30'	23		AIRWAYS, COOP
SACRAMENTO MUNICIPAL AP	1956-01-01	1969-12-01	38° 31'	-121° 30'	43		AIRWAYS, COOP
SACRAMENTO EXECUTIVE AP	1970-01-01	1973-01-01	38° 31'	-121° 30'	17		AIRWAYS, COOP
EXECUTIVE	1928-07-01	1929-06-30	38° 31'	-121° 30'			AIRWAYS
EXECUTIVE	1930-01-01	1930-06-30	38° 31'	-121° 30'			AIRWAYS
SACRAMENTO EXECUTIVE AP	1998-04-15	2011-01-01	38° 30'	-121° 29'	15	.1 MI SSE	AIRWAYS, ASOS, COOP
SACRAMENTO EXECUTIVE AP	1981-12-31	1982-01-01	38° 31'	-121° 30'	17		COOP
SACRAMENTO EXECUTIVE AP	2011-01-01	Present	38° 30'	-121° 29'	15		AIRWAYS, ASOS, COOP
SACRAMENTO EXECUTIVE AP	1969-12-01	1970-01-01	38° 31'	-121° 30'	43		AIRWAYS, COOP
SACRAMENTO EXECUTIVE AP	1974-01-01	1981-12-31	38° 31'	-121° 30'	17		AIRWAYS, COOP

# Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1928-07-01	1929-06-30	DAILY	2400	TB	RCRD	
TEMP	1982-01-01	1992-11-19	DAILY	2400			
TEMP	1930-01-01	1982-01-01	DAILY	2400			
PRECIP	1982-01-01	1992-11-19	DAILY	2400	TB	RCRD	
PRECIP	1992-11-19	1995-07-01	DAILY	2400	TB	RCRD	
PRECIP	2002-01-15	Present	HOURLY	2400	AHTB	SHLD; RCRD; HTD	
PRECIP	1992-11-19	1995-07-01	HOURLY	2400			
TEMP	1995-07-01	2002-01-15	DAILY	2400	HYGR		
PRECIP	1995-07-01	2002-01-15	HOURLY	2400	TB	RCRD	
TEMP	2002-01-15	Present	DAILY	2400	ATEMP		
TEMP	1928-07-01	1929-06-30	DAILY	2400			
PRECIP	1995-07-01	2002-01-15	DAILY	2400	TB	RCRD	
PRECIP	1982-01-01	1992-11-19	HOURLY	2400			
TEMP	1992-11-19	1995-07-01	DAILY	2400	HYGR		
PRECIP	2002-01-15	Present	DAILY	2400	PCPNX	SHLD	
PRECIP	1930-01-01	1982-01-01	DAILY	2400	TB	RCRD	

\* 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

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