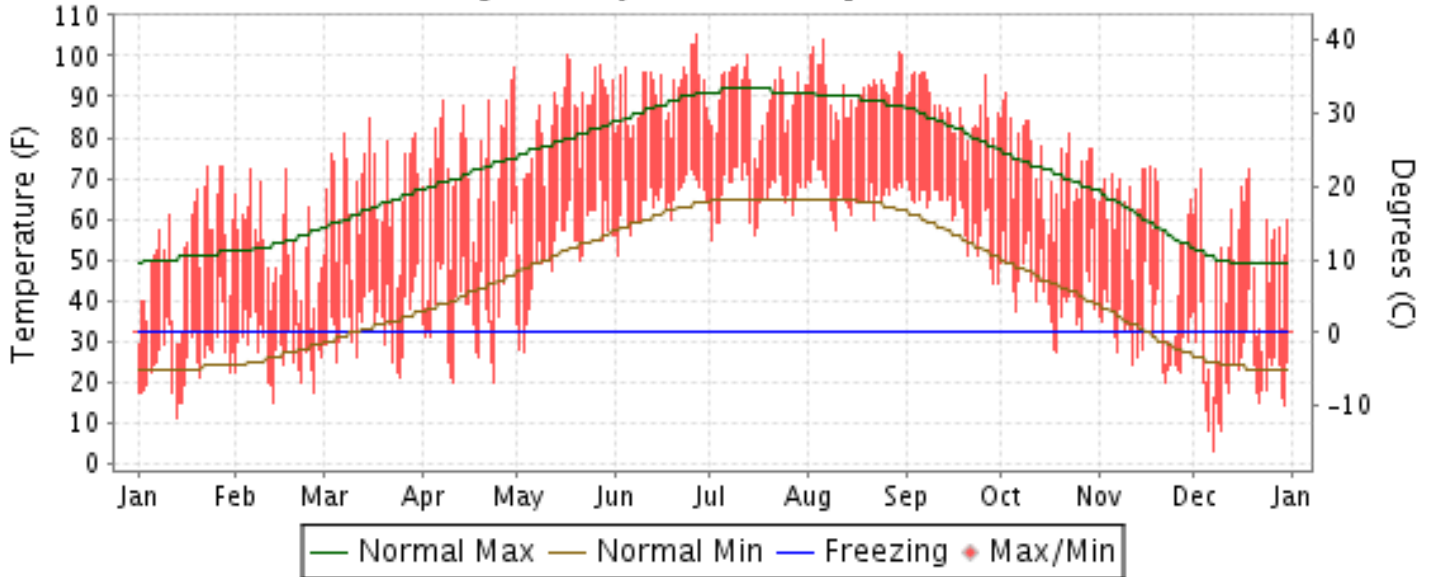


2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

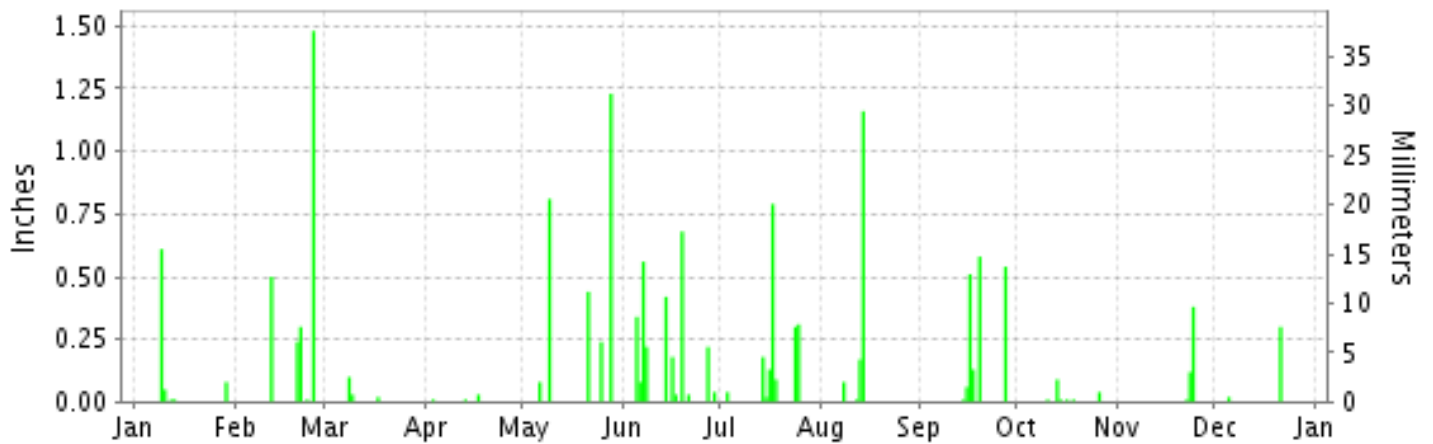
ISSN 0198-490X

AMARILLO, TEXAS (KAMA)

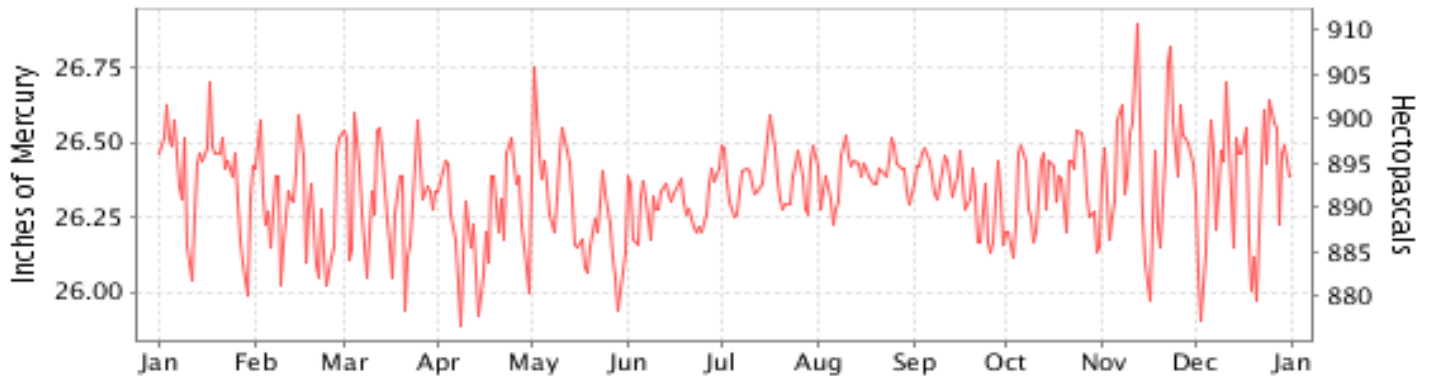
Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



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NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

Thomas R. Karl
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2013

AMARILLO (KAMA)

LATITUDE: 35° 13'N LONGITUDE: 101° 42'W ELEVATION (FT): GRND: 3604 BARO: 3589 TIME ZONE: CENTRAL (UTC -6) WBAN: 23047

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	52.0	52.5	66.3	71.6	84.3	91.2	89.8	92.4	86.6	73.5	58.0	49.4	72.3	
	HIGHEST DAILY MAXIMUM	73	72	85	97	100	105	100	104	96	91	73	72	105	
	DATE OF OCCURRENCE	28+	17+	15	30	17	27	13	06	07+	03	17	19	JUN 27	
	MEAN DAILY MINIMUM	25.3	27.1	34.9	38.2	52.3	64.3	65.9	66.0	60.8	43.0	32.0	21.9	44.3	
	LOWEST DAILY MINIMUM	11	15	21	20	27	51	55	57	44	27	20	3	3	
	DATE OF OCCURRENCE	13	13	25	24+	03	02	02	10	30+	19	22	07	DEC 07	
	AVERAGE DRY BULB	38.6	39.8	50.6	54.9	68.3	77.8	77.9	79.2	73.7	58.3	45.0	35.6	58.3	
	MEAN WET BULB	31.3	32.5	39.5	42.4	53.2	63.8	64.1	65.4	60.5	47.5	37.2	28.1	47.1	
	MEAN DEW POINT	21.9	22.1	25.9	28.4	38.9	55.1	56.1	57.7	52.1	36.1	27.8	18.1	36.7	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	2	12	18	18	22	10	1	0	0	83	
	MAXIMUM <= 32°	4	0	0	0	4	0	0	0	0	0	4	6	18	
	MINIMUM <= 32°	27	23	11	10	2	0	0	0	0	2	16	28	119	
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	809	699	437	340	94	0	0	0	9	235	594	903	4120	
	COOLING DEGREE DAYS	0	0	0	45	203	391	408	449	276	34	0	0	1806	
RH	MEAN (PERCENT)	58	56	44	45	41	51	52	53	52	50	58	57	51	
	HOUR 00 LST	65	60	52	53	50	60	59	64	62	58	67	65	60	
	HOUR 06 LST	72	69	63	65	66	75	72	77	73	71	72	72	71	
	HOUR 12 LST	47	49	33	33	29	40	42	39	37	36	46	43	40	
	HOUR 18 LST	47	43	26	28	23	32	37	36	37	33	49	45	36	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	3	4	0	1	0	0	1	0	0	1	4	2	16	
	THUNDERSTORMS	0	0	1	0	5	9	5	4	4	1	0	0	29	
PR	MEAN STATION PRESS. (IN.)	26.39	26.28	26.31	26.23	26.28	26.30	26.38	26.39	26.34	26.33	26.44	26.36	26.34	
	MEAN SEA-LEVEL PRESS. (IN.)	30.12	29.98	29.98	29.87	29.86	29.84	29.93	29.94	29.91	29.96	30.13	30.10	29.97	
WINDS	RESULTANT SPEED (MPH)	3.9	0.8	1.6	0.6	4.4	9.9	8.9	8.2	8.1	4.3	3.9	3.2	4.2	
	RES. DIR. (TENS OF DEGS.)	25	20	24	15	20	17	17	18	17	19	22	26	19	
	MEAN SPEED (MPH)	11.4	13.6	13.2	15.4	14.7	15.3	13.2	11.9	12.2	12.9	13.1	11.7	13.2	
	PREVAIL.DIR.(TENS OF DEGS.)	21	34	18	17	19	18	18	18	17	18	20	21	18	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	41	47	45	47	58	53	35	33	37	37	40	39	58	
	DIR. (TENS OF DEGS.)	23	36	34	01	17	17	14	34	20	23	23	36	17	
	DATE OF OCCURRENCE	11	25	10	22	28	20	24	06	27	03	16	29	MAY 28	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	48	58	60	56	71	62	46	44	43	45	51	48	71	
DIR. (TENS OF DEGS.)	21	36	26	02	17	17	23	31	21	29	23	36	17		
DATE OF OCCURRENCE	11	25	17	22	28	20	24	08	27	31	16	29	MAY 28		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.76	2.53	0.15	0.05	2.80	2.80	1.86	1.42	1.83	0.17	0.51	0.32	15.20	
	GREATEST 24-HOUR (IN.)	0.66	1.48	0.13	0.03	1.23	0.71	0.84	1.16	0.58	0.10	1.00	0.30	1.48	
	DATE OF OCCURRENCE	09-10	25	08-09	17	28	07-08	16-17	14	19	13-14	23-24	21	FEB 25	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	5	5	3	3	5	11	8	4	6	6	3	2	61	
PRECIPITATION 0.10	1	4	1	0	1	7	5	2	4	0	2	1	28		
PRECIPITATION 1.00	0	1	0	0	1	0	0	1	0	0	0	0	3		
SNOWFALL	SNOW,ICE PELLETS,HAIL	1.9	25.6	0.1	T	T	0.0	0.0	0.0	0.0	0.0	4.3	2.2	34.1	
	TOTAL (IN.)	1.7	19.0	0.1	T	T	0.0	0.0	0.0	0.0	0.0	3.2	2.0	19.0	
	GREATEST 24-HOUR (IN.)	29	25	23	23+	28+						24	21	FEB 25	
	DATE OF OCCURRENCE	2	17	3	0	0	0	0	0	0	0	3	2	17	
	MAXIMUM SNOW DEPTH (IN.)	30	26	01								24	22	FEB 26	
	DATE OF OCCURRENCE														
	NUMBER OF DAYS WITH:														
SNOWFALL >= 1.0	1	3	0	0	0	0	0	0	0	0	2	1	7		

NORMALS, MEANS, AND EXTREMES AMARILLO (KAMA)

LATITUDE: 35° 13'N **LONGITUDE:** 101° 42'W **ELEVATION (FT):** GRND: 3604 BARO: 3589 **TIME ZONE:** CENTRAL (UTC -6) **WBAN: 23047**

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	50.6	54.2	62.5	71.1	79.5	87.7	91.4	89.4	82.6	71.9	60.0	49.7	70.9
	MEAN DAILY MAXIMUM	66	49.8	53.5	61.8	71.3	79.4	88.1	91.4	89.7	82.5	72.3	59.6	50.9	70.9
	HIGHEST DAILY MAXIMUM	72	81	88	94	99	104	111	106	107	102	99	87	81	111
	YEAR OF OCCURRENCE		1950	1963	1971	2012	2011	2011	2009	2012	2000	2000	1980	1955	JUN 2011
	MEAN OF EXTREME MAXS.	66	71.6	76.0	82.8	89.1	94.6	100.0	100.1	98.8	95.0	89.1	79.1	72.4	87.4
	NORMAL DAILY MINIMUM	30	23.4	26.4	33.3	41.6	51.8	61.0	65.2	64.2	56.4	44.7	32.5	24.0	43.7
	MEAN DAILY MINIMUM	66	22.5	26.2	32.7	41.9	51.9	61.3	65.8	64.4	56.7	44.9	32.4	24.4	43.8
	LOWEST DAILY MINIMUM	72	-11	-14	-3	14	27	41	51	48	30	12	0	-8	-14
	YEAR OF OCCURRENCE		1984	1951	1948	1945	2013	1998	1990	2010	1984	1993	1976	1989	FEB 1951
	MEAN OF EXTREME MINS.	66	4.8	9.0	15.7	27.0	37.7	50.3	58.1	56.7	42.8	29.9	16.0	7.6	29.6
	NORMAL DRY BULB	30	37.0	40.3	47.9	56.3	65.6	74.4	78.3	76.8	69.5	58.3	46.3	36.9	57.3
	MEAN DRY BULB	66	36.1	39.9	47.3	56.6	65.7	74.9	78.6	77.1	69.6	58.6	46.0	37.7	57.3
	MEAN WET BULB	30	27.0	29.9	35.7	42.0	51.6	59.9	63.1	63.1	56.6	46.3	34.8	28.0	44.8
	MEAN DEW POINT	30	23.5	26.0	31.4	37.6	48.6	57.6	60.0	60.5	53.6	42.8	31.2	24.2	41.4
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.1	0.8	4.2	12.1	19.8	16.5	6.5	0.6	0.0	0.0	60.6
	MAXIMUM <= 32	30	2.7	1.8	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4	3.2	8.9
MINIMUM <= 32	30	26.8	21.1	13.0	3.6	0.0	0.0	0.0	0.0	0.1	1.6	14.5	26.7	107.4	
MINIMUM <= 0	30	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	
H/C	NORMAL HEATING DEG. DAYS	30	868	692	532	279	83	7	0	1	43	236	564	873	4178
	NORMAL COOLING DEG. DAYS	30	0	0	2	19	104	288	412	367	178	28	1	0	1399
RH	NORMAL (PERCENT)	30	60	59	54	51	58	59	55	60	61	59	59	62	58
	HOURLY 00 LST	30	67	65	61	59	68	67	63	69	69	67	68	68	66
	HOURLY 06 LST	30	72	72	70	71	78	78	76	80	79	75	74	72	75
	HOURLY 12 LST	30	51	49	43	39	45	45	42	47	48	45	47	50	46
	HOURLY 18 LST	30	49	43	37	33	40	40	38	44	44	44	50	52	43
S	PERCENT POSSIBLE SUNSHINE	60	69	69	74	76	72	78	79	77	74	76	72	68	74
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	3.3	4.0	3.4	2.1	1.7	0.6	0.5	1.0	1.7	2.5	2.8	3.0	26.6
	THUNDERSTORMS	66	0.2	0.5	1.6	3.4	7.6	9.6	8.7	9.0	4.0	2.5	0.6	0.2	47.9
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)	1	3.2	4.4	4.0	3.7	4.0	2.0	2.0	2.9	4.0	3.6	3.2	2.4	3.3
	MIDNIGHT-MIDNIGHT (OKTAS)	1	3.2	4.4	4.0	3.6	4.0	1.6	2.0	3.2	1.6	3.2	2.8	2.4	3.0
	MEAN NO. DAYS WITH: CLEAR	3	7.7	9.7	11.0	12.0	11.0	17.8	17.0	15.5	9.5	12.0	10.0	13.0	146.2
	PARTLY CLOUDY	3	5.0	3.7	3.3	4.3	5.3	4.7	3.0	2.5	1.0	2.5	3.0	5.0	43.3
	CLOUDY	3	4.7	6.0	3.3	4.7	5.7	1.5	2.0	3.5	1.5	4.0	3.5	3.5	43.9
PR	MEAN STATION PRESSURE(IN)	30	26.36	26.33	26.29	26.25	26.27	26.29	26.36	26.38	26.37	26.36	26.36	26.36	26.33
	MEAN SEA-LEVEL PRES. (IN)	30	30.09	30.04	29.94	29.87	29.85	29.85	29.91	29.93	29.96	29.99	30.04	30.09	29.96
WINDS	MEAN SPEED (MPH)	30	12.1	12.8	13.9	14.6	13.7	13.8	12.4	11.4	12.0	12.4	12.6	12.1	12.8
	PREVAIL.DIR(TENS OF DEGS)	35	23	36	22	19	19	19	19	20	19	21	21	36	19
	MAXIMUM 2-MINUTE: SPEED (MPH)	21	53	54	48	53	58	68	66	58	41	51	45	54	68
	DIR. (TENS OF DEGS)		29	23	36	25	17	02	18	27	20	25	35	25	02
	YEAR OF OCCURRENCE		2012	2011	2008	2001	2013	2008	2011	2012	2003	2010	2011	2009	JUN 2008
	MAXIMUM 3-SECOND SPEED (MPH)	21	68	69	63	74	71	81	81	74	52	62	59	75	81
	DIR. (TENS OF DEGS)		29	23	28	24	17	01	18	28	23	25	32	03	18
YEAR OF OCCURRENCE		2012	2011	2009	2001	2013	2008	2011	2012	2006	2010	2006	2006	JUL 2011	
PRECIPITATION	NORMAL (IN)	30	0.72	0.56	1.39	1.40	2.29	3.16	2.84	2.91	1.92	1.66	0.80	0.71	20.36
	MAXIMUM MONTHLY (IN)	72	2.67	2.53	4.14	6.45	9.81	10.73	8.02	8.07	5.02	7.64	4.06	4.52	10.73
	YEAR OF OCCURRENCE		1999	2013	2000	1997	1951	1965	2010	2009	1950	1941	2004	1959	JUN 1965
	MINIMUM MONTHLY (IN)	72	0.00	T	T	T	0.04	0.01	0.04	0.28	0.03	0.00	0.00	T	0.00
	YEAR OF OCCURRENCE		1986	1991	1950	1964	1984	1953	2001	1983	1977	1952	1989	1976	NOV 1989
	MAXIMUM IN 24 HOURS (IN)	72	3.73	1.48	2.27	2.65	6.75	6.15	7.25	4.26	3.42	3.45	2.88	3.11	7.25
	YEAR OF OCCURRENCE		2007	2013	1973	1999	1951	1960	2010	1945	1941	1948	2010	1943	JUL 2010
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	3.9	4.3	6.0	5.6	7.7	8.5	7.2	8.2	6.3	5.3	4.0	4.7	71.7
PRECIPITATION >= 1.00	30	0.0	0.0	0.3	0.4	0.4	0.8	0.9	0.7	0.4	0.3	0.1	0.0	4.3	
SNOWFALL	NORMAL (IN)	30	4.7	2.9	2.9	0.7	0.2	0.0	0.0	0.0	0.0	0.2	2.5	3.7	17.8
	MAXIMUM MONTHLY (IN)	72	14.5	25.6	14.7	6.5	4.7	T	T	T	0.3	3.9	13.8	21.2	25.6
	YEAR OF OCCURRENCE		1983	2013	1961	1997	1978	2012	2009	2009	1984	1976	2004	2000	FEB 2013
	MAXIMUM IN 24 HOURS (IN)	72	10.2	19.0	11.2	6.5	4.7	T	T	T	0.3	3.2	12.2	16.8	19.0
	YEAR OF OCCURRENCE		1994	2013	2005	1997	2005	2012	2009	2009	1984	1976	1952	2000	FEB 2013
	MAXIMUM SNOW DEPTH (IN)	68	10	17	12	6	T	T	0	0	T	3	9	15	17
	YEAR OF OCCURRENCE		1987	2013	2005	1973	1988	1949			1984	2011	1952	2000	FEB 2013
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	1.4	0.9	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.2	5.3	

PRECIPITATION (inches) 2013 AMARILLO (KAMA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	0.56	0.37	0.98	1.18	0.04	6.76	0.83	2.28	0.95	3.19	1.09	1.00	19.23
1985	0.99	0.77	1.49	2.79	0.86	3.08	2.07	1.67	4.96	3.07	0.39	0.26	22.40
1986	0.00	1.02	0.60	0.30	3.28	3.70	3.52	7.04	1.45	1.94	1.82	0.66	25.33
1987	1.26	0.84	0.92	0.57	4.28	3.29	0.83	3.28	3.40	1.17	0.43	1.75	22.02
1988	0.33	0.04	1.19	2.22	6.02	3.68	3.30	3.59	3.15	0.71	0.29	0.17	24.69
1989	0.16	0.55	0.52	0.75	2.51	6.07	2.74	3.22	1.80	0.74	0.00	0.49	19.55
1990	1.22	1.61	2.56	1.10	0.90	0.14	3.28	2.79	2.72	0.46	0.50	0.23	17.51
1991	0.86	T	0.41	0.04	3.08	2.47	2.20	1.28	2.04	0.64	0.66	2.24	15.92
1992	0.50	0.30	1.11	1.60	3.10	7.57	2.36	2.27	0.16	0.31	0.80	0.55	20.63
1993	0.76	0.36	1.29	0.35	1.92	2.76	3.36	4.64	1.00	0.53	0.51	0.95	18.43
1994	1.01	0.07	1.22	1.15	1.41	1.26	5.01	2.86	2.02	0.46	0.58	0.30	17.35
1995	0.32	T	0.80	0.83	4.94	2.71	2.85	2.18	2.62	0.45	0.06	0.59	18.35
1996	0.07	0.26	0.24	T	1.67	2.92	4.95	6.43	1.86	0.84	1.30	0.05	20.59
1997	0.64	0.47	0.01	6.45	2.16	2.93	5.51	1.40	1.35	0.74	1.17	2.12	24.95
1998	0.68	2.08	2.46	0.97	0.53	0.12	1.09	0.76	1.23	6.48	0.34	0.41	17.15
1999	2.67	T	1.35	6.30	4.29	3.61	2.87	2.04	2.54	0.38	0.00	0.52	26.57
2000	0.24	0.04	4.14	0.43	1.14	5.54	0.16	0.29	0.03	3.95	0.96	1.47	18.39
2001	1.67	0.93	3.96	0.49	3.05	1.99	0.04	1.39	3.03	0.05	1.86	0.23	18.69
2002	1.17	0.19	0.45	2.24	1.05	1.54	1.66	3.83	1.64	3.34	0.04	1.10	18.25
2003	T	0.20	0.88	0.28	1.46	6.42	0.09	0.80	1.81	0.95	0.44	0.09	13.42
2004	0.70	1.42	1.50	2.65	0.09	5.38	3.01	0.85	3.80	3.37	4.06	0.48	27.31
2005	1.43	0.67	1.92	0.60	2.65	1.87	1.15	3.93	0.14	0.42	0.19	0.03	15.00
2006	0.03	0.05	1.56	0.23	1.26	1.02	4.40	6.67	1.10	2.71	0.37	2.48	21.88
2007	0.95	0.29	4.00	0.65	5.40	2.71	1.83	0.88	3.55	0.95	0.08	1.21	22.50
2008	0.24	0.59	0.30	0.38	2.08	4.03	4.96	4.43	1.30	3.87	0.19	0.05	22.42
2009	0.03	0.45	1.01	1.84	0.43	2.79	3.78	8.07	0.83	1.41	0.26	0.25	21.15
2010	0.94	1.29	1.61	3.28	2.18	1.00	8.02	2.55	1.79	0.78	2.88	0.22	26.54
2011	0.06	0.43	0.06	0.05	0.08	0.49	1.00	0.53	0.92	1.23	0.62	1.54	7.01
2012	0.05	0.63	1.16	1.99	1.53	1.72	0.26	1.18	3.25	0.01	0.01	0.54	12.33
2013	0.76	2.53	0.15	0.05	2.80	2.80	1.86	1.42	1.83	0.17	0.51	0.32	15.20
POR= 66 YRS	0.59	0.61	1.07	1.21	2.54	3.27	2.77	2.92	1.87	1.46	0.68	0.60	19.59

WBAN : 23047

AVERAGE TEMPERATURE (°F) 2013 AMARILLO (KAMA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	31.6	40.3	44.0	51.8	66.9	74.6	75.6	75.3	65.7	56.9	47.0	40.5	55.9
1985	31.5	37.2	49.5	60.0	68.1	75.1	80.1	79.6	68.9	56.9	43.5	34.0	57.0
1986	42.5	40.4	52.7	59.4	65.1	73.3	80.6	74.4	68.8	55.7	42.7	37.1	57.7
1987	34.0	42.0	44.6	54.8	64.5	72.1	77.2	75.3	67.6	57.9	45.4	34.6	55.8
1988	32.2	38.3	44.3	54.1	63.6	73.3	75.8	76.4	67.7	59.0	47.6	38.5	55.9
1989	40.7	32.3	51.2	59.9	67.3	69.4	76.2	76.0	66.3	60.4	47.9	31.4	56.6
1990	39.2	40.8	47.0	55.9	63.6	81.3	76.4	76.3	72.0	57.7	49.7	33.2	57.8
1991	32.6	45.9	49.7	58.2	68.5	74.7	76.5	76.2	67.1	58.5	41.2	39.0	57.3
1992	38.0	45.0	50.6	58.7	63.3	70.8	76.6	73.5	70.2	60.1	39.3	34.2	56.7
1993	33.1	36.0	46.1	54.4	64.5	74.0	79.1	74.9	67.9	54.6	40.9	38.7	55.4
1994	36.5	37.6	48.9	55.0	65.2	79.4	77.4	75.9	69.1	58.2	46.5	41.7	57.6
1995	39.2	43.9	47.4	53.9	61.6	70.8	77.2	78.2	67.9	58.2	48.2	38.4	57.1
1996	34.9	43.1	44.2	56.9	72.5	75.6	77.1	74.4	65.9	57.6	45.7	39.7	57.3
1997	35.3	38.8	50.3	48.9	63.2	71.6	77.9	75.0	71.9	58.2	42.8	33.5	55.6
1998	39.8	41.0	43.5	53.5	69.2	77.4	82.4	78.0	75.8	60.4	49.2	38.1	59.0
1999	40.1	47.3	46.3	54.8	62.3	71.8	77.5	78.0	66.2	58.1	52.3	37.6	57.7
2000	39.5	47.1	49.2	57.8	69.7	72.1	80.1	81.8	73.7	59.6	39.6	33.1	58.6
2001	34.8	41.2	45.0	61.0	65.2	76.5	83.9	78.7	70.4	60.2	50.7	40.4	59.0
2002	39.5	39.7	45.6	59.8	66.4	77.7	79.0	78.1	69.2	52.9	44.1	35.6	57.3
2003	39.6	37.6	48.0	58.6	66.9	69.8	80.1	79.3	67.7	61.9	47.5	41.0	58.2
2004	39.3	37.6	52.4	55.2	69.4	73.4	75.9	73.5	70.0	58.8	43.1	39.9	57.4
2005	39.7	43.2	45.6	55.0	64.0	74.8	77.9	75.7	72.6	57.5	48.3	36.5	57.6
2006	42.7	39.3	48.2	60.7	69.3	76.6	78.3	74.6	64.3	57.9	48.8	38.1	58.2
2007	31.5	39.5	53.4	52.9	64.4	72.3	77.1	79.7	72.4	62.0	48.3	37.9	57.6
2008	37.9	41.9	48.2	56.7	66.3	77.2	77.5	74.6	66.9	58.2	48.2	39.3	57.7
2009	38.6	45.7	51.2	56.0	63.9	75.5	78.2	76.0	67.1	53.4	50.4	32.6	57.4
2010	36.1	32.8	47.6	57.3	64.2	78.6	76.8	78.4	73.9	61.5	46.5	41.1	57.9
2011	35.6	36.3	51.0	60.2	66.7	82.5	85.2	85.1	70.7	59.4	48.2	34.7	59.6
2012	42.2	40.3	56.4	62.9	69.6	78.9	82.7	80.0	71.3	57.9	52.6	41.5	61.4
2013	38.6	39.8	50.6	54.9	68.3	77.8	77.9	79.2	73.7	58.3	45.0	35.6	58.3
POR= 66 YRS	36.1	39.9	47.3	56.6	65.7	74.9	78.6	77.1	69.6	58.6	46.0	37.7	57.3

HEATING DEGREE DAYS (base 65°F) 2013 AMARILLO (KAMA)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0	0	125	262	531	752	1034	769	474	169	37	5	4158
1985-86	0	0	111	249	640	957	691	681	379	203	72	0	3983
1986-87	0	2	26	290	665	858	954	634	624	315	70	9	4447
1987-88	0	8	18	226	584	936	1010	765	633	323	102	4	4609
1988-89	0	7	32	197	517	815	747	909	429	219	59	27	3958
1989-90	0	0	91	185	507	1037	795	672	551	276	140	0	4254
1990-91	0	0	11	234	454	981	994	529	467	208	53	1	3932
1991-92	0	0	71	258	709	798	833	576	437	203	98	10	3993
1992-93	0	0	21	171	765	949	984	808	577	317	82	5	4679
1993-94	0	2	39	332	717	810	875	760	499	309	78	0	4421
1994-95	0	0	31	228	553	716	792	583	547	333	146	13	3942
1995-96	0	1	89	217	497	813	926	634	636	250	21	0	4084
1996-97	3	0	70	251	571	775	917	728	447	476	99	2	4339
1997-98	0	4	35	259	661	967	774	667	664	343	39	21	4434
1998-99	0	0	13	180	469	828	764	490	573	305	132	9	3763
1999-00	0	0	93	226	373	844	785	510	482	220	60	9	3602
2000-01	0	0	50	195	755	981	929	660	611	139	75	0	4395
2001-02	0	0	12	180	418	755	782	702	597	205	79	1	3731
2002-03	0	0	21	377	623	906	784	761	519	205	51	13	4260
2003-04	0	6	32	148	524	737	789	787	395	295	54	0	3767
2004-05	4	0	18	190	654	773	778	602	595	298	128	0	4040
2005-06	0	2	8	263	495	876	682	711	514	178	60	0	3789
2006-07	0	0	62	254	481	829	1030	711	356	356	66	5	4150
2007-08	0	0	2	163	496	836	835	665	517	268	82	0	3864
2008-09	0	0	21	219	497	791	812	536	420	286	113	0	3695
2009-10	0	0	52	370	432	996	889	895	540	238	109	0	4521
2010-11	0	0	4	123	550	734	905	801	433	165	91	0	3806
2011-12	0	0	19	207	496	930	702	711	292	115	57	0	3529
2012-13	0	0	29	242	368	718	809	699	437	340	94	0	3736
2013-	0	0	9	235	594	903							

WBAN : 23047

COOLING DEGREE DAYS (base 65°F) 2013 AMARILLO (KAMA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	1	121	298	331	325	151	17	0	0	1244
1985	0	0	2	27	143	315	473	458	235	6	0	0	1659
1986	0	0	3	45	87	256	489	299	144	10	0	0	1333
1987	0	0	0	19	64	227	386	334	105	11	0	0	1146
1988	0	0	0	3	67	263	340	366	120	19	0	0	1178
1989	0	0	10	75	136	164	354	347	138	51	0	0	1275
1990	0	0	0	9	101	494	359	358	229	17	1	0	1568
1991	0	0	0	12	166	298	364	358	144	66	0	0	1408
1992	0	0	0	19	52	188	366	271	186	25	0	0	1107
1993	0	0	0	6	77	283	443	315	134	15	0	0	1273
1994	0	0	6	18	91	439	392	345	159	24	4	0	1478
1995	0	0	9	7	47	194	388	419	182	13	0	0	1259
1996	0	5	0	14	260	325	386	297	103	27	0	0	1417
1997	0	0	0	0	49	205	407	320	247	55	0	0	1283
1998	0	0	1	6	177	399	547	407	342	43	0	0	1922
1999	0	0	0	5	56	221	396	410	135	16	0	0	1239
2000	0	0	0	14	214	225	475	529	320	39	0	0	1816
2001	0	0	0	27	88	353	594	433	180	38	0	0	1713
2002	0	0	2	56	129	390	442	412	156	10	0	0	1597
2003	0	0	0	21	115	165	473	456	120	60	6	0	1416
2004	0	0	12	6	194	257	345	273	175	6	0	0	1268
2005	0	0	0	4	104	297	404	342	244	34	3	0	1432
2006	0	0	2	54	200	356	418	306	49	41	0	0	1426
2007	0	0	7	1	57	233	380	464	231	77	0	0	1450
2008	0	0	0	25	130	372	391	305	88	19	1	0	1331
2009	0	0	0	23	84	323	416	347	123	20	2	0	1338
2010	0	0	8	14	90	414	373	420	277	24	0	0	1620
2011	0	0	9	27	152	532	633	630	196	41	0	0	2220
2012	0	0	34	61	206	423	555	474	226	28	4	0	2011
2013	0	0	0	45	203	391	408	449	276	34	0	0	1806

SNOWFALL (inches) 2013 AMARILLO (KAMA)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0.0	0.0	0.3	0.0	0.1	0.3	7.4	0.3	0.2	0.0	0.0	0.0	8.6
1985-86	0.0	0.0	T	0.0	T	2.8	0.0	10.9	1.0	0.0	0.0	0.0	14.7
1986-87	0.0	0.0	0.0	T	0.2	3.3	12.1	3.1	6.4	0.1	0.0	0.0	25.2
1987-88	0.0	0.0	0.0	0.0	0.7	15.3	4.3	0.5	8.5	4.2	0.0	0.0	33.5
1988-89	0.0	0.0	0.0	0.0	2.4	2.2	T	0.1	4.2	0.1	T	T	9.0
1989-90	0.0	0.0	T	0.0	0.0	5.4	8.5	3.0	0.0	0.0	0.0	0.0	16.9
1990-91	0.0	0.0	0.0	0.0	2.2	3.8	5.0	T	1.0	0.0	T	T	12.0
1991-92	0.0	0.0	T	3.2	T	2.0	1.0	0.2	T	0.3	T	T	6.7
1992-93	0.0	0.0	0.0	T	9.0	10.0	2.5	2.2	2.1	T	T	0.0	25.8
1993-94	0.0	0.0	0.0	T	T	0.5	10.2	T	3.0	T	0.0	0.0	13.7
1994-95	T	0.0	0.0	0.0	T	0.0	3.7	T	2.3	0.0	0.0	0.0	6.0
1995-96	T	0.0	T	0.0	0.5	2.7	1.1	4.6	0.1	0.0	T	0.0	9.0
1996-97	T	0.0	0.0	1.5	8.0	1.1	10.8	2.0	0.0	6.5	0.0	T	29.9
1997-98	T	0.0	0.0	T	5.4	10.9	T	10.4	4.4	T	0.0	0.0	31.1
1998-99	0.0	0.0	0.0	0.0	0.0	1.0	13.1	T	1.3	T	0.0	T	15.4
1999-00	T	T	0.0	T	0.0	8.6	2.8	T	0.5	0.5	T	0.0	12.4
2000-01	0.0	0.0	0.0	T	8.9	21.2	13.0	1.4	1.8	T	T	0.0	46.3
2001-02	0.0	0.0	T	0.0	2.3	2.0	3.3	1.1	0.3	T	T	T	9.0
2002-03	0.0	0.0	0.0	T	0.0	10.6	T	1.1	0.3	0.0	0.0	0.0	12.0
2003-04	0.0	0.0	0.0	0.0	T	0.5	4.7	6.0	T	0.7	0.0	T	11.9
2004-05	0.0	0.0	0.0	0.0	13.8	5.3	2.3	0.3	13.8	0.0	4.7	0.0	40.2
2005-06	0.0	T	0.0	0.0	1.3	T	0.3	T	0.9	0.0	0.0	0.0	2.5
2006-07	0.0	0.0	0.0	0.0	7.2	1.7	9.1	5.7	T	1.1	T	T	24.8
2007-08	0.0	0.0	T	T	0.8	4.7	2.7	0.3	3.5	T	T	T	12.0
2008-09	T	0.0	0.0	0.0	0.0	0.6	0.7	0.0	12.6	T	0.0	T	13.9
2009-10	T	T	0.0	T	2.1	3.0	7.1	10.0	6.7	T	0.0	0.0	28.9
2010-11	0.0	0.0	T	0.0	3.0	2.0	0.6	9.0	0.0	T	T	0.0	14.6
2011-12	0.0	0.0	0.0	3.1	0.0	6.6	0.0	2.6	0.2	0.0	0.0	T	12.5
2012-13	0.0	0.0	T	0.0	0.0	2.1	1.9	25.6	0.1	T	T	0.0	29.7
2013-	0.0	0.0	0.0	0.0	4.3	2.2							
POR= 66 YRS	T	T	T	0.3	2.2	3.1	3.9	3.9	2.6	0.5	0.1	T	16.6

WBAN : 23047

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: http://www.ncdc.noaa.gov/homr/ SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p>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.</p>
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2013 AMARILLO TEXAS (KAMA)

The station is located 7 statute miles east northeast of the downtown post office in a region of rather flat topography. The Canadian River flows eastward 18 miles north of the station, with its bed about 800 feet below the plains. The Prairie Dog Town Fork of the Red River flows southeastward about 15 miles south of the station where it enters the Palo Duro Canyon, which is about 1,000 feet deep. There are numerous shallow Playa lakes, often dry, over the area, and the nearly treeless grasslands slope downward to the east. The terrain gradually rises to the west and northwest.

Three-fourths of the total annual precipitation falls from April through September, occurring from thunderstorm activity. Snow usually melts within a few days after it falls. Heavier snowfalls of 10 inches or more, usually with near blizzard conditions, average once every 5 years and last 2 to 3 days.

The Amarillo area is subject to rapid and large temperature changes, especially during the winter months when cold fronts from the northern Rocky Mountain and Plains states sweep across the area. Temperature drops of 50 to 60 degrees within a 12-hour period are not uncommon. Temperature drops of 40 degrees have occurred within a few minutes.

Humidity averages are low, occasionally dropping below 20 percent in the spring. Low humidity moderates the effect of high summer afternoon temperatures, permits evaporative cooling systems to be very effective, and provides many pleasant evenings and nights.

Severe local storms are infrequent, although a few thunderstorms with damaging hail, lightning, and wind in a very localized area occur most years, usually in spring and summer. These storms are often accompanied by very heavy rain, which produces local flooding, particularly of roads and streets. Tornadoes are rare.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 29 and the average last occurrence in the spring is April 14.

Station History

AMARILLO, TX

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
AMARILLO ENGLISH FIELD	1937-12-15	1946-08-01	35° 13'	-101° 42'			AIRWAYS
AMARILLO INTERNATIONAL AIRPORT	1977-06-01	1990-02-28	35° 13'	-101° 42'	3604		COOP,WXSVC
AMARILLO INTERNATIONAL AIRPORT	1990-02-28	1992-11-01	35° 13'	-101° 42'	3586	300 FT W	COOP,WXSVC
ENGLISH FIELD	1932-04-01	1937-12-15	35° 13'	-101° 42'			AIRWAYS
AMARILLO AIR TERMINAL	1975-01-01	1977-06-01	35° 13'	-101° 42'	3604		COOP,WXSVC
AMARILLO INTERNATIONAL AIRPORT	1992-11-01	2007-08-17	35° 13'	-101° 42'	3586		ASOS,COOP
AMARILLO AIR TERMINAL	1950-01-01	1969-01-01	35° 13'	-101° 42'	3609		AIRWAYS,COOP
AMARILLO INTERNATIONAL AIRPORT	2007-08-17	Present	35° 13'	-101° 42'	3604		ASOS,COOP
AMARILLO AIR TERMINAL	1969-01-01	1975-01-01	35° 13'	-101° 42'	3609		COOP,WXSVC
AMARILLO ENGLISH FIELD	1946-08-01	1950-01-01	35° 13'	-101° 42'	3609		AIRWAYS,COOP

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1990-02-28	1995-07-01	DAILY		UNIV	RCRD	
PRECIP	1990-02-28	1995-07-01	HOURLY	2400			
TEMP	2007-08-17	Present	DAILY	2400	ATEMP		
TEMP	1932-04-01	1974-11-01	DAILY	2400			
TEMP	1974-11-01	1990-02-28	DAILY	2400			
PRECIP	2007-08-17	Present	DAILY	2400	PCPNX		
PRECIP	1995-07-01	2007-08-17	DAILY	2400	UNIV	RCRD	
TEMP	1995-07-01	2007-08-17	DAILY	2400	HYGR		
PRECIP	1932-04-01	1974-11-01	DAILY	2400	UNIV	RCRD	
PRECIP	1974-11-01	1990-02-28	DAILY	2400	UNIV	RCRD	
PRECIP	1974-11-01	1990-02-28	HOURLY	2400			
TEMP	1990-02-28	1995-07-01	DAILY	2400	HYGR		
PRECIP	1995-07-01	2007-08-17	HOURLY	2400	UNIV	RCRD	
PRECIP	2007-08-17	Present	HOURLY	2400	AWPAG	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>

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Fax Number : (828) 271-4876

TDD : (828) 271-4010

Email : 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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