

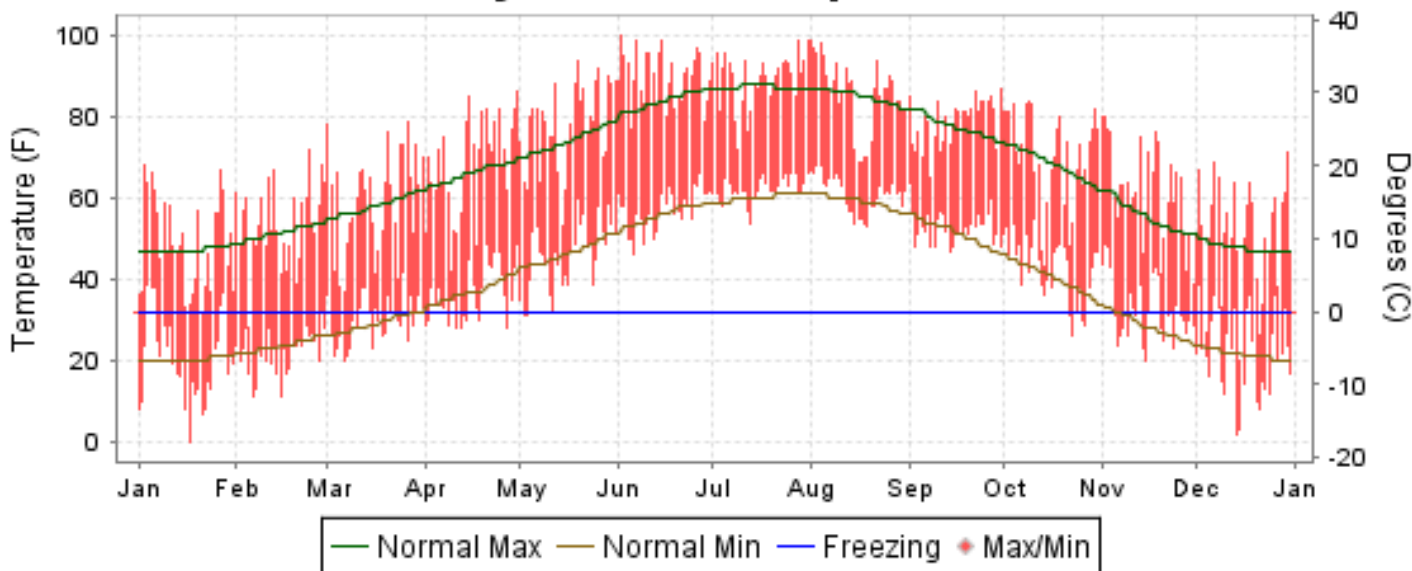


# 2008 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

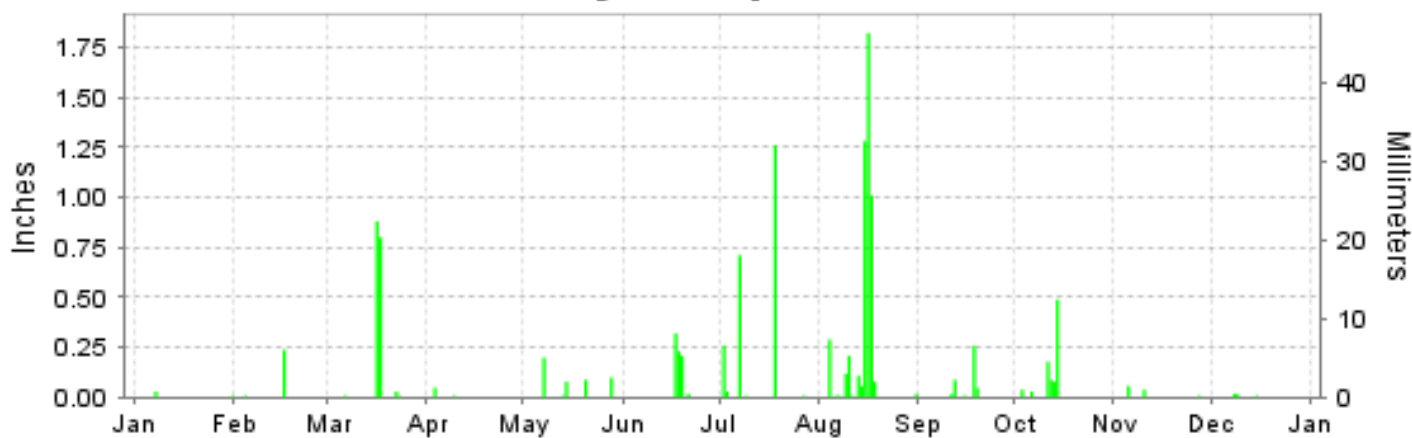
ISSN 0198-3490

## CLAYTON, NEW MEXICO (KCAO)

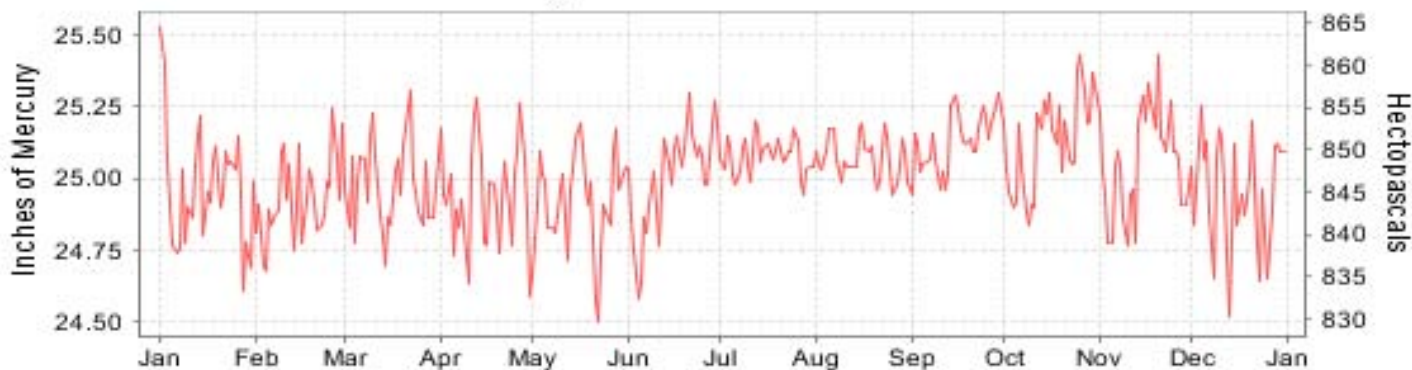
### Daily Max/Min Temperature



### 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 2008

## CLAYTON (KCAO)

LATITUDE: 36° 26'N      LONGITUDE: -103° 9'W      ELEVATION (FT): GRND: 4960 BARO: 4971      TIME ZONE: MOUNTAIN (UTC -7)      WBAN: 23051

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	48.8	53.8	59.4	68.5	77.9	89.9	89.3	85.6	78.9	70.3	61.7	51.0	69.6	
	HIGHEST DAILY MAXIMUM	68	72	79	86	94	100	99	99	87	84	80	71	100	
	DATE OF OCCURRENCE	03	24	26	30	19	02	31+	01	30	09	02+	30	JUN 02	
	MEAN DAILY MINIMUM	20.2	22.1	29.9	36.6	46.1	57.1	62.4	61.1	52.8	42.9	32.7	21.9	40.5	
	LOWEST DAILY MINIMUM	0	11	20	28	31	46	54	53	47	26	20	2	0	
	DATE OF OCCURRENCE	17	15+	06	27+	03+	06	13	19	14	23	15	14	JAN 17	
	AVERAGE DRY BULB	34.5	38.0	44.7	52.6	62.0	73.5	75.9	73.4	65.9	56.6	47.2	36.5	55.1	
	MEAN WET BULB	25.7	30.1	34.6	39.0	48.2	56.1	62.5	61.7	54.9	45.3	35.7	28.5	43.5	
	MEAN DEW POINT	10.9	17.2	19.3	18.8	32.6	40.9	54.7	55.2	47.2	33.3	20.1	15.9	30.5	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	3	16	20	10	0	0	0	0	0	49
	MAXIMUM <= 32°	1	1	0	0	0	0	0	0	0	0	0	3	5	
	MINIMUM <= 32°	26	29	21	9	3	0	0	0	0	5	19	23	135	
MINIMUM <= 0°	1	0	0	0	0	0	0	0	0	0	0	0	1		
H/C	HEATING DEGREE DAYS	938	778	623	370	153	1	0	14	31	261	525	878	4572	
	COOLING DEGREE DAYS	0	0	0	4	68	263	345	281	65	10	0	0	1036	
RH	MEAN (PERCENT)	44	49	43	36	41	40	54	61	57	48	42	48	47	
	HOUR 05 LST	59	61	58	52	55	55	71	78	76	60	53	58	61	
	HOUR 11 LST	28	34	29	23	28	22	34	43	37	33	27	37	31	
	HOUR 17 LST	38	42	35	24	26	26	43	50	50	48	41	46	39	
	HOUR 23 LST	53	62	56	49	58	52	68	77	72	60	52	53	59	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	1	2	2	2	0	0	0	0	1	0	0	0	8	
	THUNDERSTORMS	0	0	0	0	0	0	0	0	0	0	0	0	0	
CLOUDNESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
SATELLITE (> 12,000 FT.)															
NUMBER OF DAYS WITH:															
CLEAR															
PARTLY CLOUDY															
CLOUDY															
PR	MEAN STATION PRESS. (IN.)	24.98	24.93	24.97	24.94	24.93	25.01	25.08	25.07	25.13	25.13	25.06	24.96	25.02	
	MEAN SEA-LEVEL PRESS. (IN.)	30.01	29.94	29.93	29.85	29.78	29.81	29.88	29.90	30.00	30.06	30.03	29.98	29.93	
WINDS	RESULTANT SPEED (MPH)	7.8	4.7	2.7	3.0	4.4	5.2	8.3	4.5	3.2	2.8	5.0	7.1	4.1	
	RES. DIR. (TENS OF DEGS.)	25	28	30	27	23	21	20	18	20	25	28	23	24	
	MEAN SPEED (MPH)	13.6	12.2	13.1	14.0	15.2	13.6	12.7	11.3	11.6	12.9	12.2	13.8	13.0	
	PREVAIL.DIR.(TENS OF DEGS.)	25	24	36	36	20	20	18	19	19	25	25	26	18	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	41	46	48	40	47	41	37	35	39	41	41	45	48	
	DIR. (TENS OF DEGS.)	25	21	36	20	35	03	36	19	36	17	36	20	36	
	DATE OF OCCURRENCE	29	03	02	24	10	08	12	31	02	11	14	22	MAR 02	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	55	56	60	56	70	56	45	43	49	53	48	56	70	
DIR. (TENS OF DEGS.)	25	20	36	25	14	22	31	32	36	34	36	23	14		
DATE OF OCCURRENCE	29	03	02	15	21	05	28	12	02	22	14	18	MAY 21		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.04	0.25	1.73	0.06	0.48	0.78	2.28	5.03	0.43	0.91	0.11	0.05	12.15	
	GREATEST 24-HOUR (IN.)	0.03	0.24	1.68	0.05	0.20	0.43	1.26	1.90	0.31	0.55	0.06	0.04	1.90	
	DATE OF OCCURRENCE	07	16	16-17	03	07	18-19	18	16-17	18-19	13-14	05	08-09	AUG 16-17	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	2	2	5	2	5	4	6	13	5	6	3	3	56	
PRECIPITATION 0.10	0	1	2	0	2	3	3	7	1	2	0	0	21		
PRECIPITATION 1.00	0	0	0	0	0	0	1	3	0	0	0	0	4		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	1.6	0.7	2.4	0.1	0.0	T	0.0	0.0	0.0	0.0	0.2	2.3	7.3	
	GREATEST 24-HOUR (IN.)	0.5	0.6	1.3	0.1	0.0	T	0.0	0.0	0.0	0.0	0.2	1.3	1.3	
	DATE OF OCCURRENCE	31+	05	02	17		18					27	09	DEC 09	
	MAXIMUM SNOW DEPTH (IN.)	1	0	1	0	0	0	0	0	0	0	0	1	1	
	DATE OF OCCURRENCE	31		23									10	DEC 10	
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	0	0	1	0	0	0	0	0	0	0	0	1	2		

# NORMALS, MEANS, AND EXTREMES CLAYTON (KCAO)

LATITUDE: 36° 26'N      LONGITUDE: -103° 9'W      ELEVATION (FT): GRND: 4960 BARO: 4971      TIME ZONE: MOUNTAIN (UTC -7)      WBAN: 23051

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	47.4	51.5	58.2	66.1	74.2	83.9	87.4	85.1	77.9	68.5	55.7	48.0	67.0
	MEAN DAILY MAXIMUM	97	47.1	49.1	56.8	65.0	73.5	82.7	87.1	85.3	77.8	69.0	55.8	48.7	66.5
	HIGHEST DAILY MAXIMUM	60	80	81	86	91	99	104	102	102	99	93	86	83	104
	YEAR OF OCCURRENCE		1990	1963	2003	1965	2000	1998	1964	2007	1948	2000	2006	1955	JUN 1998
	MEAN OF EXTREME MAXS.	98	69.6	71.2	77.1	82.9	88.9	95.6	96.6	94.2	90.5	84.9	76.4	69.9	83.2
	NORMAL DAILY MINIMUM	30	20.3	23.7	29.2	37.2	46.7	55.9	60.2	59.2	51.5	40.6	28.7	21.6	39.6
	MEAN DAILY MINIMUM	97	19.7	21.7	27.3	35.7	45.1	53.7	59.0	58.3	50.4	40.2	27.9	21.3	38.4
	LOWEST DAILY MINIMUM	60	-21	-17	-11	9	23	37	45	45	26	12	-10	-14	-21
	YEAR OF OCCURRENCE		1959	1951	1948	1945	1967	1964	1958	1964	1985	1991	1976	1990	JAN 1959
	MEAN OF EXTREME MINS.	98	1.3	5.2	11.3	22.1	32.5	44.7	52.7	51.5	38.3	26.1	11.9	3.9	25.1
	NORMAL DRY BULB	30	33.9	37.6	43.7	51.7	60.5	69.9	73.8	72.2	64.7	54.6	42.2	34.8	53.3
	MEAN DRY BULB	96	33.5	35.5	42.1	50.4	59.3	68.2	73.1	71.8	64.1	54.6	41.9	35.0	52.5
	MEAN WET BULB	22	25.9	27.5	30.2	33.3	39.4	44.3	47.6	47.4	42.9	36.5	30.1	26.7	36.0
	MEAN DEW POINT	22	18.5	18.9	22.7	25.4	31.6	37.2	40.5	40.5	35.5	29.0	22.5	18.4	28.4
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.1	0.6	7.9	11.6	7.6	1.9	*	0.0	0.0	29.7
	MAXIMUM <= 32	30	5.0	3.3	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	1.5	4.1	15.3
MINIMUM <= 32	30	29.5	24.1	21.1	8.3	0.9	0.0	0.0	0.0	0.4	4.9	20.3	28.3	137.8	
MINIMUM <= 0	30	1.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	3.1	
H/C	NORMAL HEATING DEG. DAYS	30	964	767	661	407	179	27	1	7	85	325	685	937	5045
	NORMAL COOLING DEG. DAYS	30	0	0	0	6	37	173	274	228	77	2	0	0	797
RH	NORMAL (PERCENT)	30													
	HOURLY 05 LST	30	66	64	65	66	71	70	76	76	72	67	66	63	69
	HOURLY 11 LST	30	46	41	40	36	39	37	40	43	41	39	41	44	41
	HOURLY 17 LST	30													
	HOURLY 23 LST	30													
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH: HEAVY FOG (VISIB <= 1/4 MI)	17	2.4	2.6	3.1	2.2	0.9	0.9	0.4	0.8	0.4	2.2	1.6	1.9	19.4
	THUNDERSTORMS	23	0.0	0.3	0.4	0.9	2.9	3.9	4.9	4.4	1.4	0.8	0.0	0.1	20.0
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)	26	4.1	4.0	4.2	4.0	4.1	3.3	3.7	3.3	2.9	2.7	3.4	3.5	3.6
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	28	12.5	11.2	11.3	11.7	11.4	13.5	12.3	15.0	17.2	17.8	14.8	13.9	162.6
	PARTLY CLOUDY	28	7.0	7.3	8.8	8.8	9.3	10.4	11.9	9.7	6.0	6.6	6.0	7.0	98.8
	CLOUDY	28	11.5	9.6	10.9	9.5	10.4	6.2	6.8	6.3	6.8	6.6	9.2	10.1	103.9
PR	MEAN STATION PRESSURE (IN)	22	25.02	24.99	24.99	24.98	25.00	25.02	25.07	25.08	25.06	25.04	25.03	25.01	25.02
	MEAN SEA-LEVEL PRES. (IN)	22	30.05	30.01	29.98	29.94	29.94	29.93	29.97	29.99	29.99	30.01	30.04	30.04	29.99
WINDS	MEAN SPEED (MPH)	22	11.4	11.9	12.2	12.9	12.3	11.9	11.2	10.7	11.2	11.5	11.5	11.5	11.7
	PREVAIL. DIR. (TENS OF DEGS)	18	25	25	25	21	20	20	20	19	19	21	25	26	20
	MAXIMUM 2-MINUTE: SPEED (MPH)	12	48	46	49	53	47	52	54	44	45	47	44	46	54
	DIR. (TENS OF DEGS)		20	21	31	19	35	18	15	33	29	31	32	32	15
	YEAR OF OCCURRENCE		1999	2008	1998	2001	2008	2006	1998	1998	2006	2006	2004	2003	JUL 1998
	MAXIMUM 3-SECOND SPEED (MPH)	12	57	61	61	63	70	66	61	55	56	58	58	56	70
	DIR. (TENS OF DEGS)		19	33	19	19	14	18	24	05	29	31	33	23	14
	YEAR OF OCCURRENCE		1999	2007	1998	2001	2008	2006	2003	1998	2006	2006	2004	2008	MAY 2008
PRECIPITATION	NORMAL (IN)	30	0.30	0.27	0.62	0.99	2.08	2.21	2.81	2.69	1.56	0.74	0.54	0.32	15.13
	MAXIMUM MONTHLY (IN)	60	1.30	1.61	2.67	5.34	6.77	4.97	7.77	5.83	5.22	4.94	2.16	2.54	7.77
	YEAR OF OCCURRENCE		2001	1987	2000	2004	1949	1989	1950	1991	1960	2000	2004	2006	JUL 1950
	MINIMUM MONTHLY (IN)	60	T	T	0.01	0.04	0.06	0.19	0.25	0.28	T	T	T	0.00	0.00
	YEAR OF OCCURRENCE		1970	1991	1966	1991	2002	1955	2005	1983	1956	1992	1989	1957	DEC 1957
	MAXIMUM IN 24 HOURS (IN)	60	0.71	0.88	1.68	2.42	4.67	2.86	2.69	4.41	3.48	3.90	1.58	1.50	4.67
	YEAR OF OCCURRENCE		1960	1987	2008	1980	1954	1984	2069	1963	1960	1965	1961	2006	MAY 1954
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	4.0	3.3	4.5	5.2	8.1	7.9	9.5	9.1	5.9	3.5	4.2	3.8	69.0
	PRECIPITATION >= 1.00	30	0.0	0.0	0.0	0.1	0.4	0.4	0.6	0.6	0.4	0.1	0.1	0.0	2.7
SNOWFALL	NORMAL (IN)	30	4.9	3.6	4.9	2.1	0.7	0.0	0.0	0.0	0.3	0.8	3.5	4.7	25.5
	MAXIMUM MONTHLY (IN)	52	12.0	15.8	16.0	10.9	8.0	T	0.0	T	5.0	8.0	14.8	34.4	34.4
	YEAR OF OCCURRENCE		1990	1990	1984	1955	1978	2008		1992	1984	1984	1961	2006	DEC 2006
	MAXIMUM IN 24 HOURS (IN)	50	8.0	10.0	9.0	10.9	7.6	T	0.0	T	5.0	6.0	12.7	8.1	12.7
	YEAR OF OCCURRENCE		1990	1990	1973	1955	1978	1992		1992	1984	1984	1961	1958	NOV 1961
	MAXIMUM SNOW DEPTH (IN)	49	22	11	10	11	6	0	0	0	4	6	12	28	28
	YEAR OF OCCURRENCE		2007	1990	1973	1955	1990				1984	1984	1961	2006	DEC 2006
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	1.9	1.4	1.9	0.7	0.2	0.0	0.0	0.0	0.1	0.3	1.3	1.5	9.3	

**PRECIPITATION (inches) 2008 CLAYTON (KCAO)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1976	0.10	0.18	0.13	0.82	2.39	0.67	3.83	1.04	3.32	0.22	0.25	0.03	12.98
1977	0.20	0.04	0.15	3.00	1.47	0.80	1.39	2.44	0.45	0.01	0.19	0.08	10.22
1978	0.27	0.61	0.09	0.26	3.63	2.66	1.14	1.41	0.58	0.18	2.08	0.39	13.30
1979	0.74	0.03	0.86	1.36	2.41	2.73	3.38	1.01	1.31	0.41	0.31	0.30	14.85
1980	0.29	0.04	0.79	3.11	2.70	2.03	0.88	1.25	0.74	T	0.44	0.24	12.51
1981	0.07	0.03	1.27	0.46	1.57	3.33	3.01	5.73	0.63	0.81	0.45	0.24	17.60
1982	0.04	0.18	0.20	0.37	2.32	2.99	6.67	2.09	2.29	0.43	0.33	0.56	18.47
1983	0.78	0.58	0.72	0.69	3.35	2.12	1.39	0.28	0.36	0.35	0.33	0.45	11.40
1984	0.34	0.19	1.36	0.91	0.75	4.38	2.58	3.95	0.74	4.55	0.12	0.41	20.28
1985	0.43	0.10	1.14	1.89	1.72	0.77	1.40	1.78	2.49	2.85	0.15	0.04	14.76
1986	0.02	0.31	0.11	0.12	3.87	1.97	3.59	5.70	2.85	3.15	1.76	0.16	23.61
1987	0.47	1.61	0.86	0.64	3.73	2.14	0.45	2.64	1.02	T	0.55	0.80	14.91
1988	0.11	0.15	0.56	1.45	3.41	1.38	1.72	1.76	4.29	0.66	0.17	0.07	15.73
1989	0.18	0.30	0.03	0.76	1.49	4.97	5.60	2.42	1.92	0.12	T	0.59	18.38
1990	0.70	1.17	0.41	0.35	1.25	0.47	2.80	3.65	2.70	0.15	1.37	0.24	15.26
1991	0.38	T	1.15	0.04	2.11	2.66	0.89	5.83	3.62	0.42	0.82	0.92	18.84
1992	0.22	0.32	0.75	0.34	1.74	3.38	4.38	3.56	0.64	T	0.46	0.45	16.24
1996						0.40	4.98	4.30	2.30	0.33	0.19	0.03	
1997	0.04	0.22	0.18	2.96	1.17	2.02	2.48	5.24	1.40	1.06	0.45	0.37	17.59
1998	T	0.77	1.51	1.36	0.37	0.44	2.77	3.36	0.65	3.14	0.57	0.10	15.04
1999	0.18	T	0.43	4.33	2.47	0.52	4.59	2.07	2.81	2.37	0.03	0.17	19.97
2000	0.35	0.08	2.67	0.04	0.90	2.19	2.89	1.31	0.01	4.94	0.07	0.01	15.46
2001	1.30	0.32	0.79	0.05	2.98	1.47	1.28	1.66	1.09	T	0.79	0.06	11.79
2002	0.15	0.01	0.03	0.80	0.06	0.97	1.35	1.48	4.48	0.90	0.59	0.75	11.57
2003	T	0.07	0.89	0.43	1.44	4.75	T	1.43	0.43	0.63	0.59	0.19	10.85
2004	0.07	0.14	0.63	5.34	0.43	4.89	3.57	4.08	1.25	0.40	2.16	0.31	23.27
2005	0.96	0.48	0.98	0.94	3.37	1.76	0.25	3.91	1.54	0.41	0.16	T	14.76
2006	0.04	0.01	0.40	0.62	0.66	1.18	3.94	4.05	0.84	0.67	0.06	2.54	15.01
2007	0.34	0.07	1.60	0.64	3.62	1.54	1.71	0.57	1.77	0.15	0.03	0.34	12.38
2008	0.04	0.25	1.73	0.06	0.48	0.78	2.28	5.03	0.43	0.91	0.11	0.05	12.15
POR= 97 YRS	0.28	0.38	0.70	1.24	2.29	1.90	2.62	2.40	1.66	1.11	0.50	0.37	15.45

WBAN : 23051

**AVERAGE TEMPERATURE (°F) 2008 CLAYTON (KCAO)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1976	34.5	42.8	41.6	53.4	57.6	69.3	72.7	72.4	64.8	48.8	38.4	36.2	52.7
1977	30.0	39.9	42.4	52.9	62.3	72.8	75.7	72.9	68.5	56.3	43.5	38.8	54.7
1978	27.7	30.2	44.6	54.3	58.3	69.4	76.8	71.6	65.8	55.6	42.2	29.4	52.2
1979	23.3	36.0	43.5	50.9	56.9	67.5	73.9	70.2	66.4	56.5	37.5	37.8	51.7
1980	33.1	37.6	40.7	48.6	57.1	72.8	78.8	74.1	66.4	54.3	42.4	42.8	54.1
1981	38.3	39.2	43.9	57.7	59.8	73.1	75.0	70.4	65.7	54.1	47.3	37.2	55.1
1982	34.9	33.7	43.3	50.5	59.3	66.1	72.8	72.9	66.0	53.3	40.8	33.6	52.3
1983	35.4	36.4	42.1	45.7	55.8	65.8	75.3	76.5	68.4	56.2	43.6	23.7	52.1
1984	30.9	37.6	40.2	47.7	61.8	70.1	73.9	72.3	62.7	49.3	43.2	37.2	52.2
1985	29.5	34.1	43.6	54.9	62.3	70.2	75.2	73.1	62.1	53.4	40.2	32.6	52.6
1986	41.5	38.6	49.6	54.5	60.2	69.3	74.4	71.6	63.9	52.9	40.8	34.9	54.4
1987	34.2	37.6	41.3	51.8	60.9	69.4	73.8	70.9	65.3	55.6	42.7	32.8	53.0
1988	29.6	37.0	41.4	51.4	59.6	71.1	73.3	73.4	63.7	56.4	44.5	35.5	53.1
1989	37.3	29.9	49.0	55.3	63.3	65.3	72.1	71.7	63.1	56.1	45.4	30.0	53.2
1990	35.6	35.2	43.1	52.1	58.7	75.7	72.3	71.2	67.6	54.8	46.1	29.4	53.5
1991	31.5	42.9	43.8	52.4	63.1	70.8	72.8	71.4	62.8	54.4	37.7	36.2	53.3
1992	36.6	41.4	45.7	56.7	59.9	66.4	72.3	69.9	66.4	57.0	37.1	31.8	53.4
1996						72.1	73.5	70.2	62.0	53.3	43.1	35.9	
1997	32.4	34.5	46.9	44.8	59.7	68.8	74.8	72.5	67.5	54.4	39.6	31.9	52.3
1998	38.1	37.5	40.3	48.8	65.0	71.3	76.8	72.1	71.2	54.9	46.5	34.9	54.8
1999	38.0	43.4	43.6	49.9	58.9	69.2	72.7	73.9	63.7	54.7	50.3	37.3	54.6
2000	37.6	44.3	44.4	54.1	65.8	70.0	75.8	77.2	69.8	54.8	36.6	32.9	55.3
2001	30.7	36.3	41.9	56.1	60.5	70.9	79.0	74.1	67.2	56.4	46.8	36.9	54.7
2002	36.0	36.2	41.7	56.6	63.3	75.4	76.7	75.2	66.0	50.1	43.2	34.0	54.5
2003	39.6	34.2	45.6	53.8	62.6	65.8	78.9	75.7	64.8	59.5	44.1	38.9	55.3
2004	36.6	35.2	49.3	50.5	65.7	68.9	71.4	68.8	65.2	54.8	40.2	38.1	53.7
2005	37.3	39.2	41.7	51.8	60.4	70.0	76.1	72.3	68.2	56.6	47.5	36.3	54.8
2006	41.1	37.7	44.0	57.6	65.3	75.2	76.1	72.4	61.3	53.4	45.8	34.8	55.4
2007	28.1	37.2	49.7	49.3	60.8	68.8	75.4	78.3	69.3	58.9	46.2	33.7	54.6
2008	34.5	38.0	44.7	52.6	62.0	73.5	75.9	73.4	65.9	56.6	47.2	36.5	55.1
POR= 96 YRS	33.5	35.5	42.1	50.4	59.3	68.2	73.1	71.8	64.1	54.6	41.9	35.0	52.5

**HEATING DEGREE DAYS (base 65°F) 2008 CLAYTON (KCAO)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1977-78	0	3	17	268	637	806	1148	968	627	314	236	36	5060
1978-79	0	8	68	291	678	1100	1286	806	660	416	252	62	5627
1979-80	0	7	69	275	818	836	981	791	750	486	245	16	5274
1980-81	0	0	64	333	675	682	821	716	646	228	170	10	4345
1981-82	0	6	50	332	525	856	924	873	663	434	179	52	4894
1982-83	4	0	60	354	718	966	910	795	703	571	287	66	5434
1983-84	0	0	63	271	636	1276	1050	786	764	512	143	9	5510
1984-85	0	1	150	481	650	858	1092	858	655	296	126	26	5193
1985-86	0	4	183	355	739	995	720	731	470	315	161	12	4685
1986-87	0	3	79	369	718	926	948	762	728	391	130	16	5070
1987-88	2	27	41	295	661	992	1090	802	723	402	185	8	5228
1988-89	0	10	93	268	609	908	850	979	496	316	129	75	4733
1989-90	1	0	126	290	581	1076	903	828	673	385	221	2	5086
1990-91	10	8	40	309	558	1095	1033	613	649	371	112	3	4801
1991-92	5	2	104	344	811	886	873	676	593	252	177	41	4764
1992-93	1	11	48	252	832	1020							
1995-96												2	
1996-97	10	1	131	365	652	893	1004	850	553	597	169	20	5245
1997-98	2	5	60	342	755	1020	828	766	756	480	79	33	5126
1998-99	0	0	8	312	551	928	827	596	656	444	206	25	4553
1999-00	12	0	116	316	434	851	843	593	631	324	103	16	4239
2000-01	0	0	65	335	845	986	1057	799	706	264	166	11	5234
2001-02	0	0	45	269	538	866	894	800	716	265	121	12	4526
2002-03	0	1	63	460	648	954	781	857	592	330	127	44	4857
2003-04	0	10	69	208	623	802	873	859	480	429	81	12	4446
2004-05	16	14	78	308	738	828	853	718	712	391	179	20	4855
2005-06	0	6	26	274	516	885	735	758	645	244	106	0	4195
2006-07	0	3	122	366	574	928	1138	772	466	461	139	23	4992
2007-08	0	0	21	221	558	964	938	778	623	370	153	1	4627
2008-	0	14	31	261	525	878							

WBAN : 23051

**COOLING DEGREE DAYS (base 65°F) 2008 CLAYTON (KCAO)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1976	0	0	0	0	7	152	244	240	81	3	0	0	727
1977	0	0	0	0	16	241	342	256	130	3	0	0	988
1978	0	0	0	0	34	177	372	221	100	6	0	0	910
1979	0	0	0	1	6	145	283	173	117	17	0	0	742
1980	0	0	0	0	8	257	433	290	113	7	2	0	1110
1981	0	0	0	18	17	258	318	180	77	1	0	0	869
1982	0	0	0	4	8	90	255	251	97	0	0	0	705
1983	0	0	0	0	9	98	325	363	172	6	0	0	973
1984	0	0	0	0	50	170	282	233	88	2	0	0	825
1985	0	0	0	1	49	188	321	263	100	0	0	0	922
1986	0	0	2	6	19	147	298	212	53	0	0	0	737
1987	0	0	0	2	9	156	281	218	54	8	0	0	728
1988	0	0	0	0	22	198	263	278	61	6	0	0	828
1989	0	0	6	32	82	93	229	217	77	19	0	0	755
1990	0	0	0	1	32	326	247	207	126	0	0	0	939
1991	0	0	0	0	60	182	252	208	44	25	0	0	771
1992	0	0	0	12	23	90	234	170	93	13	0	0	635
1996						223	282	168	46	11	0	0	
1997	0	0	0	0	13	140	313	244	142	21	0	0	873
1998	0	0	0	3	87	229	371	227	203	6	0	0	1126
1999	0	0	0	0	24	156	259	283	83	5	0	0	810
2000	0	0	0	4	134	173	340	382	215	29	0	0	1277
2001	0	0	0	7	31	196	438	290	119	8	0	0	1089
2002	0	0	0	18	74	329	369	323	100	2	0	0	1215
2003	0	0	0	0	59	75	441	348	73	45	0	0	1041
2004	0	0	0	0	107	136	222	139	92	0	0	0	696
2005	0	0	0	0	43	176	355	241	125	21	0	0	961
2006	0	0	0	31	120	314	350	238	18	22	4	0	1097
2007	0	0	0	0	15	147	331	417	157	37	0	0	1104
2008	0	0	0	4	68	263	345	281	65	10	0	0	1036

**SNOWFALL (inches) 2008 CLAYTON (KCAO)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1976-77	0.0	0.0	T	T	3.9	0.5	3.8	1.0	0.6	2.0	0.0	0.0	11.8
1977-78	0.0	0.0	0.0	0.0	1.3	0.2	4.7	9.5	1.8	1.0	8.0	0.0	26.5
1978-79	0.0	0.0	0.0	0.0	4.5	11.0	6.9	0.2	0.6	6.1	1.7	0.0	31.0
1979-80	0.0	0.0	0.0	2.7	2.3	3.8	1.9	1.0	5.6	4.0	0.0	0.0	21.3
1980-81	0.0	0.0	0.0	0.0	6.5	1.5	1.3	0.7	1.0	0.5	T	0.0	11.5
1981-82	0.0	0.0	0.0	T	T	4.0	0.8	5.3	3.0	0.8	T	0.0	13.9
1982-83	0.0	0.0	0.0	0.0	4.2	8.6	12.0	8.3	9.7	8.2	0.2	0.0	51.2
1983-84	0.0	0.0	0.0	0.0	1.0	7.6	6.4	3.0	16.0	T	0.0	0.0	34.0
1984-85	0.0	0.0	5.0	8.0	1.3	5.0	9.8	0.8	5.0	0.0	0.0	0.0	34.9
1985-86	0.0	0.0	T	0.0	1.3	1.5	0.8	6.6	T	T	0.0	0.0	10.2
1986-87	0.0	0.0	0.0	0.0	6.2	3.9	10.5	7.5	9.1	5.5	0.0	0.0	42.7
1987-88	0.0	0.0	0.0	0.0	4.4	11.5	3.3	3.0	10.5	8.5	0.0	0.0	41.2
1988-89	0.0	0.0	0.0	0.0	3.3	2.0	1.2	2.9	1.0	0.2	T	0.0	10.6
1989-90	0.0	T	T	T	T	5.2	12.0	15.8	4.0	1.0	6.0	0.0	44.0
1990-91	0.0	0.0	0.0	0.5	2.5	6.5	3.8	T	10.0	T	0.3	0.0	23.6
1991-92	0.0	0.0	0.0	6.0	6.0	3.0	0.7	T	0.5	T	0.0	T	16.2
1992-93	0.0	T	0.0	0.0	9.0	9.0							
1996-97													
1997-98													
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04										4.5	T	0.0	
2004-05	0.0	0.0	0.0	0.0	12.1	3.9	8.0	T	13.7	0.4	6.2	0.0	44.3
2005-06	0.0	0.0	0.0	T	1.5	T	1.5	0.3	4.3	0.0	0.0	0.0	7.6
2006-07	0.0	0.0	0.0	T	3.0	34.4	5.4	2.0	1.0	2.5	0.0	0.0	48.3
2007-08	0.0	0.0	0.0	T	1.1	8.7	1.6	0.7	2.4	0.1	0.0	T	14.6
2008-	0.0	0.0	0.0	0.0	0.2	2.3							
POR= 92 YRS	0.0	T	0.1	0.5	3.1	4.6	3.1	3.7	4.6	2.2	0.5	T	22.4

WBAN : 23051

**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. NORMALS ARE 30-YEAR AVERAGES (1971 - 2000). 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 AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. 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.</p> <p>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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p> <p><b>NOTE:</b> The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
---	--

# 2008 CLAYTON NEW MEXICO (KCAO)

Clayton is located on the high plains of northeastern New Mexico some 90 miles southeast of the eastern slope of the Rocky Mountains. The climate is semi-arid. Nearly 80 percent of the rainfall occurs from May through October in sudden thunderstorms which form over the mountains northwest of Clayton and drift southeastward. This makes the growing of small grains and the raising of range cattle profitable. Native grasses in the area remain nutritious even in winter.

The climate of Clayton is characteristic of that found in the higher-altitude sections of the continental southwest. Temperatures are mostly moderate. While daytime temperatures in summer are moderately warm, 90 degrees or slightly higher about half the time in July, hot days recording temperatures of 100 degrees or more, only occur about once a year. Minimum temperatures range from the teens in January to the 60s in July. With clear nocturnal skies and an altitude of about 5,000 feet, summer nights in Clayton are usually comfortable for sleeping. While winter minima are generally below freezing, zero temperatures only occur about three times a year.

From June through August nearly all precipitation is from scattered thunderstorms. As late summer and fall give way to winter, showery precipitation becomes less frequent and copious. Occasional winter snows, caused in part by upslope movement of air from the Gulf of Mexico, supply some winter moisture.

Blizzards are rare but high winds and cold temperatures frequent winter storms and can produce blizzard conditions. These storms may often close highways and, unless proper precautions are taken, they may also cause loss of life and livestock.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 16 and the average last occurrence in the spring is May 1.

# Station Location

CLAYTON

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	Latitude NORTH WEST		Longitude WEST		ELEVATION ABOVE								AUTOMATIC OBSERVING EQUIPMENT *	REMARKS
								SEA LEVEL	GROUND								
								GROUND TEMPERATURE SITE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAUGE	WEIGHING RAIN GAUGE	8 INCH RAIN GAUGE		
<b>*NOTE:</b>																	
<u>AIRPORT</u>																	
Administration Building Municipal Airpark	3/25/44	11/7/49	1.5 mi. E	36° 27'	103° 09'	4996	28	5	5				3	2		Established as First Order station.	
Administration Building Municipal Airpark	11/7/49	06/01/96	0.7 mi. ESE	36° 27'	103° 09'	a4669	e30 f33	b5	d5		f3	c4	c3	f4	f	a. Established 11/18/49. b. Minor adjustment 12/7/49. c. Moved to a location 55' E of office 6/19/62. d. Minor adjustment 9/5/51. e. Type change 5/22/58. f. AMOS commissioned 450' ESE of Admin. building 10/2/75.	
Municipal Airport	06/01/96	Present	NA	36° 27'	103° 09'	g4968									S	ASOS Commissioned 06/01/96 g. Ground elevation.	

**For Hard Copy Subscription:**

Price and ordering information: NCDC Subscribing Service Center, 310 State Route 956, Building 300, Rocket Center, WV 26726.

**INQUIRES/COMMENTS CALL: Toll Free (866) 742-3322**

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

**Non-Subscription Request:**

NCDC Customer Services;  
Phone: 828-271-4800  
Fax: 828-271-4876  
Email: [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300  
CHANGE SERVICE REQUESTED

**FIRST CLASS**  
**POSTAGE & FEES PAID**  
**United States Department of Commerce**  
**NOAA Permit No. G - 19**

\* NOTES: For earlier station history see previous editions.