

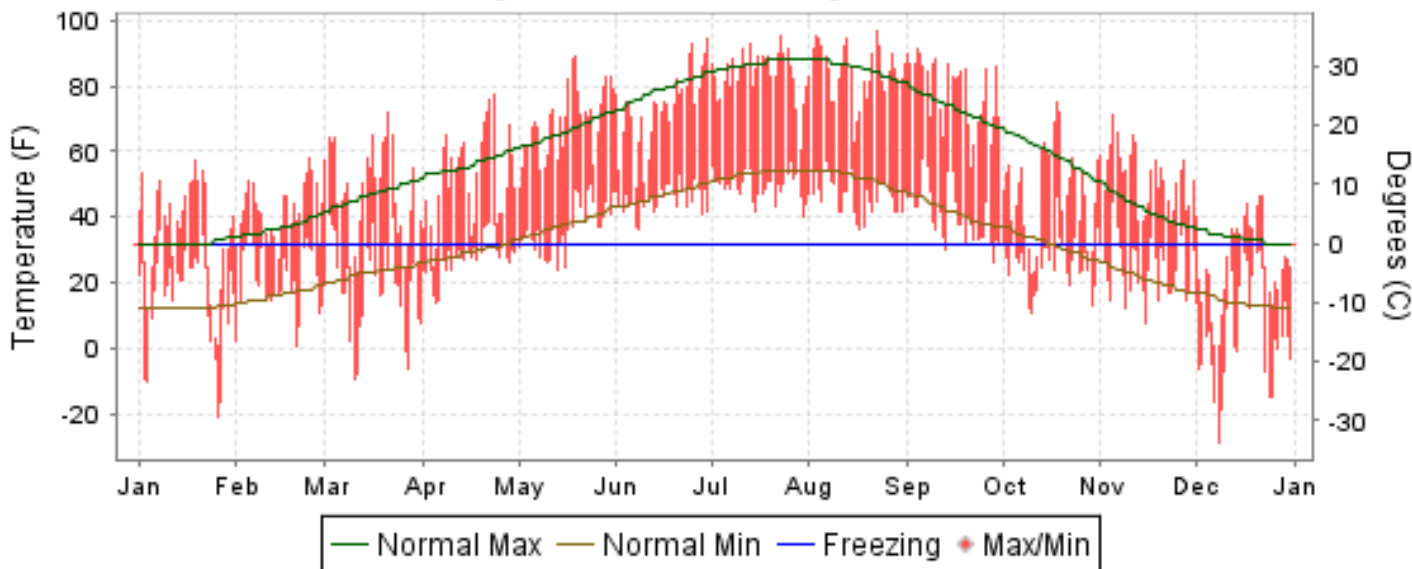


2009 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

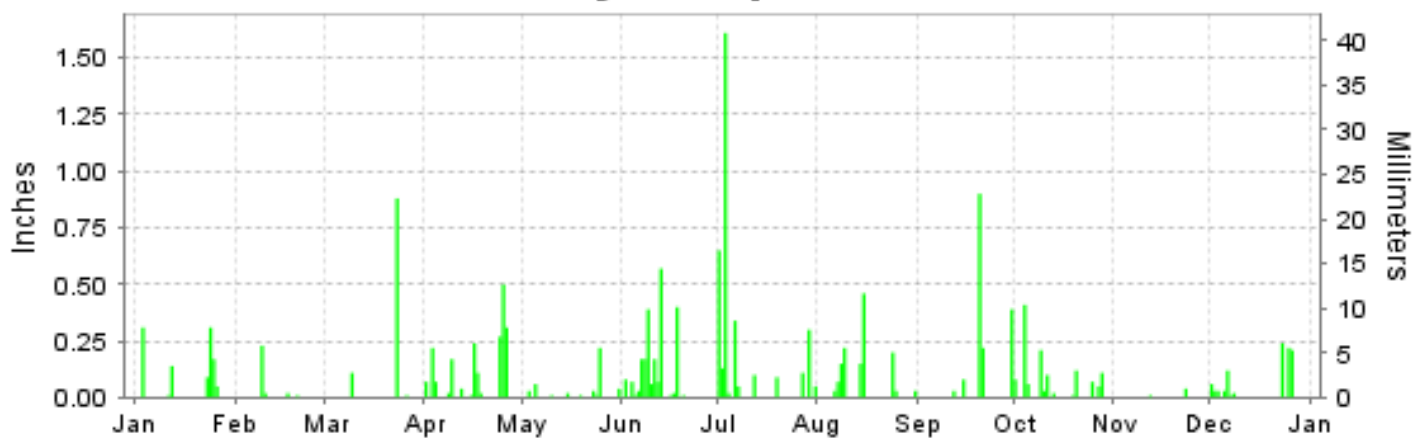
ISSN 0198-5760

CASPER, WYOMING (KCPR)

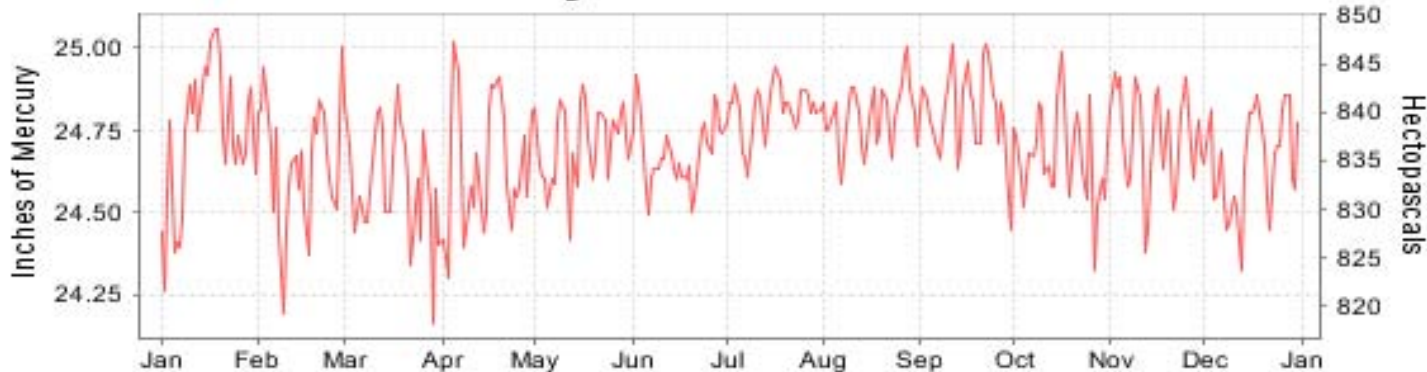
Daily Max/Min Temperature



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 2009

CASPER (KCPR)

LATITUDE: 42° 53'N LONGITUDE: -106° 28'W ELEVATION (FT): GRND: 5318 BARO: 5351 TIME ZONE: MOUNTAIN (UTC -7) WBAN: 24089

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	35.9	42.2	47.7	52.1	69.1	73.6	83.9	84.2	78.3	48.2	52.2	26.4	57.8	
	HIGHEST DAILY MAXIMUM	57	58	72	77	89	94	95	97	91	75	71	46	97	
	DATE OF OCCURRENCE	19	24	21	23	19	30	23	22	04	18	05	22+	AUG 22	
	MEAN DAILY MINIMUM	15.6	20.9	18.6	27.8	36.7	45.4	49.5	46.6	40.3	25.8	24.6	4.9	29.7	
	LOWEST DAILY MINIMUM	-21	1	-9	14	24	36	40	36	26	11	8	-29	-29	
	DATE OF OCCURRENCE	26	20	10	05	13	08	30	17	28	10	15	08	DEC 08	
	AVERAGE DRY BULB	25.8	31.6	33.2	40.0	52.9	59.5	66.7	65.4	59.3	37.0	38.4	15.7	43.8	
	MEAN WET BULB	21.6	26.9	26.5	34.6	43.9	50.1	54.7	52.1	47.1	31.8	30.7	14.6	36.2	
	MEAN DEW POINT	13.0	18.7	15.3	28.1	33.5	42.1	45.5	40.9	34.9	25.7	18.7	8.2	27.1	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	4	6	10	3	0	0	0	0	23
	MAXIMUM <= 32°	11	1	6	2	0	0	0	0	0	6	0	19	45	
MINIMUM <= 32°	29	26	26	26	9	0	0	0	5	27	25	31	204		
MINIMUM <= 0°	5	0	4	0	0	0	0	0	0	0	0	13	22		
H/C	HEATING DEGREE DAYS	1209	931	979	745	371	173	34	59	198	860	790	1523	7872	
	COOLING DEGREE DAYS	0	0	0	0	4	17	92	76	32	0	0	0	221	
RH	MEAN (PERCENT)	60	62	55	69	53	60	54	49	47	69	49	68	58	
	HOUR 05 LST	64	69	68	83	73	76	76	73	71	78	62	70	72	
	HOUR 11 LST	52	50	41	54	33	41	34	26	29	56	34	61	43	
	HOUR 17 LST	61	60	44	57	34	46	37	29	33	69	44	69	49	
	HOUR 23 LST	66	70	66	81	72	74	73	67	62	76	56	71	70	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	1	1	3	4	2	1	0	0	1	6	0	1	20	
	THUNDERSTORMS	0	0	0	1	5	6	7	11	2	0	0	0	32	
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.)	24.73	24.63	24.50	24.64	24.71	24.68	24.81	24.79	24.80	24.67	24.73	24.65	24.70	
	MEAN SEA-LEVEL PRESS. (IN.)	30.15	29.96	29.84	29.93	29.92	29.85	29.96	29.95	29.99	29.99	30.05	30.11	29.98	
WINDS	RESULTANT SPEED (MPH)	10.5	9.7	7.8	2.3	3.8	2.2	1.0	2.1	1.5	2.7	10.8	8.3	5.1	
	RES. DIR. (TENS OF DEGS.)	23	23	24	27	26	26	30	26	25	26	23	23	24	
	MEAN SPEED (MPH)	14.3	12.0	13.3	10.6	10.1	9.4	7.1	7.9	8.2	10.6	12.9	12.3	10.7	
	PREVAIL.DIR.(TENS OF DEGS.)	22	22	22	21	24	22	24	24	21	23	22	22	22	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	45	38	46	41	41	43	40	45	48	38	46	38	48	
	DIR. (TENS OF DEGS.)	22	23	25	01	26	25	33	24	11	21	22	21	11	
	DATE OF OCCURRENCE	02	25	05	04	12	06	03	06	20	31	21	12	SEP 20	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	56	49	58	49	59	54	52	55	68	47	58	48	68	
DIR. (TENS OF DEGS.)	23	23	25	01	25	25	31	34	07	22	23	22	07		
DATE OF OCCURRENCE	02	25	05	04	12	06	19	03	20	27	21	12	SEP 20		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	1.08	0.28	1.00	2.05	0.43	2.23	3.45	1.34	1.62	1.27	0.05	0.97	15.77	
	GREATEST 24-HOUR (IN.)	0.31	0.23	0.88	0.78	0.22	0.57	1.74	0.47	1.12	0.47	0.04	0.43	1.74	
	DATE OF OCCURRENCE	24+	09	23	25-26	25	13	02-03	14-15	20-21	04-05	23	25-26	JUL 02-03	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	7	4	3	13	9	15	11	9	5	12	2	10	100	
PRECIPITATION 0.10	4	0	2	7	1	6	7	5	3	5	0	4	44		
PRECIPITATION 1.00	0	0	0	0	0	0	1	0	0	0	0	0	1		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	16.4	4.1	17.5	16.5	T	0.0	0.0	0.0	1.3	13.8	0.6	19.5	89.7	
	GREATEST 24-HOUR (IN.)	4.4	3.2	10.6	4.9	T	0.0	0.0	0.0	1.3	5.2	0.5	6.3	10.6	
	DATE OF OCCURRENCE	03	09	23	04	01	0	0	0	30	09	23	26	MAR 23	
	MAXIMUM SNOW DEPTH (IN.)	8	3	9	5	0	0	0	0	0	2	1	9	9	
	DATE OF OCCURRENCE	26	10	24+	05+						11+	23	27+	DEC 27+	
	NUMBER OF DAYS WITH:														
SNOWFALL >= 1.0	6	1	3	6	0	0	0	0	1	3	0	7	27		

NORMALS, MEANS, AND EXTREMES CASPER (KCPR)

LATITUDE: 42 ° 53'N **LONGITUDE:** -106 ° 28'W **ELEVATION (FT):** GRND: 5318 BARO: 5351 **TIME ZONE:** MOUNTAIN (UTC -7) **WBAN: 24089**

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	32.3	37.0	46.9	56.1	66.4	78.8	86.8	85.3	73.4	59.5	42.6	33.6	58.2
	MEAN DAILY MAXIMUM	61	33.7	37.9	45.8	56.1	66.8	78.4	87.7	85.8	74.2	60.3	44.8	35.2	58.9
	HIGHEST DAILY MAXIMUM	59	60	68	75	84	95	102	104	102	97	87	72	63	104
	YEAR OF OCCURRENCE		1971	1982	2004	1992	2003	1990	2006	1979	1995	1993	1999	1995	JUL 2006
	MEAN OF EXTREME MAXS.	61	50.7	54.9	65.4	75.7	84.5	93.1	97.7	95.7	90.0	78.9	63.6	52.2	75.2
	NORMAL DAILY MINIMUM	30	12.2	16.4	23.1	29.3	37.9	46.6	53.2	51.8	41.7	31.8	21.3	14.0	31.6
	MEAN DAILY MINIMUM	61	13.0	16.5	21.6	29.3	38.4	46.8	54.2	52.5	42.4	32.5	22.4	15.2	32.1
	LOWEST DAILY MINIMUM	59	-40	-32	-21	-6	16	28	30	33	16	-3	-21	-41	-41
	YEAR OF OCCURRENCE		1972	2006	1965	1997	1953	1969	1972	1977	1983	1971	1985	1990	DEC 1990
	MEAN OF EXTREME MINS.	61	-13.7	-8.4	-0.1	13.7	26.3	35.8	43.8	41.3	28.6	16.0	-0.8	-10.6	14.3
	NORMAL DRY BULB	30	22.3	26.7	35.0	42.7	52.1	62.7	70.0	68.6	57.6	45.7	32.0	23.8	44.9
	MEAN DRY BULB	61	23.3	27.2	33.7	42.7	52.6	62.8	71.0	69.2	58.3	46.4	33.6	25.3	45.5
	MEAN WET BULB	26	20.3	22.2	28.2	34.7	42.9	49.4	54.2	52.4	44.8	36.0	26.7	20.8	36.1
	MEAN DEW POINT	25	15.2	17.1	22.6	27.7	36.6	42.4	46.4	44.1	37.2	28.9	21.5	15.0	29.6
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.0	*	4.7	13.2	11.5	1.8	0.0	0.0	0.0	31.2
	MAXIMUM <= 32	30	13.0	8.3	3.4	1.2	*	0.0	0.0	0.0	0.1	0.9	6.6	12.1	45.6
MINIMUM <= 32	30	29.3	26.0	26.4	19.1	6.3	0.2	*	0.0	3.6	15.0	25.0	28.3	179.2	
MINIMUM <= 0	30	6.7	3.6	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	1.8	5.0	18.4	
H/C	NORMAL HEATING DEG. DAYS	30	1312	1073	921	661	393	118	16	25	233	582	975	1262	7571
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	3	64	182	152	27	0	0	0	428
RH	NORMAL (PERCENT)	30	65	65	62	59	58	52	46	45	50	57	62	64	57
	HOURLY 05 LST	30	69	71	74	76	80	76	71	69	68	69	69	69	72
	HOURLY 11 LST	30	60	58	53	47	44	37	32	32	37	46	54	58	47
	HOURLY 17 LST	30	63	57	47	43	41	33	27	26	31	42	57	62	44
	HOURLY 23 LST	30	70	70	71	69	70	64	56	54	59	65	67	67	65
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	46	1.0	0.9	1.3	1.4	0.9	0.5	0.3	0.2	0.7	1.4	1.1	0.8	10.5
	THUNDERSTORMS	61	0.0	0.0	0.3	1.3	5.8	7.9	8.5	6.5	2.9	0.5	0.0	0.0	33.7
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)	46	5.3	5.2	5.4	5.4	5.3	4.2	3.4	3.5	3.6	4.1	5.0	4.9	4.6
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.8	4.8	5.1	5.0	4.8	3.9	3.4	3.2	3.4	4.0	4.7	4.5	4.3
	MEAN NO. DAYS WITH: CLEAR	46	6.9	6.3	5.6	5.5	5.7	9.9	13.5	12.9	12.8	11.1	7.0	8.0	105.2
	PARTLY CLOUDY	46	8.0	8.4	8.9	8.9	10.6	11.2	10.8	10.7	8.5	7.9	8.3	8.1	110.3
	CLOUDY	46	16.1	13.5	16.5	15.6	14.8	8.9	6.1	6.8	8.0	11.4	14.1	14.2	146.0
PR	MEAN STATION PRESSURE(IN)	26	24.68	24.67	24.64	24.65	24.68	24.72	24.79	24.79	24.77	24.74	24.70	24.68	24.71
	MEAN SEA-LEVEL PRES. (IN)	26	30.09	30.06	29.97	29.92	29.88	29.87	29.91	29.93	29.97	30.02	30.05	30.10	29.98
WINDS	MEAN SPEED (MPH)	26	15.5	13.9	12.8	11.7	10.9	10.5	9.4	9.6	10.1	11.3	13.8	15.2	12.1
	PREVAIL.DIR.(TENS OF DEGS)	31	23	23	23	25	25	25	25	23	25	23	23	23	23
	MAXIMUM 2-MINUTE: SPEED (MPH)	13	64	51	49	49	45	54	52	46	48	51	51	53	64
	DIR. (TENS OF DEGS)		22	20	24	23	23	26	29	26	11	24	25	22	22
	YEAR OF OCCURRENCE		2008	1999	1999	2008	2005	2002	2005	2006	2009	2004	1998	2008	JAN 2008
	MAXIMUM 3-SECOND SPEED (MPH)	13	78	66	60	64	59	66	70	56	68	63	63	68	78
	DIR. (TENS OF DEGS)		23	20	25	24	25	27	05	27	07	02	22	22	23
	YEAR OF OCCURRENCE		2008	1999	1999	2008	2009	2002	2006	1998	2009	2006	2007	2008	JAN 2008
PRECIPITATION	NORMAL (IN)	30	0.58	0.64	0.90	1.52	2.38	1.43	1.29	0.73	0.98	1.14	0.82	0.62	13.03
	MAXIMUM MONTHLY (IN)	59	1.42	1.42	2.43	3.92	6.46	4.69	3.54	2.66	3.40	4.62	2.72	3.71	6.46
	YEAR OF OCCURRENCE		1987	1987	1954	1974	1978	2003	2007	1979	1982	1998	1983	1982	MAY 1978
	MINIMUM MONTHLY (IN)	59	T	.13	0.12	0.08	0.30	0.03	0.09	0.02	0.07	T	0.05	0.03	T
	YEAR OF OCCURRENCE		1952	2005	2004	1992	1966	1956	1991	1950	1956	1965	2009	1952	OCT 1965
	MAXIMUM IN 24 HOURS (IN)	59	0.82	0.60	1.00	3.00	2.61	2.34	2.07	2.22	2.04	2.49	1.21	1.64	3.00
	YEAR OF OCCURRENCE		1987	1995	1958	1974	1978	1982	1983	2007	1989	1962	1983	1982	APR 1974
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	7.6	7.5	9.4	10.4	11.4	8.9	8.1	6.0	6.8	7.3	7.2	7.7	98.3
PRECIPITATION >= 1.00	30	0.0	0.0	0.0	0.1	0.4	0.2	0.3	*	0.1	0.1	0.0	0.1	1.3	
SNOWFALL	NORMAL (IN)	30	11.1	10.7	12.3	13.8	4.9	0.1	0.0	0.0	2.0	7.1	12.0	11.9	85.9
	MAXIMUM MONTHLY (IN)	58	24.0	23.8	36.2	56.3	24.6	3.0	T	T	11.5	21.0	37.1	62.8	62.8
	YEAR OF OCCURRENCE		1987	1952	1975	1973	1978	1969	1996	2006	1982	2003	1983	1982	DEC 1982
	MAXIMUM IN 24 HOURS (IN)	58	14.0	11.0	14.6	16.5	14.1	3.0	T	T	6.9	16.0	14.3	31.1	31.1
	YEAR OF OCCURRENCE		1987	1987	1954	1973	1950	1969	1994	1993	1995	1998	1983	1982	DEC 1982
	MAXIMUM SNOW DEPTH (IN)	50	15	12	12	20	12	2	0	0	6	12	14	21	21
	YEAR OF OCCURRENCE		1949	1987	1954	1973	1973	1995			1965	1971	1979	1982	DEC 1982
	NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	3.7	3.9	3.7	3.2	1.2	0.0	0.0	0.0	0.5	2.0	3.4	3.2	24.8

PRECIPITATION (inches) 2009 CASPER (KCPR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	0.81	0.63	1.19	0.35	2.82	0.10	0.85	0.65	0.10	0.64	0.74	0.37	9.25
1981	0.46	0.23	0.77	1.56	3.51	0.37	1.27	0.50	0.23	0.76	0.75	0.43	10.84
1982	0.41	0.33	0.60	1.25	2.10	4.15	1.92	0.88	3.40	1.18	0.55	3.71	20.48
1983	0.42	0.35	2.29	2.28	1.40	3.76	2.61	0.75	0.20	0.88	2.72	0.75	18.41
1984	1.19	0.48	1.59	2.23	1.33	1.34	2.26	0.25	0.50	0.71	0.70	0.78	13.36
1985	0.79	0.61	0.52	1.25	1.37	1.32	1.57	0.09	1.09	0.46	1.56	1.05	11.68
1986	0.36	0.89	0.55	1.89	1.33	4.06	0.88	0.27	1.31	2.63	1.48	0.27	15.92
1987	1.42	1.42	1.43	0.35	1.40	0.70	1.93	1.80	0.59	0.55	0.77	0.63	12.99
1988	0.28	0.79	0.71	0.71	1.24	0.28	0.55	0.16	0.74	0.12	0.48	0.50	6.56
1989	0.16	1.37	0.49	0.72	2.77	1.95	0.28	1.00	3.22	1.17	0.34	0.31	13.78
1990	0.27	0.70	1.13	1.35	1.09	0.66	2.15	1.89	0.52	0.90	1.27	0.61	12.54
1991	0.54	0.38	0.45	1.42	4.75	1.70	0.09	0.61	0.40	0.55	1.18	0.34	12.41
1992	0.17	0.35	1.27	0.08	2.05	0.79	1.51	0.86	0.29	0.22	0.90	0.88	9.37
1993	0.72	1.00	0.52	2.37	2.85	2.79	0.86	1.14	0.97	1.14	0.87	0.68	15.91
1994	0.60	0.82	0.57	0.90	0.37	0.22	2.66	0.85	0.68	4.17	1.79	0.37	14.00
1995	0.84	0.95	0.50	1.66	6.31	3.62	0.43	0.04	2.56	1.07	0.62	0.34	18.94
1996	0.94	0.24	0.56	1.72	1.29	0.83	1.26	.32	.47	1.64	1.06	.51	10.84
1997	0.57	0.69	0.92	1.79	1.99	1.21	1.46	0.76	1.21	0.83	0.08	0.53	12.04
1998	0.49	0.56	0.52	1.00	0.73	2.67	1.99	0.59	0.79	4.62	0.42	0.10	14.48
1999	0.22	0.30	0.45	1.53	2.29	1.78	0.24	0.11	1.30	0.25	0.36	0.10	8.93
2000	0.46	0.54	0.58	1.18	3.32	0.86	0.22	0.95	1.65	0.38	0.20	0.36	10.70
2001	0.31	0.38	0.18	1.07	0.63	0.29	1.19	0.31	1.09	0.42	0.76	0.13	6.76
2002	0.04	0.17	0.64	0.77	1.15	0.51	1.07	0.53	1.12	0.59	0.24	0.19	7.02
2003	0.10	0.51	0.97	1.54	0.51	4.69	0.40	1.68	1.38	0.60	0.30	0.39	13.07
2004	0.03	0.64	0.12	1.17	1.07	0.54	2.58	0.44	1.75	0.87	0.58	0.07	9.86
2005	0.15	0.13	0.83	1.04	2.63	0.41	1.32	2.24	0.23	1.18	0.56	0.29	11.01
2006	0.73	0.66	0.76	1.03	0.94	0.68	0.82	1.45	1.40	0.94	0.84	0.57	10.82
2007	0.52	0.26	1.36	0.37	2.86	0.72	3.54	2.57	0.71	1.08	0.05	0.74	14.78
2008	0.30	0.37	0.69	1.27	4.26	0.57	0.66	0.72	0.74	1.58	0.36	0.38	11.90
2009	1.08	0.28	1.00	2.05	0.43	2.23	3.45	1.34	1.62	1.27	0.05	0.97	15.77
POR= 61 YRS	0.51	0.55	0.89	1.41	2.07	1.39	1.22	0.73	0.96	1.02	0.69	0.54	11.98

WBAN : 24089

AVERAGE TEMPERATURE (°F) 2009 CASPER (KCPR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	16.4	27.5	31.0	44.2	51.6	64.4	72.2	66.4	59.7	46.5	33.8	34.3	45.7
1981	31.4	29.9	38.0	48.3	51.4	64.3	71.8	69.2	62.0	44.4	39.0	27.3	48.1
1982	20.1	25.7	36.6	41.1	51.1	60.3	70.7	73.7	56.9	45.2	32.2	23.3	44.7
1983	31.2	31.5	36.3	38.0	48.4	60.4	71.2	74.8	60.3	49.7	31.2	10.9	45.3
1984	21.9	27.5	34.4	39.1	54.5	61.5	70.4	71.2	52.5	40.1	34.8	22.9	44.2
1985	16.1	19.7	33.3	45.5	55.3	61.3	71.6	66.7	53.4	45.3	20.3	21.3	42.5
1986	31.6	28.5	42.8	44.4	50.9	67.4	69.0	69.3	55.5	45.9	32.0	26.2	47.0
1987	23.1	28.4	32.4	49.7	57.5	64.8	70.7	66.2	58.7	46.7	35.5	23.8	46.5
1988	20.3	27.4	32.0	46.0	54.2	72.6	73.5	69.8	58.0	49.8	34.0	26.3	47.0
1989	26.1	11.9	35.6	44.9	54.0	61.2	73.4	69.0	58.2	46.3	37.3	24.1	45.2
1990	29.1	27.9	35.4	44.3	50.5	64.6	69.8	68.5	63.2	46.3	36.9	15.8	46.0
1991	21.3	35.5	36.5	42.0	51.8	65.0	71.5	72.0	59.5	46.0	30.4	27.9	46.6
1992	28.1	36.3	40.7	49.0	56.2	63.7	67.3	68.4	61.1	50.7	32.3	21.9	48.0
1993	21.5	19.6	38.3	43.9	56.2	60.3	66.7	68.0	58.2	47.4	29.4	28.9	44.9
1994	29.0	25.2	41.5	46.8	61.0	68.4	71.4	73.4	62.8	45.6	32.1	31.8	49.1
1995	27.3	30.9	36.9	40.4	48.4	59.4	69.0	72.6	58.0	44.0	37.2	28.4	46.0
1996	20.9	28.3	30.8	43.3	50.3	64.3	69.9	67.9	55.8	44.1	32.5	26.0	44.5
1997	21.3	24.7	37.0	34.9	51.6	63.2	69.0	68.4	60.0	46.9	32.0	22.8	44.3
1998	25.6	31.2	31.8	42.7	54.4	56.0	72.7	69.9	64.7	44.8	38.4	24.5	46.4
1999	27.6	32.9	37.7	39.1	49.9	60.9	71.8	70.0	54.4	47.2	43.8	29.9	47.1
2000	27.3	33.8	36.8	44.4	54.9	61.2	72.7	72.4	57.2	45.9	21.2	19.9	45.6
2001	24.6	21.8	35.2	45.0	54.9	65.0	73.8	72.1	61.3	45.7	38.7	25.3	47.0
2002	24.0	26.7	25.8	42.8	50.3	65.4	73.6	66.6	58.6	38.3	33.0	28.5	44.5
2003	31.2	22.2	35.4	45.5	53.3	59.5	73.3	72.4	55.3	49.0	29.4	29.0	46.3
2004	28.0	27.0	37.4	44.0	53.3	60.1	68.3	64.5	58.6	47.0	33.0	29.8	45.9
2005	28.2	32.2	36.0	42.4	50.7	61.9	72.7	66.3	61.1	48.3	37.7	24.7	46.9
2006	30.9	23.5	34.2	46.6	54.4	67.7	75.3	69.8	54.6	44.4	36.0	27.5	47.1
2007	19.1	27.8	40.6	43.0	54.2	64.0	74.8	70.6	59.2	47.5	35.6	20.9	46.4
2008	20.5	27.8	32.3	39.7	49.7	59.3	71.6	68.3	55.8	44.9	38.8	20.3	44.1
2009	25.8	31.6	33.2	40.0	52.9	59.5	66.7	65.4	59.3	37.0	38.4	15.7	43.8
POR= 61 YRS	23.3	27.2	33.7	42.7	52.6	62.8	71.0	69.2	58.3	46.4	33.6	25.3	45.5

HEATING DEGREE DAYS (base 65°F) 2009 CASPER (KCPR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1980-81	0	44	176	566	931	943	1036	979	829	494	418	86	6502
1981-82	15	17	129	633	775	1161	1385	1097	873	709	423	173	7390
1982-83	4	0	276	604	977	1287	1040	930	881	802	506	156	7463
1983-84	22	0	190	468	1009	1673	1331	1082	941	769	332	146	7963
1984-85	0	0	386	767	899	1298	1512	1264	973	578	297	151	8125
1985-86	0	51	355	606	1337	1348	1031	1017	678	613	434	37	7507
1986-87	4	7	282	586	986	1196	1293	1018	1001	453	235	67	7128
1987-88	26	59	204	561	880	1271	1377	1084	1016	564	339	21	7402
1988-89	2	15	223	465	924	1191	1201	1484	905	597	336	162	7505
1989-90	0	14	214	574	825	1261	1107	1032	912	614	442	116	7111
1990-91	22	3	111	570	835	1523	1349	819	875	681	403	49	7240
1991-92	5	0	192	587	1031	1140	1140	825	747	478	283	81	6509
1992-93	33	71	136	443	972	1328	1341	1266	821	625	266	168	7470
1993-94	40	25	208	543	1063	1111	1108	1109	720	544	142	31	6644
1994-95	12	11	105	595	980	1023	1158	948	862	729	507	188	7118
1995-96	17	3	259	645	825	1129	1361	1059	1056	649	447	66	7516
1996-97	2	24	279	644	968	1202	1347	1123	863	897	410	76	7835
1997-98	33	25	177	556	981	1301	1212	942	1023	664	319	266	7499
1998-99	0	1	104	618	792	1250	1149	891	840	768	460	146	7019
1999-00	7	6	316	548	631	1082	1162	900	865	615	314	144	6590
2000-01	0	0	258	583	1306	1390	1247	1206	920	596	312	100	7918
2001-02	0	0	154	588	781	1225	1265	1064	1207	661	457	83	7485
2002-03	1	45	217	823	952	1123	1037	1192	911	576	378	175	7430
2003-04	0	26	295	490	1061	1108	1140	1096	850	620	360	158	7204
2004-05	26	74	207	553	951	1084	1134	913	890	670	436	152	7090
2005-06	7	41	152	513	813	1241	1051	1159	947	542	332	17	6815
2006-07	4	15	313	631	863	1153	1414	1037	750	653	333	107	7273
2007-08	0	16	216	534	872	1362	1374	1075	1007	755	466	177	7854
2008-09	8	26	280	618	780	1380	1209	931	979	745	371	173	7500
2009-	34	59	198	860	790	1523							

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COOLING DEGREE DAYS (base 65°F) 2009 CASPER (KCPR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1980	0	0	0	0	1	64	232	93	20	0	0	0	410
1981	0	0	0	0	0	73	235	155	45	0	0	0	508
1982	0	0	0	0	0	41	188	275	37	0	0	0	541
1983	0	0	0	0	0	24	220	309	56	0	0	0	609
1984	0	0	0	0	14	48	175	197	15	0	0	0	449
1985	0	0	0	0	4	48	210	109	13	0	0	0	384
1986	0	0	0	0	0	117	135	150	0	0	0	0	402
1987	0	0	0	0	8	68	211	100	20	0	0	0	407
1988	0	0	0	0	12	252	273	170	20	0	0	0	727
1989	0	0	0	0	0	56	268	148	18	0	0	0	490
1990	0	0	0	0	0	113	176	120	65	0	0	0	474
1991	0	0	0	0	1	54	214	225	31	4	0	0	529
1992	0	0	0	4	18	50	108	186	27	2	0	0	395
1993	0	0	0	0	1	33	98	123	10	4	0	0	269
1994	0	0	0	2	25	141	218	278	46	0	0	0	710
1995	0	0	0	0	0	28	150	247	57	1	0	0	483
1996	0	0	0	0	0	49	160	121	9	0	0	0	339
1997	0	0	0	0	0	32	161	138	32	0	0	0	363
1998	0	0	0	0	0	5	247	162	104	0	0	0	518
1999	0	0	0	0	0	30	226	167	4	0	0	0	427
2000	0	0	0	0	7	36	244	235	33	0	0	0	555
2001	0	0	0	0	5	105	279	225	48	0	0	0	662
2002	0	0	0	0	7	106	272	103	32	0	0	0	520
2003	0	0	0	0	22	17	262	263	12	0	0	0	576
2004	0	0	0	0	3	17	136	67	26	0	0	0	249
2005	0	0	0	0	0	65	251	91	42	3	0	0	452
2006	0	0	0	0	10	107	330	168	5	0	0	0	620
2007	0	0	0	0	6	82	308	200	47	0	0	0	643
2008	0	0	0	0	0	12	219	136	8	0	0	0	375
2009	0	0	0	0	4	17	92	76	32	0	0	0	221

SNOWFALL (inches) 2009 CASPER (KCPR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1980-81	0.0	0.0	0.0	6.1	10.0	7.9	9.9	7.3	5.0	10.3	0.4	0.0	56.9
1981-82	0.0	0.0	0.0	5.8	7.3	6.1	10.0	6.1	9.3	17.8	6.3	T	68.7
1982-83	0.0	0.0	11.5	11.3	2.5	62.8	4.4	6.2	27.7	23.3	1.9	0.0	151.6
1983-84	0.0	0.0	0.3	1.3	37.1	12.0	19.4	7.6	26.1	33.6	5.7	0.0	143.1
1984-85	0.0	0.0	3.1	9.4	6.1	10.2	14.7	10.5	9.7	11.6	0.0	0.0	75.3
1985-86	0.0	0.0	7.0	4.8	28.3	14.4	6.2	13.4	6.1	16.3	9.4	0.0	105.9
1986-87	0.0	0.0	0.0	16.1	17.2	5.5	24.0	22.7	16.4	3.3	T	0.0	105.2
1987-88	0.0	0.0	0.0	5.0	3.4	11.8	5.9	13.7	13.6	8.9	4.9	0.0	67.2
1988-89	0.0	0.0	T	T	7.5	10.1	4.9	21.5	6.3	6.0	T	T	56.3
1989-90	0.0	T	0.0	6.4	3.2	5.6	4.4	12.8	12.4	4.6	2.5	T	51.9
1990-91	T	T	0.0	7.1	13.8	9.5	10.2	5.9	5.9	15.1	0.4	T	67.9
1991-92	0.0	0.0	T	7.6	16.8	4.7	3.6	3.7	10.3	T	T	T	46.7
1992-93	0.0	T	0.0	1.2	16.5	13.2	12.6	12.5	5.4	19.5	0.4	0.0	81.3
1993-94	0.0	T	0.4	5.0	11.2	12.2	11.2	12.1	6.8	4.8	0.0	0.0	63.7
1994-95	T	0.0	4.9	14.7	22.4	6.4	10.8	16.9	4.5	10.2	8.0	2.1	100.9
1995-96	0.0	0.0	7.1	13.4	8.7	6.6	16.2	6.1	8.3	13.6			
1996-97	T			14.1	13.9								
1997-98						23.8	11.0	7.7	9.1	5.5			
1998-99				20.2	6.0	4.0	4.9	5.0	8.0	20.8	1.0	0.0	
1999-00	0.0	0.0	T	6.0	3.6	2.6	13.2	8.1	7.6	18.9	0.0	0.0	60.0
2000-01	0.0	0.0	11.5	3.1	11.1	14.2	5.1	11.3	2.1	4.7	3.8	0.0	66.9
2001-02	0.0	0.0	0.0	2.4	8.7	3.8	1.4	6.4	14.2	10.8	8.3	0.0	56.0
2002-03	0.0	0.0	0.0	7.8	6.9	2.4	0.4	9.2	19.4	7.0	0.4	0.0	53.5
2003-04	0.0	0.0	2.5	21.0	5.2	11.2	0.8	18.9	1.5	6.0	1.0	0.0	68.1
2004-05	0.0	0.0	0.0	3.5	15.3	1.9	9.2	2.4	10.0	13.5	0.0	T	55.8
2005-06	0.0	0.0	0.0	3.5	10.5	4.8	11.0	16.0	15.8	8.3	5.0	0.0	74.9
2006-07	0.0	T	0.0	4.9	4.4	8.9	13.9	4.3	14.1	3.7	11.3	T	65.5
2007-08	0.0	0.0	0.0	3.0	0.8	16.1	5.5	10.1	9.9	12.6	5.3	0.0	63.3
2008-09	0.0	0.0	0.0	9.4	0.8	11.2	16.4	4.1	17.5	16.5	T	0.0	75.9
2009-	0.0	0.0	1.3	13.8	0.6	19.5							
POR= 61 YRS	T	T	1.3	6.5	9.6	10.3	10.0	9.8	12.7	11.9	3.8	0.3	76.2

WBAN : 24089

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. 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.</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 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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED HISTORY GO TO "MULTI-NETWORK MEDADATA SYSTEM", URL IS: https://mi3.ncdc.noaa.gov/mi3qry/login.cfm</p> <p>NOTE: 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>
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2009 CASPER WYOMING (KCPR)

Casper is located in the central portion of Wyoming in the North Platte River Valley at an elevation of about 5,300 feet. The country immediately surrounding Casper is mostly rolling and hilly with considerable flat prairie land in each direction except toward the south where Casper Mountain rises some 3,500 feet above the valley floor. The prairie land is used mainly for grazing.

The National Weather Service Office is located at Natrona County International Airport, some 8 miles west-northwest of the Casper Post Office and about 200 feet higher in elevation.

The climate of Casper is semi-arid. Most of the air masses reaching this area move in from the Pacific and the mountains to the west are effective moisture barriers. About 70 percent of the annual precipitation occurs during the growing season of late spring and summer, mostly in thunderstorms. Monthly snowfall amounts are unusually uniform from November through February, and a bit heavier in March and April. Snow has occurred as early in the season as September and as late as early June.

Casper experiences large diurnal and annual temperature ranges. This is due to the advent of both warm and cold air masses and the relatively high elevation which permits rapid incoming and outgoing radiation. The mean daily temperature averages about 71 degrees in summer and 22 degrees in winter. Temperatures during winter months average a few degrees higher and summer temperatures average several degrees cooler than locations in the Missouri Valley to the east.

Windy days are quite frequent during winter and spring months. Usually the stronger winds are from the southwest and this tends to raise the temperature because the air is moving downslope.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is September 22 and the average last occurrence in the spring is May 22.

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