

1998

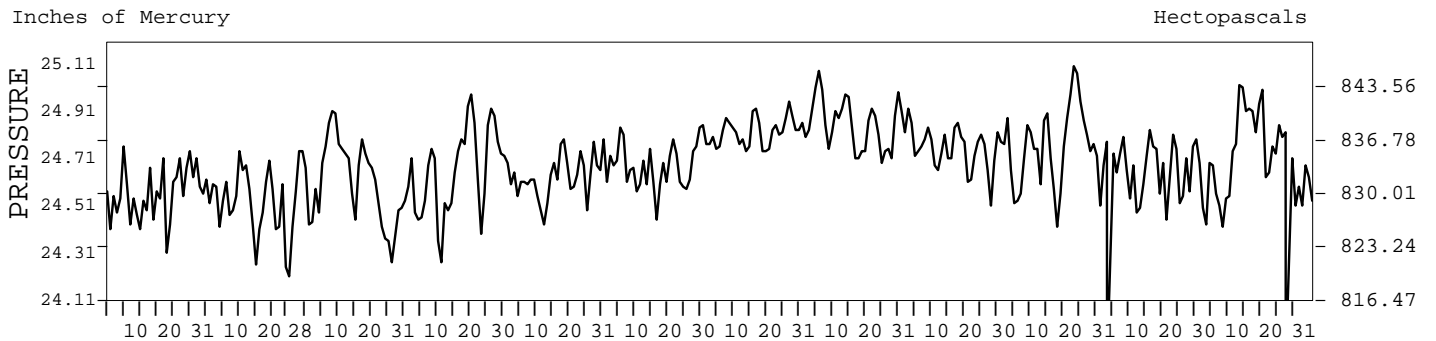
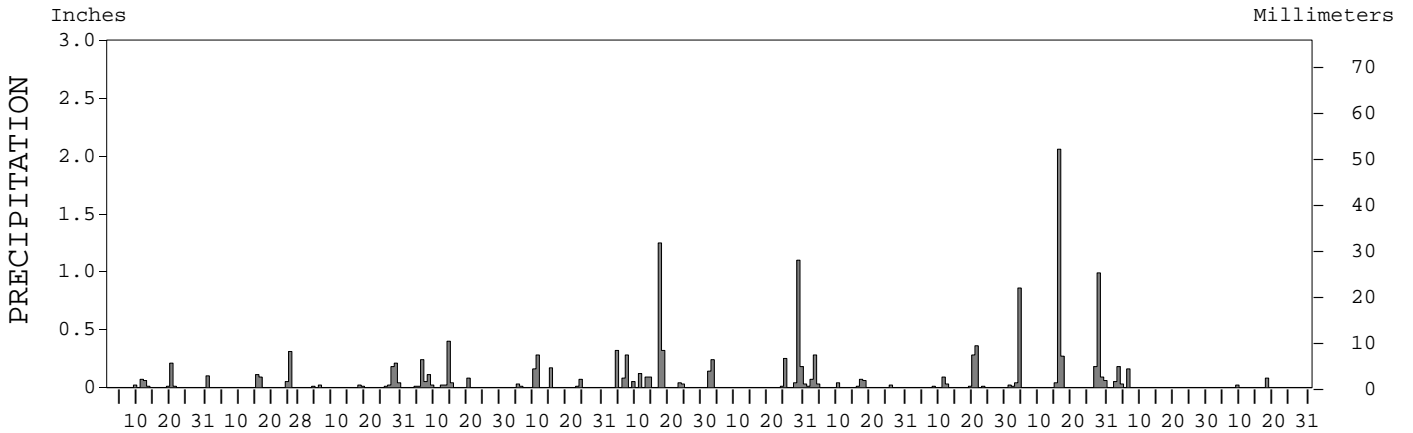
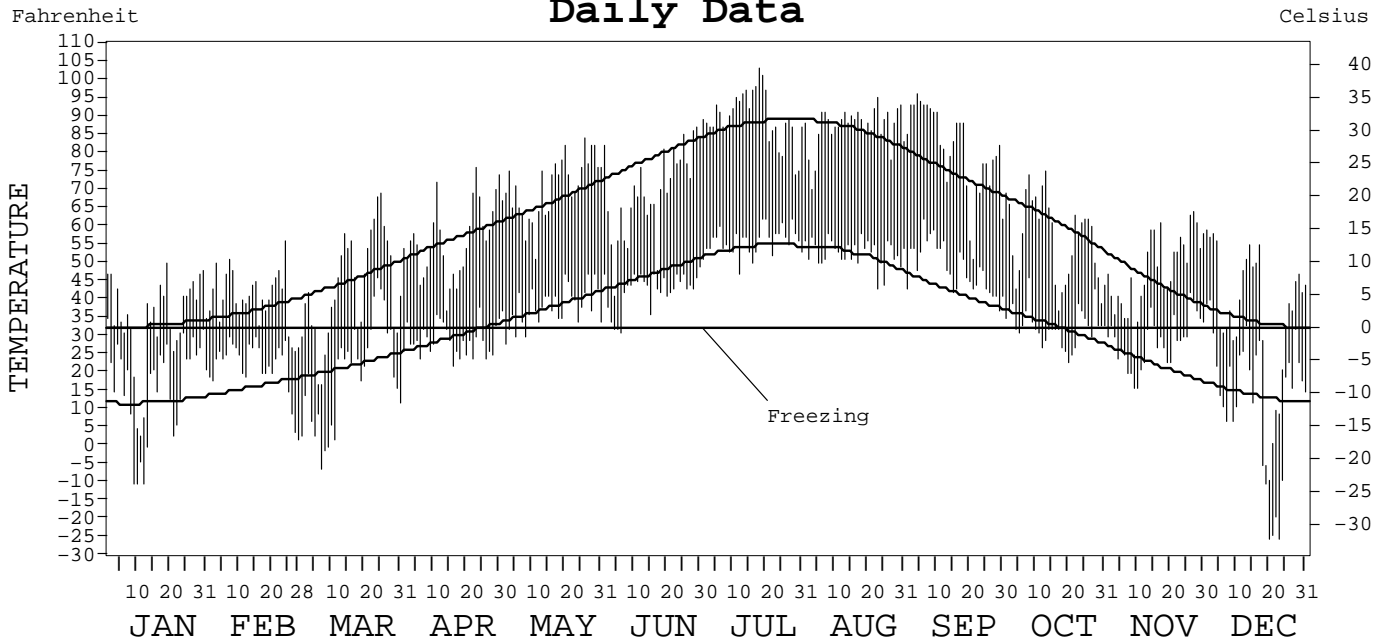
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-5779

CASPER,
WYOMING (CPR)

Daily Data



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Thomas R. Karl

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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 ASHEVILLE, NORTH CAROLINA

METEOROLOGICAL DATA FOR 1998

CASPER, WY (CPR)

LATITUDE: 42° 53' 51" N LONGITUDE: 106° 28' 23" W ELEVATION (FT): GRND: 5338 BARO: 5323 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	34.6	40.4	43.6	56.3	70.7	69.5	89.5	87.1	80.9	56.8	48.1	35.9	59.4	
	HIGHEST DAILY MAXIMUM	50	56	69	76	84	87	103	95	96	75	64	59	103	
	DATE OF OCCURRENCE	19	24	25	23	26	29	18	23	04	13	27	01	JUL 18	
	MEAN DAILY MINIMUM	16.6	21.9	19.9	29.0	38.1	42.5	55.8	52.7	48.5	32.7	28.6	13.0	33.3	
	LOWEST DAILY MINIMUM	-10	2	-6	22	28	31	47	43	37	23	16	-25	-25	
	DATE OF OCCURRENCE	12+	28	07	16	02	06	12	23	29	20	10+	23+	DEC 23+	
	AVERAGE DRY BULB	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	
	MEAN WET BULB	23.2	27.3	27.9	36.3	44.4	47.6	59.5	56.8	53.0		32.5			
	MEAN DEW POINT	17.0	21.5	22.3	27.9	32.8	40.0	50.3	47.3	44.0		24.1			
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	0	14	10	9	0	0	0	0	33
	MAXIMUM ≤ 32°	11	4	9	0	0	0	0	0	0	0	1	12	37	
	MINIMUM ≤ 32°	30	28	27	23	4	3	0	0	0	16	21	28	180	
	MINIMUM ≤ 0°	5	0	3	0	0	0	0	0	0	0	0	7	15	
H/C	HEATING DEGREE DAYS	1212	942	1023	664	319	266	0	1	104	618	792	1250	7191	
	COOLING DEGREE DAYS	0	0	0	0	0	5	247	162	104	0	0	0	518	
RH	MEAN (PERCENT)	69	71	71	61	49	61	52	51	54	77	61	58	61	
	HOUR 05 LST	71	78	81	81	73	81	79	77	72	86	68	66	76	
	HOUR 11 LST	64	63	62	44	34	47	37	35	41	67	55	50	50	
	HOUR 17 LST	68	62	58	42	29	46	33	30	37	68	57	53	49	
	HOUR 23 LST	75	78	81	76	60	74	60	64	64	86	67	63	71	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	1	1	2	2	0	2	1	1	0	6	3	1	20	
	THUNDERSTORMS	0	0	0	1	0	8	5	6	4	1	0	0	25	
CLOUDINESS	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.)	24.56	24.52	24.61	24.65	24.64	24.68	24.82	24.86	24.75		24.65			
	MEAN SEA-LEVEL PRESS. (IN.)	29.94	29.85	29.96	29.92	29.82	29.86		30.00			29.96			
WINDS	RESULTANT SPEED (MPH)	10.9	8.7	5.8	2.3	3.7	3.6	0.7	2.4	2.9		12.0			
	RES. DIR. (TENS OF DEGS.)	23	24	24	27	24	27	25	23	24		23			
	MEAN SPEED (MPH)	13.8	11.8	11.8	9.7	10.7	11.4	8.3	8.9	8.9	9.0	15.2	16.0	11.3	
	PREVAIL. DIR. (TENS OF DEGS.)	22	22	22	23	22	24	23	23	22	23	22	22	22	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	44	38	40	45	41	39	43	38	34	34	51	48	51	
	DIR. (TENS OF DEGS.)	22	21	23	24	22	24	30	27	28	19	25	24	25	
	DATE OF OCCURRENCE	15	24+	25	12	13	26+	18	01	18	13	24	28	NOV 24	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	51	48	52	52	48	47	70	56	49	44	57	56	70	
DIR. (TENS OF DEGS.)	22	22	24	26	23	26	30	27	24	20	26	24	30		
DATE OF OCCURRENCE	15	24	25	12	13	26+	14	01	18	13	24	28	JUL 14		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	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	
	GREATEST 24-HOUR (IN.)	0.22	0.36	0.21	0.40	0.42	1.25	1.10	0.34	0.64	2.33	0.18	0.08	2.33	
	DATE OF OCCURRENCE	19-20	24-25	29	14-15	10-11	17	29	02-03	20-21	16-17	03	18	OCT 16-17	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	8	4	9	11	7	11	8	9	7	11	4	2	91	
PRECIPITATION ≥ 0.10	2	2	2	3	3	5	5	1	2	5	2	0	32		
PRECIPITATION ≥ 1.00	0	0	0	0	0	1	1	0	0	1	0	0	3		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	11.0	7.7	9.1	5.5						20.2	6.0	4.0		
	GREATEST 24-HOUR (IN.)	4.0	5.5	4.0	4.0						16.0	3.0	3.0		
	DATE OF OCCURRENCE	20	24-25	29	14						16	06	18		
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	4	2	3	1							3	2	1		

NORMALS, MEANS, AND EXTREMES

CASPER, WY (CPR)

LATITUDE: 42° 53' 51" N LONGITUDE: 106° 28' 23" W ELEVATION (FT): GRND: 5338 BARO: 5323 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	32.8	37.0	45.2	56.1	66.6	78.6	87.6	85.7	73.8	60.5	44.3	33.9	58.5
	MEAN DAILY MAXIMUM	50	33.1	37.8	45.2	55.9	66.5	78.3	87.1	85.6	74.3	60.6	44.3	35.2	58.7
	HIGHEST DAILY MAXIMUM	48	60	68	74	84	92	102	104	102	97	87	71	63	104
	YEAR OF OCCURRENCE		1971	1982	1986	1992	1984	1990	1954	1979	1995	1993	1983	1995	JUL 1954
	MEAN OF EXTREME MAXS.	50	50.2	54.7	64.9	75.4	83.8	93.0	97.2	95.4	89.9	78.8	63.2	52.2	74.9
	NORMAL DAILY MINIMUM	30	12.0	16.0	21.8	29.5	37.9	46.9	54.0	51.8	41.6	32.2	21.8	13.7	31.6
	MEAN DAILY MINIMUM	50	12.3	16.4	21.5	29.4	38.8	47.5	54.2	52.7	42.6	32.8	22.1	15.2	32.1
	LOWEST DAILY MINIMUM	48	-40	-29	-21	-6	16	28	30	33	16	-3	-21	-41	-41
	YEAR OF OCCURRENCE		1972	1989	1965	1997	1953	1969	1972	1977	1983	1971	1985	1990	DEC 1990
	MEAN OF EXTREME MINS.	50	-15.2	-8.6	-6	13.5	27.1	36.5	43.7	41.5	28.4	16.3	-1.3	-12.1	14.1
	NORMAL DRY BULB	30	22.4	26.5	33.5	42.8	52.3	62.7	70.8	68.7	57.8	46.4	33.1	23.8	45.1
	MEAN DRY BULB	50	22.8	27.0	33.4	42.6	52.7	62.9	70.7	69.2	58.3	46.7	33.2	25.2	45.4
	MEAN WET BULB	15	21.1	23.0	30.0	36.1	44.7	51.8	56.0	54.2	46.7	34.6	28.1	21.5	37.3
	MEAN DEW POINT	15	13.5	16.0	21.7	26.4	35.3	41.5	45.0	41.9	35.7	25.0	20.2	13.9	28.0
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.1	4.2	12.5	10.1	1.2	0.0	0.0	0.0	28.1	
MAXIMUM ≤ 32°	30	13.3	8.7	4.9	1.1	0.1	0.0	0.0	0.0	0.1	0.7	5.6	12.7	47.2	
MINIMUM ≤ 32°	30	29.4	26.1	27.2	19.1	6.8	0.3	*	0.0	3.9	15.1	24.6	28.8	181.3	
MINIMUM ≤ 0°	30	7.0	3.5	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	1.8	5.4	19.4	
H/C	NORMAL HEATING DEG. DAYS	30	1321	1078	977	666	394	139	10	36	250	577	957	1277	7682
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	70	190	151	34	0	0	0	445
RH	NORMAL (PERCENT)	30	64	64	62	58	57	51	44	43	48	54	61	64	56
	HOUR 05 LST	30	68	70	73	75	77	75	69	66	68	67	69	68	70
	HOUR 11 LST	30	59	58	53	47	43	37	32	31	36	44	54	58	46
	HOUR 17 LST	30	60	57	48	41	39	32	26	24	30	40	56	62	43
	HOUR 23 LST	30	68	70	70	68	68	62	54	52	58	62	66	67	64
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	49	0.8	0.7	1.0	1.4	0.9	0.5	0.3	0.3	0.6	1.0	0.9	0.8	9.2
	THUNDERSTORMS	49	0.0	0.0	0.3	1.4	6.3	8.6	8.8	7.0	2.9	0.4	0.1	0.0	35.8
CLOUDINESS	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	47	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	47	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	47	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	24.69	24.69	24.60	24.70	24.70	24.70	24.80	24.80	24.80	23.84	24.70	24.69	24.64
	MEAN SEA-LEVEL PRES. (IN)	15	30.09	30.06	29.97	29.91	29.88	29.87	29.92	29.93	29.98	27.88	30.03	30.10	29.80
WINDS	MEAN SPEED (MPH)	32	16.4	14.9	13.7	12.3	11.5	10.9	10.1	10.4	10.7	12.1	14.6	15.9	12.8
	PREVAIL. DIR (TENS OF DEGS)	20	22	22	22	24	24	24	24	24	24	23	22	22	22
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	2	44	38	48	45	41	39	44	38	39	45	51	48	51
	DIR. (TENS OF DEGS)		21	21	29	24	22	26	24	27	28	26	25	24	25
	YEAR OF OCCURRENCE		1997	1997	1997	1998	1998	1997	1997	1998	1997	1997	1998	1998	NOV 1998
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	2	52	48	55	52	48	47	70	56	49	53	57	56	70
DIR. (TENS OF DEGS)		22	22	29	26	23	26	30	27	24	25	26	24	30	
YEAR OF OCCURRENCE		1997	1998	1997	1998	1998	1998	1998	1998	1998	1997	1998	1998	JUL 1998	
PRECIPITATION	NORMAL (IN)	30	0.55	0.60	0.95	1.56	2.13	1.46	1.26	0.67	0.94	0.97	0.77	0.66	12.52
	MAXIMUM MONTHLY (IN)	48	1.42	1.42	2.43	3.92	6.46	4.15	3.05	2.66	3.40	4.62	2.72	3.71	6.46
	YEAR OF OCCURRENCE		1987	1987	1954	1974	1978	1982	1951	1979	1982	1998	1983	1982	MAY 1978
	MINIMUM MONTHLY (IN)	48	T	0.15	0.25	0.08	0.30	0.03	0.09	0.02	0.07	T	0.07	0.03	T
	YEAR OF OCCURRENCE		1952	1957	1953	1992	1966	1956	1991	1950	1956	1965	1965	1952	OCT 1965
	MAXIMUM IN 24 HOURS (IN)	48	0.82	0.60	1.00	3.00	2.61	2.34	2.07	1.74	2.04	2.49	1.21	1.64	3.00
	YEAR OF OCCURRENCE		1987	1995	1958	1974	1978	1982	1983	1979	1989	1962	1983	1982	APR 1974
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	7.6	8.1	9.4	10.3	10.6	8.8	8.5	5.9	6.5	6.8	6.9	8.1	97.5	
PRECIPITATION ≥ 1.00	30	0.0	0.0	0.0	0.2	0.3	0.2	0.2	*	0.1	0.1	0.0	0.1	1.2	
SNOWFALL	NORMAL (IN)	30	10.6	10.2	13.6	13.3	4.9	0.2	0.0	0.0	1.5	5.9	10.3	11.8	82.3
	MAXIMUM MONTHLY (IN)	47	24.0	23.8	36.2	56.3	24.6	3.0	T	T	11.5	20.2	37.1	62.8	62.8
	YEAR OF OCCURRENCE		1987	1952	1975	1973	1978	1969	1996	1993	1982	1998	1983	1982	DEC 1982
	MAXIMUM IN 24 HOURS (IN)	47	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)	47	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	3.7	4.1	3.6	1.3	0.1	0.0	0.0	0.5	2.0	3.1	3.3	25.4	

PRECIPITATION (inches) 1998 CASPER, WY (CPR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0.08	0.55	1.10	1.52	0.85	2.39	0.70	0.78	0.16	1.43	0.96	0.16	10.68
1970	0.59	0.27	1.53	1.57	2.03	2.03	0.73	0.16	0.21	1.01	1.01	0.89	12.03
1971	0.19	0.80	1.17	3.40	5.59	0.17	0.11	0.11	0.74	1.73	0.61	0.34	14.96
1972	0.99	0.41	1.41	1.44	0.76	0.83	1.04	1.52	0.37	2.04	0.66	0.41	11.88
1973	0.63	0.57	0.52	3.86	1.02	0.66	2.26	0.34	3.28	0.60	0.80	0.55	15.09
1974	0.69	0.42	0.37	3.92	0.62	0.60	0.75	1.00	0.83	1.15	0.46	0.22	11.03
1975	0.51	0.51	2.01	0.97	3.88	0.94	0.63	0.12	0.11	1.01	0.51	0.72	11.92
1976	0.44	0.89	0.50	1.52	2.69	1.66	1.07	0.31	1.15	1.21	0.09	0.38	11.91
1977	0.35	0.69	1.05	1.07	1.93	0.19	1.88	0.34	0.30	0.71	0.79	0.71	10.01
1978	0.70	0.75	0.93	1.05	6.46	1.40	2.62	0.93	0.26	0.40	0.94	1.20	17.64
1979	0.81	0.39	1.31	0.83	2.25	1.31	1.22	2.66	0.18	0.50	0.75	0.36	12.57
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	0.32	0.47	1.64	1.06	0.51	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
POR= 59 YRS	0.55	0.57	0.91	1.49	2.13	1.42	1.12	0.60	0.90	0.97	0.70	0.49	11.85

WBAN : 24089

AVERAGE TEMPERATURE (°F) 1998 CASPER, WY (CPR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	27.1	29.0	28.4	46.7	55.4	57.0	71.6	71.8	63.3	37.9	34.4	28.5	45.9
1970	23.3	32.7	27.6	38.2	53.3	62.6	71.2	72.3	54.7	41.2	34.9	25.2	44.8
1971	25.4	24.7	31.7	40.9	50.1	64.3	67.2	71.3	53.9	42.8	30.5	23.9	43.9
1972	17.7	28.5	38.2	43.0	52.1	65.0	65.9	68.0	56.7	44.1	30.6	17.7	44.0
1973	19.2	24.5	33.0	36.1	51.1	63.0	68.4	70.7	55.0	48.7	33.1	26.7	44.1
1974	18.7	27.6	36.2	43.1	51.4	64.9	72.6	64.4	54.4	48.5	34.3	24.3	45.0
1975	21.1	20.9	30.2	37.7	48.9	58.8	72.9	68.0	56.7	47.6	32.5	28.4	43.6
1976	23.0	30.2	32.0	44.0	53.6	60.7	72.8	68.4	59.2	43.8	34.3	28.3	45.9
1977	20.2	30.9	31.3	46.5	55.1	69.4	71.7	66.1	60.3	48.8	33.3	24.9	46.5
1978	17.1	22.3	37.2	44.6	49.6	63.6	69.6	66.8	60.2	47.9	26.9	13.2	43.3
1979	8.8	23.6	35.4	43.7	49.3	61.8	70.8	67.7	62.1	47.8	26.5	28.7	43.9
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
POR= 59 YRS	22.9	26.8	33.1	42.8	52.5	62.5	70.7	69.2	58.5	47.1	33.2	25.5	45.4

HEATING DEGREE DAYS (base 65°F) 1998 CASPER, WY (CPR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	3	3	71	834	914	1125	1289	897	1149	797	355	143	7580
1970-71	1	0	322	733	894	1225	1222	1119	1025	714	456	71	7782
1971-72	36	0	352	681	1026	1268	1461	1052	824	653	393	48	7794
1972-73	67	42	251	641	1025	1461	1415	1124	984	861	424	117	8412
1973-74	36	0	296	495	951	1181	1432	1044	885	650	416	105	7491
1974-75	3	61	319	504	912	1253	1352	1230	1066	813	493	193	8199
1975-76	1	18	247	532	969	1126	1295	1004	1017	625	346	149	7329
1976-77	3	14	199	654	913	1133	1385	949	1040	549	298	12	7149
1977-78	3	51	164	492	945	1240	1481	1191	854	605	471	107	7604
1978-79	17	60	212	522	1137	1602	1738	1153	910	631	479	151	8612
1979-80	0	41	118	523	1149	1116	1505	1081	1048	617	408	75	7681
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-	0	1	104	618	792	1250							

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COOLING DEGREE DAYS (base 65°F) 1998 CASPER, WY (CPR)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0	0	0	0	12	18	213	222	26	0	0	0	491
1970	0	0	0	0	0	77	200	234	24	0	0	0	535
1971	0	0	0	0	0	58	109	202	26	0	0	0	395
1972	0	0	0	0	0	54	101	142	7	0	0	0	304
1973	0	0	0	0	1	65	147	182	5	0	0	0	400
1974	0	0	0	0	0	109	243	47	7	0	0	0	406
1975	0	0	0	0	0	16	254	119	5	1	0	0	395
1976	0	0	0	0	0	29	250	127	33	0	0	0	439
1977	0	0	0	0	0	150	218	92	31	0	0	0	491
1978	0	0	0	0	2	72	170	124	74	0	0	0	442
1979	0	0	0	0	0	62	187	129	37	0	0	0	415
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

SNOWFALL (inches) 1998 CASPER, WY (CPR)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0.0	0.0	0.0	12.5	12.0	2.7	9.0	4.8	22.3	10.9	1.7	T	75.9
1970-71	0.0	0.0	0.2	11.2	7.4	11.9	3.7	11.2	14.8	24.2	2.2	0.0	86.8
1971-72	0.0	0.0	2.8	13.1	9.7	4.7	19.2	7.2	14.5	13.9	0.0	0.0	85.1
1972-73	0.0	0.0	0.2	9.8	8.1	9.1	9.6	11.3	10.7	56.3	1.7	0.0	116.8
1973-74	0.0	0.0	T	5.9	13.2	9.6	14.0	8.1	7.5	19.4	2.0	0.0	79.7
1974-75	0.0	0.0	5.1	1.2	8.9	5.1	10.3	8.1	36.2	13.4	21.3	0.0	109.6
1975-76	0.0	0.0	T	11.8	6.8	16.1	6.9	16.1	7.3	4.1	1.4	T	70.5
1976-77	0.0	0.0	0.0	3.8	1.8	6.2	8.5	11.8	26.6	4.8	T	0.0	63.5
1977-78	0.0	0.0	0.0	4.3	18.2	16.8	14.2	14.6	8.0	5.4	24.6	0.0	106.1
1978-79	0.0	0.0	T	3.1	17.1	25.7	16.3	7.3	18.6	9.2	22.7	T	120.0
1979-80	0.0	0.0	0.0	3.6	16.5	8.8	22.1	13.5	17.3	3.7	15.7	0.0	101.2
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-				20.2	6.0	4.0							
POR= 45 YRS	T	T	1.3	5.9	10.8	10.9	10.1	10.2	13.1	12.3	3.9	0.2	78.7

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 (1961 - 1990). 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 EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1998
CASPER,
WYOMING (CPR)

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.

STATION LOCATION

CASPER, WYOMING

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											AUCI T O M P A T I O N E T H E R M O M E T E R S I T E S * *	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS
						SEA LEVEL	GROUND												
							WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND			
AIRPORT																			
Inland Air Lines Hangar Wardwell Field 5 miles NNW of P. O.	3/7/37	12/15/39		42° 55'	106°20'													Airways observations	
Hangar, Wardwell Field 5 miles NNW of P. O.	12/15/39	9/13/48	App. 150 ft. SW	42° 55'	106°20'	5287	49	35	35	NA	NA	NA	a30	30	NA	NA	NA	First Order Station. a - Installed June 1940.	
Hangar, Wardwell Field 5 miles NNW of P. O.	9/13/48	3/8/50	App. 100 ft. ENE	42° 55'	106°20'	5287	49	5	5	NA	NA	4	b5	3	NA	NA	NA	b - Effective 5/20/52.	
Terminal Building Casper Air Terminal 8 miles WNW of P. O.	3/8/50	11/12/58	5.5 mi. W	42° 55'	106°28'	5322	80	6	5	NA	NA	4	b5	3	NA	NA	NA	b - Effective 5/20/52.	
New WB/FAA Building+ Casper Air Terminal++ + NWS/FAA Ops. Building (Effective 1970) ++ Natrona County Int'l Airport (Effective 1/1973)	11/12/58	Present	0.5 mi. SW	42°55'	106°28'	5319 e3338	33 c20	6	5	NA	NA	5	d5	4	d5	NA	NA	c - Effective 8/12/64 d - Commissioned 2112' N of thermometer site 9/11/64. e - Effective 9/11/64.	
																		S ASOS Commissioned 04/01/96 f - corrected 05/01/97	

SUBSCRIPTION: Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801.
INQUIRIES/COMMENTS CALL: (828) 271-4800

National Climatic Data Center
151 Patton Avenue, Rm 120
Asheville NC 28801-5001

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