

1999

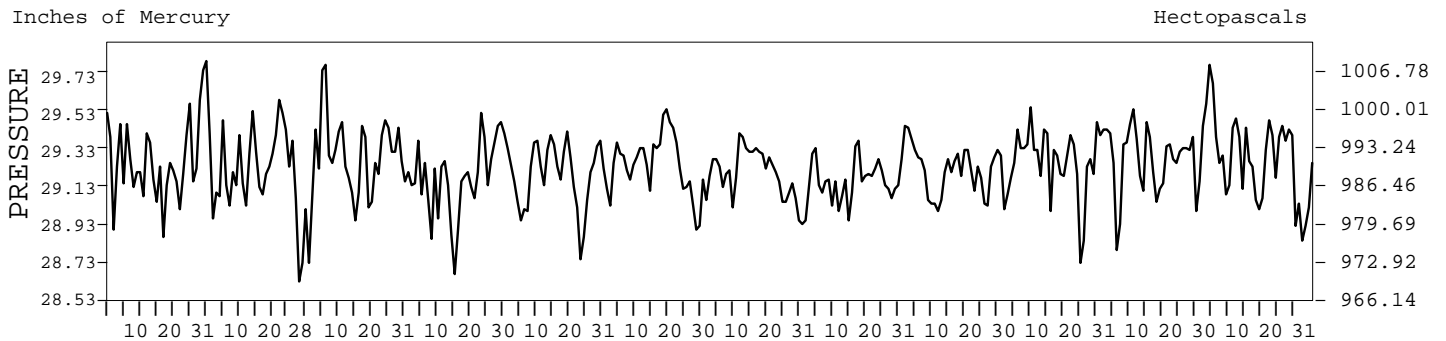
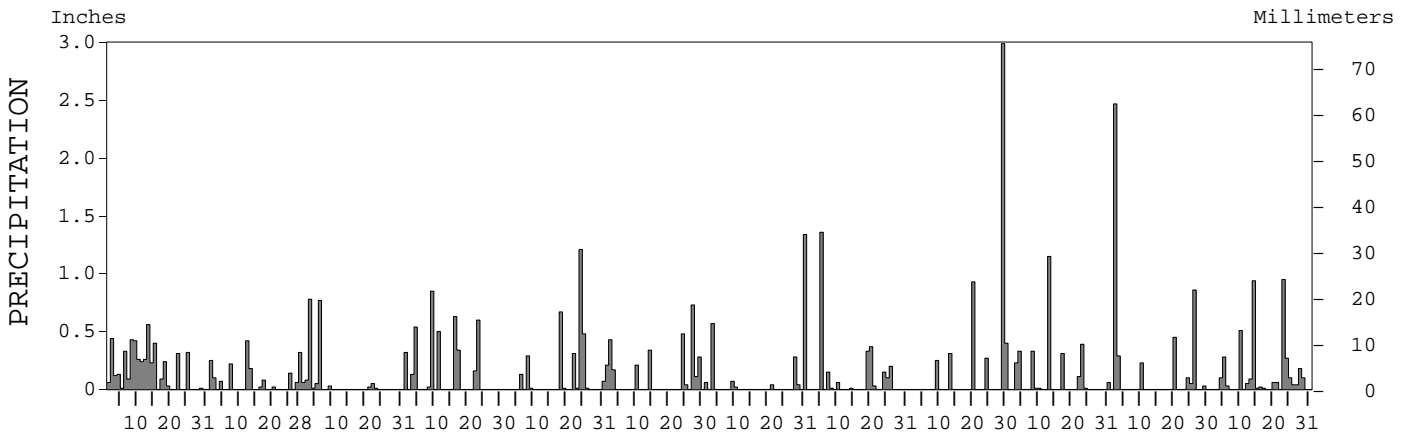
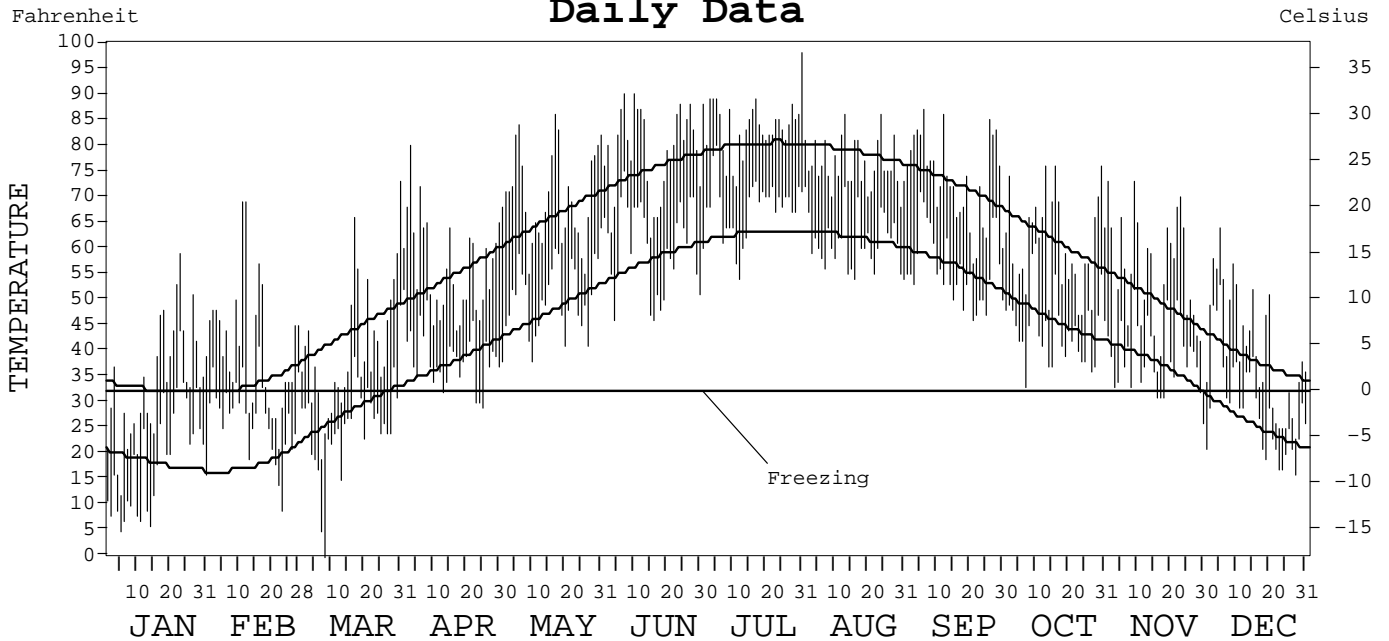
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-4497

ERIE,
PENNSYLVANIA (ERI)

Daily Data



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Thomas R. Karl

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL ENVIRONMENTAL AND INFORMATION SERVICE
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 ASHEVILLE, NORTH CAROLINA

METEOROLOGICAL DATA FOR 1999

ERIE, PA (ERI)

LATITUDE: 42° 04' 48" N LONGITUDE: 80° 10' 57" W ELEVATION (FT): GRND: 730 BARO: 730 TIME ZONE: EASTERN (UTC + 5) WBAN: 14860

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	33.8	40.8	40.6	56.3	70.0	78.6	83.7	76.5	73.3	60.7	54.0	40.6	59.1	
	HIGHEST DAILY MAXIMUM	59	69	73	80	86	90	98	86	87	76	73	64	98	
	DATE OF OCCURRENCE	23	12+	31	03	17	10+	31	24+	06	30+	09+	05	JUL 31	
	MEAN DAILY MINIMUM	19.1	27.2	25.8	38.8	50.3	60.3	67.7	61.2	56.1	44.3	38.9	29.3	43.2	
	LOWEST DAILY MINIMUM	5	9	0	29	38	46	54	54	46	33	26	16	0	
	DATE OF OCCURRENCE	05	23	08	25	10+	16+	12	31+	21	07	30	28	MAR 08	
	AVERAGE DRY BULB	26.5	34.0	33.2	47.6	60.2	69.5	75.7	68.9	64.7	52.5	46.5	35.0	51.2	
	MEAN WET BULB	24.6	29.9	29.3	42.7	53.2		68.4	63.5	59.0	48.2	42.7	32.0		
	MEAN DEW POINT	19.8	23.0	22.2	36.7	46.6		64.0	59.6	54.5	42.9	37.6	26.9		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	2	1	0	0	0	0	0	0	3
	MAXIMUM ≤ 32°	13	7	7	0	0	0	0	0	0	0	1	8	36	
	MINIMUM ≤ 32°	27	22	26	4	0	0	0	0	0	0	5	22	106	
MINIMUM ≤ 0°	0	0	1	0	0	0	0	0	0	0	0	0	1		
H/C	HEATING DEGREE DAYS	1186	860	980	516	187	52	0	5	89	380	549	925	5729	
	COOLING DEGREE DAYS	0	0	0	0	42	195	341	132	87	2	0	0	799	
RH	MEAN (PERCENT)	76	66	66	69	63	65	68	74	70	70	72	74	69	
	HOUR 01 LST	78	64	71	73	71	71	76	81	78	72	73	74	74	
	HOUR 07 LST	78	70	73	79	71	72	75	80	76	77	79	78	76	
	HOUR 13 LST	72	65	63	62	53	58	59	66	61	61	67	71	63	
	HOUR 19 LST	77	68	65	63	58	57	62	70	71	73	71	71	67	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	4	2	1	1	0	0	2	0	1	0	1	3	15	
	THUNDERSTORMS	0	0	0	3	1	6	5	6	2	1	2	0	26	
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.)	29.29	29.24	29.27	29.18	29.21	29.26	29.20	29.20	29.21	29.30	29.30	29.27	29.24	
	MEAN SEA-LEVEL PRESS. (IN.)	30.11	30.06	30.09	29.98	30.00		29.98	29.98		30.09	30.10	30.07		
WINDS	RESULTANT SPEED (MPH)	5.7	3.7	3.3	1.1	1.2	2.6	3.0	0.4	2.4	3.8	4.6	7.1	2.7	
	RES. DIR. (TENS OF DEGS.)	20	21	29	06	20	19	19	27	21	22	25	22	22	
	MEAN SPEED (MPH)	12.4	10.9	10.8	10.3	8.8	8.7	8.5	8.3	8.6	10.6	11.6	11.5	10.1	
	PREVAIL. DIR. (TENS OF DEGS.)	21	25	26	05	16	16	20	19	17	18	18	22	19	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	31	31	31	34	26	29	43	23	29	29	30	37	43	
	DIR. (TENS OF DEGS.)	15	05	25	05	22	25	26	03	28	19	31	20	26	
	DATE OF OCCURRENCE	23+	07	17+	23	25	02	03	30+	30+	22+	02	29	JUL 03	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	41	41	44	43	37	41	61	30	41	41	39	53	61	
DIR. (TENS OF DEGS.)	16	25	23	05	25	25	27	18	29	33	29	21	27		
DATE OF OCCURRENCE	03	12	17	23+	25	02	31+	24	29	13	02	29	JUL 31+		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	4.98	1.88	1.86	4.09	3.20	3.00	2.42	2.77	5.15	2.94	4.48	3.84	40.61	
	GREATEST 24-HOUR (IN.)	0.56	0.42	0.78	0.85	1.33	0.73	1.34	1.36	3.39	1.15	2.59	0.95	3.39	
	DATE OF OCCURRENCE	13	12	03	09	24-25	27	31	05	29-30	13	02-03	23	SEP 29-30	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	21	12	10	10	11	10	8	11	6	11	8	19	137	
PRECIPITATION ≥ 0.10	15	7	2	9	6	9	3	7	6	7	6	9	86		
PRECIPITATION ≥ 1.00	0	0	0	0	1	0	1	1	1	1	1	0	6		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	57.9	9.7	14.8	T	0.0	0.0	T	0.0	0.0	T	0.6	29.7	112.7	
	GREATEST 24-HOUR (IN.)	6.5	4.1	10.9	T	0.0	0.0	T	0.0	0.0	T	0.3	11.2	11.2	
	DATE OF OCCURRENCE	15	13	06	12			03			22	29	23	DEC 23	
	MAXIMUM SNOW DEPTH (IN.)	22	3	7		0	0				0		18		
	DATE OF OCCURRENCE	15	14	07									23		
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	14	3	2	0	0	0	0	0	0	0	0	7	26		

NORMALS, MEANS, AND EXTREMES

ERIE, PA (ERI)

LATITUDE: 42° 04' 48" N LONGITUDE: 80° 10' 57" W ELEVATION (FT): GRND: 730 BARO: 730 TIME ZONE: EASTERN (UTC + 5) WBAN: 14860

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	32.5	33.7	43.6	54.5	65.9	75.3	79.9	78.5	72.1	61.0	49.4	37.8	57.0
	MEAN DAILY MAXIMUM	46	33.0	34.3	42.7	54.4	65.6	75.2	79.3	77.9	71.4	60.7	48.5	37.8	56.7
	HIGHEST DAILY MAXIMUM	46	68	70	82	89	90	100	99	93	94	88	80	75	100
	YEAR OF OCCURRENCE		1995	1997	1998	1990	1996	1988	1990	1988	1959	1963	1961	1982	JUN 1988
	MEAN OF EXTREME MAXS.	46	55.5	55.9	70.4	77.6	83.4	88.7	89.9	88.6	85.7	78.7	69.3	58.7	75.2
	NORMAL DAILY MINIMUM	30	18.2	17.9	28.1	37.7	47.8	57.6	62.6	61.8	55.9	45.6	37.0	25.2	41.3
	MEAN DAILY MINIMUM	46	19.7	19.5	26.7	36.9	46.9	57.0	61.9	60.8	54.4	44.6	35.7	25.9	40.8
	LOWEST DAILY MINIMUM	46	-18	-17	-9	12	26	32	44	37	33	24	7	-6	-18
	YEAR OF OCCURRENCE		1994	1979	1980	1982	1970	1972	1963	1982	1974	1975	1976	1983	JAN 1994
	MEAN OF EXTREME MINS.	46	0.8	0.0	9.0	22.6	33.2	42.8	50.2	48.9	40.5	31.6	22.2	9.0	25.9
	NORMAL DRY BULB	30	25.4	25.8	35.9	46.1	56.9	66.5	71.3	70.1	64.0	53.3	43.2	31.5	49.2
	MEAN DRY BULB	46	26.4	26.9	34.6	45.7	56.3	66.1	70.7	69.4	62.9	52.6	42.2	31.8	48.8
	MEAN WET BULB	15	25.7	26.3	32.0	42.2	51.9	61.3	66.1	64.7	58.2	48.0	38.9	28.2	45.3
	MEAN DEW POINT	15	20.7	21.2	26.0	36.0	46.3	56.7	62.0	60.9	53.9	42.8	33.4	23.4	40.3
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.0	0.6	0.8	0.7	0.2	0.0	0.0	0.0	2.3	
MAXIMUM ≤ 32°	30	16.4	14.1	6.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	10.8	50.0	
MINIMUM ≤ 32°	30	28.1	25.2	23.3	11.2	1.0	*	0.0	0.0	0.0	1.7	10.9	24.6	126.0	
MINIMUM ≤ 0°	30	2.0	2.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.6	
H/C	NORMAL HEATING DEG. DAYS	30	1228	1098	902	567	268	52	0	12	89	370	654	1039	6279
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	17	97	199	171	59	7	0	0	550
RH	NORMAL (PERCENT)	30	74	75	72	68	69	71	72	74	74	71	72	75	72
	HOUR 01 LST	30	76	77	75	73	76	79	80	82	80	74	74	76	77
	HOUR 07 LST	30	77	78	77	75	76	78	79	82	82	77	75	77	78
	HOUR 13 LST	30	72	71	66	62	62	64	63	64	65	63	68	72	66
	HOUR 19 LST	30	74	76	71	64	62	64	64	68	73	73	73	75	70
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	44	1.4	1.8	2.8	1.9	1.9	0.9	0.3	0.4	0.3	0.4	1.0	1.1	14.2
	THUNDERSTORMS	44	0.1	0.4	1.5	2.8	3.9	6.1	6.3	6.4	4.1	2.2	1.5	0.3	35.6
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1						6.4							
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	1			3.0		6.0	5.0								
PARTLY CLOUDY	1	2.0	3.0	2.0		4.0	6.0								
CLOUDY	1	6.0	6.0	10.0		8.0	8.0								
PR	MEAN STATION PRESSURE (IN)	27	29.20	29.30	29.20	29.20	29.20	29.20	29.20	29.30	29.29	29.30	29.29	29.29	29.25
	MEAN SEA-LEVEL PRES. (IN)	15	30.06	30.07	30.05	29.96	29.99	30.01	30.00	30.04	30.06	30.07	30.07	30.09	30.04
WINDS	MEAN SPEED (MPH)	41	12.7	11.7	12.1	11.2	9.9	9.4	8.9	8.8	9.8	10.9	12.8	12.9	10.9
	PREVAIL. DIR (TENS OF DEGS)	25	18	18	18	18	18	18	18	18	18	18	18	20	18
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	39	38	40	34	34	36	43	29	29	34	34	37	43
	DIR. (TENS OF DEGS)		19	25	14	05	20	21	26	20	28	25	15	20	26
	YEAR OF OCCURRENCE		1998	1996	1997	1999	1997	1998	1999	1996	1999	1996	1998	1999	JUL 1999
	MAXIMUM 5-SECOND:														
SPEED (MPH)	4	52	52	53	47	44	45	61	37	41	52	45	53	61	
DIR. (TENS OF DEGS)		16	24	20	31	19	21	27	22	29	27	26	21	27	
YEAR OF OCCURRENCE		1996	1996	1996	1996	1997	1998	1999	1997	1999	1996	1997	1999	JUL 1999	
PRECIPITATION	NORMAL (IN)	30	2.22	2.28	3.00	3.24	3.44	4.09	3.43	4.06	4.39	3.77	4.02	3.59	41.53
	MAXIMUM MONTHLY (IN)	46	5.35	5.73	6.78	7.11	6.14	8.35	7.70	11.06	10.65	9.87	10.40	6.94	11.06
	YEAR OF OCCURRENCE		1998	1990	1976	1961	1989	1996	1970	1977	1977	1954	1985	1990	AUG 1977
	MINIMUM MONTHLY (IN)	46	0.87	0.57	0.63	1.63	1.00	0.75	0.65	0.58	1.33	1.13	1.52	1.38	0.57
	YEAR OF OCCURRENCE		1981	1978	1960	1975	1991	1991	1978	1959	1995	1963	1978	1960	FEB 1978
	MAXIMUM IN 24 HOURS (IN)	44	1.63	2.16	2.38	2.53	2.23	4.66	3.22	3.91	6.11	4.35	3.67	2.39	6.11
	YEAR OF OCCURRENCE		1998	1961	1987	1977	1969	1996	1970	1994	1979	1954	1985	1979	SEP 1979
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	19.3	15.1	15.1	14.1	12.0	10.6	9.5	10.8	11.3	13.2	16.2	19.9	167.1	
PRECIPITATION ≥ 1.00	30	0.1	0.3	0.5	0.4	0.6	1.2	1.0	1.2	1.1	0.6	0.4	0.4	7.8	
SNOWFALL	NORMAL (IN)	30	23.8	16.8	9.6	2.3	0.*	0.0	0.0	0.0	0.0	0.4	9.2	23.7	85.8
	MAXIMUM MONTHLY (IN)	44	62.4	32.1	31.8	17.2	0.4	T	T	T	T	4.0	36.3	66.9	66.9
	YEAR OF OCCURRENCE		1978	1972	1996	1957	1989	1990	1999	1992	1993	1954	1967	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	44	12.9	17.8	13.6	10.0	0.4	T	T	T	T	2.3	23.0	19.2	23.0
	YEAR OF OCCURRENCE		1986	1979	1996	1957	1989	1990	1999	1992	1993	1974	1956	1989	NOV 1956
	MAXIMUM SNOW DEPTH (IN)	44	28	25	20	9	0	0	0	0	0	2	27	39	39
	YEAR OF OCCURRENCE		1985	1977	1984	1987						1974	1950	1989	DEC 1989
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	7.3	5.1	3.1	0.8	0.0	0.0	0.0	0.0	0.0	0.2	2.3	6.8	25.6	

PRECIPITATION (inches) 1999 ERIE, PA (ERI)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	1.44	2.09	1.61	2.48	3.23	2.65	7.70	2.03	7.08	3.52	4.87	2.80	41.50
1971	1.63	2.05	1.85	1.81	2.20	2.83	2.67	3.46	3.51	3.48	4.51	4.06	34.06
1972	1.94	2.77	3.95	2.64	4.69	7.50	2.91	3.01	5.37	1.72	3.36	3.69	43.55
1973	1.72	2.00	3.18	2.71	4.57	6.28	1.55	3.96	2.22	3.56	2.83	3.46	38.04
1974	2.45	1.93	5.02	4.89	4.44	5.33	1.11	2.97	3.34	1.57	5.20	3.58	41.83
1975	2.99	3.30	3.58	1.63	2.36	4.36	3.22	8.93	2.52	2.42	3.17	4.55	43.03
1976	3.07	5.01	6.78	2.71	4.18	3.98	4.35	1.40	3.87	4.14	2.12	2.24	43.85
1977	1.05	1.44	3.45	5.21	2.53	4.39	6.67	11.06	10.65	3.37	6.25	5.63	61.70
1978	3.61	0.57	1.79	2.45	2.76	2.68	0.65	4.56	4.83	5.81	1.52	3.81	35.04
1979	3.50	2.15	2.50	4.71	3.70	3.58	4.27	5.09	8.44	6.63	5.84	4.90	55.31
1980	1.57	1.29	4.11	3.79	2.23	4.83	5.42	6.76	5.48	6.51	2.56	2.49	47.04
1981	0.87	5.21	1.58	6.09	2.13	4.84	3.04	3.85	4.26	5.04	2.22	2.84	41.97
1982	3.85	1.24	3.50	1.81	3.06	6.02	4.40	2.20	4.07	2.74	5.33	3.34	41.56
1983	1.49	1.07	3.63	2.93	3.91	3.84	5.52	4.74	5.27	3.77	6.11	3.97	46.25
1984	1.65	2.42	1.91	2.63	5.83	4.49	1.94	2.09	5.29	1.82	3.62	4.10	37.79
1985	2.56	2.75	5.08	1.76	2.94	3.50	4.97	1.66	2.22	5.20	10.40	2.83	45.87
1986	2.33	2.72	2.10	2.88	5.24	7.71	2.54	1.83	7.97	4.86	2.99	4.13	47.30
1987	2.15	1.05	4.28	1.87	1.78	5.15	3.91	7.82	5.45	5.76	2.25	3.39	44.86
1988	1.50	2.47	2.44	3.00	3.21	1.26	4.14	3.78	3.21	8.25	2.99	2.62	38.87
1989	1.95	2.41	4.70	2.02	6.14	5.14	1.35	3.96	3.76	3.33	3.87	3.25	41.88
1990	2.30	5.73	1.29	3.52	5.74	2.84	2.53	6.49	7.74	4.15	2.69	6.94	51.96
1991	2.16	1.62	3.38	3.64	1.00	0.75	3.49	3.07	3.25	3.00	3.18	3.17	31.71
1992	2.60	1.91	2.11	4.04	1.78	1.95	6.06	4.11	6.81	4.01	5.37	3.34	44.09
1993	3.36	2.03	3.59	2.34	1.28	3.94	2.80	2.85	4.52	4.41	4.10	2.88	38.10
1994	2.58	1.35	2.99	4.87	2.02	5.80	1.12	7.72	3.39	2.46	3.01	3.19	40.50
1995	3.37	1.66	1.29	3.08	2.69	1.45	2.20	3.54	1.33	4.51	4.99	3.25	33.36
1996	3.26	2.03	2.04	6.07	3.37	8.35	2.99	1.43	10.63	3.28	3.26	2.96	49.67
1997	1.66	3.00	4.80	2.25	4.36	4.30	2.90	3.07	3.16	2.43	3.23	4.85	40.01
1998	5.35	1.34	2.99	4.86	2.67	2.64	2.33	2.54	1.63	1.92	1.80	3.59	33.66
1999	4.98	1.88	1.86	4.09	3.20	3.00	2.42	2.77	5.15	2.94	4.48	3.84	40.61
POR= 126 YRS	2.68	2.38	2.81	3.14	3.34	3.52	3.18	3.27	3.75	3.57	3.50	2.94	38.08

WBAN : 14860

AVERAGE TEMPERATURE (°F) 1999 ERIE, PA (ERI)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	16.8	23.1	28.4	45.1	58.2	63.9	68.9	68.0	62.8	53.0	40.4	30.8	46.6
1971	22.0	27.3	30.0	40.6	51.9	66.0	66.9	64.7	64.1	57.0	39.3	35.9	47.1
1972	26.9	22.9	29.8	40.0	55.6	59.8	68.4	66.1	61.1	47.2	37.3	33.3	45.7
1973	29.6	23.8	42.2	46.0	52.5	66.2	69.7	69.6	62.6	54.8	42.8	31.7	49.3
1974	30.0	24.6	35.4	47.6	53.0	63.2	67.7	68.1	58.7	48.3	41.0	31.0	47.4
1975	29.9	28.4	32.1	38.8	60.3	67.4	71.8	69.4	58.5	52.7	46.6	30.7	48.9
1976	20.9	32.8	38.9	45.8	52.5	66.4	66.4	67.0	60.5	48.1	34.2	23.9	46.5
1977	12.5	25.0	40.6	47.8	58.4	61.9	70.3	67.1	62.5	49.4	43.7	28.3	47.3
1978	19.8	14.5	27.9	41.8	56.0	65.2	69.5	71.1	62.3	49.3	40.6	31.0	45.8
1979	19.5	14.1	36.5	42.2	53.9	63.5	67.6	69.5	64.3	53.6	43.7	34.5	46.9
1980	26.6	20.9	31.0	43.3	55.7	61.3	69.6	72.2	63.7	48.1	38.9	27.5	46.6
1981	19.6	30.3	33.1	47.4	53.9	66.0	72.1	70.6	61.9	49.7	41.6	31.4	48.1
1982	19.2	23.4	34.4	42.5	60.9	61.3	70.9	66.2	62.5	54.2	44.8	40.3	48.4
1983	30.6	31.6	38.5	45.3	55.0	67.0	73.0	72.4	65.7	54.4	45.2	25.9	50.4
1984	21.6	35.5	28.5	47.0	53.8	68.6	69.6	72.0	61.8	56.4	42.4	37.3	49.5
1985	21.7	25.9	37.4	51.4	59.8	63.4	70.2	70.7	66.9	54.6	46.3	27.2	49.6
1986	27.5	27.0	38.7	48.2	59.6	65.2	72.0	69.2	65.0	53.6	40.0	32.9	49.9
1987	28.0	27.3	37.5	48.3	60.5	69.2	74.6	70.0	64.5	48.2	45.1	35.8	50.8
1988	27.2	25.9	36.3	46.0	58.2	65.6	74.5	72.9	63.0	48.2	44.6	32.4	49.6
1989	33.4	24.8	35.6	43.1	56.1	66.4	71.9	69.4	63.2	54.8	41.2	21.7	48.5
1990	36.0	33.3	40.4	49.4	55.2	67.0	70.9	69.9	63.4	54.8	46.0	36.7	51.9
1991	28.1	32.7	39.0	51.5	64.8	70.3	73.2	72.6	63.8	55.8	41.3	34.6	52.3
1992	30.4	30.4	34.7	46.6	57.5	63.9	69.4	67.8	64.0	51.1	42.4	34.7	49.4
1993	32.5	24.1	31.7	48.1	57.8	68.4	75.4	73.4	61.2	51.1	41.7	30.5	49.7
1994	18.4	24.2	33.2	49.1	54.2	68.5	73.3	69.1	63.4	53.7	48.1	36.8	49.3
1995	31.4	24.4	37.8	43.0	57.5	70.1	73.7	74.7	62.1	55.8	38.1	27.6	49.7
1996	24.5	25.9	30.0	44.3	55.8	68.2	69.2	70.6	63.2	53.5	36.8	34.6	48.1
1997	25.9	31.9	36.7	43.6	50.8	66.9	69.4	67.5	62.2	53.3	39.8	33.9	48.5
1998	34.5	35.7	39.8	47.9	63.5	67.6	71.5	72.1	66.9	54.5	45.2	38.2	53.1
1999	26.5	34.0	33.2	47.6	60.2	69.5	75.7	68.9	64.7	52.5	46.5	35.0	51.2
POR= 126 YRS	27.1	26.8	34.5	45.5	56.7	66.4	71.3	69.9	63.9	53.1	41.9	31.8	49.1

HEATING DEGREE DAYS (base 65°F) 1999 ERIE, PA (ERI)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	18	18	125	366	731	1056	1324	1048	1078	723	404	68	6959
1971-72	32	55	97	242	763	895	1172	1217	1082	742	287	184	6768
1972-73	55	47	144	546	820	976	1090	1146	697	568	379	40	6508
1973-74	9	18	141	309	658	1022	1077	1128	915	521	373	101	6272
1974-75	32	9	204	511	713	1046	1081	1016	1013	781	203	51	6660
1975-76	3	14	197	381	546	1057	1361	931	804	580	386	51	6311
1976-77	28	42	163	519	920	1269	1620	1116	751	519	249	126	7322
1977-78	9	51	110	477	636	1131	1395	1408	1143	688	303	84	7435
1978-79	15	2	125	481	723	1046	1406	1424	874	678	369	106	7249
1979-80	36	17	84	378	634	939	1188	1275	1045	644	299	161	6700
1980-81	12	2	108	520	775	1156	1400	967	982	523	345	42	6832
1981-82	3	6	153	467	694	1034	1413	1159	942	672	158	123	6824
1982-83	11	47	126	336	605	762	1062	933	814	585	312	67	5660
1983-84	10	0	89	336	591	1207	1338	847	1123	539	360	25	6465
1984-85	11	5	141	262	673	853	1337	1088	846	423	202	87	5928
1985-86	5	3	75	316	558	1164	1152	1056	811	502	207	74	5923
1986-87	5	32	84	350	742	989	1138	1048	844	495	225	31	5983
1987-88	0	21	67	513	592	902	1166	1128	883	565	236	96	6169
1988-89	5	10	102	528	605	1006	972	1121	905	651	301	45	6251
1989-90	2	16	128	320	706	1335	892	879	773	500	309	58	5918
1990-91	9	0	113	323	564	866	1137	898	800	412	148	15	5285
1991-92	0	0	130	304	704	934	1065	996	934	556	258	94	5975
1992-93	5	23	110	423	673	928	1002	1137	1025	507	227	51	6111
1993-94	0	0	162	430	692	1061	1438	1137	979	480	346	61	6786
1994-95	0	12	90	344	503	868	1034	1130	835	654	237	28	5735
1995-96	14	0	127	285	803	1153	1245	1126	1079	614	321	19	6786
1996-97	10	0	109	353	840	934	1206	920	870	638	430	57	6367
1997-98	16	20	111	389	750	957	940	813	794	506	107	82	5485
1998-99	0	4	47	323	585	824	1186	860	980	516	187	52	5564
1999-	0	5	89	380	549	925							

WBAN : 14860

COOLING DEGREE DAYS (base 65°F) 1999 ERIE, PA (ERI)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	13	28	76	145	119	62	3	0	0	446
1971	0	0	0	0	7	105	96	55	75	3	0	0	341
1972	0	0	0	0	2	32	165	88	35	0	0	0	322
1973	0	0	0	6	0	84	163	167	76	1	0	0	497
1974	0	0	0	5	9	55	120	114	23	0	0	0	326
1975	0	0	0	0	64	132	221	156	9	6	0	0	588
1976	0	0	0	10	5	98	81	110	33	2	0	0	339
1977	0	0	2	9	52	42	179	121	44	0	1	0	450
1978	0	0	0	0	32	94	162	198	48	0	0	0	534
1979	0	0	0	3	29	69	125	163	71	32	0	0	492
1980	0	0	0	0	20	56	162	234	75	4	0	0	551
1981	0	0	0	2	8	81	230	187	65	0	0	0	573
1982	0	0	0	4	35	19	201	90	59	8	5	4	425
1983	0	0	0	0	7	135	261	235	117	15	0	0	770
1984	0	0	0	7	18	145	161	227	52	3	0	0	613
1985	0	0	0	21	45	45	172	187	140	4	3	0	617
1986	0	0	2	6	46	86	228	169	88	3	0	0	628
1987	0	0	0	0	92	164	304	182	61	0	2	0	805
1988	0	0	0	0	29	119	305	263	52	10	0	0	778
1989	0	0	0	0	35	94	225	159	80	7	0	0	600
1990	0	0	16	40	13	123	198	159	73	13	2	0	637
1991	0	0	0	14	148	181	259	244	102	25	0	0	973
1992	0	0	0	9	30	70	148	117	85	0	0	0	459
1993	0	0	0	4	13	161	331	269	55	7	0	0	840
1994	0	0	0	9	18	170	266	147	48	3	0	0	661
1995	0	0	0	0	8	189	287	308	45	6	0	0	843
1996	0	0	0	0	43	122	148	181	61	3	0	0	558
1997	0	0	0	0	0	119	157	107	30	33	0	0	446
1998	0	0	23	0	70	167	208	232	108	5	0	0	813
1999	0	0	0	0	42	195	341	132	87	2	0	0	799

SNOWFALL (inches) 1999 ERIE, PA (ERI)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	T	18.6	23.6	26.8	21.4	26.8	2.8	0.0	0.0	120.0
1971-72	0.0	0.0	0.0	T	14.6	9.3	27.3	32.1	7.9	1.1	0.0	0.0	92.3
1972-73	0.0	0.0	0.0	0.6	6.6	18.5	7.9	12.6	5.7	1.8	T	0.0	53.7
1973-74	0.0	0.0	0.0	T	0.4	10.8	21.2	17.9	13.2	5.1	T	0.0	68.6
1974-75	0.0	0.0	0.0	2.3	2.9	20.1	17.7	12.6	10.0	1.1	0.0	0.0	66.7
1975-76	0.0	0.0	0.0	0.0	2.1	24.7	24.8	6.8	7.5	0.1	T	0.0	66.0
1976-77	0.0	0.0	0.0	3.1	33.9	27.6	29.0	13.0	4.5	0.4	0.0	0.0	111.5
1977-78	0.0	0.0	0.0	0.0	13.1	51.0	62.4	12.6	3.6	0.1	0.0	0.0	142.8
1978-79	0.0	0.0	0.0	0.0	1.8	10.6	33.4	27.8	2.2	0.7	0.0	0.0	76.5
1979-80	0.0	0.0	0.0	0.1	22.2	4.8	9.2	12.2	6.7	T	0.0	0.0	55.2
1980-81	0.0	0.0	0.0	T	4.9	21.0	27.9	22.5	13.1	T	0.0	0.0	89.4
1981-82	0.0	0.0	0.0	T	0.4	17.3	27.1	9.0	7.3	10.2	0.0	0.0	71.3
1982-83	0.0	0.0	0.0	T	9.2	8.9	6.7	9.2	5.6	1.6	0.0	0.0	41.2
1983-84	0.0	0.0	0.0	0.0	1.4	41.1	18.7	27.2	21.6	T	0.0	0.0	110.0
1984-85	0.0	0.0	0.0	0.0	4.7	16.7	57.2	19.0	3.5	5.2	0.0	0.0	106.3
1985-86	0.0	0.0	0.0	0.0	1.9	59.9	30.6	22.9	4.2	5.4	0.0	0.0	124.9
1986-87	0.0	0.0	0.0	0.0	4.6	8.0	31.3	10.1	11.6	2.6	0.0	0.0	68.2
1987-88	0.0	0.0	0.0	T	T	24.3	30.8	31.2	16.8	0.4	0.0	0.0	103.5
1988-89	0.0	0.0	0.0	1.8	0.5	28.1	10.2	21.5	10.5	3.5	0.4	0.0	76.5
1989-90	0.0	0.0	0.0	T	19.6	66.9	13.7	8.3	2.3	4.1	0.0	T	114.9
1990-91	0.0	T	T	T	2.0	15.4	24.3	15.4	2.1	0.4	0.0	0.0	59.6
1991-92	0.0	0.0	0.0	T	13.7	30.0	32.6	8.0	12.8	7.7	0.0	0.0	104.8
1992-93	0.0	T	0.0	T	23.0	15.6	10.0	31.7	27.3	0.9	0.0	0.0	108.5
1993-94	0.0	0.0	T	0.3	3.5	25.7	46.9	27.8	22.2	4.9	0.0	0.0	131.3
1994-95	0.0	0.0	0.0	0.0	1.1	1.0	27.0	15.3	5.2	4.1	0.0	0.0	53.7
1995-96	0.0	0.0	0.0	0.0	20.4	39.6	23.3	11.8	31.8				
1996-97													
1997-98							9.8	0.7	16.6	0.0	0.0	0.0	
1998-99	0.0	0.0	0.0	0.0	0.4	28.3	57.9	9.7	14.8	T	0.0	0.0	111.1
1999-	T	0.0	0.0	T	0.6	29.7							
POR= 43 YRS	0.0	T	T	0.3	9.9	23.0	23.5	15.3	11.0	2.5	0.0	T	85.5

WBAN : 14860

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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1999
ERIE,
PENNSYLVANIA (ERI)

Erie is located on the southeast shore of Lake Erie and observations are made at Erie International Airport, which is 6 miles southwest of the center of the city and about 1 mile from the lake shore. The terrain rises gradually in a series of ridges paralleling the shoreline to 500 feet above the lake level 3 to 4 miles inland and to 1,000 feet about 15 miles inland. Snowfall from instability showers moving southward off the lake usually increases due to the upslope terrain. Snowfall is somewhat higher south of the city than along the lake shore.

During the winter months, the many cold air masses moving south from Canada are modified by the relatively warm waters of Lake Erie. However, the temperature difference between air and water produces an excess of cloudiness and frequent snow from November through March.

Spring weather is quite variable in Erie, but generally cloudy and cool. Proximity to the lake frequently prevents killing frosts that occur

inland. This has led to the establishment of numerous vineyards and orchards in a narrow belt along the shore. Summer heat waves are tempered by cool lake breezes that may reach several miles inland, and days with temperatures above 90 degrees are infrequent. Summer thunderstorms are usually less destructive in Erie than inland areas because of the stabilizing effects of Lake Erie.

Autumn, with long dry periods and an abundance of sunshine, is usually the most pleasant period of the year in Erie. The growing season is extended by the influence of the warmer waters of the lake. Precipitation is well distributed throughout the year, although the number of days with measurable amounts varies considerably from a low average of about one day in three for the period June through September to about one-half of the days from November through March, when snow flurries and squalls move in from the lake.

STATION LOCATION

ERIE, PENNSYLVANIA

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE													* Type	REMARKS
						SEA LEVEL	GROUND													
							WIND	W	E	P	S	T	R	W	8	H	A	E		
CITY																				
Rindernecht Building 502-504 State Street	5/25/73	7/31/88	NA	42°07'	80°05'	a650	78	31	32	NA	NA	NA	59	NA	NA	NA	a	Approximate value.		
Federal Building SE Corner State and South Park Row	7/31/88	3/31/15	2 blocks south on State St.	42°07'	80°05'	a655	102	94	92	NA	NA	NA	82	NA	NA	NA	a	Approximate value. b - Installed 1897.		
Commerce Building NE Corner 12th and State Streets	3/31/15	6/30/38	5 blocks south on State St.	42°07'	80°05'	670	166	131	130	NA	122	NA	122	NA	NA	NA				
Federal Building SE Corner State and South Park Row	6/30/38	8/31/53	5 blocks north on State St.	42°07'	80°05'	655	81	58	57	NA	51	NA	50	NA	NA	NA		New building on site of old Federal Building.		
AIRPORT																				
Port Erie Airport South end Terminal Bldg	10/16/29	1/31/60	NA	42°05'	80°11'	732	c30	5	5	NA	NA	NA	3	NA	NA	NA	CAA	to 10/20/55. c - Effective 9/1/53. d - Installed 9/1/53.		
New Terminal Building Port Erie Airport + 4411 West 12th Street 5 mi. SW of Erie P.O. + Erie International AP (Effective 1/1/68)	2/1/60	12/16/83	800 fe.ENE	42°05'	80°11'	732 g731	e20	25 j	25 135	NA	NA	h32	h32	NA f4 k10	NA	NA	e	Effective 9/28/65. f - Commissioned 100' S of thermometer site 12/10/65. g - Effective 12/10/65. h - Moved to roof 10/30/73. i - Minor move 11/19/73. j - Removed 6/1981 k - Effective 6/1981.		
NWS Office Erie International AP	12/16/83	10/01/95	400 ft. NW	42°05'	80°11'	731	m20	5	5	NA	NA	3	3	m10 n6	NA	NA	m	Not moved 12/16/83. n - Minor move & type change 11/2/84.		
Terminal Building	10/01/95	Present	NA	42°05'	80°11'	730											S	ASOS Commissioned 10/01/95		

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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