

1999

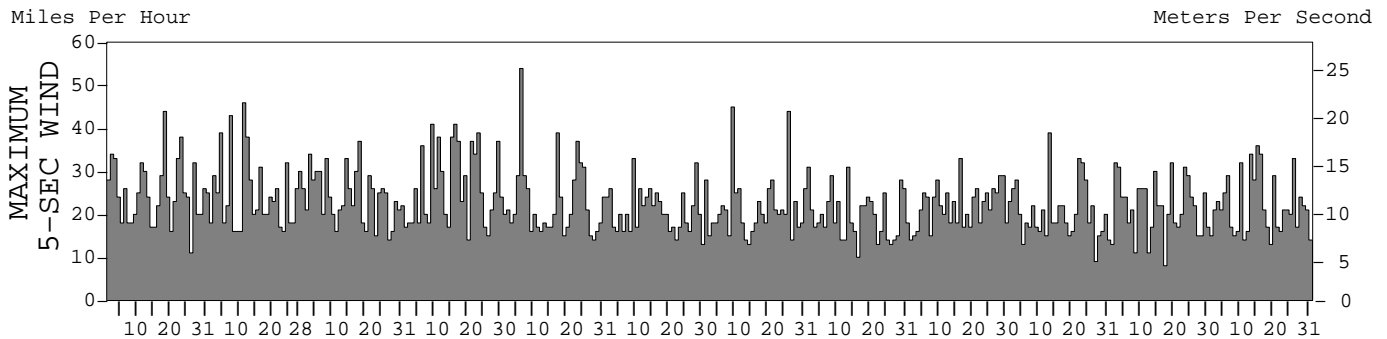
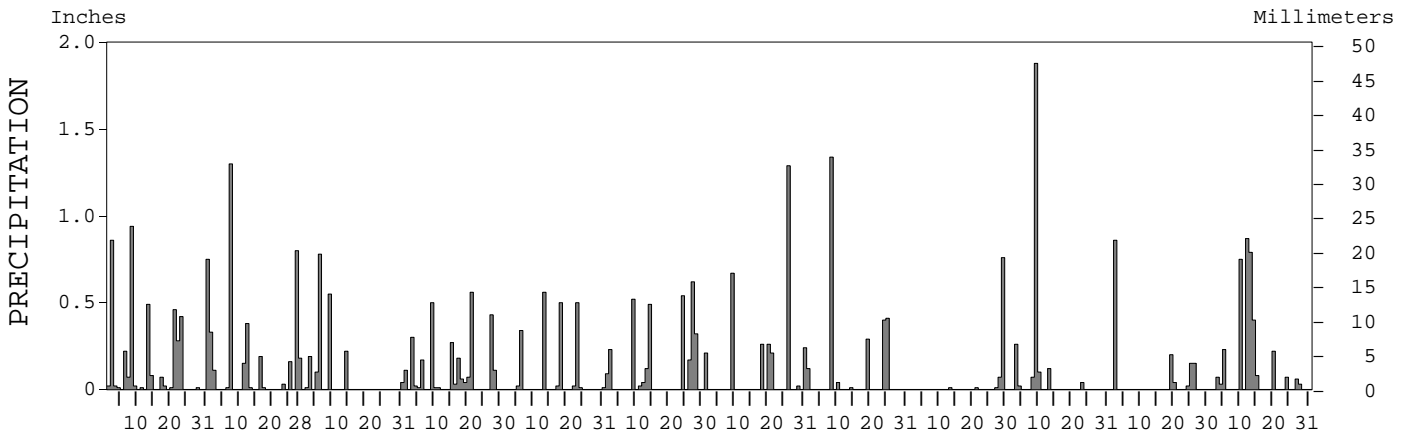
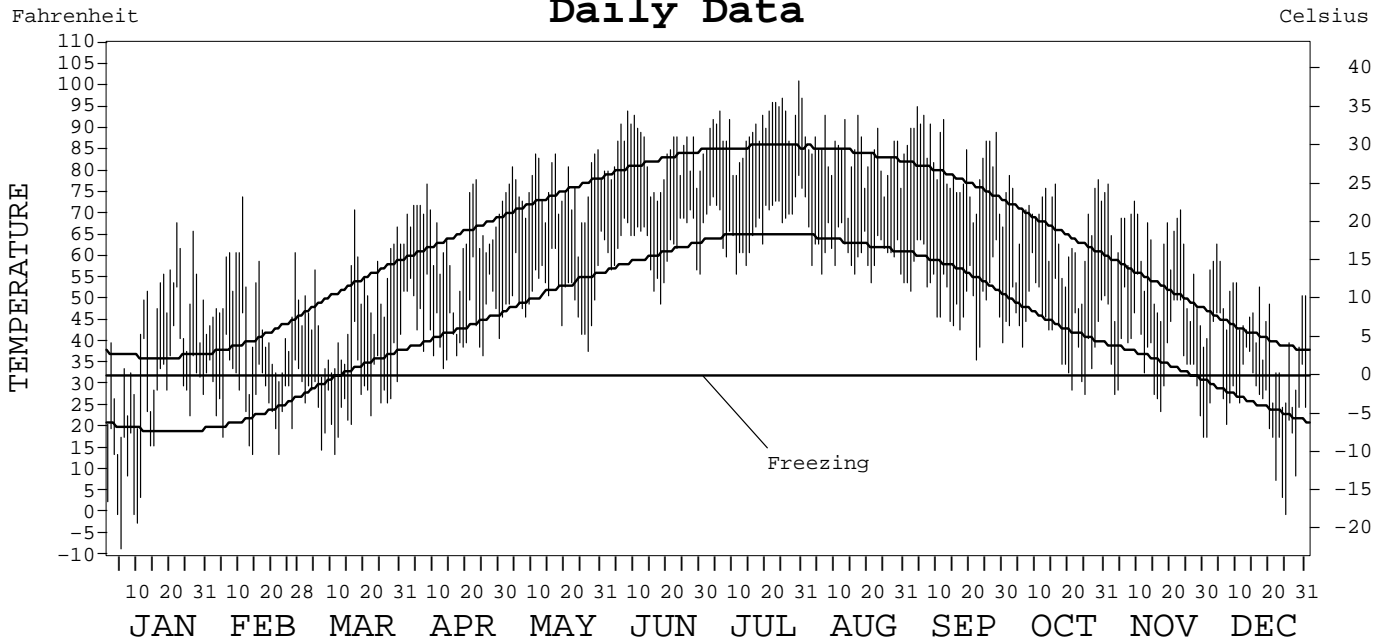
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-3911

COVINGTON/CINCINNATI, KY
(CVG)

Daily Data



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METEOROLOGICAL DATA FOR 1999

COVINGTON/CINCINNATI, KY (CVG)

LATITUDE: 39° 02' 35" N LONGITUDE: 84° 40' 18" W ELEVATION (FT): GRND: 885 BARO: 885 TIME ZONE: EASTERN (UTC + 5) WBAN: 93814

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	41.4	47.3	48.5	64.9	75.7	83.6	89.9	83.9	81.9	67.0	59.3	43.7	65.6	
	HIGHEST DAILY MAXIMUM	68	74	71	78	85	94	101	93	95	79	77	63	101	
	DATE OF OCCURRENCE	22	11	17	23	30	08	30	17+	04	02	01	04	JUL 30	
	MEAN DAILY MINIMUM	23.3	28.4	28.0	45.1	51.4	62.4	68.0	61.5	51.6	43.6	37.7	25.9	43.9	
	LOWEST DAILY MINIMUM	-8	14	14	34	38	49	56	54	36	28	18	0	-8	
	DATE OF OCCURRENCE	05	22+	11	13	27	18	11	31+	22	25	30	25	JAN 05	
	AVERAGE DRY BULB	32.4	37.9	38.3	55.0	63.6	73.0	79.0	72.7	66.8	55.3	48.5	34.8	54.8	
	MEAN WET BULB	30.2	34.0	33.1	50.0	57.3	65.7	71.5	65.0	57.2	49.3	44.5	32.8	49.2	
	MEAN DEW POINT	26.1	28.0	24.7	44.6	51.3	61.3	67.8	60.1	49.0	43.1	40.0	28.3	43.7	
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	5	17	4	7	0	0	0	33	
	MAXIMUM ≤ 32°	9	2	1	0	0	0	0	0	0	0	0	5	17	
	MINIMUM ≤ 32°	21	18	25	0	0	0	0	0	0	3	9	23	99	
MINIMUM ≤ 0°	4	0	0	0	0	0	0	0	0	0	0	1	5		
H/C	HEATING DEGREE DAYS	1007	754	820	297	90	5	0	0	63	294	489	931	4750	
	COOLING DEGREE DAYS	0	0	0	6	52	253	440	247	125	2	0	0	1125	
RH	MEAN (PERCENT)	78	71	61	69	65	70	72	67	57	67	76	77	69	
	HOUR 01 LST	79	74	69	75	75	80	85	78	68	75	83	82	77	
	HOUR 07 LST	82	81	76	82	79	83	87	86	82	82	89	86	83	
	HOUR 13 LST	73	62	51	59	53	56	55	53	37	53	63	68	57	
	HOUR 19 LST	78	67	52	63	54	60	59	54	44	61	72	75	62	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	2	2	2	0	1	0	0	3	0	2	0	4	16	
	THUNDERSTORMS	2	1	0	5	5	9	5	4	1	2	0	1	35	
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.)	29.14	29.12	29.16	29.02	29.06	29.10	29.11	29.06	29.08	29.19	29.21	29.15	29.12	
	MEAN SEA-LEVEL PRESS. (IN.)	30.10	30.07	30.11	29.94	29.98	30.01	30.01	29.97	29.99	30.12	30.16	30.11	30.05	
WINDS	RESULTANT SPEED (MPH)	2.4	2.2	3.1	1.4	1.3	0.4	2.3	1.3	1.2	1.3	2.4	3.0	1.2	
	RES. DIR. (TENS OF DEGS.)	22	24	36	21	24	17	27	36	29	25	26	23	26	
	MEAN SPEED (MPH)	9.9	9.7	10.0	10.3	7.0	6.7	6.5	6.8	6.3	7.4	7.9	8.4	8.1	
	PREVAIL. DIR. (TENS OF DEGS.)	26	19	01	25	20	19	22	36	21	21	21	21	21	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	34	36	28	37	31	24	37	25	24	33	28	28	37	
	DIR. (TENS OF DEGS.)	26	27	30	28	31	26	02	30	28	31	30	29	02	
	DATE OF OCCURRENCE	18	11	18+	09	23+	28+	26+	13	09	13	03	26+	JUL 26+	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	44	46	37	41	54	33	45	31	33	39	32	36	54	
DIR. (TENS OF DEGS.)	27	27	31	22	25	24	33	30	01	31	20	26	25		
DATE OF OCCURRENCE	18	11	18	16+	06	09	09	09	13+	16	13	19+	15		
														MAY 06	
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	4.76	3.66	1.89	2.88	1.98	3.16	3.16	2.61	0.86	2.49	1.42	3.60	32.47	
	GREATEST 24-HOUR (IN.)	0.94	1.30	0.88	0.63	0.56	0.79	1.29	1.34	0.77	1.89	0.86	1.02	1.89	
	DATE OF OCCURRENCE	08	07	05-06	20-21	13	26-27	26	08	28-29	9-10	02	13-14	OCT 9-10	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	19	13	7	17	9	11	8	7	5	7	6	12	121	
PRECIPITATION ≥ 0.10	8	9	5	9	4	8	7	5	1	4	4	6	70		
PRECIPITATION ≥ 1.00	0	1	0	0	0	0	1	1	0	1	0	0	4		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	9.6	3.9	9.5	T	0.0	0.0	0.0	0.0	0.0	0.0	T	2.3	25.3	
	GREATEST 24-HOUR (IN.)	3.9	1.9	5.2	T	0.0	0.0	0.0	0.0	0.0	0.0	T	1.2	5.2	
	DATE OF OCCURRENCE	02	12	09	09	0	0	0	0	0	0	02	24	MAR 09	
	MAXIMUM SNOW DEPTH (IN.)	5	1	4	0	0	0	0	0	0	0	0	1	5	
	DATE OF OCCURRENCE	11+	25+	15+									29+	JAN 11+	
	NUMBER OF DAYS WITH:														
SNOWFALL ≥ 1.0	2	2	2	0	0	0	0	0	0	0	0	1	7		

NORMALS, MEANS, AND EXTREMES

COVINGTON/CINCINNATI, KY (CVG)

LATITUDE: 39° 02' 35" N LONGITUDE: 84° 40' 18" W ELEVATION (FT): GRND: 885 BARO: 885 TIME ZONE: EASTERN (UTC + 5) WBAN: 93814

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	36.6	40.8	53.0	64.2	74.0	82.0	85.5	84.1	77.9	66.0	53.3	41.5	63.2
	MEAN DAILY MAXIMUM	52	37.9	42.3	51.9	64.1	74.1	82.4	86.0	84.7	78.1	66.5	52.7	42.1	63.6
	HIGHEST DAILY MAXIMUM	38	69	74	84	89	93	102	103	102	98	88	81	75	103
	YEAR OF OCCURRENCE		1967	1999	1986	1976	1962	1988	1988	1962	1964	1963	1987	1982	JUL 1988
	MEAN OF EXTREME MAXS.	52	60.5	64.3	75.0	82.0	87.1	92.5	94.9	93.6	90.7	82.4	72.0	62.7	79.8
	NORMAL DAILY MINIMUM	30	19.5	22.7	33.1	42.2	51.8	60.0	64.8	62.9	56.6	44.2	35.3	25.3	43.2
	MEAN DAILY MINIMUM	52	21.6	24.5	32.5	42.6	52.2	61.0	65.4	63.5	56.3	44.7	34.9	26.2	43.8
	LOWEST DAILY MINIMUM	38	-25	-11	-11	15	27	39	47	43	31	16	1	-20	-25
	YEAR OF OCCURRENCE		1977	1996	1980	1997	1963	1972	1963	1986	1993	1962	1976	1989	JAN 1977
	MEAN OF EXTREME MINS.	52	-2.0	2.7	14.1	26.3	36.0	47.5	53.8	52.1	40.1	27.6	17.4	5.3	26.7
	NORMAL DRY BULB	30	28.1	31.8	43.0	53.2	62.9	71.0	75.1	73.5	67.3	55.1	44.3	33.5	53.2
	MEAN DRY BULB	52	29.8	33.4	42.2	53.3	63.2	71.6	75.7	74.1	67.3	55.6	43.9	34.1	53.7
	MEAN WET BULB	16	28.4	31.7	38.0	47.3	57.2	65.3	68.9	67.2	60.5	50.0	40.4	32.1	48.9
	MEAN DEW POINT	16	23.6	25.8	31.2	40.6	52.0	61.5	65.1	63.4	56.0	44.9	34.9	27.3	43.9
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.7	4.3	7.8	5.6	2.1	0.0	0.0	0.0	20.5	
MAXIMUM ≤ 32°	30	12.0	7.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	6.6	28.1	
MINIMUM ≤ 32°	30	26.5	22.3	15.6	4.6	0.3	0.0	0.0	0.0	0.0	3.5	12.7	22.4	107.9	
MINIMUM ≤ 0°	30	3.2	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	6.2	
H/C	NORMAL HEATING DEG. DAYS	30	1144	930	682	354	151	11	0	0	51	327	621	977	5248
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	86	191	313	266	120	20	0	0	996
RH	NORMAL (PERCENT)	30	72	70	67	63	67	69	72	72	73	69	71	74	70
	HOUR 01 LST	30	75	74	72	70	77	80	83	83	82	77	75	76	77
	HOUR 07 LST	30	78	78	77	76	80	82	85	88	88	83	80	80	81
	HOUR 13 LST	30	67	64	59	53	54	56	57	57	55	55	62	68	59
	HOUR 19 LST	30	69	65	60	54	58	59	61	63	66	64	68	72	63
S	PERCENT POSSIBLE SUNSHINE	13	33	40	48	56	57	61	62	61	61	54	36	31	50
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	37	2.5	2.0	1.6	0.9	1.2	1.5	1.7	2.7	2.8	2.2	1.6	2.5	23.2
	THUNDERSTORMS	53	0.7	0.8	2.5	4.3	5.8	7.3	8.0	7.1	3.0	1.4	1.2	0.5	42.6
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	1			5.0											
PARTLY CLOUDY	1			1.0		1.0									
CLOUDY	1	1.0	4.0	7.0		2.0	1.0								
PR	MEAN STATION PRESSURE (IN)	27	29.20	29.10	29.10	29.10	29.09	29.10	29.10	29.10	29.10	29.20	29.19	29.19	29.13
	MEAN SEA-LEVEL PRES. (IN)	16	30.12	30.10	30.06	29.97	29.99	29.97	30.01	30.04	30.06	30.10	30.11	30.13	30.06
WINDS	MEAN SPEED (MPH)	45	10.4	10.4	11.0	10.6	8.6	7.9	7.2	6.8	7.4	8.2	10.0	9.9	9.0
	PREVAIL. DIR (TENS OF DEGS)	29	21	21	21	21	22	21	21	22	21	21	21	21	21
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	41	39	38	40	34	37	37	36	36	33	36	32	41
	DIR. (TENS OF DEGS)		17	30	28	29	30	34	02	28	31	27	18	29	17
	YEAR OF OCCURRENCE		1996	1996	1997	1997	1996	1998	1999	1997	1997	1996	1998	1996	JAN 1996
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	4	51	47	55	59	54	45	45	53	43	45	45	36	59
DIR. (TENS OF DEGS)		01	31	28	31	25	33	33	28	31	27	22	29	31	
YEAR OF OCCURRENCE		1996	1996	1997	1998	1999	1998	1999	1997	1997	1996	1998	1996	APR 1998	
PRECIPITATION	NORMAL (IN)	30	2.59	2.69	4.24	3.75	4.28	3.84	4.24	3.35	2.88	2.86	3.46	3.15	41.33
	MAXIMUM MONTHLY (IN)	52	9.43	6.72	12.18	9.77	9.48	9.61	8.36	7.71	8.61	8.60	7.51	7.90	12.18
	YEAR OF OCCURRENCE		1950	1955	1964	1998	1968	1998	1962	1982	1979	1983	1985	1990	MAR 1964
	MINIMUM MONTHLY (IN)	52	0.57	0.25	1.14	1.04	1.13	0.95	0.63	0.31	0.18	0.25	0.43	0.51	0.18
	YEAR OF OCCURRENCE		1981	1978	1960	1971	1964	1965	1997	1953	1963	1963	1949	1976	SEP 1963
	MAXIMUM IN 24 HOURS (IN)	52	4.33	2.84	5.21	3.31	3.71	3.45	4.28	3.52	4.54	4.47	3.36	2.96	5.21
	YEAR OF OCCURRENCE		1959	1990	1964	1996	1956	1974	1988	1995	1979	1985	1948	1948	MAR 1964
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	11.3	11.0	13.3	12.1	11.1	10.4	10.1	9.2	8.3	8.4	10.8	12.5	128.5	
PRECIPITATION ≥ 1.00	30	0.5	0.6	0.7	0.6	1.0	1.0	1.1	0.8	0.6	0.7	0.7	0.5	8.8	
SNOWFALL	NORMAL (IN)	30	7.1	6.1	4.1	0.5	0.*	0.0	0.0	0.0	0.0	0.3	1.8	3.7	23.6
	MAXIMUM MONTHLY (IN)	52	31.5	19.9	13.0	3.7	0.2	T	T	0.0	0.0	6.2	12.1	12.5	31.5
	YEAR OF OCCURRENCE		1978	1993	1968	1977	1989	1993	1994			1993	1966	1989	JAN 1978
	MAXIMUM IN 24 HOURS (IN)	52	12.8	12.6	9.8	3.6	0.2	T	T	0.0	0.0	5.9	9.0	7.5	12.8
	YEAR OF OCCURRENCE		1996	1998	1968	1977	1989	1993	1994			1993	1966	1990	JAN 1996
	MAXIMUM SNOW DEPTH (IN)	51	14	19	11	5	0	0	0	0	0	4	8	8	19
	YEAR OF OCCURRENCE		1978	1998	1980	1987						1993	1966	1990	FEB 1998
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	2.2	2.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.1	7.1	

PRECIPITATION (inches) 1999 CINCINNATI, (GREATER CINCINNATI AIRPORT) KY (CVG)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	1.27	1.68	4.71	7.19	1.88	5.73	3.47	2.96	3.87	2.44	2.29	3.32	40.81
1971	2.47	5.89	2.55	1.04	3.31	5.18	3.70	3.45	6.56	1.44	1.68	3.39	40.66
1972	1.96	2.20	3.68	5.89	6.02	2.41	1.50	2.64	5.96	2.55	6.26	4.23	45.30
1973	1.79	1.58	6.11	5.81	3.46	6.27	7.16	2.62	2.63	4.39	4.95	2.66	49.43
1974	3.65	1.63	4.39	5.08	5.53	4.38	3.82	5.75	4.44	1.07	4.19	2.83	46.76
1975	4.05	3.38	6.76	4.16	3.11	5.09	1.62	1.97	3.64	4.59	2.50	3.36	44.23
1976	3.00	2.37	2.14	1.21	1.80	5.94	2.33	4.36	1.95	3.85	0.83	0.51	30.29
1977	1.90	1.29	4.52	4.16	1.53	7.36	1.90	5.45	1.80	3.74	3.90	4.00	41.55
1978	4.52	0.25	1.99	2.28	5.30	6.63	6.86	4.41	0.43	5.03	2.67	6.46	46.83
1979	3.68	3.77	2.05	4.90	4.00	5.92	5.49	4.80	8.61	1.77	4.86	2.91	52.76
1980	2.26	1.04	4.50	1.96	4.59	4.13	5.51	4.19	1.83	3.28	2.58	1.26	37.13
1981	0.57	3.86	1.72	5.05	5.07	3.34	3.66	2.15	1.47	2.33	2.94	2.39	34.55
1982	7.17	1.17	4.67	2.18	4.60	3.61	2.44	7.71	1.27	0.99	5.08	4.25	45.14
1983	1.56	1.14	2.02	4.84	8.89	2.22	1.96	3.23	1.22	8.60	4.20	2.84	42.72
1984	0.75	2.40	3.61	4.88	4.82	2.11	2.57	3.30	3.50	3.85	6.00	4.21	42.00
1985	1.68	2.25	6.90	1.34	6.18	4.55	3.59	2.02	0.76	5.83	7.51	1.52	44.13
1986	1.01	2.85	3.07	1.57	3.59	1.46	3.33	3.78	3.53	3.08	3.79	2.58	33.64
1987	0.92	1.62	4.65	2.88	2.73	4.62	5.07	2.27	1.17	1.42	1.82	3.43	32.60
1988	2.75	4.94	3.42	3.92	1.99	1.19	6.85	2.44	3.05	1.86	4.78	2.78	39.97
1989	3.21	4.67	6.40	5.19	4.64	3.04	5.97	5.33	2.97	3.18	3.05	1.96	49.61
1990	2.59	5.82	2.75	3.22	9.41	5.01	3.68	5.67	4.13	5.09	2.31	7.90	57.58
1991	2.84	3.99	6.20	3.62	3.41	1.39	2.66	5.04	2.60	1.37	1.89	5.08	40.09
1992	2.99	0.93	4.19	2.71	2.84	3.65	7.00	3.17	3.23	1.11	4.31	1.36	37.49
1993	3.83	3.43	3.60	3.13	2.33	4.80	1.26	4.20	2.68	2.61	4.31	2.53	38.71
1994	3.22	1.68	2.22	6.46	2.06	4.08	5.64	5.14	0.55	1.49	2.87	2.88	38.29
1995	3.51	1.80	2.58	4.26	8.57	2.65	2.37	5.59	2.43	4.28	2.15	3.43	43.62
1996	4.36	1.98	5.58	8.20	9.20	5.83	2.62	0.76	5.41	1.74	3.40	4.33	53.41
1997	2.79	2.13	6.00	1.98	6.33	8.34	0.63	3.95	0.55	1.68	2.97	2.77	40.12
1998	3.27	3.04	3.52	9.77	5.12	9.61	4.75	2.67	0.67	2.82	2.33	3.82	51.39
1999	4.76	3.66	1.89	2.88	1.98	3.16	3.16	2.61	0.86	2.49	1.42	3.60	32.47
POR= 52 YRS	3.24	2.84	3.93	3.76	4.15	4.06	3.99	3.24	2.65	2.66	3.23	3.14	40.89

WBAN : 93814

AVERAGE TEMPERATURE (°F) 1999 CINCINNATI, (GREATER CINCINNATI AIRPORT) KY

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	24.0	30.6	39.0	56.8	66.8	72.2	75.5	75.1	73.7	58.6	45.0	38.0	54.6
1971	28.3	33.3	40.2	53.1	60.8	75.8	74.8	72.4	70.3	61.4	43.2	41.2	54.6
1972	30.2	29.5	40.6	52.5	63.1	65.3	75.5	73.4	68.7	51.7	40.3	36.1	52.2
1973	31.7	33.0	50.6	51.1	58.4	72.3	74.8	73.7	69.6	59.0	45.4	33.6	54.4
1974	35.7	33.9	45.9	54.3	61.9	67.7	75.2	74.3	61.6	53.2	44.4	34.4	53.5
1975	34.0	37.1	39.8	50.6	67.6	72.3	74.6	76.9	62.4	57.5	49.1	37.4	54.9
1976	27.1	41.7	47.0	56.1	60.0	71.5	73.6	71.2	63.6	48.8	34.9	27.6	51.9
1977	12.0	29.8	46.5	56.3	68.2	68.7	77.9	73.9	69.8	52.3	45.4	28.7	52.5
1978	18.4	18.2	36.4	53.4	60.1	72.2	75.0	73.0	70.8	52.6	46.4	36.0	51.0
1979	21.3	21.4	46.6	50.9	60.2	69.4	73.4	72.3	66.1	54.3	44.2	36.2	51.4
1980	29.9	24.0	38.5	50.3	64.9	70.1	76.6	76.5	68.6	50.6	41.5	32.9	52.0
1981	24.1	34.2	40.1	58.1	59.8	72.3	75.9	73.6	65.2	53.9	43.7	29.0	52.5
1982	23.9	30.6	44.3	49.6	68.1	67.4	77.0	71.3	66.9	59.3	48.4	42.9	54.1
1983	31.6	35.3	44.7	49.4	59.0	71.6	79.2	78.3	67.2	55.7	44.7	24.6	53.4
1984	23.7	38.2	34.4	51.1	58.9	74.1	72.2	74.3	65.7	61.5	42.0	42.4	53.2
1985	22.7	29.4	47.5	57.9	65.4	69.9	75.1	72.5	67.5	59.3	49.9	26.2	53.6
1986	30.9	35.2	45.2	55.3	64.5	72.9	77.6	72.0	70.1	56.4	42.7	34.0	54.7
1987	30.7	37.3	45.0	53.0	69.3	73.6	76.1	75.2	68.3	49.3	48.0	36.8	55.2
1988	27.5	30.5	42.2	52.4	64.4	72.4	78.5	77.5	67.2	48.5	45.0	34.1	53.4
1989	38.6	30.8	45.4	52.9	60.1	71.3	76.7	73.5	66.4	55.7	43.9	21.6	53.1
1990	40.0	40.8	48.2	52.8	61.6	71.8	74.7	73.7	67.7	55.9	48.9	38.3	56.2
1991	31.0	37.3	45.4	56.9	70.4	75.4	77.9	74.8	68.6	58.6	41.4	37.3	56.3
1992	32.9	39.7	43.6	54.1	61.2	68.0	73.5	69.6	64.5	53.3	44.2	35.6	53.4
1993	34.5	29.3	40.2	52.0	63.3	70.9	79.1	76.2	63.9	53.0	43.5	32.8	53.2
1994	23.3	33.2	41.4	55.5	59.3	75.0	75.2	71.9	65.7	57.1	49.9	40.0	54.0
1995	31.3	31.0	45.7	53.3	62.7	72.9	76.6	79.5	65.7	55.3	37.5	29.3	53.4
1996	27.9	32.4	36.7	49.2	63.2	71.0	72.1	74.3	65.4	55.1	37.8	37.6	51.9
1997	28.2	37.6	44.2	48.1	57.2	69.1	75.1	71.6	65.6	55.4	41.3	35.7	52.4
1998	38.6	40.5	43.6	53.0	66.6	71.3	74.3	75.1	71.6	56.2	45.5	38.3	56.2
1999	32.4	37.9	38.3	55.0	63.6	73.0	79.0	72.7	66.8	55.3	48.5	34.8	54.8
POR= 52 YRS	29.8	33.4	42.2	53.3	63.2	71.7	75.7	74.1	67.3	55.6	43.9	34.1	53.7

HEATING DEGREE DAYS (base 65°F) 1999 CINCINNATI, (GREATER CINCINNATI AIRPORT) KY (

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	4	0	28	212	591	829	1133	881	758	351	157	0	4944
1971-72	0	0	31	128	649	731	1073	1024	751	374	116	79	4956
1972-73	2	3	24	404	733	891	1025	888	445	425	206	3	5049
1973-74	0	1	27	217	583	964	901	863	591	332	161	31	4671
1974-75	0	0	147	371	614	942	953	774	778	435	50	10	5074
1975-76	5	0	142	244	474	848	1168	670	558	321	176	5	4611
1976-77	0	4	72	498	893	1157	1640	980	571	276	67	36	6194
1977-78	0	2	32	391	586	1118	1440	1303	880	346	207	10	6315
1978-79	0	0	21	381	552	891	1348	1216	563	425	179	15	5591
1979-80	1	14	60	346	616	887	1080	1182	814	434	92	24	5550
1980-81	0	0	48	446	697	988	1261	858	768	230	191	6	5493
1981-82	0	0	87	344	634	1107	1268	956	635	460	28	19	5538
1982-83	0	1	56	244	505	682	1029	825	627	466	199	21	4655
1983-84	1	0	89	288	600	1247	1274	773	939	425	219	4	5859
1984-85	0	0	101	128	684	692	1306	992	543	256	72	22	4796
1985-86	0	0	78	212	450	1195	1056	828	613	305	105	3	4845
1986-87	0	21	25	292	664	955	1058	766	612	365	52	2	4812
1987-88	0	1	39	477	505	868	1156	991	699	374	84	22	5216
1988-89	1	0	38	509	595	949	811	949	608	380	211	14	5065
1989-90	0	4	77	297	630	1335	770	671	531	390	127	21	4853
1990-91	0	1	66	296	477	821	1046	773	602	250	44	0	4376
1991-92	0	0	81	232	700	853	988	727	658	339	172	27	4777
1992-93	0	8	97	358	617	907	937	997	762	384	103	40	5210
1993-94	0	0	101	370	640	992	1291	885	724	298	211	5	5517
1994-95	0	6	56	250	447	766	1037	948	589	353	109	2	4563
1995-96	0	0	68	298	818	1099	1142	939	873	478	132	10	5857
1996-97	0	0	93	307	811	847	1136	765	640	498	252	36	5385
1997-98	1	7	53	339	703	900	808	679	679	355	51	47	4622
1998-99	0	0	17	284	576	826	1007	754	820	297	90	5	4676
1999-	0	0	63	294	489	931							

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COOLING DEGREE DAYS (base 65°F) 1999 CINCINNATI, (GREATER CINCINNATI AIRPO

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	28	151	225	336	320	292	21	0	0	1373
1971	0	0	0	0	33	335	313	236	195	25	0	0	1137
1972	0	0	0	7	65	96	334	268	142	0	0	0	912
1973	0	0	4	13	7	228	310	278	170	36	0	0	1046
1974	0	0	8	17	70	121	323	297	50	12	2	0	900
1975	0	0	0	8	138	236	309	376	72	19	3	0	1161
1976	0	0	6	59	28	207	276	202	39	5	0	0	822
1977	0	0	7	22	171	152	407	285	181	4	5	0	1234
1978	0	0	0	4	63	231	315	255	200	2	0	0	1070
1979	0	0	2	8	38	154	271	248	102	22	0	0	845
1980	0	0	0	0	98	187	364	363	166	5	0	0	1183
1981	0	0	1	31	34	234	343	275	99	9	0	0	1026
1982	0	0	0	5	129	99	381	203	120	73	13	8	1031
1983	0	0	4	4	18	225	448	417	161	8	0	0	1285
1984	0	0	0	13	38	289	233	295	130	29	0	0	1027
1985	0	0	6	47	93	174	318	241	162	41	5	0	1087
1986	0	0	4	22	97	247	399	243	183	30	0	0	1225
1987	0	0	0	12	193	266	353	325	147	0	4	0	1300
1988	0	0	2	3	70	251	425	392	111	6	0	0	1260
1989	0	0	7	26	67	210	369	275	125	17	0	0	1096
1990	0	0	17	32	27	230	309	276	155	21	3	0	1070
1991	0	0	0	14	218	317	408	310	195	42	0	0	1504
1992	0	0	0	19	59	126	273	158	88	2	0	0	725
1993	0	0	0	0	56	224	443	353	75	5	0	0	1156
1994	0	0	0	19	40	314	325	228	83	14	0	0	1023
1995	0	0	0	9	45	242	365	454	97	1	0	0	1213
1996	0	0	0	7	79	198	226	296	109	5	0	0	920
1997	0	0	0	0	16	163	320	218	77	48	0	0	842
1998	0	0	23	0	104	242	299	319	222	16	0	5	1230
1999	0	0	0	6	52	253	440	247	125	2	0	0	1125

SNOWFALL (inches) 1999 CINCINNATI, (GREATER CINCINNATI AIRPORT) KY (CVG)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	0.0	0.4	0.4	3.2	13.3	9.7	T	0.0	0.0	27.0
1971-72	0.0	0.0	0.0	0.0	3.0	T	1.6	10.8	0.1	0.5	0.0	0.0	16.0
1972-73	0.0	0.0	0.0	T	6.5	1.9	0.5	3.1	3.9	1.8	0.0	0.0	17.7
1973-74	0.0	0.0	0.0	0.0	0.4	2.0	1.7	3.2	3.4	0.5	0.0	0.0	11.2
1974-75	0.0	0.0	0.0	T	5.0	5.6	2.0	2.2	6.8	0.2	0.0	0.0	21.8
1975-76	0.0	0.0	0.0	0.0	3.7	1.7	8.0	0.1	0.6	0.0	0.0	0.0	14.1
1976-77	0.0	0.0	0.0	0.0	2.7	1.0	30.3	4.2	5.4	3.7	0.0	0.0	47.3
1977-78	0.0	0.0	0.0	0.0	4.0	6.3	31.5	4.6	7.5	0.0	0.0	0.0	53.9
1978-79	0.0	0.0	0.0	0.0	T	0.7	17.5	11.7	0.6	0.1	0.0	0.0	30.6
1979-80	0.0	0.0	0.0	0.0	1.0	1.0	8.3	11.9	7.9	T	0.0	0.0	30.1
1980-81	0.0	0.0	0.0	T	1.2	3.7	4.0	2.6	2.5	0.0	0.0	0.0	14.0
1981-82	0.0	0.0	0.0	T	0.3	10.9	7.1	3.9	0.5	1.5	0.0	0.0	24.2
1982-83	0.0	0.0	0.0	0.0	T	T	0.8	5.5	0.3	T	0.0	0.0	6.6
1983-84	0.0	0.0	0.0	0.0	T	1.7	4.1	6.7	4.1	0.0	0.0	0.0	16.6
1984-85	0.0	0.0	0.0	0.0	1.4	7.3	12.2	9.5	0.4	1.7	0.0	0.0	32.5
1985-86	0.0	0.0	0.0	0.0	0.0	5.0	2.8	11.3	0.8	T	0.0	0.0	19.9
1986-87	0.0	0.0	0.0	0.0	T	0.8	1.6	2.4	8.8	2.3	0.0	0.0	15.9
1987-88	0.0	0.0	0.0	0.0	0.1	0.2	4.3	4.7	2.3	T	0.0	0.0	11.6
1988-89	0.0	0.0	0.0	0.0	0.7	2.9	T	3.0	1.2	0.3	0.2	0.0	8.3
1989-90	0.0	0.0	0.0	5.9	0.2	12.5	1.3	3.6	5.6	T	0.0	0.0	29.1
1990-91	0.0	0.0	0.0	0.0	0.0	8.6	4.3	2.6	T	0.0	0.0	0.0	15.5
1991-92	T	0.0	0.0	0.0	1.9	0.5	3.6	1.2	3.6	2.9	0.1	0.0	13.8
1992-93	0.0	0.0	0.0	T	1.6	3.8	0.3	19.9	3.9	T	0.0	T	29.5
1993-94	0.0	0.0	0.0	6.2	0.8	5.4	13.3	0.5	6.6	0.2	0.0	0.0	33.0
1994-95	T	0.0	0.0	0.0	0.0	0.2	16.4	7.6	3.3	0.0	0.0	0.0	27.5
1995-96	0.0	0.0	0.0	0.0	0.9	4.1	27.0	1.7	8.4	2.5	0.0	0.0	44.6
1996-97	0.0	0.0	0.0	0.0	2.1	1.3	4.3	4.5	T	T	0.0	0.0	12.2
1997-98	0.0	0.0	0.0	0.0	0.4	4.2	1.2	18.5	7.1	T	0.0	0.0	31.4
1998-99	0.0	0.0	0.0	0.0	0.0	3.4	9.6	3.9	9.5	T	0.0	0.0	26.4
1999-	0.0	0.0	0.0	0.0	T	2.3							
POR= 51 YRS	T	0.0	0.0	0.3	2.0	3.8	7.1	5.6	4.3	0.5	0.0	T	23.6

WBAN : 93814

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
CINCINNATI, (GREATER CINCINNATI AIRPORT)
OHIO (CVG)

Greater Cincinnati Airport is located on a gently rolling plateau about 12 miles southwest of downtown Cincinnati and 2 miles south of the Ohio River at its nearest point. The river valley is rather narrow and steep-sided varying from 1 to 3 miles in width and the river bed is 500 feet below the level of the airport.

The climate is continental with a rather wide range of temperatures from winter to summer. A precipitation maximum occurs during winter and spring with a late summer and fall minimum. On the average, the maximum snowfall occurs during January, although the heaviest 24-hour amounts have been recorded during late November and February.

The heaviest precipitation, as well as the precipitation of the longest duration, is normally associated with low pressure disturbances moving in a general southwest to northeast direction through the Ohio valley and south of the Cincinnati area.

Summers are warm and rather humid. The temperature will reach 100 degrees or more in 1 year out of 3. However, the temperature will reach 90 degrees or higher on about 19 days each year. Winters are moderately cold with frequent periods of extensive cloudiness.

The freeze free period lasts on the average 187 days from mid-April to the latter part of October.

STATION LOCATION

COVINGTON/CINCINNATI, KY
CINCINNATI/NORTHERN KY INT

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	NORTH	WEST	ELEVATION ABOVE												AUTOMATED	* Type	REMARKS
						SEA LEVEL	GROUND													
							WIND	EMERGENCY	REMEMORANDUM	STATION	RAINFALL	WIND	RAINFALL	WIND	RAINFALL	WIND	RAINFALL			
Greater Cincinnati AP Donaldson Road Erlanger, Kentucky	3/15/47	7/20/75	13 mi. WSW from Lunken Airport #	39° 03'	84° 40'	869	46 a64 e20	33	33	NA	NA g31	30 b5 c5	30 b4 d4	NA f4	NA	# - Station at Lunken Airport operated by Weather Bureau 5/7/30 to 2/14/49 with exception of interruptions due to floods in 1937 and 1945. a - Effective 4/5/51. b - Effective 5/26/54. c - Minor move 3/18/58. d - Minor move 12/10/58. e - Moved to field 2/8/62. f - Commissioned 1980's of thermometer site 4/24/62. g - Installed 12/18/73.				
OKI Air Freight Bldg. Greater Cincinnati AP	7/20/75	6/15/76	0.4 mi. NNW	39° 04' 139°03'	84° 40'	869	h20	5	5	NA	3	3	3	h4	NA	Temporary relocation due to fire. h - Not moved 7/20/75. i - Corrected value eff. 3/15/47.				
Terminal "A" Greater Cincinnati AP	6/15/76	10/01/95	0.4 mi. SSE	39° 03'	84° 40'	869	k20	NA	33	NA m36	3 p	4	3	k4 n4	NA	k - Not moved 6/15/76. m - Installed on roof 4/10/83. n - Type change 8/8/85. p - Removed 7/1987.				
Cincinnati/Northern KY International	10/01/95	Present	NA	39°03'	84°40'	885								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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