

1998

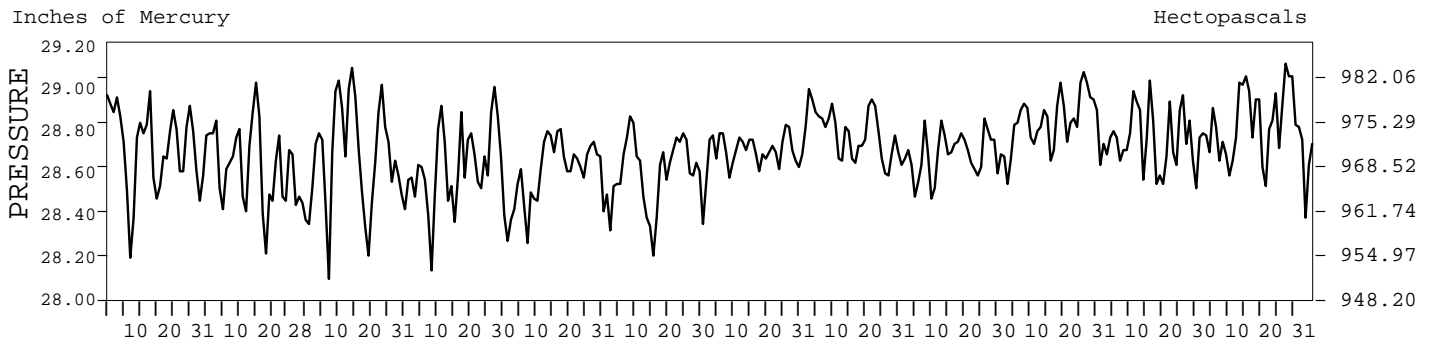
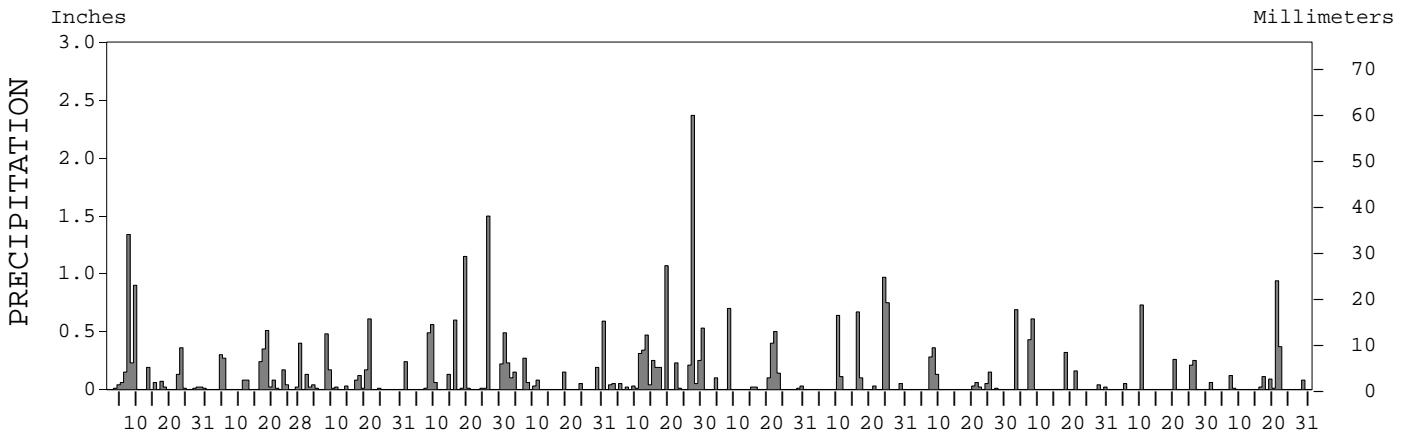
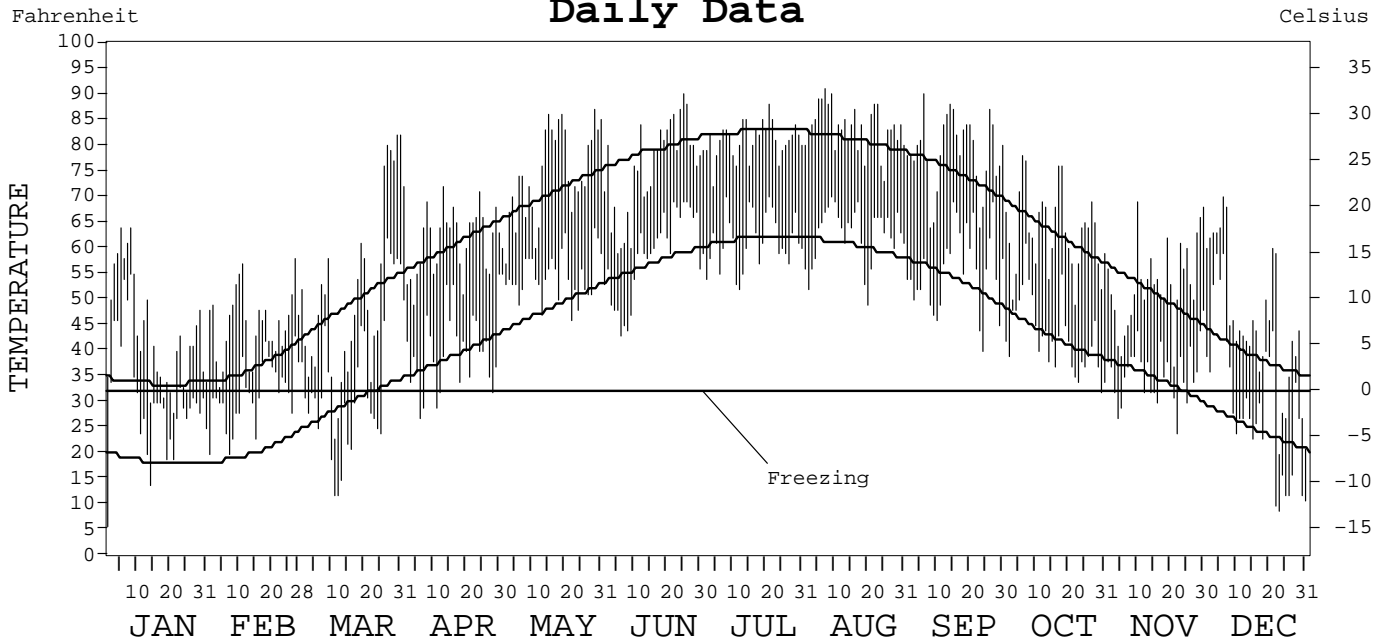
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



PITTSBURGH, GRTR. PITT. AIRPORT
PENNSYLVANIA (PIT)

ISSN 0270-0522

Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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 ASHEVILLE, NORTH CAROLINA

METEOROLOGICAL DATA FOR 1998

PITTSBURGH, PA (PIT)

LATITUDE: 40° 30' 05" N LONGITUDE: 80° 13' 52" W ELEVATION (FT): GRND: 1137 BARO: 1213 TIME ZONE: EASTERN (UTC+ 5) WBAN: 94823

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	43.3	45.3	50.7	61.8	74.3	75.7	81.0	83.5	78.6	63.2	53.1	45.7	63.0	
	HIGHEST DAILY MAXIMUM	64	58	82	72	87	90	88	91	90	78	69	70	91	
	DATE OF OCCURRENCE	08+	27	31+	13+	29	25	21	07	06	06	10	06	AUG 07	
	MEAN DAILY MINIMUM	30.8	31.7	34.1	40.2	54.5	58.5	61.3	62.6	55.8	42.9	35.6	29.9	44.8	
	LOWEST DAILY MINIMUM	6	20	12	27	46	43	52	49	40	32	24	9	6	
	DATE OF OCCURRENCE	01	07+	12+	06	22	06	12	20	24	30	22	23	JAN 01	
	AVERAGE DRY BULB	37.1	38.5	42.4	51.0	64.4	67.1	71.2	73.1	67.2	53.1	44.4	37.8	53.9	
	MEAN WET BULB	34.3	35.1	38.0	45.3	58.3	62.2	64.9	65.2	60.6	47.9	39.5	33.9	48.8	
	MEAN DEW POINT	29.3	30.5	32.0	37.5	53.7	58.9	60.7	60.4	55.8	42.9	32.4	28.5	43.5	
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	1	0	2	1	0	0	0	4	
	MAXIMUM ≤ 32°	5	0	2	0	0	0	0	0	0	0	0	5	12	
	MINIMUM ≤ 32°	22	17	19	5	0	0	0	0	0	1	10	19	93	
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	858	736	716	415	78	75	0	0	52	369	616	837	4752	
	COOLING DEGREE DAYS	0	0	22	0	67	147	199	254	125	6	0	0	820	
RH	MEAN (PERCENT)	76	76	70	63	72	77	71	68	69	71	64	72	71	
	HOUR 01 LST	80	81	79	72	83	87	84	81	81	82	71	76	80	
	HOUR 07 LST	78	84	83	81	84	86	86	84	85	85	74	82	83	
	HOUR 13 LST	68	67	59	51	54	65	55	51	50	54	52	64	58	
	HOUR 19 LST	74	71	62	52	66	70	60	57	61	66	60	67	64	
S	PERCENT POSSIBLE SUNSHINE	16	27	28	44	47	34	57	62	64	53	41	35	42	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	4	0	1	0	2	1	1	0	0	1	0	2	12	
	THUNDERSTORMS	2	1	0	3	6	12	3	6	5	0	0	0	38	
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.)	28.72	28.63	28.66	28.63	28.60	28.60	28.71	28.78	28.68	28.85	28.76	28.82	28.70	
	MEAN SEA-LEVEL PRESS. (IN.)	30.08	29.98	30.01	29.96	29.91	29.90	30.01	30.08	29.99	30.18	30.11	30.18	30.03	
WINDS	RESULTANT SPEED (MPH)	2.4	1.8	2.2	2.2	1.1	3.4	1.7	0.9	2.4	2.5	3.9	4.3	2.1	
	RES. DIR. (TENS OF DEGS.)	24	35	24	32	30	25	28	27	27	30	25	25	27	
	MEAN SPEED (MPH)	7.4	7.6	9.4	7.7	5.9	6.9	5.5	5.4	5.7	6.3	7.6	7.0	6.9	
	PREVAIL. DIR. (TENS OF DEGS.)	21	09	22	27	26	23	26	21	25	27	27	27	27	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	28	30	37	51	39	53	33	31	30	30	30	33	53	
	DIR. (TENS OF DEGS.)	29	10	28	30	27	34	29	31	34	31	25	31	34	
	DATE OF OCCURRENCE	09	17	14	08	31	30	21	25	08	01	11	22	JUN 30	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	40	37	43	61	51	62	41	41	36	36	39	40	62	
DIR. (TENS OF DEGS.)	27	10	28	31	26	34	29	31	33	31	25	32	34		
DATE OF OCCURRENCE	09	17	14	08	31	30	22	25	08	01	11	30+	JUN 30		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	3.63	2.57	1.91	5.00	2.39	6.71	2.02	3.32	1.09	2.27	1.50	1.81	34.22	
	GREATEST 24-HOUR (IN.)	1.51	0.53	0.61	1.51	0.70	2.37	0.70	1.41	0.45	1.04	0.73	1.31	2.37	
	DATE OF OCCURRENCE	07-08	17-18	21	25-26	01-02	27	08	24-25	08-09	07-08	10	21-22	JUN 27	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	18	14	15	14	12	21	10	8	9	7	5	10	143	
PRECIPITATION ≥ 0.10	7	7	6	8	8	12	6	6	4	5	4	4	77		
PRECIPITATION ≥ 1.00	1	0	0	2	0	2	0	0	0	0	0	0	5		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	1.7	2.5	4.9	0.0	0.0	0.0	0.0	0.0	0.0	T	T	1.8	10.9	
	GREATEST 24-HOUR (IN.)	0.7	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.8	2.4	
	DATE OF OCCURRENCE	17	04	11							22	21+	17	MAR 11	
	MAXIMUM SNOW DEPTH (IN.)	5	2	2	0	0	0	0	0	0	0	0	T	5	
	DATE OF OCCURRENCE	01	05	11									31+	JAN 01	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	0	1	2	0	0	0	0	0	0	0	0	0	3		

NORMALS, MEANS, AND EXTREMES

PITTSBURGH, PA (PIT)

LATITUDE: 40° 30' 05" N LONGITUDE: 80° 13' 52" W ELEVATION (FT): GRND: 1137 BARO: 1213 TIME ZONE: EASTERN (UTC+ 5) WBAN: 94823

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	33.7	36.9	49.0	60.3	70.6	78.9	82.6	80.8	74.3	62.5	50.4	38.6	59.9
	MEAN DAILY MAXIMUM	51	35.4	38.4	48.3	60.7	70.9	79.3	82.8	81.3	74.4	63.1	50.3	39.2	60.3
	HIGHEST DAILY MAXIMUM	46	69	73	82	89	91	98	103	100	97	87	82	74	103
	YEAR OF OCCURRENCE		1985	1997	1998	1990	1987	1988	1988	1988	1954	1959	1961	1982	JUL 1988
	MEAN OF EXTREME MAXS.	51	58.2	60.5	73.6	80.7	85.6	90.2	91.9	90.5	87.7	79.3	71.1	60.8	77.5
	NORMAL DAILY MINIMUM	30	18.5	20.3	29.8	38.8	48.4	56.9	61.6	60.2	53.5	42.3	34.1	24.4	40.7
	MEAN DAILY MINIMUM	51	20.3	22.0	29.6	39.5	49.0	57.7	62.3	60.8	53.7	42.9	34.0	25.1	41.4
	LOWEST DAILY MINIMUM	46	-22	-12	-1	14	26	34	42	39	31	16	-1	-12	-22
	YEAR OF OCCURRENCE		1994	1979	1980	1982	1970	1972	1963	1982	1959	1965	1958	1989	JAN 1994
	MEAN OF EXTREME MINS.	51	-7	1.1	11.2	22.8	34.1	43.7	50.3	48.5	38.0	28.1	17.2	6.0	25.0
	NORMAL DRY BULB	30	26.1	28.7	39.4	49.6	59.5	67.9	72.1	70.5	63.9	52.4	42.3	31.5	50.3
	MEAN DRY BULB	51	27.8	30.3	39.0	50.1	60.0	68.6	72.5	71.0	64.2	53.0	42.0	32.1	50.9
	MEAN WET BULB	15	26.6	28.7	35.2	44.1	53.4	62.0	65.9	64.5	58.4	47.5	38.3	30.4	46.2
	MEAN DEW POINT	15	21.1	22.4	28.0	36.2	47.4	57.0	61.6	60.1	53.9	42.1	32.6	25.1	40.6
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.3	1.6	3.4	1.7	0.6	0.0	0.0	0.0	7.6	
MAXIMUM ≤ 32°	30	14.5	10.3	3.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3	9.9	39.2	
MINIMUM ≤ 32°	30	27.3	23.9	19.5	8.4	0.9	0.0	0.0	0.0	0.0	4.3	14.1	24.5	122.9	
MINIMUM ≤ 0°	30	2.6	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*	0.8	5.0	
H/C	NORMAL HEATING DEG. DAYS	30	1206	1016	794	462	214	36	6	14	100	400	681	1039	5968
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	44	123	227	184	67	9	0	0	654
RH	NORMAL (PERCENT)	30	70	67	64	60	63	66	69	71	72	68	70	72	68
	HOUR 01 LST	30	72	71	69	66	72	77	80	82	82	77	74	75	75
	HOUR 07 LST	30	75	74	74	72	76	79	82	86	86	81	78	77	78
	HOUR 13 LST	30	65	62	57	50	52	52	54	56	57	55	62	67	57
	HOUR 19 LST	30	67	63	58	52	55	57	60	63	66	63	67	70	62
S	PERCENT POSSIBLE SUNSHINE	46	32	36	43	46	50	55	57	55	55	51	36	29	45
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	47	1.4	1.2	1.0	0.8	1.3	1.1	1.6	2.1	2.3	1.8	1.4	1.8	17.8
	THUNDERSTORMS	47	0.2	0.5	1.7	3.3	5.1	7.0	6.6	5.4	3.0	1.2	0.6	0.3	34.9
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	44	6.5	6.2	6.0	5.8	5.5	5.2	4.9	4.9	4.8	4.9	6.0	6.4	5.6
	MIDNIGHT-MIDNIGHT (OKTAS)	32	6.3	5.9	5.7	5.4	5.1	4.9	4.6	4.4	4.5	4.6	5.8	6.2	5.3
	MEAN NO. DAYS WITH:														
CLEAR	44	2.9	3.3	4.5	4.4	5.3	4.8	5.4	6.6	7.3	7.8	3.7	2.7	58.7	
PARTLY CLOUDY	44	6.0	5.9	6.8	8.3	9.0	11.8	12.8	11.6	10.1	8.8	6.3	5.7	103.1	
CLOUDY	44	22.2	19.1	19.8	17.3	16.7	13.4	12.7	12.9	12.5	14.4	20.0	22.6	203.6	
PR	MEAN STATION PRESSURE (IN)	25	28.74	28.74	28.70	28.68	28.69	28.71	28.74	28.75	28.80	28.79	28.77	28.76	28.74
	MEAN SEA-LEVEL PRES. (IN)	15	30.09	30.07	30.05	29.96	29.99	29.98	30.02	30.06	30.08	30.11	30.10	30.11	30.05
WINDS	MEAN SPEED (MPH)	41	10.6	10.5	10.8	10.5	8.9	8.1	7.4	7.0	7.6	8.4	9.8	10.2	9.2
	PREVAIL. DIR (TENS OF DEGS)	30	26	26	26	27	23	23	24	23	24	26	24	27	24
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	2	32	38	37	51	39	53	41	33	30	30	34	33	53
	DIR. (TENS OF DEGS)		27	25	28	30	27	34	35	36	34	31	31	31	34
	YEAR OF OCCURRENCE		1997	1997	1998	1998	1998	1998	1997	1997	1998	1998	1997	1998	JUN 1998
	MAXIMUM 5-SECOND:														
SPEED (MPH)	2	43	49	45	61	59	62	61	41	36	36	43	40	62	
DIR. (TENS OF DEGS)		24	22	28	31	22	34	33	31	33	31	30	32	34	
YEAR OF OCCURRENCE		1997	1997	1997	1998	1997	1998	1997	1998	1998	1998	1997	1998	JUN 1998	
PRECIPITATION	NORMAL (IN)	30	2.54	2.39	3.41	3.15	3.59	3.71	3.75	3.21	2.97	2.36	2.85	2.92	36.85
	MAXIMUM MONTHLY (IN)	46	6.25	5.98	6.10	7.61	6.56	10.29	8.71	7.86	6.00	8.20	11.05	8.51	11.05
	YEAR OF OCCURRENCE		1978	1956	1967	1964	1989	1989	1992	1987	1990	1954	1985	1990	NOV 1985
	MINIMUM MONTHLY (IN)	46	0.77	0.51	1.14	0.48	1.21	0.64	1.62	0.78	0.28	0.16	0.90	0.40	0.16
	YEAR OF OCCURRENCE		1981	1969	1969	1971	1965	1992	1989	1957	1985	1963	1976	1955	OCT 1963
	MAXIMUM IN 24 HOURS (IN)	46	1.69	2.30	2.00	2.15	2.90	3.11	2.97	3.06	2.59	3.56	1.97	2.76	3.56
	YEAR OF OCCURRENCE		1986	1975	1964	1964	1997	1996	1971	1956	1990	1954	1985	1990	OCT 1954
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	16.4	14.0	15.4	13.6	12.9	11.8	10.4	9.5	10.0	10.5	13.3	16.7	154.5	
PRECIPITATION ≥ 1.00	30	0.3	0.3	0.3	0.4	0.7	0.8	0.9	0.9	0.5	0.2	0.3	0.3	5.9	
SNOWFALL	NORMAL (IN)	30	12.6	9.9	7.7	1.7	0.2	0.0	0.0	0.0	0.2	3.2	8.1	43.6	
	MAXIMUM MONTHLY (IN)	45	40.2	24.2	34.1	8.1	3.1	T	T	T	8.5	13.9	21.2	40.2	
	YEAR OF OCCURRENCE		1978	1972	1993	1987	1966	1990	1991	1994	1989	1993	1995	1974	JAN 1978
	MAXIMUM IN 24 HOURS (IN)	45	14.0	12.3	23.8	7.7	3.1	T	T	T	6.6	10.5	12.5	23.8	
	YEAR OF OCCURRENCE		1966	1960	1993	1987	1966	1990	1991	1994	1989	1993	1958	1974	MAR 1993
	MAXIMUM SNOW DEPTH (IN)	50	26	16	25	7	1	0	0	0	0	1	22	13	26
	YEAR OF OCCURRENCE		1978	1961	1993	1987	1963					1992	1950	1974	JAN 1978
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	3.9	3.1	2.3	0.5	0.1	0.0	0.0	0.0	0.0	0.1	0.9	2.5	13.4	

PRECIPITATION (inches) 1998 PITTSBURGH, GRTR. PITT. AIRPORT PA (PIT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	2.02	0.51	1.14	2.91	1.89	3.74	4.52	2.96	0.91	2.59	2.44	3.95	29.58
1970	1.61	1.92	3.35	3.09	4.36	4.61	3.89	1.55	2.77	4.80	2.64	3.29	37.88
1971	2.29	4.04	3.20	0.48	3.87	1.41	6.82	1.23	3.86	0.84	1.94	3.24	33.22
1972	1.84	3.64	3.68	4.37	1.38	5.08	2.98	1.79	5.42	2.15	4.70	3.04	40.07
1973	2.03	1.80	3.86	4.69	5.87	3.12	2.16	3.40	3.56	4.45	2.65	2.15	39.74
1974	3.47	2.10	3.72	3.26	5.35	5.08	3.30	2.93	4.42	1.12	3.06	4.02	41.83
1975	3.34	4.64	4.62	2.27	1.84	4.58	4.38	7.56	5.06	3.46	1.77	2.90	46.42
1976	3.25	1.74	4.45	1.24	1.99	3.37	4.72	1.25	3.30	3.76	0.90	1.81	31.78
1977	2.06	0.87	4.12	3.26	2.57	2.85	3.38	2.66	3.13	2.44	2.59	3.27	33.20
1978	6.25	0.54	1.65	2.25	4.26	4.11	2.15	3.65	2.64	3.42	1.62	5.24	37.78
1979	4.80	3.12	1.32	3.17	4.49	1.73	4.31	6.84	3.60	2.46	2.43	2.29	40.56
1980	1.56	1.32	5.65	2.94	4.32	4.34	6.76	5.10	1.29	2.42	2.38	1.38	39.46
1981	0.77	4.20	2.12	4.92	2.04	8.20	3.82	0.98	4.13	1.82	1.50	3.00	37.50
1982	4.44	1.93	3.52	1.44	3.98	3.05	2.36	1.97	2.80	0.40	3.33	2.79	32.01
1983	1.19	1.58	3.50	4.33	5.24	4.82	3.32	3.13	2.42	3.67	3.94	4.27	41.41
1984	1.40	2.05	2.32	3.72	5.22	1.98	3.01	5.15	0.84	3.45	3.14	3.04	35.32
1985	1.43	1.45	3.37	1.64	5.80	2.26	4.06	2.64	0.28	2.27	11.05	2.26	38.51
1986	2.49	3.43	1.38	1.94	1.67	5.24	5.66	3.04	2.33	2.83	3.92	3.47	37.40
1987	2.23	0.71	2.65	5.30	2.41	6.30	2.42	7.86	3.97	0.92	2.02	2.41	39.20
1988	1.49	3.46	2.56	1.97	2.78	1.26	2.82	2.04	2.34	1.40	2.80	2.17	27.09
1989	1.99	3.42	5.52	1.43	6.56	10.29	1.62	1.12	4.57	2.04	1.56	2.39	42.51
1990	3.30	3.31	1.47	3.48	6.19	4.24	6.59	3.59	6.00	3.51	2.05	8.51	52.24
1991	2.55	1.88	2.92	2.56	3.29	3.82	3.74	1.63	3.45	0.55	1.97	3.66	32.02
1992	2.13	1.73	3.54	2.30	2.31	0.64	8.71	4.77	2.91	1.47	3.31	2.83	36.65
1993	2.99	2.92	4.14	3.66	2.85	3.35	2.85	2.44	3.87	2.77	4.30	2.12	38.26
1994	3.90	2.13	5.00	3.72	2.54	2.91	3.27	7.75	3.59	0.88	3.64	2.01	41.34
1995	2.23	1.73	1.56	1.70	3.72	3.74	3.06	1.75	1.80	3.24	2.74	1.62	28.89
1996	3.68	2.54	4.54	4.42	2.95	7.95	4.01	1.99	5.63	2.96	2.83	1.98	45.48
1997	1.58	1.15	3.22	1.57	6.33	3.95	1.82	3.80	2.90	0.95	5.98	1.29	34.54
1998	3.63	2.57	1.91	5.00	2.39	6.71	2.02	3.32	1.09	2.27	1.50	1.81	34.22
POR= 127 YRS	2.85	2.45	3.27	3.09	3.39	3.79	3.87	3.19	2.61	2.39	2.42	2.67	35.99

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AVERAGE TEMPERATURE (°F) 1998 PITTSBURGH, GRTR. PITT. AIRPORT PA (PIT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	26.7	29.5	34.3	51.7	60.2	69.3	72.7	69.7	63.0	52.9	39.2	26.7	49.7
1970	20.7	27.7	35.5	52.5	63.9	68.2	71.6	71.6	67.8	54.9	42.2	32.1	50.7
1971	23.7	30.4	34.3	46.0	56.6	71.4	70.2	69.6	68.5	59.5	40.4	38.8	50.8
1972	29.6	26.5	36.4	48.5	61.8	63.8	71.2	70.6	65.3	48.4	39.3	37.2	49.9
1973	29.7	28.8	48.3	49.3	56.4	70.9	73.2	73.2	66.5	56.1	44.1	33.3	52.5
1974	34.0	29.9	41.2	51.8	58.3	65.2	73.1	72.8	62.2	52.4	43.9	32.5	51.4
1975	32.6	32.1	36.3	44.3	63.0	67.8	72.8	73.0	58.8	53.3	46.3	32.9	51.1
1976	23.5	37.2	45.2	50.6	55.6	68.4	67.4	65.3	59.9	45.9	33.1	23.9	48.0
1977	11.4	26.9	43.7	50.8	63.0	63.8	71.8	68.1	64.7	50.5	45.6	31.1	49.3
1978	22.6	20.9	36.9	51.0	60.2	69.4	73.0	71.4	66.2	49.1	43.0	32.7	49.7
1979	21.4	18.0	43.1	49.7	59.1	67.7	70.3	69.6	63.4	50.9	44.7	34.6	49.4
1980	26.9	24.2	35.6	48.1	60.3	66.2	75.0	74.5	67.1	49.5	38.6	28.6	49.6
1981	20.5	31.4	35.6	51.9	58.4	68.8	72.1	69.7	61.9	49.4	40.3	29.4	49.1
1982	20.9	28.4	38.4	45.3	64.7	63.7	72.4	68.2	63.4	54.4	44.7	39.9	50.4
1983	30.0	32.6	40.7	47.1	55.8	67.8	73.0	72.8	64.4	53.0	43.5	25.4	50.5
1984	23.2	36.4	32.2	49.2	55.3	69.7	68.5	70.8	61.4	58.3	40.2	39.3	50.4
1985	22.1	27.7	42.1	55.0	60.6	64.2	70.5	69.6	65.3	55.2	47.1	27.4	50.6
1986	28.3	31.3	41.1	53.1	62.0	68.3	73.3	68.6	66.6	54.2	40.4	33.1	51.7
1987	28.0	32.6	41.9	50.0	63.0	70.9	75.7	71.8	65.1	47.8	46.2	35.1	52.3
1988	26.6	29.0	39.3	49.4	61.4	68.5	76.9	75.1	63.5	46.6	44.2	31.9	51.0
1989	35.5	27.8	41.1	47.0	58.0	69.0	74.1	71.6	64.8	53.3	40.6	19.2	50.2
1990	36.8	36.9	44.0	51.3	57.7	68.3	71.7	70.5	63.7	55.0	45.5	38.0	53.3
1991	29.7	35.4	43.0	54.5	68.7	72.6	75.4	74.4	64.6	55.7	41.6	35.3	54.2
1992	30.5	34.3	38.8	51.3	59.1	66.0	72.4	67.9	63.7	50.1	42.9	33.9	50.9
1993	35.1	27.8	37.6	50.0	61.9	68.9	75.7	75.4	63.3	51.7	43.0	31.7	51.8
1994	21.1	29.5	37.8	53.9	56.7	72.9	74.5	70.0	63.8	53.4	47.7	38.2	51.6
1995	31.0	26.5	42.8	48.6	60.4	72.0	75.8	77.8	64.3	56.3	38.1	27.7	51.8
1996	27.5	30.1	34.7	50.7	60.0	72.3	69.6	70.6	63.7	52.0	36.3	36.5	50.3
1997	28.1	35.1	40.5	46.4	54.3	68.1	71.7	68.2	62.1	52.6	39.0	33.5	50.0
1998	37.1	38.5	42.4	51.0	64.4	67.1	71.2	73.1	67.2	53.1	44.4	37.8	53.9
POR= 123 YRS	30.0	31.2	39.9	50.9	61.6	70.2	74.2	72.5	66.2	54.7	43.0	33.3	52.3

HEATING DEGREE DAYS (base 65°F) 1998 PITTSBURGH, GRTR. PITT. AIRPORT PA (PIT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0	8	127	383	770	1183	1370	1039	908	390	127	31	6336
1970-71	5	1	69	318	678	1013	1277	961	949	562	264	6	6103
1971-72	1	6	41	184	729	807	1093	1112	881	489	128	96	5567
1972-73	20	11	63	508	767	853	1087	1006	508	474	264	2	5563
1973-74	2	8	55	274	621	978	957	978	729	403	223	54	5282
1974-75	0	0	124	384	630	1001	997	916	881	617	116	48	5714
1975-76	0	0	192	362	554	989	1278	801	605	453	301	24	5559
1976-77	15	59	159	587	953	1268	1655	1060	658	436	138	102	7090
1977-78	11	41	78	442	583	1043	1307	1229	860	412	209	38	6253
1978-79	4	3	80	485	656	993	1346	1311	671	458	219	38	6264
1979-80	23	26	111	438	601	935	1175	1177	906	500	172	71	6135
1980-81	0	5	48	476	787	1117	1372	936	904	391	223	18	6277
1981-82	3	10	159	475	736	1098	1361	1017	819	586	82	67	6413
1982-83	9	23	119	336	605	770	1080	904	746	535	280	44	5451
1983-84	10	2	126	365	639	1223	1293	823	1008	471	305	16	6281
1984-85	12	7	165	214	734	790	1322	1038	701	334	163	65	5545
1985-86	3	9	116	300	531	1160	1131	936	737	368	148	37	5476
1986-87	1	40	65	346	733	983	1139	904	710	451	145	22	5539
1987-88	4	20	61	529	560	920	1181	1040	792	461	149	64	5781
1988-89	5	3	83	570	619	1018	905	1033	739	532	260	25	5792
1989-90	1	14	102	364	723	1414	869	781	657	439	229	49	5642
1990-91	4	1	116	314	577	829	1085	820	674	337	63	5	4825
1991-92	0	0	127	308	698	913	1063	880	805	417	210	50	5471
1992-93	1	17	116	457	657	956	920	1037	841	445	135	43	5625
1993-94	0	0	118	407	654	1028	1357	988	836	345	278	21	6032
1994-95	0	10	80	351	516	824	1047	1071	678	487	163	5	5232
1995-96	0	0	79	269	799	1150	1155	1005	930	436	215	5	6043
1996-97	14	1	104	397	853	873	1136	832	755	554	329	35	5883
1997-98	2	21	109	401	772	973	858	736	716	415	78	75	5156
1998-	0	0	52	369	616	837							

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COOLING DEGREE DAYS (base 65°F) 1998 PITTSBURGH, GRTR. PITT. AIRPORT PA (P)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0	0	0	2	42	170	245	162	72	14	0	0	707
1970	0	0	0	21	100	133	215	213	162	11	0	0	855
1971	0	0	0	0	13	204	171	158	153	17	0	0	716
1972	0	0	0	0	34	68	219	192	76	0	0	0	589
1973	0	0	0	10	5	185	264	269	108	5	0	0	846
1974	0	0	0	13	19	66	258	247	45	5	4	0	657
1975	0	0	0	0	60	137	248	257	12	7	0	0	721
1976	0	0	1	25	14	134	99	73	12	0	0	0	358
1977	0	0	3	14	83	75	231	141	72	0	4	0	623
1978	0	0	0	0	69	178	260	207	122	0	0	0	836
1979	0	0	0	9	41	125	193	175	70	7	0	0	620
1980	0	0	0	0	34	115	317	306	118	0	0	0	890
1981	0	0	0	5	25	139	230	160	72	0	0	0	631
1982	0	0	0	0	79	33	246	127	77	15	3	0	580
1983	0	0	0	3	3	135	263	251	115	0	0	0	770
1984	0	0	0	3	12	165	127	194	63	13	0	0	577
1985	0	0	0	41	33	49	181	160	130	4	0	0	598
1986	0	0	3	20	65	144	265	157	121	20	0	0	795
1987	0	0	0	6	93	204	342	240	72	0	1	0	958
1988	0	0	0	0	44	174	381	322	47	7	0	0	975
1989	0	0	5	0	49	154	291	225	100	9	0	0	833
1990	0	0	14	37	9	153	218	179	83	13	0	0	706
1991	0	0	0	27	184	239	333	298	124	27	0	0	1232
1992	0	0	0	9	33	87	233	112	86	3	0	0	563
1993	0	0	0	2	45	166	337	327	73	1	1	0	952
1994	0	0	0	21	28	264	302	175	51	0	2	0	843
1995	0	0	0	0	27	220	342	402	65	7	0	0	1063
1996	0	0	0	11	67	230	162	186	71	0	0	0	727
1997	0	0	0	2	4	134	217	128	29	24	0	0	538
1998	0	0	22	0	67	147	199	254	125	6	0	0	820

SNOWFALL (inches) 1998 PITTSBURGH, GRTR. PITT. AIRPORT PA (PIT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0.0	0.0	0.0	0.4	7.9	20.6	12.6	13.0	16.1	0.1	0.0	0.0	70.7
1970-71	0.0	0.0	0.0	T	0.1	10.1	12.1	20.6	16.8	0.2	0.0	0.0	59.9
1971-72	0.0	0.0	0.0	0.0	10.5	0.7	4.9	24.2	9.8	1.8	0.0	0.0	51.9
1972-73	0.0	0.0	0.0	1.8	6.1	2.9	3.4	6.1	4.6	1.4	T	0.0	26.3
1973-74	0.0	0.0	0.0	0.0	0.8	4.8	4.9	2.2	2.3	1.6	T	0.0	16.6
1974-75	0.0	0.0	0.0	T	2.6	21.2	10.1	13.9	9.8	1.1	0.0	0.0	58.7
1975-76	0.0	0.0	0.0	0.0	1.9	3.8	21.8	3.3	4.3	0.5	0.0	0.0	35.6
1976-77	0.0	0.0	0.0	T	6.6	7.9	26.5	6.4	0.9	1.3	T	0.0	49.6
1977-78	0.0	0.0	0.0	T	3.3	9.1	40.2	5.4	4.0	0.2	0.0	0.0	62.2
1978-79	0.0	0.0	0.0	0.0	2.3	3.2	18.2	13.7	2.0	1.4	0.0	0.0	40.8
1979-80	0.0	0.0	0.0	T	1.1	1.1	7.8	6.2	7.9	T	0.0	0.0	24.1
1980-81	0.0	0.0	0.0	T	9.7	6.3	12.5	11.9	7.6	T	0.0	0.0	48.0
1981-82	0.0	0.0	0.0	T	0.6	11.5	13.4	3.6	12.2	3.8	0.0	0.0	45.1
1982-83	0.0	0.0	0.0	T	0.1	8.8	3.9	12.0	4.3	1.0	0.0	0.0	30.1
1983-84	0.0	0.0	0.0	0.0	6.1	10.5	10.8	11.4	10.4	T	0.0	0.0	49.2
1984-85	0.0	0.0	0.0	0.0	1.5	4.8	14.6	8.1	0.2	7.2	0.0	0.0	36.4
1985-86	0.0	0.0	0.0	0.0	T	15.3	11.1	12.4	4.8	2.7	0.0	0.0	46.3
1986-87	0.0	0.0	0.0	0.0	1.0	0.9	11.6	1.1	7.3	8.1	0.0	0.0	30.0
1987-88	0.0	0.0	0.0	T	4.1	7.9	5.5	6.9	9.8	0.9	0.0	0.0	35.1
1988-89	0.0	0.0	0.0	0.2	1.1	4.0	4.2	4.1	7.5	0.6	T	0.0	21.7
1989-90	0.0	0.0	T	0.2	1.6	12.5	7.7	2.5	0.6	3.3	0.0	T	28.4
1990-91	0.0	0.0	0.0	0.0	T	4.6	4.8	3.6	4.2	T	0.0	0.0	17.2
1991-92	T	0.0	0.0	0.0	2.1	3.1	12.9	2.4	10.6	2.8	T	0.0	33.9
1992-93	0.0	0.0	0.0	1.3	1.5	14.1	2.1	18.5	34.1	0.5	0.0	0.0	72.1
1993-94	0.0	0.0	0.0	8.5	2.6	10.4	30.1	11.0	13.6	0.6	0.0	0.0	76.8
1994-95	0.0	T	0.0	0.0	0.2	T	7.6	9.0	6.4	0.2	0.0	0.0	23.4
1995-96	0.0	0.0	0.0	0.0	13.9	12.6	23.4	9.6	13.4	1.6	0.0	0.0	74.5
1996-97	0.0	0.0	0.0	0.0	4.4	6.1					0.0	0.0	
1997-98	0.0	0.0	0.0	0.0		12.6	1.7	2.5	4.9	0.0	0.0	0.0	
1998-	0.0	0.0	0.0	T	T	1.8							
POR= 45 YRS	T	T	T	0.4	3.4	8.2	11.4	9.0	8.5	1.6	0.2	T	42.7

WBAN : 94823

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
PITTSBURGH, GRTR. PITT. AIRPORT
PENNSYLVANIA (PIT)

Pittsburgh lies at the foothills of the Allegheny Mountains at the confluence of the Allegheny and Monongahela Rivers which form the Ohio. The city is a little over 100 miles southeast of Lake Erie. It has a humid continental type of climate modified only slightly by its nearness to the Atlantic Seaboard and the Great Lakes.

The predominant winter air masses influencing the climate of Pittsburgh have a polar continental source in Canada and move in from the Hudson Bay region or the Canadian Rockies. During the summer, frequent invasions of air from the Gulf of Mexico bring warm humid weather. Occasionally, Gulf air reaches as far north as Pittsburgh during the winter and produces intermittent periods of thawing. The last spring temperature of 32 degrees usually occurs in late April and the first in late October. The average growing season is about 180 days. There is a wide variation in the time of the first and last frosts over a radius of 25 miles from the center of Pittsburgh due to terrain differences.

Precipitation is distributed well throughout the year. During the winter months about a fourth of the precipitation occurs as snow and there is about a 50 percent chance of measurable

precipitation on any day. Thunderstorms occur normally during all months, except midwinter, and have a maximum frequency in midsummer. The first appreciable snowfall generally occurs in late November and usually the last occurs early in April. Snow lies on the ground in the suburbs on an average of about 33 days during the year.

Seven months of the year, April through October, have sunshine more than 50 percent of the possible time. During the remaining five months cloudiness is heavier because the track of migratory storms from west to east is closer to the area and because of the frequent periods of cloudy, showery weather associated with northwest winds from across the Great Lakes. Cold air drainage induced by the many hills leads to the frequent formation of early morning fog which may be quite persistent in the river valleys during the colder months.

The Allegheny River flowing south and the Monongahela River flowing north meet to form the Ohio River at Pittsburgh. Heavier rainfall and steeper topography cause the Monongahela River to flood more frequently than the Allegheny River.

Both rivers combine to cause the Ohio River at Pittsburgh to reach the 25 foot flood stage approximately once every four years. The serious flood level of 30 feet is reached much less frequently.

STATION LOCATION

PITTSBURGH, PENNSYLVANIA
GREATER PITTSBURGH AIRPORT

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	NORTH	WEST	ELEVATION ABOVE											REMARKS		
						SEA LEVEL	GROUND												
							8 INCH RAINGAGE	W EIGH IN GAGE	RAI N GAGE	W EIGH IN GAGE	8 INCH RAINGAGE	W EIGH IN GAGE	RAI N GAGE	W EIGH IN GAGE	8 INCH RAINGAGE	W EIGH IN GAGE		RAI N GAGE	
CITY -- NOTE: For October 13, 1870 through October 1, 1886, refer to previous editions.																			
Schmidt Building 95-97 Fifth Avenue	10/01/86	6/01/92	400 ft. ESE	40°26'	80°00'	740	138	130	130							e124	e - 126 feet to 4/3/90.		
U.S. Court House & Post Office Smithfield Street 3rd & 4th Avenue	6/01/92	6/24/04	800 ft. S	40°26'	80°00'	754	123	f116	f116	i	h				g101	f - 115 feet to 9/22/92. g - 107 feet to 9/22/92 & 108 feet to 3/23/93. h - Added 4/1/95. i - Added 12/1/96.			
Farmers Bank Building 5th Avenue & Wood St.	6/24/04	3/20/10	1000 ft. NNW	40°26'	80°00'	738	352	k336	k336						329	k - 330 feet 1/12/05-4/1/05.			
Oliver Building Smithfield Street Oliver & Sixth Avenue	3/20/10	12/15/34	600 ft. ENE	40°27'	80°00'	743	410	353	353	355	345				345	Instrumentation included a pyranometer 367 feet above the ground from 12/18/29-12/15/34.			
Post Office & Federal Courts Building	12/15/34	1/27/65	1300 ft. NE	40°27'	80°00'	749	q182	175	173	p177	166	n166	165			n - Added April 1944. p - Kept at Oliver Building until 1/4/44. q - Kept at Oliver Building until 7/5/45.			
Federal Office Bldg. 1000 Liberty Avenue	1/27/65	10/1/79	300 ft. W	40°27'	80°00'	747	319	287	287	287	284	284	284						
AIRPORT Office Building, Bettis AP (about 8 miles SE of Pittsburgh P.O.)	1/01/31	3/18/32		40°22'	79°54'														
Administration Bldg. Allegheny County AP	3/18/32	9/15/52	1.5 mi. E	40°21'	79°56'	1252	52	37	36	%36	35	36	34				Surface record station for Pittsburgh beginning 7/1/35. % - Commissioned 11/17/51.		
Terminal Building Greater Pittsburgh AP + + Greater Pittsburgh International Airport Effective 12/1973	9/15/52	Present	17 mi. WNW	40°30'	80°13'	e1137	a20	b75	b75	h63	88	i75	f75	g75	c4 j4	a - 119 feet to 10/24/58. b - Data source to 10/9/52 and 10/17/52 to 3/11/53. c - Telepsychrometer (6") 10/9/52-10/17/52 and from 3/11/53 until removed 7/26/59. Hygro. comm. on field site 7/26/59. e - 1151 feet to 7/26/59. f - 4 feet to 6/9/64. g - 2 feet to 10/1/65; removed prior to 12/1968. h - Effective 1/26/68. i - Moved to roof 6/1/72. j - Minor move 3/19/79. Station type changed from WSO to WSCMO 11/29/79. S ASOS Commissioned 07/01/96			

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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