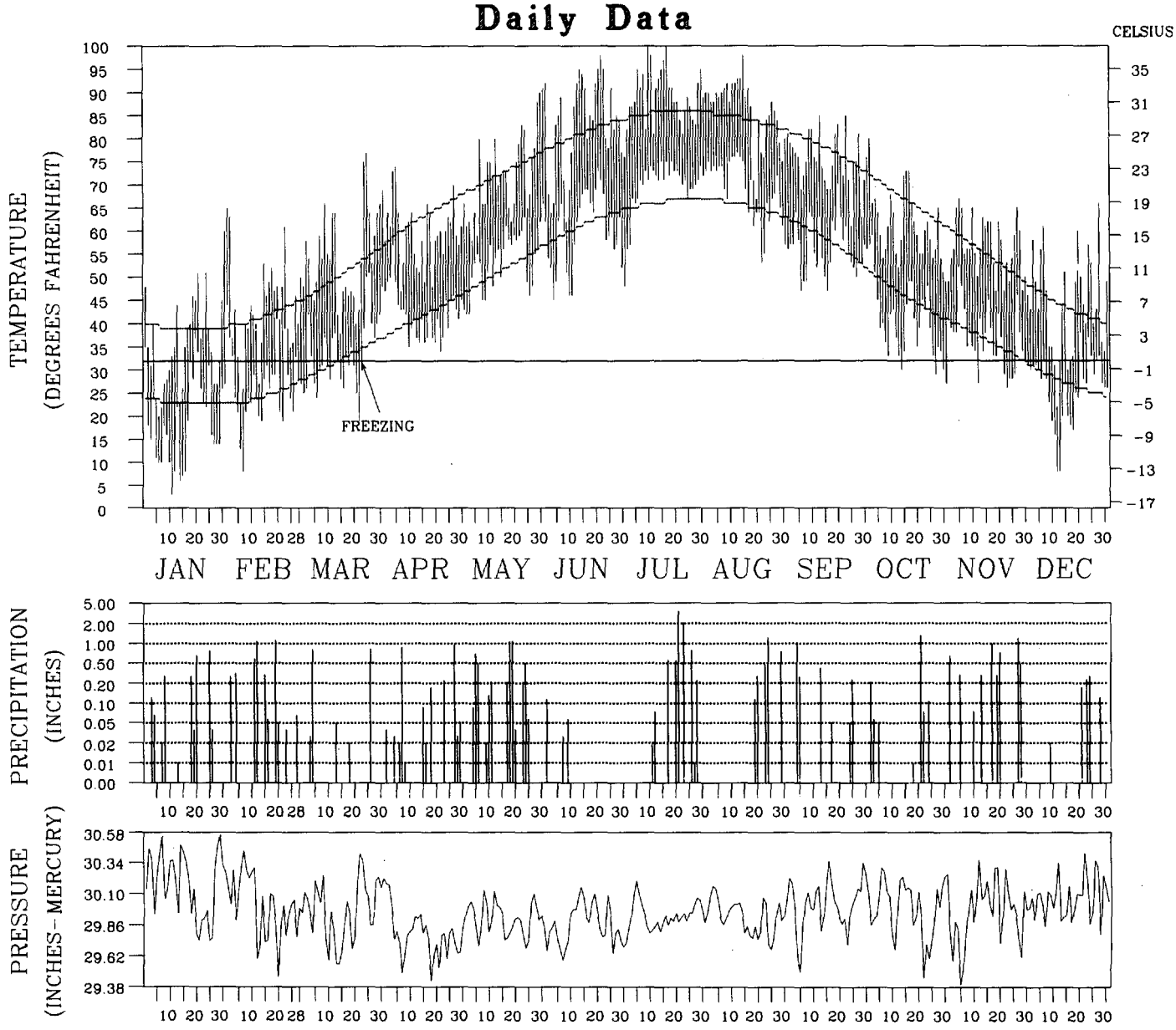
ISSN 0198-1145

1988 LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA
WILMINGTON, DELAWARE

Daily Data



TEMPERATURE DEPICTS NORMAL MAXIMUM, NORMAL MINIMUM AND ACTUAL DAILY HIGH AND LOW VALUES (FAHRENHEIT)
PRECIPITATION IS MEASURED IN INCHES, SCALE IS NON-LINEAR
STATION PRESSURE IS MEASURED IN INCHES OF MERCURY

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA, 28801

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noaa
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

METEOROLOGICAL DATA FOR 1988

WILMINGTON, DELAWARE

LATITUDE: 39°40' N LONGITUDE: 75°36' W ELEVATION: FT. GRND 74 BARO 96 TIME ZONE: EASTERN WBAN: 13781

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F:													
Averages													
-Daily Maximum	35.9	43.1	54.6	59.6	72.3	83.0	89.2	86.0	75.3	61.4	56.7	44.2	63.4
-Daily Minimum	18.8	26.4	33.7	41.9	53.5	60.1	69.5	68.6	56.2	40.5	36.7	25.9	44.3
-Monthly	27.4	34.8	44.2	50.8	62.9	71.6	79.4	77.3	65.8	51.0	46.7	35.1	53.9
-Monthly Dewpt.	17.5	23.1	28.9	36.9	52.8	54.1	67.6	67.8	56.3	40.3	38.1	22.3	42.1
Extremes													
-Highest	60	65	77	74	91	98	100	98	85	80	67	66	100
-Date	31	1	25	5	31	22	17	15	23	2	5	28	JUL 17
-Lowest	3	8	19	34	42	45	48	53	47	27	26	8	3
-Date	11	7	22	22	3	4	1	22	16	31	23	13	JAN 11
DEGREE DAYS BASE 65 °F:													
Heating	1159	869	637	419	121	38	3	0	52	434	541	923	5196
Cooling	0	0	0	0	62	242	455	389	80	5	0	0	1233
% OF POSSIBLE SUNSHINE													
AVG. SKY COVER (tenths)													
Sunrise - Sunset	6.6	5.9	4.9	6.4	6.6	5.0	5.7	4.7	5.8	5.1	5.7	5.7	5.7
Midnight - Midnight	5.8	5.6	4.9	6.2	6.5	5.0	5.9	4.5	5.5	4.7	4.9	5.3	5.4
NUMBER OF DAYS:													
Sunrise to Sunset													
-Clear	8	9	10	8	6	12	8	12	11	13	10	10	117
-Partly Cloudy	6	8	13	7	10	9	13	10	8	10	10	8	112
-Cloudy	17	12	8	15	15	9	10	9	11	8	10	13	137
Precipitation .01 inches or more	10	10	5	12	13	3	9	5	6	7	9	5	94
Snow, Ice pellets 1.0 inches or more	2	0	0	0	0	0	0	0	0	0	0	0	2
Thunderstorms	0	0	1	3	5	2	7	2	0	1	2	0	23
Heavy Fog, visibility 1/4 mile or less	3	1	1	2	0	0	1	1	1	1	3	2	16
Temperature °F													
-Maximum													
90° and above	0	0	0	0	2	10	14	12	0	0	0	0	38
32° and below	12	3	0	0	0	0	0	0	0	0	0	5	20
-Minimum													
32° and below	28	23	16	0	0	0	0	0	0	4	7	27	105
0° and below	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG. STATION PRESS. (mb)	1022.0	1015.9	1015.2	1008.5	1012.9	1011.2	1013.5	1013.5	1016.6	1015.9	1014.2	1018.3	1014.9
RELATIVE HUMIDITY (%)													
Hour 01	75	70	66	68	87	69	83	86	85	83	81	68	77
Hour 07 (Local Time)	75	71	70	70	82	64	78	88	86	87	86	71	77
Hour 13	58	55	44	52	60	41	56	60	57	49	59	49	53
Hour 19	65	64	56	60	68	50	70	68	70	66	73	62	64
PRECIPITATION (inches):													
Water Equivalent													
-Total	2.46	4.14	1.82	2.59	4.95	0.21	8.29	3.03	2.18	1.94	5.29	0.90	37.80
-Greatest (24 hrs)	0.84	1.72	0.87	1.00	1.68	0.12	3.80	1.39	1.39	1.42	1.72	0.31	3.80
-Date	25-26	11-12	26	27-28	18-19	1	21-22	23-24	4- 5	21-22	27-28	24	JUL 21-22
Snow, Ice pellets													
-Total	10.8	1.1	T	T	0.0	0.0	0.0	0.0	0.0	0.0	T	0.2	12.1
-Greatest (24 hrs)	6.4	0.7	T	T	0.0	0.0	0.0	0.0	0.0	0.0	T	0.2	6.4
-Date	7- 8	11	20	16							19	9	JAN 7- 8
WIND:													
Resultant													
-Direction (!!)	295	290	285	330	118	298	215	214	306	307	282	287	283
-Speed (mph)	3.7	3.7	4.1	1.9	1.2	3.0	3.5	2.7	1.9	3.2	3.4	5.0	2.5
Average Speed (mph)	7.3	10.4	10.5	11.4	8.4	8.8	7.6	6.9	6.6	7.3	8.9	8.6	8.6
Fastest Obs. 1 Min.													
-Direction (!!)	30	30	34	08	29	36	30	12	24	13	28	32	32
-Speed (mph)	32	26	26	28	23	30	45	26	22	21	29	46	46
-Date	4	21	20	7	23	1	17	29	4	21	20	28	DEC 28
Peak Gust													
-Direction (!!)	NW	NW	NW	NW	W	N	NW	S	SW	NW	W	NW	NW
-Speed (mph)	48	43	43	40	37	44	58	48	36	33	40	69	69
-Date	4	13	20	24	24	1	17	29	4	11	20	28	DEC 28

(!!) See Reference Notes on Page 6B

NORMALS, MEANS, AND EXTREMES

WILMINGTON, DELAWARE

LATITUDE: 39°40'N LONGITUDE: 75°36' W ELEVATION: FT. GRND 74 BARO 96 TIME ZONE: EASTERN WBAN: 13781

	(a)	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F:														
Normals														
-Daily Maximum		39.2	41.8	50.9	63.0	72.7	81.2	85.6	84.1	77.8	66.7	54.8	43.6	63.5
-Daily Minimum		23.2	24.6	32.6	41.8	51.7	61.2	66.3	65.4	58.0	45.9	36.4	27.3	44.5
-Monthly		31.2	33.2	41.8	52.4	62.2	71.2	76.0	74.8	67.9	56.3	45.6	35.5	54.0
Extremes														
-Record Highest	41	75	78	86	94	95	99	102	101	100	91	85	74	102
-Year		1950	1985	1948	1985	1962	1952	1966	1955	1983	1951	1950	1984	JUL 1966
-Record Lowest	41	-14	-6	2	18	30	41	48	43	36	24	14	-7	-14
-Year		1985	1979	1984	1982	1978	1972	1988	1982	1974	1976	1955	1983	JAN 1985
NORMAL DEGREE DAYS:														
Heating (base 65°F)		1048	890	719	378	130	6	0	0	36	282	582	915	4986
Cooling (base 65°F)		0	0	0	0	43	192	341	304	123	12	0	0	1015
% OF POSSIBLE SUNSHINE														
MEAN SKY COVER (tenths)														
Sunrise - Sunset	41	6.6	6.4	6.3	6.4	6.5	6.0	5.9	5.8	5.6	5.5	6.3	6.5	6.2
MEAN NUMBER OF DAYS:														
Sunrise to Sunset														
-Clear	41	7.4	7.3	7.8	7.3	6.5	7.8	8.0	9.0	10.0	10.7	7.7	7.7	97.3
-Partly Cloudy	41	7.0	6.9	8.3	8.4	10.0	10.6	11.3	10.2	8.1	8.2	8.1	7.5	104.7
-Cloudy	41	16.5	14.1	14.9	14.3	14.6	11.5	11.6	11.8	11.8	12.1	14.2	15.8	163.2
Precipitation .01 inches or more	41	10.8	9.6	10.8	10.9	11.4	9.5	9.1	9.0	8.0	7.7	9.5	9.7	116.0
Snow, Ice pellets 1.0 inches or more	41	2.2	1.6	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.*	0.2	0.9	5.9
Thunderstorms	41	0.2	0.3	1.2	2.2	4.3	5.7	6.2	5.9	2.4	0.9	0.6	0.2	30.0
Heavy Fog Visibility 1/4 mile or less	41	4.1	3.5	2.9	2.1	2.4	1.9	1.7	2.5	2.5	3.9	3.6	3.7	34.8
Temperature °F														
-Maximum														
90° and above	41	0.0	0.0	0.0	0.1	0.7	3.8	8.1	5.2	1.7	0.*	0.0	0.0	19.7
32° and below	41	7.8	4.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.9	17.1
-Minimum														
32° and below	41	25.9	22.2	15.3	3.0	0.*	0.0	0.0	0.0	0.0	1.6	10.3	22.3	100.7
0° and below	41	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8
AVG. STATION PRESS. (mb)	16	1015.4	1015.5	1013.7	1012.0	1012.4	1012.4	1013.0	1014.5	1015.6	1016.8	1016.2	1016.4	1014.5
RELATIVE HUMIDITY (%)														
Hour 01	41	73	72	70	72	79	81	82	84	84	82	78	75	78
Hour 07 (Local Time)	41	75	74	73	73	76	77	79	83	85	84	80	76	78
Hour 13	41	60	57	52	50	53	53	54	56	55	54	56	59	55
Hour 19	41	68	65	61	59	64	64	65	69	71	70	69	69	66
PRECIPITATION (inches):														
Water Equivalent														
-Normal		3.11	2.99	3.87	3.39	3.23	3.51	3.90	4.03	3.59	2.89	3.33	3.54	41.38
-Maximum Monthly	41	8.41	7.02	6.84	6.80	7.38	7.49	8.29	12.09	9.53	6.41	7.84	7.90	12.09
-Year		1978	1979	1983	1983	1983	1972	1988	1955	1960	1971	1972	1969	AUG 1955
-Minimum Monthly	41	0.52	0.83	0.81	0.35	0.22	0.21	0.16	0.25	0.82	0.21	0.49	0.19	0.16
-Year		1981	1980	1966	1985	1964	1988	1955	1972	1970	1963	1976	1955	JUL 1955
-Maximum in 24 hrs	41	2.12	2.29	3.11	2.56	2.41	4.35	6.24	4.11	5.62	3.88	3.83	2.22	6.24
-Year		1978	1966	1978	1961	1985	1972	1952	1971	1960	1966	1956	1969	JUL 1952
Snow, Ice pellets														
-Maximum Monthly	41	21.4	27.5	20.3	2.6	T	0.0	0.0	0.0	0.0	2.5	11.9	21.5	27.5
-Year		1987	1979	1958	1982	1963					1979	1953	1966	FEB 1979
-Maximum in 24 hrs	41	12.1	16.5	15.6	2.4	T	0.0	0.0	0.0	0.0	2.5	11.9	12.4	16.5
-Year		1987	1979	1958	1987	1963					1979	1953	1966	FEB 1979
WIND:														
Mean Speed (mph)	40	9.9	10.5	11.2	10.6	9.1	8.5	7.8	7.5	7.8	8.2	9.2	9.4	9.1
Prevailing Direction through 1963		WNW	NW	WNW	WNW	S	S	NW	S	S	NW	NW	WNW	S
Fastest Obs. 1 Min.														
-Direction (!!!)	40	29	29	06	29	30	23	27	35	07	20	16	32	20
-Speed (MPH)	40	46	46	43	45	46	40	48	46	40	58	46	46	58
-Year		1957	1956	1984	1963	1984	1960	1963	1971	1956	1954	1950	1988	OCT 1954
Peak Gust														
-Direction (!!!)	5	NW	NW	NW	NE	NW	N	NW	SE	NW	W	NW	NW	NW
-Speed (mph)	5	51	51	58	45	71	44	66	51	64	58	44	69	71
-Date		1986	1987	1985	1987	1984	1988	1987	1986	1985	1987	1987	1988	MAY 1984

(!!!) See Reference Notes on Page 6B.

PRECIPITATION (inches)

WILMINGTON, DELAWARE

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ANNUAL
1959	1.89	1.80	2.97	2.15	1.34	4.23	5.21	5.75	2.29	4.11	2.99	3.46	38.19
1960	2.86	3.69	1.71	2.93	5.12	1.37	6.18	5.08	9.53	2.85	2.04	2.67	46.03
1961	2.84	3.74	5.19	4.88	2.45	3.10	4.84	3.75	2.33	1.88	2.41	3.03	40.44
1962	2.51	3.26	4.30	3.50	1.61	3.05	1.78	1.87	3.65	1.51	4.87	2.50	34.41
1963	2.05	2.09	4.24	1.12	1.23	3.26	1.65	4.03	3.50	0.21	6.87	1.85	32.10
1964	4.13	3.37	2.20	5.97	0.22	1.02	3.70	1.83	2.77	1.29	1.62	4.70	32.82
1965	2.38	2.17	3.20	1.76	1.41	1.62	3.84	2.04	2.41	1.59	0.94	1.54	24.90
1966	2.82	4.90	0.81	3.16	3.35	0.70	3.09	1.42	8.53	5.17	1.75	3.81	39.51
1967	1.67	1.90	5.45	2.69	3.79	3.01	4.45	11.16	1.16	2.05	2.08	5.24	44.65
1968	2.29	1.52	4.75	1.57	4.78	2.81	1.83	1.17	1.50	3.28	3.92	2.33	31.75
1969	1.68	1.76	1.71	1.58	3.21	3.62	6.48	2.34	6.84	1.47	1.79	7.90	40.38
1970	1.00	2.13	3.61	5.56	0.94	6.16	6.03	2.31	0.82	2.64	4.09	3.02	38.31
1971	2.22	6.29	2.29	2.15	4.51	2.50	3.65	8.38	6.99	6.41	5.52	1.33	52.24
1972	2.50	5.43	2.40	4.47	3.85	7.49	2.07	0.25	1.64	4.20	7.84	5.99	48.13
1973	3.81	3.42	4.02	6.57	5.56	5.19	2.82	2.44	3.02	2.22	0.67	7.31	47.05
1974	2.92	1.73	4.56	3.08	3.96	3.97	1.49	5.11	5.65	1.77	1.19	4.18	39.61
1975	4.23	2.95	4.63	3.03	5.65	6.16	5.53	2.55	6.19	3.06	2.63	3.00	49.61
1976	4.21	1.70	2.25	1.40	5.05	2.14	4.33	2.00	2.11	6.12	0.49	1.79	33.59
1977	2.18	1.09	4.55	3.91	0.96	4.41	1.38	4.82	1.29	3.59	6.14	5.81	40.13
1978	8.41	1.77	5.59	2.16	6.94	3.00	5.53	5.97	2.18	1.48	2.69	5.56	51.28
1979	7.61	7.02	2.61	4.03	3.10	4.01	4.76	6.11	5.94	3.45	3.23	1.44	53.31
1980	2.44	0.83	6.22	4.55	2.40	4.23	3.49	1.09	1.44	3.99	2.41	0.83	33.92
1981	0.52	3.23	1.26	3.54	5.05	4.50	2.52	3.38	3.82	2.84	0.67	3.95	35.28
1982	3.75	2.71	2.87	5.41	3.72	4.70	2.70	4.68	2.30	1.97	3.87	2.39	41.07
1983	2.98	3.55	6.84	6.80	7.38	3.94	2.33	1.29	3.44	3.87	5.48	6.80	54.70
1984	1.25	4.27	5.40	4.24	5.03	4.54	6.53	1.56	2.02	3.31	1.63	1.94	41.72
1985	1.56	2.05	2.03	0.35	5.52	1.37	6.91	2.28	4.56	1.84	4.46	0.80	33.73
1986	4.21	2.77	1.19	2.77	1.69	4.05	3.99	2.88	2.75	4.04	6.42	6.11	42.87
1987	4.35	1.52	1.16	2.63	3.15	2.31	4.09	4.21	4.85	2.31	3.50	1.90	35.98
1988	2.46	4.14	1.82	2.59	4.95	0.21	8.29	3.03	2.18	1.94	5.29	0.90	37.80
Record Mean	3.31	3.09	3.66	3.52	3.63	3.74	4.48	4.54	3.60	3.02	3.28	3.43	43.29

See Reference Notes on Page 6B.

AVERAGE TEMPERATURE (deg. F)

WILMINGTON, DELAWARE

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ANNUAL
1959	30.9	33.0	41.1	54.3	65.6	72.0	75.4	76.0	70.4	59.5	44.7	38.0	55.1
1960	35.1	35.9	32.8	56.4	60.6	71.0	73.1	74.9	68.0	55.3	45.9	28.4	53.1
1961	25.6	34.7	42.6	48.9	58.9	70.5	75.6	74.0	72.5	56.9	46.7	33.2	53.3
1962	31.2	31.3	41.2	52.2	64.2	71.5	72.6	72.9	63.6	56.7	42.5	30.3	52.5
1963	28.4	27.5	44.1	52.6	60.3	70.8	76.3	71.7	63.7	58.4	48.0	28.4	52.5
1964	33.2	31.6	43.1	49.4	64.3	72.1	75.8	71.5	67.2	52.8	47.6	37.3	53.8
1965	29.0	33.6	38.4	49.3	66.0	70.2	74.5	73.3	69.4	53.6	45.0	37.7	53.3
1966	29.3	31.9	42.9	47.9	60.3	72.5	77.2	74.8	65.3	53.6	46.6	34.8	53.1
1967	36.2	29.4	39.4	51.5	55.4	71.2	74.4	72.8	65.1	54.7	40.7	36.8	52.3
1968	28.0	30.5	44.6	54.1	59.6	71.4	76.7	77.1	69.7	59.0	47.0	34.2	54.3
1969	30.8	33.6	39.6	55.1	64.2	73.4	75.7	75.4	68.2	56.0	44.6	32.7	54.1
1970	24.5	33.5	38.9	51.9	64.8	71.7	76.6	76.7	72.1	60.4	48.5	35.9	54.6
1971	27.4	35.5	40.7	51.1	60.4	73.4	75.9	74.0	71.1	62.9	45.7	42.1	55.0
1972	36.1	32.6	41.3	50.0	62.5	68.6	76.9	75.5	69.6	53.5	45.2	41.6	54.4
1973	35.6	35.5	49.4	54.7	61.4	75.8	78.1	78.1	70.4	59.9	49.1	37.7	57.2
1974	36.2	33.1	44.3	55.5	62.4	70.4	76.7	76.1	66.5	53.2	46.6	38.9	55.0
1975	37.5	35.9	40.6	47.5	65.2	71.5	75.7	76.3	65.4	60.0	51.0	36.2	55.2
1976	27.7	41.2	46.5	54.7	59.9	72.4	74.2	73.7	66.9	52.5	40.4	31.0	53.4
1977	20.8	33.3	47.2	54.4	63.9	68.9	76.4	75.4	69.3	53.4	46.6	33.4	53.6
1978	27.2	22.8	37.6	50.3	60.3	70.6	73.4	77.1	66.7	54.1	46.8	37.2	52.0
1979	31.4	22.1	45.4	50.6	63.8	67.9	75.3	75.0	68.2	55.0	49.6	38.1	53.5
1980	32.4	29.9	40.0	54.6	64.9	68.9	77.7	78.2	71.3	54.8	43.3	33.1	54.1
1981	25.4	37.9	40.2	55.0	62.5	72.3	77.1	73.5	66.9	53.0	45.3	34.2	53.6
1982	24.2	34.2	41.8	50.6	65.0	69.9	77.3	72.0	67.4	56.0	47.5	41.3	53.9
1983	35.2	35.3	45.9	53.1	61.0	71.8	77.6	77.0	69.3	56.9	46.7	32.1	55.2
1984	24.8	38.6	35.6	50.7	61.2	73.8	75.2	75.2	63.7	61.2	43.3	42.1	53.8
1985	27.5	37.4	47.1	58.0	65.9	70.6	76.6	74.4	69.1	58.3	51.0	32.9	55.7
1986	32.2	31.6	43.6	52.4	65.7	72.1	77.1	72.5	67.5	57.2	44.1	37.3	54.4
1987	31.4	31.9	44.6	52.3	63.1	73.5	79.1	74.3	68.3	51.7	47.4	38.6	54.7
1988	27.4	34.8	44.2	50.8	62.9	71.6	79.4	77.3	65.8	51.0	46.7	35.1	53.9
Record Mean	32.1	33.1	42.0	52.3	62.8	71.3	76.1	74.3	67.8	56.5	45.7	35.3	54.1
Max	39.9	41.4	51.5	62.8	73.4	81.6	85.7	83.7	77.6	66.5	54.5	43.1	63.5
Min	24.2	24.8	32.6	41.7	52.1	61.0	66.4	64.8	58.1	46.6	36.9	27.5	44.7

See Reference Notes on Page 6B.

HEATING DEGREE DAYS Base 65 deg. F

WILMINGTON, DELAWARE

SEASON	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1959-60	0	0	44	256	605	831	920	840	994	279	144	2	4915
1960-61	0	0	18	297	565	1130	1215	843	687	486	203	6	5450
1961-62	0	0	36	250	553	976	1042	940	729	400	122	6	5054
1962-63	0	4	113	266	672	1072	1130	1044	641	370	180	10	5502
1963-64	0	3	104	199	502	1128	982	962	669	467	91	21	5128
1964-65	0	9	49	372	514	854	1108	873	816	467	63	27	5152
1965-66	0	12	40	349	593	839	1103	921	676	507	186	24	5250
1966-67	0	0	84	346	545	931	888	991	788	402	295	5	5275
1967-68	0	0	80	327	722	866	1139	994	626	319	171	6	5250
1968-69	0	0	7	205	532	949	1052	874	780	298	92	1	4790
1969-70	0	0	41	288	606	993	1250	876	803	389	95	1	5342
1970-71	0	0	25	175	487	895	1159	821	746	411	153	3	4875
1971-72	0	2	23	93	585	702	889	935	732	443	105	27	4536
1972-73	0	0	20	356	586	716	902	820	477	322	143	0	4342
1973-74	0	0	15	179	469	839	886	887	635	300	137	7	4354
1974-75	0	0	65	362	553	805	847	808	753	520	84	5	4802
1975-76	0	0	56	177	418	888	1149	681	567	341	178	31	4486
1976-77	0	4	44	387	734	1047	1361	884	546	333	107	32	5479
1977-78	0	1	31	353	550	975	1165	1179	842	433	191	17	5737
1978-79	6	0	60	337	542	854	1037	1197	605	424	89	28	5179
1979-80	4	7	31	318	458	827	1004	1009	768	307	83	35	4851
1980-81	0	0	20	322	645	985	1222	752	763	299	135	4	5147
1981-82	0	0	57	370	585	947	1259	855	715	426	69	12	5295
1982-83	0	14	29	305	519	724	919	822	587	368	163	7	4457
1983-84	0	0	74	275	542	1013	1240	758	904	422	162	5	5395
1984-85	0	2	113	149	641	701	1154	766	550	248	73	7	4404
1985-86	0	0	45	213	411	986	1011	930	653	373	99	11	4732
1986-87	0	27	36	276	619	848	1032	923	628	374	143	2	4908
1987-88	0	2	22	406	521	811	1159	869	637	419	121	38	5005
1988-89	3	0	52	434	541	923							

See Reference Notes on Page 6B.
Page 5A

COOLING DEGREE DAYS Base 65 deg. F

WILMINGTON, DELAWARE

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
1969	0	0	0	8	73	258	336	330	143	14	0	0	1162
1970	0	0	0	2	97	211	365	371	244	38	0	0	1328
1971	0	0	0	0	16	261	345	287	214	34	16	0	1173
1972	0	0	2	0	35	143	376	334	165	8	0	0	1063
1973	0	0	0	19	42	332	416	413	183	29	0	0	1434
1974	0	0	0	24	64	175	370	355	113	2	6	0	1109
1975	0	0	0	0	97	207	337	355	73	27	5	0	1101
1976	0	0	0	37	25	260	291	278	106	6	0	0	1003
1977	0	0	5	20	80	156	360	328	166	0	5	0	1120
1978	0	0	0	0	48	188	273	383	117	7	0	0	1016
1979	0	0	4	1	57	123	327	324	138	16	0	0	990
1980	0	0	0	0	83	159	400	417	214	10	0	0	1283
1981	0	0	0	9	62	228	381	270	120	3	0	0	1073
1982	0	0	0	2	75	163	391	238	107	32	1	0	1009
1983	0	0	0	17	47	218	398	378	209	29	0	0	1296
1984	0	0	0	0	50	276	321	327	80	34	0	0	1088
1985	0	0	4	47	106	181	366	300	174	13	0	0	1191
1986	0	0	0	0	129	227	379	267	116	40	0	0	1158
1987	0	0	0	3	91	264	446	295	129	0	0	0	1228
1988	0	0	0	0	62	242	455	389	80	5	0	0	1233

See Reference Notes on Page 6B.
Page 5B

SNOWFALL (inches)

WILMINGTON, DELAWARE

SEASON	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1959-60	0.0	0.0	0.0	0.0	T	3.1	0.2	5.1	13.4	T	0.0	0.0	21.8
1960-61	0.0	0.0	0.0	T	T	13.2	16.5	13.3	1.1	T	0.0	0.0	44.1
1961-62	0.0	0.0	0.0	0.0	3.3	6.4	1.2	8.0	5.2	T	0.0	0.0	24.1
1962-63	0.0	0.0	0.0	0.3	T	8.6	5.2	4.6	0.3	0.0	T	0.0	19.0
1963-64	0.0	0.0	0.0	0.0	T	8.0	6.7	14.9	9.5	T	0.0	0.0	39.1
1964-65	0.0	0.0	0.0	0.0	T	1.6	8.4	1.7	5.8	0.6	0.0	0.0	18.1
1965-66	0.0	0.0	0.0	0.0	0.0	0.0	17.2	10.0	T	T	0.0	0.0	27.2
1966-67	0.0	0.0	0.0	0.0	T	21.5	0.6	18.7	2.7	T	0.0	0.0	43.5
1967-68	0.0	0.0	0.0	0.0	6.8	4.0	1.6	0.9	1.3	0.0	0.0	0.0	14.6
1968-69	0.0	0.0	0.0	0.0	T	0.6	2.9	5.5	7.8	0.0	0.0	0.0	16.8
1969-70	0.0	0.0	0.0	T	0.1	6.8	9.7	1.5	0.4	0.0	0.0	0.0	18.5
1970-71	0.0	0.0	0.0	0.0	0.0	3.2	5.8	0.2	2.4	0.6	0.0	0.0	12.2
1971-72	0.0	0.0	0.0	0.0	T	T	2.1	7.0	0.3	0.1	0.0	0.0	9.5
1972-73	0.0	0.0	0.0	T	T	T	T	1.2	T	T	0.0	0.0	1.2
1973-74	0.0	0.0	0.0	0.0	0.0	6.1	2.4	11.5	T	T	0.0	0.0	20.0
1974-75	0.0	0.0	0.0	0.0	T	T	5.1	4.8	1.1	T	0.0	0.0	11.0
1975-76	0.0	0.0	0.0	0.0	0.0	0.3	4.5	1.7	6.7	T	0.0	0.0	13.2
1976-77	0.0	0.0	0.0	0.0	0.1	3.2	14.5	T	0.0	T	0.0	0.0	17.8
1977-78	0.0	0.0	0.0	0.0	0.4	0.9	16.0	18.4	9.9	T	0.0	0.0	45.6
1978-79	0.0	0.0	0.0	0.0	4.5	T	12.0	27.5	0.2	T	0.0	0.0	44.2
1979-80	0.0	0.0	0.0	2.5	0.0	1.4	6.1	0.8	5.1	0.0	0.0	0.0	15.9
1980-81	0.0	0.0	0.0	0.0	0.5	1.4	6.5	T	3.7	0.0	0.0	0.0	12.1
1981-82	0.0	0.0	0.0	0.0	T	2.8	14.6	4.5	0.4	2.6	0.0	0.0	24.9
1982-83	0.0	0.0	0.0	0.0	T	5.8	T	18.5	0.3	0.5	0.0	0.0	25.1
1983-84	0.0	0.0	0.0	0.0	T	T	9.7	T	5.2	T	0.0	0.0	14.9
1984-85	0.0	0.0	0.0	0.0	T	0.3	14.2	0.7	T	0.4	0.0	0.0	15.6
1985-86	0.0	0.0	0.0	0.0	0.0	1.4	3.1	9.7	T	T	0.0	0.0	14.2
1986-87	0.0	0.0	0.0	0.0	T	0.3	21.4	15.7	0.2	2.4	0.0	0.0	40.0
1987-88	0.0	0.0	0.0	0.0	0.7	2.1	10.8	1.1	T	T	0.0	0.0	14.7
1988-89	0.0	0.0	0.0	0.0	T	0.2							
Record Mean	0.0	0.0	0.0	0.1	0.9	3.3	7.0	6.4	3.3	0.2	T	0.0	21.0

See Reference Notes on Page 6B.

REFERENCE NOTES

WILMINGTON, DELAWARE

GENERAL

T - TRACE AMOUNT.
BLANK ENTRIES DENOTE MISSING/UNREPORTED DATA.
# INDICATES A STATION OR INSTRUMENT RELOCATION.
SEE STATION LOCATION TABLE ON PAGE 8.

SPECIFIC

PAGE 2
PM - INCLUDES LAST DAY OF PREVIOUS MONTH

PAGE 3
(a) - LENGTH OF RECORD IN YEARS, ALTHOUGH INDIVIDUAL MONTHS MAY BE MISSING.
* LESS THAN .05
NORMALS - BASED ON THE 1951-1980 RECORD PERIOD.
EXTREMES - DATES ARE THE MOST RECENT OCCURRENCE
WIND DIR.- NUMERALS SHOW TENS OF DEGRESS CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM.
RESULTANT DIRECTIONS ARE GIVEN TO WHOLE DEGREES.

PAGE 4B
MAX AND MIN ARE LONG TERM MEAN DAILY MAXIMUM AND MEAN DAILY MINIMUM TEMPERATURES.

EXCEPTIONS

PAGES 4A, 4B, 6A
RECORD MEANS ARE THROUGH THE CURRENT YEAR, BEGINNING IN 1895 FOR TEMPERATURE
1894 FOR PRECIPITATION
1948 FOR SNOWFALL

WILMINGTON, DELAWARE

Delaware is part of the Atlantic Coastal Plain consisting mainly of flat low land with many marshes. Small streams and tidal estuaries comprise the drainage of the State. Wilmington, at the northern end of the State, marks the beginning of low rolling hills extending northward and northwestward into Pennsylvania. The Delaware River, the Delaware Bay, and the Atlantic Ocean are along the eastern boundary of the State. The broad Chesapeake Bay lies 35 miles, or less, to the west of the western boundary of nearly the entire State. These large water areas considerably influence the climate of the Wilmington, Delaware region.

Summers are warm and humid, winters are usually mild. During the summer maximum temperatures are usually in the 80s. The temperature reaches 100 degrees on the average once in six years. During January, the coldest month of the year, the daily average temperature is 32 degrees. Temperatures of zero may be expected once in four years. Most of the winter precipitation falls as rain. Seasonal snowfall has been as little as 1 inch, and as much as 50 inches. Snow is frequently mixed with rain and sleet, and seldom remains on the ground more than a few days.

The proximity of large water areas and the inflow of southerly winds cause the relative humidity to be quite high all year. During the summer months the relative humidity is approximately 75 percent. Fog is relatively frequent and may occur in any month. Light southeast winds blowing up the Delaware Bay favor the formation of fog. Light north-northeast winds bring in smoke from Philadelphia and from the heavy industry area located along the Delaware River north of Wilmington.

Rainfall distribution throughout the year is fairly uniform, however, the greatest amounts normally come during the summer months. Mostly, the summer rainfall comes in the form of thunderstorms. Moisture deficiencies for crops occur occasionally, but severe droughts are rare. During the fall, winter, and spring seasons, much of the rainfall comes from storms forming over the southern states or the South Atlantic and moving northward along the coast. During the late summer and early fall, hurricanes occasionally cause heavy rainfall, but winds seldom reach hurricane force in Wilmington. Heavy rains occasionally cause minor flooding, but the streams and rivers of northern Delaware are not subject to major flooding. Strong easterly and southeasterly winds sometimes cause high tides in the Delaware Bay and the Delaware River, resulting in the flooding of lowlands and damage to bay front and river front properties.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 29 and the average last occurrence in the spring is April 13.

STATION LOCATION

WILMINGTON, DELAWARE

Location	Occupied from	Occupied to	Airline distance and direction from previous location	Latitude North	Longitude West	Elevation above Sea level: Ground at temperature site	Elevation above Ground: Wind instruments	Extreme thermometers	Psychrometer	Sunshine Switch	Tipping bucket rain gage	Weighing rain gage	8" rain gage	Hygrothermometer	Automatic Observing Equipment *	Remarks
COOPERATIVE																
Wilmington, Delaware 6th and King Streets	4- 1-94	7-12-16		39° 45'	75° 33'	86							35'			Ordinary thermometer exposed outside N window; Sept. '09 max. and min. in use, exposure of thermometers poor.
Porter Reservoir Wilmington, Delaware 1.9 miles NNE of P. O.	3- 1-12	Present		39° 46'	75° 33'	260		3'					3'			Home made shelter in use; C. R. shelter September 1936, good exposure over sod. Precipitation record began 7-12-12.
Wilmington, Delaware 10th and King Streets 1 block S of P. O.	7-12-16	10-31-58	1.9 mi.SSW	39° 45'	75° 33'	99							47'			Precipitation only most of time.
AIRPORT																
Bellanca Field New Castle, Delaware 6.1 miles SSW Wilmington Post Office	4-20-31	6- ?-34		39° 40'	75° 36'											
DuPont Airport Wilmington Delaware 3 miles WNW Wilmington Post Office	4-27-42	12- 8-42	6.8 mi. N	39° 46'	75° 36'											
New Castle County Airport Tower, Wilmington, Delaware, 5.6 miles SW of Post Office	5-19-47	11- 6-47	5.6 mi.SSW	39° 40'	75° 36'		75									Airway Observation by County Tower employees.
New Castle County Airport, Admn. Bldg.	11- 7-47	12- 5-47	125 yds.SW	39° 40'	75° 36'	73	75	5	5				3			Wind instruments of previous location used.
New Castle County Airport, Terminal Bldg.	12- 5-47	7-16-56	150 ft. NE	39° 40'	75° 36'	73	34	5	5				4			Exposure of instruments good.
New Terminal Building New Castle County AP †	7-16-56	Present	7/8 mi. SE	39° 40'	75° 36'	78 b74	20	s5	s5	NA	NA	5	4	NA a4 c4	NA	Exposure of instruments excellent. a - Commissioned 1,000 feet from thermometer site 4/11/67. b - Lowered 4/11/67. s - Standby after 4/11/67. c - Type change 8/12/85.

† Greater Wilmington Airport eff. 5/1961

* Type
M = AMOS
T = AUTOB

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