



# JULY 2000

## LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

# WILMINGTON, DE

NEW CASTLE COUNTY APRT (ILG)  
 Lat: 39° 40' N Long: 75° 36' W Elev (Ground): 93 Feet  
 Time Zone: EASTERN WBAN: 13781 ISSN #:0198-117X

JULY 2000  
WILMINGTON, DE

DATE	TEMPERATURE °F						DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								DATE																																																																											
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM																																																																																
																			5-SEC		2-MIN																																																																														
1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	20	21	22	23	24																																																																													
01	84	60	72	-3	57	63	0	7				0.00	29.94	30.04	2.5	32	4.4	13	03	11	03	01																																																																													
02	85	59	72	-3	60	66	0	7				0.00	29.96	30.06	3.2	17	5.8	20	14	16	15	02																																																																													
03	87	68	78	3	68	71	0	13	TSRA	RA	BR	HZ	0.04	29.91	30.01	2.9	21	4.8	17	32	15	32	03																																																																												
04	84	71	78	3	72	74	0	13	RA	BR	HZ	0.05	29.80	29.90	5.7	23	6.4	14	22	11	22	04																																																																													
05	85	68	77	2	62	68	0	12	BR	HZ		0.00	29.76	29.85	7.3	31	7.9	18	29	16	28	05																																																																													
06	81	63	72	-4	52	61	0	7				0.00	29.80	29.90	5.6	34	7.2	16	31	13	35	06																																																																													
07	79	61	70	-6	51	59	0	5	RA			0.01	29.92	30.02	10.9	34	11.2	23	36	18	30	07																																																																													
08	79	53*	66	-10	50	58	0	1				0.00	30.05	30.15	7.0	29	8.7	20	27	17	27	08																																																																													
09	85	60	73	-3	63	67	0	8	HZ			0.00	29.88	29.98	7.8	22	8.2	23	22	18	24	09																																																																													
10	91*	74	83*	7	69	73	0	18	RA	BR	HZ	T	29.68	29.78	9.6	27	11.0	26	27	21	28	10																																																																													
11	83	67	75	-1	59	65	0	10				0.00	29.79	29.89	5.5	34	7.7	21	03	18	02	11																																																																													
12	82	64	73	-3	54	62	0	8				0.00	29.91	30.01	4.0	35	8.0	18	14	17	14	12																																																																													
13	83	61	72	-4	60	65	0	7				0.00	29.91	30.01	3.3	19	4.9	16	17	14	13	13																																																																													
14	79	67	73	-3	66	68	0	8	TS	TSRA	RA	BR	0.81	29.75	29.85	8.2	14	9.0	26	14	23	14	14																																																																												
15	74	64	69	-8	65	66	0	4	TSRA	RA	BR		0.35	29.61	29.71	4.2	18	5.3	29*	19	25*	19	15																																																																												
16	79	63	71	-6	65	67	0	6	TS	TSRA	RA	FG+	BR	HZ	0.01	29.72	29.81	1.4	13	2.8	15	17	14	17	16																																																																										
17	82	69	76	-1	65	69	0	11	BR	HZ		0.00	29.83		2.0	25	3.6	14	27	11	29	17	17																																																																												
18	87	68	78	1	68	71	0	13	BR	HZ		0.00	29.81	29.91	7.6	24	8.5	28	23	21	23	18																																																																													
19	71	60	66*	-11	59	61	0	1	RA	BR		0.58	29.87	29.97	5.3	02	6.2	16	02	14	02	19																																																																													
20	79	60	70	-7	59	63	0	5	RA	BR		0.02	29.78	29.88	5.7	34	7.6	17	02	14	27	20																																																																													
21	81	60	71	-6	61	65	0	6	RA	BR		0.35	29.79	29.89	4.7	22	5.1	23	22	18	22	21																																																																													
22	82	62	72	-5	61	65	0	7	RA	BR	HZ	T	29.89	29.99	6.0	30	6.6	17	30	15	28	22																																																																													
23	79	60	70	-7	59	64	0	5				0.00	30.03	30.13	0.9	07	5.3	13	11	10	03	23																																																																													
24	73	66	70	-7	63	65	0	5	RA	BR		0.11	30.03	30.13	4.1	02	4.9	10	06	9	06	24																																																																													
25	76	65	71	-6	62	65	0	6	BR			0.00	30.09	30.19	7.4	06	8.7	18	07	15	07	25																																																																													
26	71	65	68	-9	67	68	0	3	RA	BR		2.05	30.05	30.15	10.7	03	11.2	23	05	20	04	26																																																																													
27	77	68	73	-4	69	70	0	8	RA	FG+	BR	0.03	29.97	30.07	3.4	35	4.9	11	06	10	06	27																																																																													
28	81	68	75	-2	68	70	0	10	RA			0.02	29.95	30.04	3.5	12	7.9	17	17	15	16	28																																																																													
29	80	69	75	-2	70	71	0	10	RA			T	29.96	30.06	8.2	14	9.2	18	16	16	14	29																																																																													
30	85	72	79	2	72	74	0	14	TSRA	RA	BR	HZ	0.03	29.98	30.08	5.6	13	6.9	17	17	15	18	30																																																																												
31	86	73	80	3	74	75	0	15	TSRA	RA	BR		0.18	29.98	30.08	6.8	15	7.4	26	16	22	16	31																																																																												
81.0										64.8		72.9		■■■		62.9		66.8		0.0		8.2		< MONTHLY AVERAGES TOTALS-->				4.64		29.88		1.1		36		7.0		-- MONTHLY AVERAGES																																																													
-4.6										-2.3		-3.5		■■■		<----- DEPARTURE FROM NORMAL ----->																				0.41		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																																																													
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 2.07 DATE: 26-27										GREATEST 24-HR SNOWFALL: DATE: DATE:										GREATEST SNOW DEPTH: DATE: DATE:										SEA LEVEL PRESSURE DATE TIME																																																											
MONTHLY TOTAL DEPARTURE										SEASON TO DATE TOTAL DEPARTURE										NUMBER OF DAYS WITH										MAXIMUM TEMP ≥ 90: 1										MINIMUM TEMP ≤ 32: 0										PRECIPITATION ≥ 0.01 INCH: 15																																																	
HEATING: 0										COOLING: 0										253 -100										575 -21										MAXIMUM TEMP ≤ 32: 0										THUNDERSTORMS: 6										MINIMUM TEMP ≤ 0: 0										HEAVY FOG: 2										PRECIPITATION ≥ 0.10 INCH: 7										SNOWFALL ≥ 1.0 INCH: :									

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# WILMINGTON, DE

JULY 2000

ILG

WBAN # 13781

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST	
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water	Equiv.
01													01												01		0.00		
02													02												02		0.00		
03													03												03		0.04		
04	T	0.02		0.01	0.01								04		T	0.01		T	T	0.04	T	T	T		04		0.05		
05													05												05		0.00		
06													06												06		0.00		
07		T		T		0.01							07												07		0.01		
08													08												08		0.00		
09													09												09		0.00		
10				T	T	T							10												10		T		
11													11												11		0.00		
12													12												12		0.00		
13													13												13		0.00		
14													14		0.03	0.22	0.13								14		0.00		
15	T	0.13	0.10	0.03	T					T	0.01		15					0.09	T	0.15	0.27	T		15		0.81			
16													16			T	T	T							16		0.01		
17	0.01												17												17		0.00		
18													18												18		0.00		
19													19		0.04	0.09	0.19	0.04	0.02	0.03	0.03	0.03	0.01	T	0.02	19		0.58	
20	0.01	0.01	T							0.02	0.06	T	20												20		0.02		
21													21												21		0.35		
22	T												22												22		T		
23													23												23		0.00		
24													24	T	T	0.01	0.01	0.02	T	T	0.05	0.01	T	0.01	24		0.11		
25													25												25		0.00		
26	T	0.06	0.03	0.19	0.12	0.22	0.44	0.10	T	0.02	0.05	0.02	26	0.05	0.04	0.02	0.02	0.01	0.07	0.05		0.02	0.07	0.38	0.07	26		2.05	
27	0.02	T			0.01								27												27		0.03		
28													28												28		0.02		
29	T	T											29												29		T		
30													30												30		0.03		
31	0.17												31		0.01	T	0.02	0.01			T			31		0.18			

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

# REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

\* = Extreme for the month (last occurrence if more than one)  
 T = Trace precipitation amount  
 + = also occurs on earlier date  
 FG+ = Heavy fog, visibility .25 miles or less  
 BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1961–1990

## WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):  
 '+ ' = Heavy    ' ' = Moderate    '- ' = Light

# WILMINGTON, DE JULY 2000

Ceilometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR–SS), or midnight to midnight (MN–MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0–2 oktas, Partly Cloudy = 3–6 oktas, Cloudy = 7–8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

### ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							10.00	10.00	
02							8.00	10.00	
03							2.50	10.00	
04							1.75	8.00	
05							3.00	10.00	
06							10.00	10.00	
07							10.00	10.00	
08							10.00	10.00	
09							4.00	10.00	
10							4.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							.00	10.00	
15							4.00	10.00	
16							<.25	10.00	
17							.00	7.00	
18							1.75	10.00	
19							1.75	10.00	
20							6.00	10.00	
21							1.00	10.00	
22							3.00	10.00	
23							10.00	10.00	
24							5.00	10.00	
25							4.00	10.00	
26							1.00	10.00	
27							.25	10.00	
28							8.00	10.00	
29							7.00	10.00	
30							2.00	10.00	
31							1.50	10.00	
<b>MONTHLY AVGS</b>							5.30	9.84	
<b>SUNSHINE (MINUTES)</b>									
Total:      Possible: Percent Possible:									
<b>NUMBER OF DAYS WITH:</b>									
<b>SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING 31									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25   <=3.0   >=7.0 1      12      12									





# OBSERVATIONS AT 3-HOURLY INTERVALS

# WILMINGTON, DE

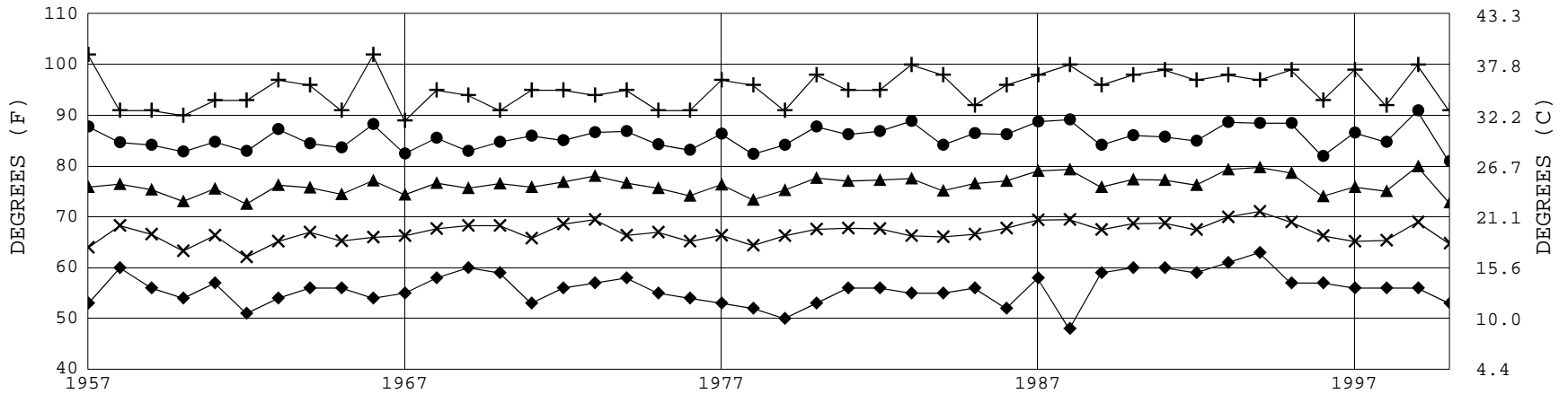
JULY 2000

ILG

WBAN # 13781

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F				WIND		PRESSURE (INCHES, HG)	
	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)		SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL										
SUNRISE: 0456								JUL 25				SUNSET: 1922				SUNRISE: 0501								JUL 31				SUNSET: 1917			
01	CLR	NC				5.00	BR	66	64	65	93	6	35	30.03	30.13	01	OVC	004				8.00	-RA	75	75	75	100	7	13	30.00	30.09
04	OVC	100				6.00	BR	65	63	64	93	6	35	30.04	30.13	04	OVC	014				10.00		74	73	73	97	3	18	29.99	30.08
07	SCT	NC				5.00	BR	67	64	65	91	6	34	30.07	30.16	07	OVC	014				10.00		74	72	73	94	5	20	30.01	30.10
10	FEW	NC				10.00		73	59	65	62	10	05	30.10	30.19	10	OVC	011				9.00		78	73	75	85	8	15	30.02	30.11
13	OVC	070				10.00		74	60	65	62	10	06	30.11	30.21	13	CLR	NC				10.00		84	73	76	70	8	15	30.00	30.09
16	OVC	060				10.00		73	61	66	66	12	06	30.10	30.20	16	CLR	NC				10.00		78	73	75	85	9	17	29.96	30.05
19	OVC	055				10.00		71	60	64	68	9	06	30.11	30.20	19	BKN	039				10.00		78	74	75	87	8	13	29.95	30.04
22	OVC	050				10.00		69	59	63	70	13	08	30.12	30.22	22	BKN	018				10.00		76	75	75	97	7	12	29.97	30.06
SUNRISE: 0457								JUL 26				SUNSET: 1921				3-HOURLY OBSERVATION NOTES															
01	OVC	012				10.00	-RA	67	64	65	91	8	05	30.10	30.20	Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8.															
04	OVC	005				2.00	RA BR	65	65	65	100	10	03	30.09	30.19	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.															
07	OVC	009				1.25	+RA BR	65	65	65	100	14	02	30.09	30.19	NC = No ceiling detected.															
10	OVC	007				4.00	-RA BR	67	66	66	97	16	04	30.09	30.19	& = Original observation contained additional weather elements.															
13	OVC	009				5.00	-RA BR	69	68	68	96	16	05	30.06	30.16	See page 3 for additional notes.															
16	OVC	005				5.00	-RA BR	70	70	70	100	12	04	30.02	30.12																
19	OVC	003				4.00	BR	70	70	70	100	10	02	30.00	30.10																
22	OVC	006				2.50	+RA BR	69	69	69	100	5	35	30.00	30.09																
SUNRISE: 0457								JUL 27				SUNSET: 1921				SUMMARY BY HOUR															
01	OVC	004				7.00	-RA	69	69	69	100	3	31	29.98	30.07	AVERAGES															
04	OVC	002				0.75	BR	68	68	68	100	3	31	29.96	30.06	RESULTANT WIND (MPH)															
07	OVC	002				0.75	BR	68	68	68	100	8	30	29.98	30.08	HOUR (LST)															
10	OVC	012				10.00		72	69	70	91	5	31	30.00	30.10	CEILOMETER															
13	OVC	022				10.00		75	69	71	82	3	01	29.98	30.08	EFF CLD AMT															
16	OVC	022				10.00		76	69	71	79	8	33	29.95	30.05	DRY BULB															
19	OVC	060				9.00		75	69	71	82	3	01	29.95	30.05	DEW POINT															
22	OVC	021				7.00		71	69	70	94	6	09	29.98	30.07	WET BULB															
SUNRISE: 0458								JUL 28				SUNSET: 1920				RELATIVE HUMIDITY															
01	OVC	019				8.00		71	68	69	90	7	35	29.96	30.06	PRESSURE (INCHES, HG)															
04	OVC	043				9.00		69	67	68	93	6	35	29.95	30.05	STATION															
07	OVC	042				10.00		70	67	68	90	9	03	29.96	30.06	SEA LEVEL															
10	BKN	018				10.00		75	68	70	79	5	09	29.97	30.07	VISIBILITY (MILES)															
13	BKN	030				10.00		79	68	72	69	6	15	29.96	30.06	WIND SPEED (MPH)															
16	CLR	NC				10.00		80	69	73	69	8	15	29.91	30.01	SPEED															
19	CLR	NC				10.00		73	70	71	90	14	16	29.92	30.02	DIRECTION															
22	OVC	009				10.00		71	69	70	94	10	19	29.96	30.06																
SUNRISE: 0459								JUL 29				SUNSET: 1919				HOUR (LST)															
01	BKN	017				9.00	-RA	70	68	69	93	6	13	29.94	30.04	CEILOMETER															
04	OVC	020				8.00		69	68	68	96	7	08	29.92	30.02	EFF CLD AMT															
07	OVC	006				7.00		69	68	68	96	6	11	29.96	30.06	DRY BULB															
10	OVC	012				10.00		75	69	71	82	7	15	29.97	30.07	DEW POINT															
13	CLR	NC				10.00		79	71	74	77	15	17	29.98	30.08	WET BULB															
16	CLR	NC				10.00		78	72	74	82	13	16	29.95	30.05	RELATIVE HUMIDITY															
19	SCT	NC				9.00		75	72	73	90	10	17	29.95	30.05	PRESSURE (INCHES, HG)															
22	OVC	011				9.00		73	70	71	90	9	12	29.98	30.08	STATION															
SUNRISE: 0500								JUL 30				SUNSET: 1918				SEA LEVEL															
01	OVC	007				8.00		72	70	71	94	6	09	29.97	30.07	VISIBILITY (MILES)															
04	OVC	005				6.00	BR	72	71	71	97	6	11	29.96	30.06	WIND SPEED (MPH)															
07	OVC	003				2.00	BR	73	71	72	94	7	13	29.99	30.09	SPEED															
10	OVC	010				5.00	HZ	78	72	74	82	9	15	30.01	30.10	DIRECTION															
13	FEW	NC				8.00		82	73	76	74	6	VR	29.98	30.08																
16	CLR	NC				10.00		80	73	75	79	12	18	29.96	30.05																
19	BKN	070				7.00		76	74	75	94	8	13	29.98	30.08																
22	OVC	008				10.00		75	74	74	96	5	07	30.00	30.09																

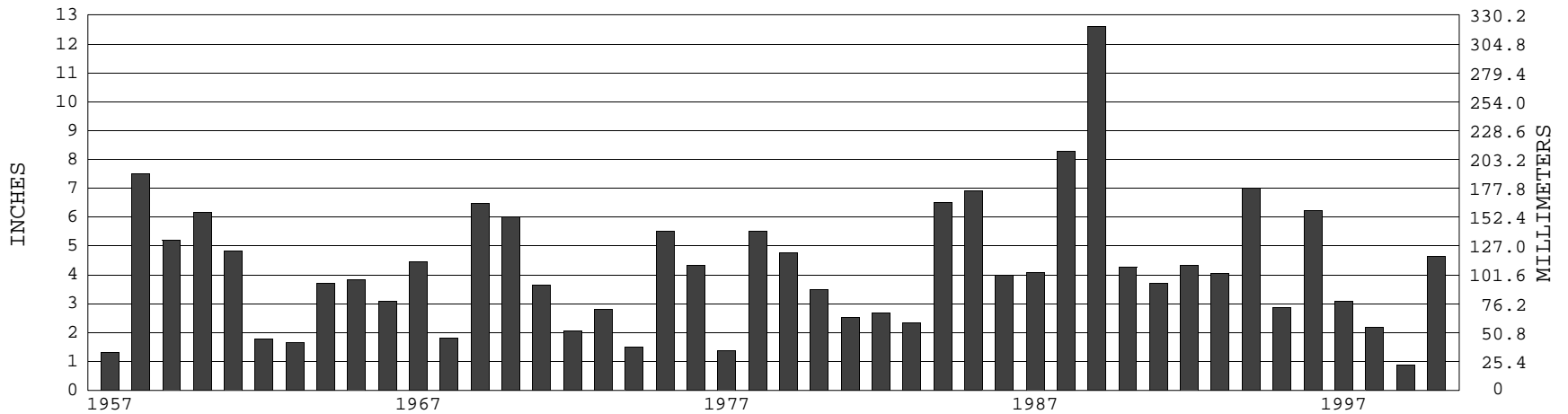
### WILMINGTON, DE JULY TEMPERATURES



+ Extreme Max.      ● Mean Max.      ▲ Mean      × Mean Min.      ◆ Extreme Min.

Long-Term (1957-2000) Mean: 76.3      1961-1990 Normal: 76.4

### WILMINGTON, DE JULY PRECIPITATION



Long-Term (1957-2000) Mean Monthly Total: 4.23

1961-1990 Normal: 4.23



**JULY 2000  
WILMINGTON, DE**

# **LOCAL CLIMATOLOGICAL DATA**

NOAA, National Climatic Data Center

*I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.*

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