



# JANUARY 2002

## LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

# WILMINGTON, DE

NEW CASTLE COUNTY AP (ILG)  
 Lat: 39° 40' N Long: 75° 36' W Elev (Ground): 92 Feet  
 Time Zone: EASTERN WBAN: 13781 ISSN #: 0198-117X

JANUARY 2002  
 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	34	19	27	-6	13	22	38	0			0.0	0.00	30.09	30.18	12.0	30	12.3	25	30	22	31	01		
02	37	19*	28	-5	17	24	37	0			0.0	0.00	30.21	30.29	6.9	29	7.7	20	31	17	30	02		
03	38	23	31	-1	18	26	34	0			0.0	0.00	29.92	30.01	7.7	33	8.3	20	35	17	35	03		
04	39	23	31	-1	19	27	34	0			0.0	0.00	29.99	30.07	8.8	28	9.7	25	32	21	31	04		
05	45	26	36	4	18	30	29	0			0.0	0.00	30.03	30.12	6.3	23	7.0	25	27	20	26	05		
06	39	22	31	-1			34	0	RA BR		0.0	0.91	29.67	29.76	2.7	35	6.9	32	36	26	01	06		
07	35	29	32	0			33	0	RA SN GS BR UP		T	0.09	29.54	29.63	10.3	30	11.0	32	31	24	31	07		
08	36	24	30	-2	22	27	35	0			0.0	0.00	29.90	29.99	8.1	28	10.5	28	32	23	32	08		
09	39	28	34	2	32	33	31	0	RA		0.0	0.04	29.70	29.79	5.5	20	5.8	14	21	12	20	09		
10	56	34	45	13	40	42	20	0			0.0	0.00	29.72	29.81	5.3	24	5.6	24	27	20	26	10		
11	46	40	43	12			22	0	RA BR		0.0	0.45	29.74	29.82	9.2	28	10.0	33	30	29	29	11		
12	47	31	39	8	28	35	26	0			0.0	0.00	29.82	29.91	6.8	21	8.5	18	19	17	22	12		
13	45	34	40	9	23	33	25	0			0.0	0.00	29.61	29.69	13.0	27	14.7	47*	27	37*	28	13		
14	45	29	37	6	27	34	28	0			0.0	0.00	29.96	30.04	6.0	15	7.6	23	15	20	15	14		
15	52	28	40	9	29	36	25	0			0.0	0.00	29.82	29.91	9.8	28	10.4	38	29	35	29	15		
16	44	33	39	8	24	33	26	0			0.0	0.00	30.11	30.19	7.4	27	9.0	26	31	22	32	16		
17	48	33	41	10	27	35	24	0			0.0	0.00	29.92	30.01	3.9	23	7.9	18	29	15	29	17		
18	40	25	33	2	17	29	32	0			0.0	0.00	30.05	30.14	7.8	29	8.7	32	27	24	29	18		
19	31	23	27*	-4	25	27	38	0	RA FZRA SN FG+ FZFG BR		2.3	0.48	29.98	30.07	5.3	05	7.8	22	36	17	36	19		
20	36	23	30	-1	24	28	35	0	SN BR		0.1	0.01	30.02	30.11	4.5	28	7.0	20	30	16	31	20		
21	40	24	32	1	32	33	33	0	RA SN BR		T	T	29.88	29.97	3.7	22	5.7	21	21	18	22	21		
22	46	32	39	8	27	35	26	0			0.0	0.00	30.20	30.28	6.8	25	8.2	22	28	18	28	22		
23	46	30	38	7	27	27	0	0	RA FG BR		0.0	0.03	30.05	30.14	6.6	18	7.1	18	18	15	19	23		
24	52	43	48	17	47	47	17	0	RA FG+ BR		0.0	0.38	29.69	29.77	3.7	21	6.5	20	25	16	26	24		
25	50	35	43	12	27	36	22	0	RA		0.0	0.02	29.98	30.07	11.4	29	12.9	32	30	26	30	25		
26	53	28	41	10	25	35	24	0			0.0	0.00	30.14	30.23	6.4	22	6.9	20	26	16	26	26		
27	60	27	44	13	33	38	21	0			0.0	0.00	30.11	30.20	2.4	18	3.5	12	20	9	18	27		
28	62	29	46	14	39	42	19	0			0.0	0.00	29.99	30.07	2.4	19	3.2	13	20	10	15	28		
29	70*	36	53	21	46	49	12	0			0.0	0.00	29.90	29.99	4.2	22	5.0	18	25	15	25	29		
30	66	47	57*	25	51	53	8	0	RA BR		0.0	0.17	29.98	30.07	4.8	34	7.3	23	36	20	36	30		
31	47	40	44	12	44	44	21	0	RA BR		0.0	0.14	30.16	30.24	10.2	05	10.4	23	09	20	09	31		
45.9		29.6	37.8	■ ■			27.0	0.0	< MONTHLY AVERAGES		TOTALS->		2.4	2.72	29.93	30.02	4.2	27	8.2	<- MONTHLY AVERAGES				
6.6		5.9	6.3	■ ■	<-----DEPARTURE FROM NORMAL----->									- .71	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.99 DATE :06-07				SEA LEVEL PRESSURE				DATE		TIME					
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 2.3 DATE :19				MAXIMUM				: 30.39		22 1951					
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH:				MINIMUM				: 29.39		06 1951					
HEATING:		836		-193		2290		-523		NUMBER OF DAYS WITH		MAXIMUM TEMP ≥ 90: 0		MINIMUM TEMP ≤ 32 : 21		PRECIPITATION ≥ 0.01 INCH : 11								
COOLING:		0		0		0		0		MAXIMUM TEMP ≤ 32 : 1		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 6										
		0		0		0		0		THUNDERSTORMS : 0		HEAVY FOG : 2		SNOWFALL ≥ 1.0 INCH : 1										

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# WILMINGTON, DE

JANUARY 2002 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		0.00		
04													04												04		0.00		
05													05												05		0.00		
06													06				0.02	0.09	0.20	0.33	0.18	0.07	0.02	T	06		0.91		
07			T	0.01	0.02	T	0.01	0.01	T		T	T	07	T	0.03	T	0.01	T	T	0.18	0.07	0.02	T	07		0.09			
08													08												08		0.00		
09													09	T	T										09		0.04		
10													10												10		0.00		
11		T	0.02	T	T	0.04	0.13	0.11	0.06	0.03	0.05	T	11	0.01											11		0.45		
12													12												12		0.00		
13													13												13		0.00		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17													17												17		0.00		
18													18												18		0.00		
19													19	0.03	0.06	0.03	0.07	0.02	0.06	0.03	0.01	0.01	0.04	0.05	0.02	19		0.48	
20	0.01									T	0.02	0.03	20												20		0.01		
21												T	21												21		T		
22													22												22		0.00		
23							T	T	T		T	0.03	23	T											23		0.03		
24								0.04	0.11	0.14	T	0.06	24	0.02		T							0.01		24		0.38		
25	0.01	T		0.01									25												25		0.02		
26													26												26		0.00		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		
30	0.01		0.01	0.01	0.02	0.01	0.02	0.01		T		0.01	30			T	T				T	0.02	0.06	0.07	0.02	30		0.17	
31													31			0.01			0.01	0.01	T		0.01	0.01	31		0.14		

## 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	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

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

## WILMINGTON, DE JANUARY 2002

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							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							2.50	10.00	
07							1.50	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							1.75	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							10.00	10.00	
19							.25	10.00	
20							2.00	10.00	
21							3.00	10.00	
22							10.00	10.00	
23							.50	10.00	
24							.25	10.00	
25							8.00	10.00	
26							10.00	10.00	
27							7.00	10.00	
28							8.00	10.00	
29							8.00	10.00	
30							4.00	10.00	
31							1.25	10.00	
<b>MONTHLY AVGS</b>							7.23	10.00	
<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									
2                      8                      22									





# OBSERVATIONS AT 3-HOURLY INTERVALS

# WILMINGTON, DE

JANUARY 2002

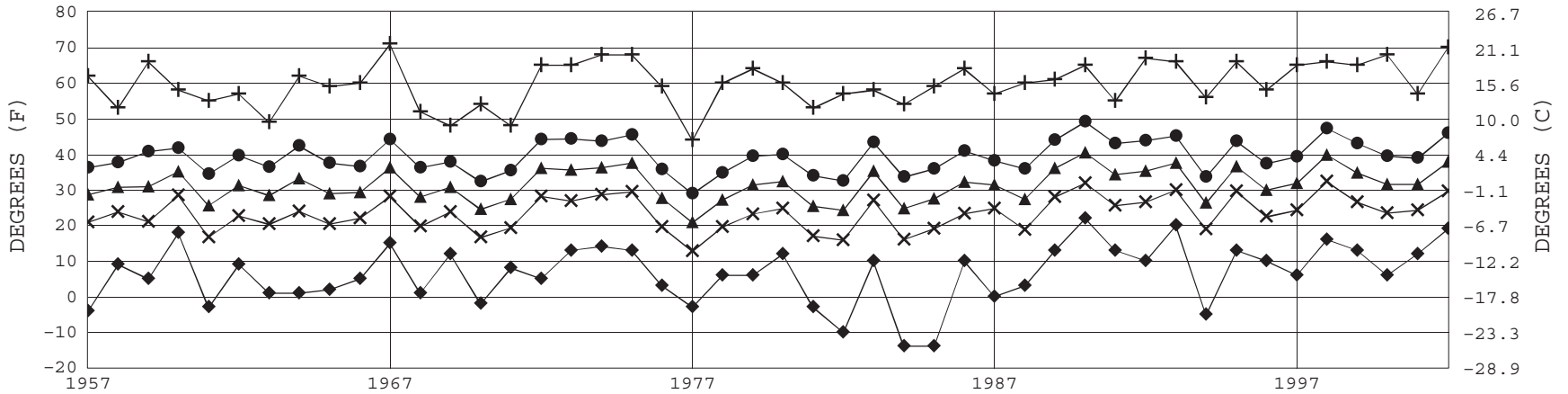
ILG

WBAN # 13781

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)						
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT	RELATIVE HUMIDITY (PCT)	DRY BULB	DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT	RELATIVE HUMIDITY (PCT)	DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0716 JAN 25 SUNSET: 1714											SUNRISE: 0711 JAN 31 SUNSET: 1721															
01	OVC	060		-RA	49	47	48	93	9	31	29.67	29.76	01	OVC	008		8.00	47	47	47	100	15	04	30.16	30.25	
04	OVC	030			43	36	40	76	15	30	29.74	29.83	04	OVC	007		8.00	44	44	44	100	14	04	30.21	30.30	
07	SCT	NC			38	28	34	68	20	29	29.90	29.99	07	OVC	007		7.00	-RA	41	41	41	100	14	04	30.25	30.33
10	CLR	NC			39	24	33	55	17	30	30.01	30.10	10	OVC	007		2.00	BR	42	42	42	100	12	08	30.24	30.33
13	CLR	NC			46	24	37	42	16	30	30.02	30.10	13	OVC	003		1.25	BR	43	43	43	100	9	03	30.17	30.26
16	CLR	NC			47	20	37	34	15	27	30.04	30.13	16	OVC	003		1.50	BR	45	45	45	100	8	07	30.10	30.19
19	CLR	NC			41	22	34	47	6	19	30.11	30.20	19	OVC	003		1.50	BR	44	44	44	100	9	05	30.10	30.19
22	CLR	NC			37	25	33	62	7	22	30.14	30.23	22	OVC	003		2.50	BR	44	44	44	100	6	06	30.05	30.14
SUNRISE: 0715 JAN 26 SUNSET: 1715											3-HOURLY OBSERVATION NOTES															
01	CLR	NC			34	25	31	70	6	21	30.14	30.23	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	CLR	NC			35	22	30	59	5	21	30.16	30.24	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.													
07	CLR	NC			30	25	28	82	3	19	30.18	30.27	NC = No ceiling detected.													
10	CLR	NC			42	27	36	55	8	24	30.20	30.29	& = Original observation contained additional weather elements.													
13	CLR	NC			51	25	40	36	12	22	30.13	30.22	See page 3 for additional notes.													
16	CLR	NC			53	24	41	32	10	22	30.10	30.19														
19	CLR	NC			45	26	37	48	6	22	30.11	30.21														
22	CLR	NC			40	25	34	55	6	19	30.12	30.21														
SUNRISE: 0714 JAN 27 SUNSET: 1716											SUMMARY BY HOUR															
01	CLR	NC			34	27	31	76	0	00	30.12	30.21	AVERAGES													
04	CLR	NC			30	27	29	88	3	32	30.11	30.20														
07	CLR	NC			28	27	28	96	0	00	30.14	30.23	RESULTANT WIND (MPH)													
10	CLR	NC			42	34	39	73	0	00	30.17	30.26														
13	CLR	NC			57	31	45	37	8	21	30.11	30.19	HOUR (LST)													
16	CLR	NC			58	37	48	46	8	15	30.06	30.15														
19	CLR	NC			45	38	42	77	7	18	30.08	30.17	CEILOMETER													
22	CLR	NC			39	39	39	100	3	14	30.07	30.15														
SUNRISE: 0714 JAN 28 SUNSET: 1717											EFF CLD AMT															
01	CLR	NC			35	35	35	100	0	00												30.05	30.13			
04	CLR	NC			33	32	33	96	0	00	30.03	30.11	DRY BULB													
07	CLR	NC			29	29	29	100	0	00	30.03	30.12														
10	CLR	NC			47	44	46	90	3	VR	30.05	30.14	DEW POINT													
13	CLR	NC			59	42	51	54	7	20	29.99	30.07														
16	CLR	NC			61	43	52	52	8	20	29.92	30.01	WET BULB													
19	CLR	NC			54	40	47	59	5	20	29.93	30.02														
22	CLR	NC			44	43	44	96	5	15	29.93	30.02	RELATIVE HUMIDITY													
SUNRISE: 0713 JAN 29 SUNSET: 1719											STATION															
01	CLR	NC			39	38	39	96	0	00												29.89	29.97			
04	CLR	NC			39	38	39	96	3	17	29.87	29.96	SEA LEVEL													
07	CLR	NC			37	37	37	100	0	00	29.89	29.98														
10	CLR	NC			55	42	49	62	9	23	29.92	30.01	PRESSURE (INCHES, HG)													
13	CLR	NC			69	50	58	51	14	25	29.89	29.98														
16	CLR	NC			68	52	59	57	9	22	29.88	29.97	VISIBILITY (MILES)													
19	CLR	NC			60	52	56	75	7	20	29.94	30.03														
22	BKN	090			55	52	53	90	0	00	29.91	30.00	WIND SPEED (MPH)													
SUNRISE: 0712 JAN 30 SUNSET: 1720											SPEED															
01	FEW	NC			49	48	48	97	0	00												29.89	29.98	DIRECTION		
04	CLR	NC			51	50	51	96	6	27	29.86	29.95														
07	FEW	NC			53	51	52	93	5	25	29.90	29.98	HOUR (LST)													
10	OVC	060			61	54	57	78	5	33	29.95	30.03														
13	BKN	070			65	53	58	66	10	31	29.95	30.03	CEILOMETER													
16	OVC	037			61	53	57	75	10	34	30.00	30.09														
19	OVC	040			53	52	52	96	15	36	30.08	30.17	EFF CLD AMT													
22	OVC	015			49	49	49	100	9	02	30.15	30.23														



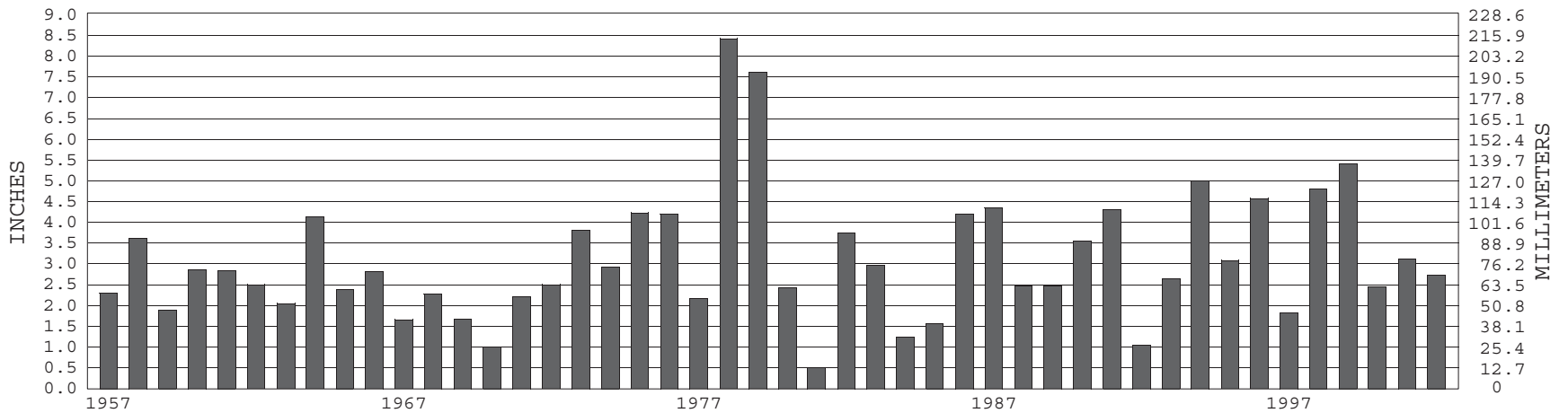
### WILMINGTON, DE JANUARY TEMPERATURES



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

Long-Term (1957-2002) Mean: 31.4      1961-1990 Normal: 31.5

### WILMINGTON, DE JANUARY PRECIPITATION



Long-Term (1957-2002) Mean Monthly Total: 3.10

1961-1990 Normal: 3.43



JANUARY 2002

WILMINGTON, DE

# LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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