



NOVEMBER 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

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	52	32	42	-8	32	38	23	0			0.0	0.01	29.93	30.02	9.8	26	10.7	28	30	22	24	01																																															
02	48	32	40	-10	25	33	25	0	RA		0.0	0.00	29.95	30.03	8.1	26	8.6	23	26	17	26	02																																															
03	49	30	40	-10	27	35	25	0			0.0	0.00	30.06	30.15	2.8	30	6.2	18	32	15	32	03																																															
04	52	36	44	-5	32	39	21	0			0.0	0.00	29.99	30.08	3.1	25	5.5	20	29	17	29	04																																															
05	49	30	40	-9	35	39	25	0	RA BR		0.0	0.47	30.01	30.10	1.7	09	6.8	16	16	14	16	05																																															
06	54	43	49	0	41	45	16	0	RA BR		0.0	0.20	29.49	29.58	14.7	30	15.1	44*	31	35*	30	06																																															
07	52	34	43	-6	29	38	22	0			0.0	0.00	29.94	30.02	11.0	29	12.3	31	28	25	29	07																																															
08	59	31	45	-3	33	40	20	0			0.0	0.00	30.04	30.12	6.5	20	6.9	21	20	17	19	08																																															
09	63	35	49	1	33	43	16	0	HZ		0.0	0.00	29.95	30.04	5.7	17	6.2	15	17	12	21	09																																															
10	72*	49	61	13	55	58	4	0			0.0	0.00	29.77	29.85	10.8	16	11.3	29	18	23	19	10																																															
11	68	55	62*	15	58	61	3	0	TS TSRA RA FG BR HZ		0.0	0.35	29.76	29.84	7.7	19	10.0	25	18	21	17	11																																															
12	58	49	54	7	49	51	11	0	RA BR		0.0	0.80	29.95	30.03	8.4	01	9.7	28	05	24	05	12																																															
13	51	37	44	-3	41	44	21	0	RA		0.0	0.07	29.94	30.02	8.9	32	9.5	26	30	22	31	13																																															
14	57	33	45	-1	37	42	20	0			0.0	0.00	29.99	30.07	5.5	22	6.2	16	21	13	23	14																																															
15	59	37	48	2	31	41	17	0			0.0	0.00	29.95	30.04	3.7	19	4.6	13	19	10	22	15																																															
16	49	42	46	0	30	40	19	0	RA HZ		0.0	1.32	29.92	30.00	15.2	04	15.5	36	04	30	04	16																																															
17	43	40	42	-4	32	38	23	0	RA HZ		0.0	0.74	29.59	29.67	7.7	35	11.1	38	04	32	03	17																																															
18	49	34	42	-3	27	36	23	0	RA		0.0	0.01	30.00	30.08	12.7	27	13.2	36	28	30	29	18																																															
19	51	27	39	-6	30	36	26	0	RA		0.0	T	30.18	30.27	3.1	16	5.6	18	15	16	14	19																																															
20	56	32	44	-1	31	39	21	0	BR HZ		0.0	0.00	30.14	30.23	2.5	18	3.9	15	14	10	17	20																																															
21	53	31	42	-2	34	40	23	0	RA BR HZ		0.0	0.14	29.87	29.95	2.4	04	3.3	13	04	12	06	21																																															
22	52	41	47	3	43	45	18	0	TSRA RA FG+ BR HZ		0.0	0.12	29.48	29.57	4.0	26	9.2	26	29	23	29	22																																															
23	45	35	40	-4	25	34	25	0			0.0	0.00	29.79	29.87	17.1	28	17.8	43	29	33	28	23																																															
24	53	33	43	0	30	37	22	0			0.0	0.00	30.01	30.09	4.6	26	5.7	24	29	20	29	24																																															
25	58	31	45	2	31	39	20	0			0.0	0.00	30.04	30.12	0.9	30	4.6	18	33	15	33	25																																															
26	48	37	43	0	30	38	22	0	RA		0.0	0.05	30.13	30.21	4.1	01	5.8	22	01	17	01	26																																															
27	40	25	33	-9	26	32	32	0	RA UP		T	0.18	30.02	30.10	11.1	32	11.2	26	31	22	32	27																																															
28	38	22*	30*	-12	17	26	35	0			0.0	0.00	30.08	30.17	8.0	28	8.6	25	26	20	27	28																																															
29	40	26	33	-8	22	30	32	0			0.0	0.00	29.70	29.79	8.9	20	9.3	28	19	22	20	29																																															
30	47	31	39	-2	30	36	26	0	RA		0.0	0.01	29.40	29.48	7.5	24	8.4	32	28	28	27	30																																															
										52.2		35.0	43.6	■ ■	33.2	39.8	21.2	0.0	< MONTHLY AVERAGES		TOTALS->		T	4.47	29.90	29.99	3.4	27	8.8	<- MONTHLY AVERAGES																																							
										-2.8		-1.9	-2.3	■ ■	<-----DEPARTURE FROM NORMAL----->										1.28	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																																											
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.54 DATE :16-17										SEA LEVEL PRESSURE DATE TIME																																																	
MONTHLY TOTAL DEPARTURE										SEASON TO DATE TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: T DATE :27										MAXIMUM : 30.36 19 0251																																							
HEATING: 636 72										973 60										GREATEST SNOW DEPTH: DATE :										MINIMUM : 29.38 30 1351																																							
COOLING: 0 -1										1311 186										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 0										MINIMUM TEMP ≤ 32: 13										PRECIPITATION ≥ 0.01 INCH : 14																			
																														MAXIMUM TEMP ≤ 32 : 0										MINIMUM TEMP ≤ 0 : 0										PRECIPITATION ≥ 0.10 INCH : 9																			
																																								THUNDERSTORMS : 2										HEAVY FOG : 1										SNOWFALL ≥ 1.0 INCH : 0									

NOVEMBER 2002
WILMINGTON, DE

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

WILMINGTON, DE

NOVEMBER 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			0.01		
02													02											02			0.00		
03													03											03			0.00		
04													04											04			0.00		
05													05											05			0.47		
06	0.08	0.05	0.06	T		T	T	T					06			0.01								06			0.20		
07													07											07			0.00		
08													08											08			0.00		
09													09											09			0.00		
10													10											10			0.00		
11													11	0.07	T									11			0.35		
12								0.04	0.04	0.05	0.08	0.06	12	0.10	0.01	0.07	0.09	0.13	0.04	T	T	T	T	12			0.80		
13	T			T	0.02	0.04	0.01	T	0.04	0.02	0.20	0.08	13											13			0.07		
14													14											14			0.00		
15													15											15			0.00		
16					T	0.01	0.07	0.19	0.16	0.02	T	0.02	16	0.02	0.06	0.03	0.05	0.06	0.01	0.01	0.06	0.06	0.08	0.18	0.23	16		1.32	
17	0.09	0.07	0.03	0.02	0.01	0.02	0.01	0.01	T	T	0.03		17	0.01	T	0.01	0.03	0.03	0.04	0.04	0.07	0.06	0.08	0.03	0.05	17		0.74	
18	0.01	T											18														18		0.01
19													19			T	T										19		T
20													20														20		0.00
21													21	T	T				0.01	0.07	0.03	T	T	T	0.03	21		0.14	
22	T	0.01	T	T						0.01			22	0.09	0.01									T		22		0.12	
23													23														23		0.00
24													24														24		0.00
25													25														25		0.00
26													26														26		0.05
27	0.07	0.05	0.05	0.01	T	T							27														27		0.18
28													28														28		0.00
29													29														29		0.00
30													30			T	T										30		0.01

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.06	.11	.13	.15	.19	.23	.28	.33	.38	.42	.47	.51
Ending Date	16	16	16	16	16	16	16	16	16	17	17	17
Ending Time (Hour/Min)	2255	2259	2304	2304	2310	2304	2317	2334	2343	0012	0035	0105

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 1971–2000

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 NOVEMBER 2002

Ceilorometer (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							3.00	10.00	
06							4.00	10.00	
07							10.00	10.00	
08							7.00	10.00	
09							6.00	10.00	
10							9.00	10.00	
11							.25	10.00	
12							1.75	10.00	
13							9.00	10.00	
14							7.00	10.00	
15							8.00	10.00	
16							3.00	10.00	
17							5.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							.50	10.00	
21							.75	10.00	
22							.25	10.00	
23							10.00	10.00	
24							8.00	10.00	
25							7.00	10.00	
26							10.00	10.00	
27							7.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							10.00	10.00	
MONTHLY AVGS							7.04	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING									
30									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0									
1 6 20									

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 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 Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0631				NOV 01				SUNSET: 1701				SUNRISE: 0638				NOV 07				SUNSET: 1654									
01	CLR	NC			10.00	34	30	32	85	7	29	29.99	30.08	01	FEW	NC			10.00	45	33	40	63	15	28	29.70	29.78		
04	CLR	NC			10.00	33	30	32	89	6	27	29.98	30.07	04	OVC	055			10.00	46	34	41	63	21	29	29.74	29.83		
07	CLR	NC			10.00	33	31	32	92	5	23	29.98	30.07	07	CLR	NC			10.00	45	31	39	58	13	26	29.83	29.92		
10	CLR	NC			10.00	47	36	42	66	12	25	29.96	30.05	10	OVC	042			10.00	47	33	41	59	18	29	29.93	30.02		
13	BKN	060			10.00	49	37	44	64	12	23	29.88	29.96	13	SCT	NC			10.00	51	25	40	36	16	32	29.95	30.04		
16	OVC	050			10.00	50	34	43	54	17	28	29.84	29.92	16	CLR	NC			10.00	50	24	40	36	8	33	30.00	30.08		
19	BKN	060			10.00	44	33	39	65	20	30	29.91	30.00	19	CLR	NC			10.00	41	27	36	57	5	19	30.07	30.15		
22	CLR	NC			10.00	39	26	34	60	12	27	29.93	30.02	22	CLR	NC			10.00	34	29	32	82	8	32	30.07	30.16		
SUNRISE: 0632				NOV 02				SUNSET: 1660				SUNRISE: 0639				NOV 08				SUNSET: 1653									
01	CLR	NC			10.00	36	26	32	67	8	28	29.96	30.05	01	CLR	NC			10.00	38	32	36	79	3	24	30.09	30.18		
04	CLR	NC			10.00	32	26	30	79	8	24	29.96	30.04	04	CLR	NC			10.00	35	32	34	89	0	00	30.07	30.16		
07	FEW	NC			10.00	32	25	29	75	8	25	29.98	30.07	07	CLR	NC			7.00	31	30	31	96	5	31	30.10	30.19		
10	CLR	NC			10.00	41	25	35	53	15	26	29.98	30.07	10	CLR	NC			10.00	49	32	42	52	8	20	30.09	30.18		
13	CLR	NC			10.00	46	24	37	42	12	28	29.90	29.99	13	CLR	NC			10.00	58	32	46	38	13	20	30.01	30.09		
16	FEW	NC			10.00	46	22	37	38	14	25	29.88	29.97	16	CLR	NC			10.00	57	32	46	39	9	21	29.98	30.07		
19	CLR	NC			10.00	40	25	34	55	6	19	29.91	30.01	19	CLR	NC			10.00	50	32	42	50	8	17	29.99	30.08		
22	CLR	NC			10.00	35	27	32	72	6	26	29.96	30.05	22	CLR	NC			10.00	47	30	40	52	6	20	29.99	30.08		
SUNRISE: 0633				NOV 03				SUNSET: 1659				SUNRISE: 0640				NOV 09				SUNSET: 1652									
01	CLR	NC			10.00	35	23	31	61	6	25	29.97	30.06	01	CLR	NC			10.00	45	42	44	90	7	17	29.99	30.07		
04	CLR	NC			10.00	33	22	29	64	6	26	30.00	30.09	04	CLR	NC			9.00	41	32	37	70	0	00	29.98	30.07		
07	CLR	NC			10.00	33	25	30	72	3	29	30.07	30.16	07	CLR	NC			7.00	37	32	35	82	3	17	29.98	30.07		
10	OVC	065			10.00	43	28	37	56	7	29	30.10	30.19	10	CLR	NC			10.00	52	31	43	45	9	19	30.01	30.10		
13	OVC	055			10.00	48	29	40	48	10	31	30.07	30.16	13	CLR	NC			10.00	61	28	46	29	10	17	29.92	30.01		
16	CLR	NC			10.00	49	25	39	39	8	32	30.05	30.14	16	CLR	NC			10.00	61	28	46	29	8	19	29.91	30.00		
19	CLR	NC			10.00	43	29	37	58	5	10	30.08	30.17	19	CLR	NC			10.00	54	25	42	33	5	15	29.91	30.00		
22	CLR	NC			10.00	39	31	36	73	3	11	30.08	30.16	22	CLR	NC			10.00	52	29	42	41	8	16	29.92	30.01		
SUNRISE: 0634				NOV 04				SUNSET: 1657				SUNRISE: 0641				NOV 10				SUNSET: 1651									
01	CLR	NC			10.00	37	32	35	82	0	00	30.04	30.13	01	CLR	NC			10.00	53	51	52	93	8	16	29.89	29.98		
04	OVC	085			10.00	40	30	36	68	6	08	30.00	30.09	04	OVC	060			10.00	52	51	52	97	3	11	29.86	29.95		
07	OVC	090			10.00	41	32	37	70	0	00	29.99	30.08	07	FEW	NC			9.00	53	52	52	96	10	15	29.84	29.93		
10	OVC	050			10.00	47	32	41	56	7	20	29.97	30.06	10	BKN	100			10.00	61	55	58	81	12	15	29.81	29.90		
13	OVC	032			10.00	49	32	42	52	8	23	29.93	30.01	13	CLR	NC			9.00	69	60	64	73	17	19	29.72	29.81		
16	OVC	037			10.00	51	32	43	48	7	28	29.93	30.02	16	OVC	044			10.00	70	60	64	71	16	19	29.71	29.80		
19	BKN	042			10.00	44	32	39	63	3	30	30.00	30.09	19	BKN	065			10.00	64	58	60	81	13	15	29.70	29.78		
22	SCT	NC			10.00	44	33	39	65	6	27	30.03	30.11	22	OVC	120			10.00	61	59	60	93	12	16	29.68	29.77		
SUNRISE: 0635				NOV 05				SUNSET: 1656				SUNRISE: 0642				NOV 11				SUNSET: 1651									
01	FEW	NC			9.00	39	36	38	89	6	27	30.08	30.17	01	OVC	065			10.00	63	52	57	68	14	15	29.63	29.72		
04	CLR	NC			6.00	35	34	35	96	6	27	30.11	30.19	04	OVC	018			10.00	68	64	66	87	16	18	29.63	29.72		
07	BKN	039			5.00	34	33	34	97	7	31	30.12	30.21	07	FEW	NC			10.00	68	64	66	87	13	18	29.67	29.76		
10	CLR	NC			10.00	48	31	41	52	8	36	30.13	30.22	10	SCT	NC			10.00	67	58	62	73	13	17	29.68	29.77		
13	CLR	NC			10.00	48	29	40	48	5	14	30.06	30.15	13	OVC	014			10.00	66	58	61	75	10	22	29.71	29.80		
16	FEW	NC			10.00	47	32	41	56	10	15	30.01	30.10	16	BKN	012			10.00	66	58	61	75	9	22	29.78	29.87		
19	OVC	070			10.00	44	35	40	71	8	10	29.92	30.01	19	CLR	NC			9.00	62	56	59	81	6	27	29.87	29.96		
22	OVC	008			3.00	42	42	43	97	7	08	29.78	29.86	22	BKN	060			10.00	58	54	56	87	0	00	29.93	30.02		
SUNRISE: 0637				NOV 06				SUNSET: 1655				SUNRISE: 0643				NOV 12				SUNSET: 1650									
01	OVC	004			5.00	46	45	46	96	8	36	29.61	29.70	01	CLR	NC			10.00	57	54	55	90	3	03	29.98	30.06		
04	OVC	005			10.00	47	46	46	97	7	31	29.43	29.52	04	OVC	070			10.00	54	53	53	97	0	00	30.02	30.10		
07	SCT	NC			7.00	46	45	46	96	6	30	29.42	29.50	07	OVC	080			10.00	55	50	52	83	6	36	30.00	30.09		
10	OVC	013			7.00	50	47	48	89	14	29	29.41	29.50	10	OVC	050			4.00	55	54	54	96	14	05	29.99	30.08		
13	OVC	021			10.00	53	45	49	74	14	29	29.37	29.45	13	OVC	019			8.00	51	49	50	92	18	05	29.92	30.00		
16	OVC	035			10.00	50	41	46	71	22	30	29.42	29.50	16	OVC	012			2.50	50	48	49	93	12	32	29.89	29.98		
19	OVC	044			10.00	48	33	41	56	31	30	29.57	29.65	19	OVC	015			10.00	50	46	48	86	15	36	29.89	29.98		
22	SCT	NC			10.00	44	31	39	60	18	29	29.68	29.76	22	OVC	036			10.00	50	41	46	71	8	33	29.89	29.98		

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

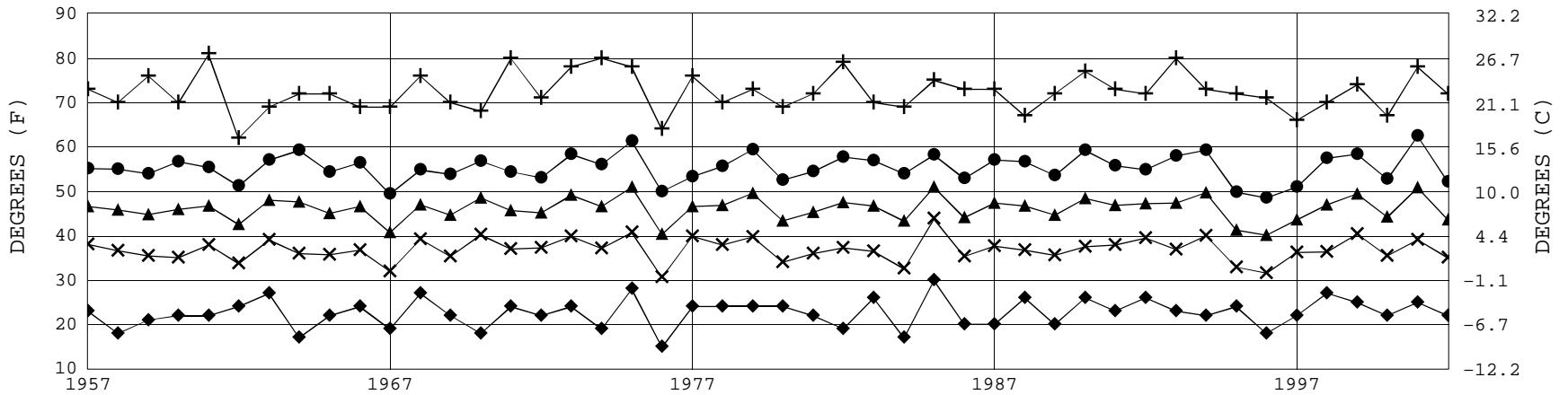
NOVEMBER 2002

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 OtkAs	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL	SKY COVER		CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT OtkAs	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0644				NOV 13	SUNSET: 1649				SUNRISE: 0651				NOV 19	SUNSET: 1644															
01	OVC	046		10.00	-RA	49	47	48	93	10	31	29.89	29.98	01	CLR	NC		10.00	34	28	32	79	0	00	30.26	30.35			
04	OVC	036		10.00		49	45	47	86	9	33	29.88	29.97	04	CLR	NC		10.00	28	26	27	92	0	00	30.26	30.35			
07	OVC	055		10.00		48	46	47	93	7	36	29.88	29.97	07	CLR	NC		10.00	29	27	28	92	0	00	30.25	30.35			
10	OVC	030		10.00		50	44	47	80	12	32	29.94	30.03	10	CLR	NC		10.00	42	30	37	62	9	12	30.22	30.31			
13	OVC	060		10.00		50	40	45	68	14	35	29.88	29.96	13	CLR	NC		10.00	50	32	42	50	14	14	30.14	30.22			
16	CLR	NC		10.00		50	36	44	59	17	31	29.92	30.01	16	OVC	060		10.00	-RA	48	32	41	54	9	16	30.10	30.19		
19	CLR	NC		10.00		43	35	40	74	6	29	29.99	30.07	19	CLR	NC		10.00	45	32	39	61	8	18	30.11	30.20			
22	CLR	NC		10.00		40	37	39	89	0	00	29.99	30.08	22	OVC	060		10.00	43	34	39	71	7	23	30.12	30.21			
SUNRISE: 0646				NOV 14	SUNSET: 1648				SUNRISE: 0652				NOV 20	SUNSET: 1644															
01	CLR	NC		10.00		37	35	36	93	7	25	29.99	30.08	01	CLR	NC		10.00	41	32	37	70	0	00	30.14	30.23			
04	CLR	NC		10.00		37	35	36	93	5	26	29.99	30.08	04	CLR	NC		10.00	37	32	35	82	0	00	30.16	30.24			
07	CLR	NC		7.00		33	32	33	96	0	00	30.03	30.12	07	CLR	NC	BR	6.00	35	32	34	89	0	00	30.17	30.26			
10	CLR	NC		10.00		49	38	44	66	9	27	30.04	30.13	10	CLR	NC		10.00	48	32	41	54	3	26	30.20	30.29			
13	CLR	NC		10.00		56	40	48	55	7	22	29.98	30.06	13	CLR	NC		10.00	56	31	45	39	6	17	30.15	30.24			
16	CLR	NC		10.00		56	39	48	53	8	21	29.95	30.03	16	CLR	NC		10.00	53	31	43	43	9	15	30.13	30.22			
19	CLR	NC		10.00		51	40	46	66	6	19	29.96	30.05	19	CLR	NC		10.00	46	31	40	56	6	14	30.12	30.21			
22	CLR	NC		10.00		49	39	44	69	7	20	29.95	30.04	22	CLR	NC		10.00	41	27	36	57	0	00	30.09	30.18			
SUNRISE: 0647				NOV 15	SUNSET: 1647				SUNRISE: 0653				NOV 21	SUNSET: 1643															
01	CLR	NC		10.00		48	32	41	54	6	19	29.93	30.02	01	CLR	NC	5.00 HZ		37	32	35	82	0	00	30.06	30.15			
04	CLR	NC		10.00		45	32	39	61	0	00	29.93	30.01	04	CLR	NC	6.00 BR		32	32	32	100	0	00	30.01	30.10			
07	CLR	NC		8.00		38	32	36	79	0	00	29.95	30.03	07	BKN	008	0.75 BR		34	32	33	92	0	00	29.97	30.06			
10	CLR	NC		10.00		50	31	42	48	9	23	29.97	30.06	10	BKN	002	4.00 HZ		45	32	39	61	0	00	29.96	30.04			
13	CLR	NC		10.00		56	31	45	39	6	21	29.94	30.03	13	SCT	NC	10.00 -RA		51	32	43	48	5	15	29.84	29.93			
16	CLR	NC		10.00		58	31	46	36	6	21	29.93	30.02	16	OVC	060	9.00		52	31	43	45	0	00	29.78	29.87			
19	CLR	NC		10.00		50	30	41	46	8	15	29.96	30.05	19	OVC	017	5.00 -RA		49	32	42	52	7	02	29.75	29.84			
22	CLR	NC		10.00		48	30	40	50	0	00	29.98	30.07	22	OVC	011	6.00 -RA BR		49	48	48	97	8	05	29.68	29.77			
SUNRISE: 0648				NOV 16	SUNSET: 1646				SUNRISE: 0655				NOV 22	SUNSET: 1642															
01	OVC	090		10.00		46	32	40	58	6	01	29.95	30.03	01	OVC	003	5.00 -RA BR		49	49	49	100	5	05	29.60	29.68			
04	OVC	060		10.00		48	31	41	52	5	36	29.95	30.04	04	OVC	003	5.00 BR		49	49	49	100	9	07	29.53	29.62			
07	OVC	032		5.00	RA	48	30	40	50	14	04	29.97	30.06	07	OVC	001	1.50 BR		49	49	49	100	5	09	29.51	29.60			
10	OVC	055		10.00	-RA	47	30	40	52	17	06	29.98	30.07	10	OVC	001	1.00 BR		51	50	51	96	5	13	29.48	29.57			
13	OVC	007		4.00	-RA	49	28	40	45	12	05	29.94	30.03	13	OVC	008	7.00 RA		50	50	50	100	21	28	29.40	29.49			
16	OVC	007		5.00	RA	48	29	40	48	20	04	29.90	29.99	16	OVC	049	10.00		45	40	43	83	15	29	29.43	29.52			
19	OVC	009		10.00	-RA	47	28	39	48	23	04	29.87	29.95	19	OVC	095	10.00		43	40	42	89	7	24	29.45	29.54			
22	OVC	010		8.00	RA	46	30	39	54	24	04	29.78	29.87	22	OVC	090	10.00		41	32	37	70	12	24	29.47	29.56			
SUNRISE: 0649				NOV 17	SUNSET: 1646				SUNRISE: 0656				NOV 23	SUNSET: 1642															
01	OVC	013		9.00	RA	41	32	37	70	20	02	29.67	29.75	01	OVC	100	10.00		41	32	37	70	22	27	29.49	29.58			
04	OVC	033		10.00	-RA	41	32	37	70	20	02	29.58	29.67	04	CLR	NC	10.00		38	25	33	60	24	28	29.59	29.68			
07	OVC	011		10.00	-RA	42	32	38	68	17	04	29.54	29.63	07	CLR	NC	10.00		36	20	30	52	21	28	29.70	29.79			
10	OVC	011		10.00		42	31	37	65	5	31	29.63	29.72	10	BKN	045	10.00		41	25	35	53	32	29	29.76	29.85			
13	OVC	011		7.00	-RA	43	31	38	63	7	35	29.58	29.67	13	FEW	NC	10.00		45	25	37	46	26	28	29.80	29.89			
16	OVC	011		8.00	RA	43	31	38	63	9	34	29.55	29.64	16	CLR	NC	10.00		43	23	35	45	17	26	29.87	29.96			
19	OVC	015		10.00	-RA	42	32	38	68	5	28	29.56	29.65	19	CLR	NC	10.00		39	22	33	50	12	28	29.93	30.02			
22	OVC	017		10.00	-RA	41	34	38	76	15	28	29.60	29.69	22	OVC	085	10.00		37	25	33	62	6	21	29.94	30.03			
SUNRISE: 0650				NOV 18	SUNSET: 1645				SUNRISE: 0657				NOV 24	SUNSET: 1641															
01	OVC	022		10.00	-RA	40	32	37	73	15	29	29.63	29.72	01	FEW	NC	10.00		38	26	33	62	7	21	29.94	30.03			
04	OVC	032		10.00		40	31	36	70	12	25	29.71	29.80	04	OVC	047	10.00		36	28	33	73	8	20	29.94	30.03			
07	CLR	NC		10.00		40	30	36	68	13	26	29.84	29.93	07	CLR	NC	10.00		34	28	32	79	6	24	29.98	30.07			
10	CLR	NC		10.00		43	28	37	56	18	28	29.98	30.07	10	CLR	NC	10.00		45	30	39	56	8	23	30.03	30.12			
13	CLR	NC		10.00		47	26	39	44	22	28	30.03	30.12	13	CLR	NC	10.00		52	31	43	45	10	29	29.99	30.08			
16	CLR	NC		10.00		47	24	38	41	21	29	30.09	30.18	16	CLR	NC	10.00		52	31	43	45	9	29	30.00	30.09			
19	CLR	NC		10.00		42	22	35	45	10	26	30.21	30.29	19	CLR	NC	10.00		45	31	39	58	3	14	30.05	30.14			
22	CLR	NC		10.00		37	26	33	65	3	29	30.25	30.34	22	CLR	NC	10.00		38	32	36	79	0	00	30.06	30.15			

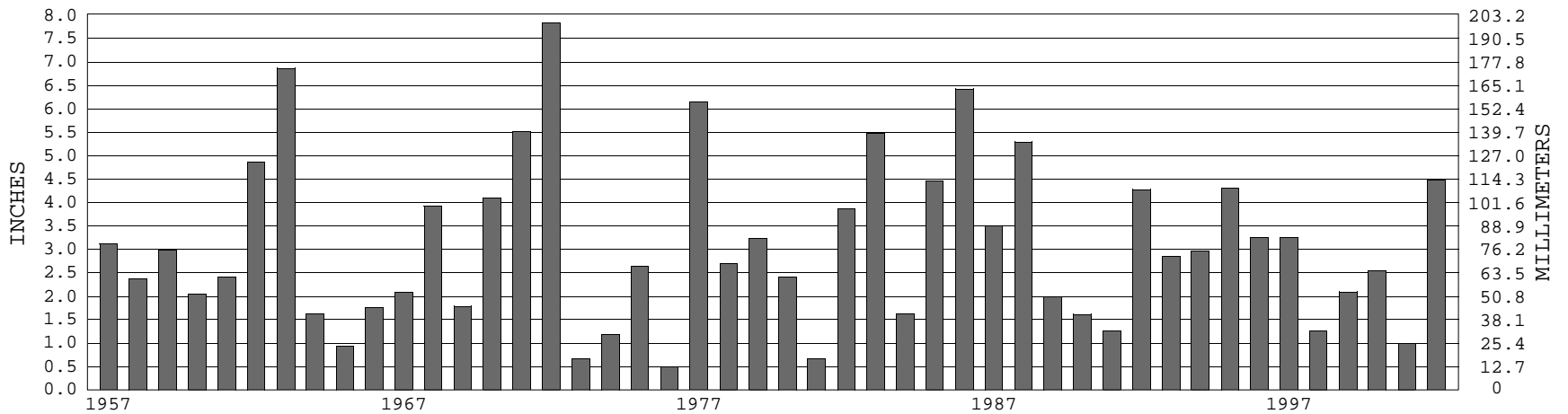
WILMINGTON, DE NOVEMBER TEMPERATURES



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

Long-Term (1957-2002) Mean: 46.1 1961-1990 Normal: 45.9

WILMINGTON, DE NOVEMBER PRECIPITATION



Long-Term (1957-2002) Mean Monthly Total: 3.09

1961-1990 Normal: 3.19



NOVEMBER 2002
WILMINGTON, DE

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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