



NOVEMBER 2003

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

WILMINGTON, DE

NEW CASTLE COUNTY AIRPORT (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							
																			SPEED	DIR	SPEED	DIR						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
01	78	46	62	12	56	58	3	0	FG+ BR	0		0.0	0.00	30.14	30.22	1.3	17	2.0	9	20	8	16	01					
02	72	52	62	12	59	60	3	0	BR HZ	0		0.0	0.00	30.14	30.22	3.7	16	5.1	16	16	14	16	02					
03	78*	51	65*	15	56	59	0	0	FG+ BR	0		0.0	0.00	30.06	30.15	3.4	19	3.7	16	20	13	20	03					
04	72	55	64	15	59	60	1	0	RA FG+ BR HZ	0		0.0	0.01	30.05	30.14	4.7	06	6.1	24	04	21	04	04					
05	70	58	64	15	63	63	1	0	RA FG+ BR	0		0.0	0.17	30.00	30.08	4.3	05	5.5	17	16	15	16	05					
06	66	57	62	13	60	60	3	0	RA BR	0		0.0	0.31	30.00	30.08	5.5	03	6.4	15	06	13	01	06					
07	59	48	54	5	44	49	11	0	RA	0		0.0	T	30.08	30.16	6.9	31	8.3	22	31	18	32	07					
08	49	35	42	-6	21	34	23	0		0		0.0	0.00	30.35	30.44	10.8	32	11.9	26	31	20	32	08					
09	44	26	35	-13	14	28	30	0		0		0.0	0.00	30.59	30.68	3.8	02	4.6	17	35	15	36	09					
10	48	22*	35*	-13	23	32	30	0		0		0.0	0.00	30.42	30.51	1.2	22	3.4	12	20	9	19	10					
11	56	30	43	-4	42	44	22	0	RA	0		0.0	T	30.09	30.18	4.3	19	5.5	18	17	16	17	11					
12	55	51	53	6	53	53	12	0	RA FG+ BR	0		0.0	0.84	29.77	29.86	2.3	16	5.0	20	16	17	16	12					
13	60	39	50	3	29	41	15	0	RA BR SQ	0		0.0	0.02	29.57	29.65	25.7	27	26.6	59*	27	47*	29	13					
14	47	36	42	-4	20	34	23	0		0		0.0	0.00	29.85	29.94	20.3	28	21.8	55	30	39	29	14					
15	54	37	46	0	30	39	19	0		0		0.0	0.00	30.01	30.09	7.7	27	8.8	25	32	20	30	15					
16	54	39	47	1	41	44	18	0		0		0.0	0.00	30.11	30.20	1.4	09	2.1	9	08	8	14	16					
17	60	39	50	4	45	48	15	0	BR HZ	0		0.0	0.00	30.15	30.23	3.1	31	4.1	16	29	14	32	17					
18	56	40	48	3	49	50	17	0	RA BR	0		0.0	T	30.18	30.27	5.7	09	6.5	15	07	14	06	18					
19	67	51	59	14	58	59	6	0	RA BR	0		0.0	1.05	29.64	29.72	9.6	15	14.7	39	14	32	15	19					
20	54	38	46	1	38	44	19	0	RA	0		0.0	0.08	29.73	29.81	13.2	30	13.7	37	33	29	31	20					
21	67	39	53	9	39	46	12	0		0		0.0	0.00	29.90	29.98	6.0	28	6.5	22	30	18	30	21					
22	62	40	51	7	44	47	14	0	BR	0		0.0	0.00	30.04	30.12	0.9	08	4.4	14	05	12	06	22					
23	57	37	47	3	46	47	18	0	FG+ BR	0		0.0	0.00	30.11	30.19	2.3	12	3.7	13	15	10	16	23					
24	61	38	50	7	47	48	15	0	RA FG+ BR	0		0.0	0.13	29.87	29.96	2.7	14	11.0	44	30	38	30	24					
25	43	32	38	-5	25	33	27	0	RA	0		0.0	T	30.06	30.14	8.5	30	8.7	25	32	21	31	25					
26	48	28	38	-5	32	37	27	0		0		0.0	0.00	30.12	30.20	1.9	21	3.0	13	21	10	22	26					
27	53	33	43	1	40	43	22	0	RA	0		0.0	T			2.8	15	4.5	15	15	14	17	27					
28	60	42	51	9	51	52	14	0	RA FG+ BR	0		0.0	0.76	29.60	29.69	4.0	18	9.9	32	29	26	28	28					
29	45	36	41	0	26	35	24	0		0		0.0	0.00	29.66	29.74	18.1	25	18.7	46	27	32	27	29					
30	50	36	43	2	27	36	22	0		0		0.0	0.00	29.88	29.97	8.3	23	8.5	29	25	21	23	30					
58.2 40.4 49.3 ■■										< MONTHLY AVERAGES TOTALS->				0.0	3.37			2.9	27	8.2	<- MONTHLY AVERAGES							
3.2 3.5 3.4 ■■										<-----DEPARTURE FROM NORMAL----->										0.18	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3							
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.13 DATE: 19-20				SEA LEVEL PRESSURE DATE TIME															
MONTHLY TOTAL DEPARTURE 466 -98									GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM : 30.75 09 0951															
SEASON TO DATE TOTAL DEPARTURE 1022 -103									GREATEST SNOW DEPTH: 0 DATE:				MINIMUM : 29.36 28 1951															
HEATING: 466 -98									NUMBER OF DAYS WITH → MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 5				PRECIPITATION ≥ 0.01 INCH : 9											
COOLING: 0 -1									MAXIMUM TEMP ≤ 32: 0				MINIMUM TEMP ≤ 0: 0				PRECIPITATION ≥ 0.10 INCH : 6											
									THUNDERSTORMS: 0				HEAVY FOG: 8				SNOWFALL ≥ 1.0 INCH : 0											

NOVEMBER 2003
WILMINGTON, DE

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

WILMINGTON, DE

NOVEMBER 2003

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			0.01	
05			0.01	0.01	T								05					0.05	0.04	0.05	T	0.01	T	0.01	05			0.17	
06	0.01	T	T										06	0.05	0.08	0.02	T	0.01	0.04	0.04	T		T	0.02	T	06		0.31	
07	T	T	T	T				T		0.03	0.01	T	07												07		T		
08													08												08			0.00	
09													09												09			0.00	
10													10												10			0.00	
11													11												11			T	
12	0.02	0.07	0.12	0.18	0.05	0.21	0.13	0.05	T				12		T						T	T	0.01	T	12			0.84	
13				0.02				T	T	T	T	T	13	T	T										13			0.02	
14													14												14			0.00	
15													15												15			0.00	
16													16												16			0.00	
17													17												17			0.00	
18													18												18		T	T	
19													19			T	0.14	0.28	0.15	0.07	0.06	0.05	0.10	0.11	0.09	19		1.05	
20	0.04	0.03	0.01										20												20			0.08	
21													21												21			0.00	
22													22												22			0.00	
23													23												23			0.00	
24													24								T	0.03	0.04	0.05	0.01	24		0.13	
25	T												25												25			T	
26													26												26			0.00	
27													27				0.01	T	0.01	0.34	0.07	0.16	0.07	T	T	27		T	
28	T	T					0.01	T	T	0.03	0.02	0.01	28				0.01	T	0.01	0.34	0.07	0.16	0.07	0.03		28		0.76	
29													29													29		0.00	
30													30													30		0.00	

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.18	.23	.26	.28	.31	.33	.36	.40	.45	.49	.55	.60
Ending Date	19	19	19	19	19	19	19	19	19	19	19	19
Ending Time (Hour/Min)	1648	1652	1656	1703	1706	1725	1739	1800	1706	1720	1751	1824

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.

* = 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

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

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

WEATHER NOTATIONS

**WILMINGTON, DE
NOVEMBER 2003**

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.

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							.25	10.00	
02							2.00	10.00	
03							<.25	10.00	
04							.25	10.00	
05							.50	7.00	
06							2.00	9.00	
07							8.00	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							9.00	10.00	
11							9.00	10.00	
12							.25	6.00	
13							4.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							9.00	10.00	
17							4.00	10.00	
18							.75	10.00	
19							.75	10.00	
20							1.00	10.00	
21							10.00	10.00	
22							1.50	10.00	
23							.25	10.00	
24							.25	10.00	
25							10.00	10.00	
26							7.00	10.00	
27							7.00	10.00	
28							.25	10.00	
29							10.00	10.00	
30							10.00	10.00	
MONTHLY AVGS							5.14	9.73	
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 5 13 14									

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 2003

ILG

WBAN # 13781

HOUR (LST)				SATELLITE		WEATHER	TEMPERATURE °F				RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)				SATELLITE		WEATHER	TEMPERATURE °F				RELATIVE HUMIDITY (PCT)	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	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	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL		
SUNRISE: 0631 NOV 01 SUNSET: 1701																															
01	CLR	NC			1.50	BR	50	50	50	100	0	00	30.14	30.23	01	OVC	008				10.00	-RA	56	55	55	97	7	35	29.97	30.06	
04	CLR	NC			4.00	BR	48	48	48	100	0	00	30.14	30.22	04	OVC	016				10.00		54	53	53	97	5	35	30.00	30.09	
07	CLR	NC			5.00	BR	47	47	47	100	0	00	30.15	30.24	07	OVC	014				10.00		53	51	52	93	10	34	30.05	30.14	
10	CLR	NC			9.00		60	56	58	86	0	00	30.17	30.26	10	OVC	025				10.00		53	46	50	77	14	33	30.11	30.20	
13	CLR	NC			10.00		71	61	65	71	7	16	30.11	30.20	13	CLR	NC				10.00		58	40	49	51	15	31	30.08	30.16	
16	SCT	NC			10.00		76	61	67	60	5	21	30.10	30.19	16	CLR	NC				10.00		55	37	47	51	8	29	30.07	30.15	
19	FEW	NC			10.00		63	60	61	90	0	00	30.12	30.21	19	CLR	NC				10.00		52	38	45	59	6	25	30.11	30.20	
22	SCT	NC			7.00		60	59	59	96	0	00	30.13	30.22	22	CLR	NC				10.00		50	39	45	66	9	26	30.14	30.23	
SUNRISE: 0632 NOV 02 SUNSET: 1660																															
01	CLR	NC			7.00		59	59	59	100	6	23	30.13	30.22	01	CLR	NC				10.00		48	24	39	39	15	30	30.16	30.25	
04	CLR	NC			6.00	BR	57	57	57	100	0	00	30.13	30.22	04	CLR	NC				10.00		42	25	36	51	9	29	30.19	30.28	
07	CLR	NC			2.50	BR	53	53	53	100	5	32	30.16	30.24	07	CLR	NC				10.00		41	27	36	57	8	28	30.25	30.34	
10	CLR	NC			3.00	HZ	66	61	63	84	3	VR	30.18	30.27	10	FEW	NC				10.00		47	27	39	46	16	32	30.32	30.41	
13	FEW	NC			9.00		71	62	66	73	8	16	30.11	30.20	13	CLR	NC				10.00		46	23	37	40	17	29	30.35	30.44	
16	CLR	NC			9.00		67	60	63	79	12	15	30.10	30.19	16	CLR	NC				10.00		43	16	34	34	15	32	30.39	30.48	
19	CLR	NC			9.00		62	59	60	90	6	14	30.12	30.21	19	CLR	NC				10.00		37	14	30	39	9	36	30.47	30.56	
22	CLR	NC			4.00	BR	58	58	58	100	6	16	30.12	30.21	22	CLR	NC				10.00		36	13	29	39	10	35	30.53	30.62	
SUNRISE: 0633 NOV 03 SUNSET: 1659																															
01	CLR	NC			1.50	BR	57	57	57	100	5	15	30.10	30.18	01	CLR	NC				10.00		34	12	27	40	13	36	30.57	30.66	
04	VV	001			0.25	FG	53	53	53	100	0	00	30.09	30.17	04	CLR	NC				10.00		30	14	25	51	10	01	30.58	30.68	
07	VV	001			<.25	FG	52	52	52	100	0	00	30.11	30.19	07	CLR	NC				10.00		27	16	24	63	6	03	30.62	30.71	
10	CLR	NC			6.00	BR	64	61	62	90	7	22	30.10	30.19	10	CLR	NC				10.00		38	17	31	43	8	02	30.66	30.75	
13	CLR	NC			10.00		77	57	65	50	8	22	30.04	30.13	13	CLR	NC				10.00		42	11	32	28	0	00	30.61	30.70	
16	CLR	NC			10.00		76	55	64	48	10	20	30.01	30.09	16	CLR	NC				10.00		42	10	32	27	0	00	30.55	30.64	
19	CLR	NC			8.00		63	57	60	81	5	17	30.02	30.11	19	CLR	NC				10.00		38	12	30	34	0	00	30.55	30.64	
22	CLR	NC			8.00		61	55	58	81	0	00	30.04	30.13	22	CLR	NC				10.00		29	20	26	69	0	00	30.54	30.63	
SUNRISE: 0634 NOV 04 SUNSET: 1658																															
01	CLR	NC			4.00	BR	58	57	57	97	3	18	30.02	30.11	01	CLR	NC				10.00		28	22	26	78	3	31	30.52	30.61	
04	VV	001			0.25	FG	58	58	58	100	0	00	30.01	30.10	04	CLR	NC				10.00		26	21	24	81	5	31	30.50	30.59	
07	VV	001			0.25	FG	58	58	58	100	0	00	30.04	30.13	07	CLR	NC				10.00		24	20	23	84	3	31	30.49	30.58	
10	OVC	001			0.50	BR	61	61	61	100	3	18	30.06	30.15	10	CLR	NC				10.00		40	25	34	55	5	16	30.49	30.58	
13	CLR	NC			10.00		70	61	64	73	6	08	30.02	30.11	13	CLR	NC				10.00		46	17	36	31	6	14	30.40	30.50	
16	CLR	NC			7.00		68	61	64	78	18	04	30.02	30.11	16	CLR	NC				10.00		46	20	36	35	5	17	30.35	30.44	
19	OVC	009			6.00	BR	62	59	60	90	10	05	30.08	30.16	19	CLR	NC				10.00		42	27	36	55	3	21	30.34	30.43	
22	OVC	003			2.00	-RA BR	59	59	59	100	10	05	30.10	30.18	22	CLR	NC				10.00		38	28	34	68	0	00	30.32	30.41	
SUNRISE: 0635 NOV 05 SUNSET: 1657																															
01	OVC	001			1.75	BR	59	59	59	100	7	06	30.06	30.14	01	CLR	NC				10.00		34	31	33	89	0	00	30.26	30.35	
04	OVC	003			2.50	-RA BR	58	58	58	100	10	03	30.04	30.13	04	CLR	NC				10.00		32	30	31	92	0	00	30.25	30.34	
07	OVC	001			0.75	BR	59	59	59	100	7	03	30.04	30.13	07	CLR	NC				10.00		33	31	32	92	0	00	30.20	30.29	
10	OVC	001			0.50	FG	60	60	60	100	7	03	30.04	30.12	10	CLR	NC				10.00		50	42	46	74	14	17	30.17	30.25	
13	OVC	001			0.50	BR	64	64	64	100	3	34	29.97	30.06	13	BKN	070				10.00		56	45	50	67	7	19	30.05	30.13	
16	FEW	NC			4.00	BR	69	67	68	93	0	00	29.94	30.03	16	OVC	044				10.00		56	47	51	72	12	21	29.98	30.07	
19	OVC	005			2.50	-RA BR	66	66	66	100	3	36	29.98	30.06	19	OVC	050				10.00		55	48	51	77	8	21	29.97	30.06	
22	OVC	004			3.00	BR	66	66	66	100	7	19	29.95	30.04	22	OVC	065				10.00	-RA	53	50	51	89	7	19	29.95	30.03	
SUNRISE: 0636 NOV 06 SUNSET: 1656																															
01	OVC	100			4.00	BR	64	64	64	100	0	00	29.98	30.07	01	OVC	049				6.00	-RA BR	51	50	51	96	3	33	29.90	29.98	
04	CLR	NC			5.00	BR	64	64	64	100	3	30	30.00	30.09	04	OVC	030				3.00	-RA BR	51	51	51	100	5	07	29.84	29.93	
07	CLR	NC			6.00	BR	61	61	61	100	3	33	30.03	30.12	07	OVC	055				4.00	-RA BR	52	52	52	100	0	00	29.85	29.94	
10	BKN	014			7.00	-RA	62	60	61	93	12	03	30.04	30.13	10	OVC	003				3.00	BR	52	52	52	100	0	00	29.85	29.93	
13	OVC	011			3.00	RA BR	60	58	59	93	10	02	30.00	30.09	13	OVC	010				5.00	BR	54	53	53	97	0	00	29.81	29.90	
16	OVC	008			5.00	-RA BR	60	59	59	96	9	03	29.96	30.05	16	OVC	006				2.50	BR	54	54	54	100	6	15	29.76	29.85	
19	OVC	006			7.00		58	58	58	100	7	05	29.96	30.05	19	VV	001				0.75	BR	54	54	54	100	8	16	29.71	29.79	
22	OVC	004			6.00	-RA BR	58	57	57	97	12	36	29.98	30.07	22	OVC	001				3.00	-RA BR	54	54	54	100	17	15	29.55	29.64	

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 2003

ILG

WBAN # 13781

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)			
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Okta		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT Okta	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
			SUNRISE: 0644		NOV 13	SUNSET: 1649										SUNRISE: 0651		NOV 19	SUNSET: 1644										
01	OVC	007		4.00	BR	55	55	55	100	3	18	29.44	29.52	01	OVC	025		10.00		56	54	55	93	6	09	29.96	30.05		
04	OVC	041		10.00	-RA	60	53	56	78	20	26	29.39	29.48	04	OVC	011		10.00		56	56	56	100	13	15	29.89	29.98		
07	CLR	NC		10.00		50	30	41	46	33	28	29.49	29.58	07	OVC	003		6.00	BR	59	59	59	100	13	15	29.83	29.92		
10	CLR	NC		10.00	-RA	48	25	39	41	35	26	29.55	29.64	10	OVC	003		1.00	BR	62	62	62	100	15	14	29.71	29.80		
13	OVC	085		10.00	-RA	47	17	36	30	40	28	29.56	29.64	13	BKN	035		10.00		65	62	63	90	25	14	29.52	29.61		
16	BKN	060		10.00		43	21	35	42	35	26	29.60	29.69	16	OVC	022		1.00	RA BR	62	62	62	100	28	15	29.42	29.51		
19	OVC	070		10.00		41	22	34	47	22	26	29.67	29.75	19	OVC	055		3.00	-RA	58	58	58	100	5	15	29.46	29.55		
22	OVC	060		10.00		41	18	33	39	37	28	29.73	29.82	22	OVC	004		1.00	-RA	57	57	57	100	5	19	29.42	29.51		
			SUNRISE: 0645		NOV 14	SUNSET: 1648										SUNRISE: 0652		NOV 20	SUNSET: 1644										
01	SCT	NC		10.00		38	17	31	43	29	29	29.77	29.85	01	OVC	060		1.00	-RA	50	48	49	93	17	30	29.46	29.54		
04	SCT	NC		10.00		36	20	30	52	24	29	29.80	29.89	04	OVC	120		1.00		50	44	47	80	9	29	29.53	29.62		
07	CLR	NC		10.00		37	18	30	46	29	28	29.85	29.94	07	CLR	NC		10.00		48	40	44	74	13	29	29.64	29.72		
10	FEW	NC		10.00		41	20	33	43	31	30	29.90	29.98	10	FEW	NC		10.00		51	35	44	54	25	33	29.74	29.82		
13	CLR	NC		10.00		46	21	37	37	24	29	29.85	29.93	13	BKN	049		10.00		53	34	44	49	21	31	29.74	29.83		
16	BKN	085		10.00		46	22	37	38	21	27	29.86	29.95	16	CLR	NC		10.00		52	34	44	50	15	30	29.79	29.88		
19	OVC	100		10.00		45	21	36	39	13	23	29.86	29.95	19	CLR	NC		10.00		44	34	40	68	7	29	29.86	29.95		
22	SCT	NC		10.00		43	21	35	42	12	24	29.87	29.96	22	CLR	NC		10.00		42	35	39	76	5	24	29.88	29.96		
			SUNRISE: 0646		NOV 15	SUNSET: 1647										SUNRISE: 0653		NOV 21	SUNSET: 1643										
01	FEW	NC		10.00		42	21	34	43	13	25	29.88	29.97	01	CLR	NC		10.00		40	34	37	79	8	28	29.88	29.96		
04	OVC	060		10.00		44	23	36	43	12	22	29.92	30.01	04	CLR	NC		10.00		41	34	38	76	6	27	29.87	29.96		
07	OVC	050		10.00		43	26	36	51	10	24	29.99	30.08	07	CLR	NC		10.00		40	33	37	77	6	23	29.91	29.99		
10	SCT	NC		10.00		50	32	42	50	13	28	30.03	30.12	10	CLR	NC		10.00		51	37	45	59	6	23	29.91	30.00		
13	FEW	NC		10.00		52	32	43	47	16	29	30.01	30.10	13	CLR	NC		10.00		65	41	53	42	15	28	29.85	29.94		
16	CLR	NC		10.00		52	32	43	47	12	30	30.01	30.10	16	CLR	NC		10.00		65	44	54	47	8	29	29.85	29.93		
19	CLR	NC		10.00		46	33	40	61	0	00	30.04	30.13	19	CLR	NC		10.00		56	42	49	60	0	00	29.90	29.99		
22	CLR	NC		10.00		41	33	38	74	0	00	30.07	30.16	22	CLR	NC		10.00		52	42	47	69	5	30	29.93	30.02		
			SUNRISE: 0648		NOV 16	SUNSET: 1647										SUNRISE: 0654		NOV 22	SUNSET: 1643										
01	BKN	120		10.00		41	33	38	74	0	00	30.10	30.19	01	CLR	NC		10.00		47	42	45	83	3	31	29.96	30.04		
04	BKN	100		10.00		41	35	38	79	3	06	30.09	30.18	04	CLR	NC		10.00		43	41	42	93	5	31	29.98	30.07		
07	BKN	065		10.00		40	38	39	93	3	05	30.13	30.22	07	CLR	NC		10.00		44	41	43	89	5	32	30.04	30.12		
10	OVC	060		10.00		47	36	42	66	5	05	30.15	30.24	10	CLR	NC		10.00		55	44	50	67	8	05	30.08	30.16		
13	CLR	NC		10.00		53	39	46	59	3	06	30.08	30.17	13	CLR	NC		10.00		60	45	52	58	3	23	30.03	30.11		
16	SCT	NC		10.00		53	44	49	72	5	15	30.08	30.17	16	CLR	NC		10.00		60	46	53	60	5	16	30.00	30.09		
19	OVC	095		10.00		50	45	48	83	0	00	30.11	30.19	19	CLR	NC		10.00		51	44	48	77	5	16	30.05	30.14		
22	OVC	049		9.00		49	47	48	93	0	00	30.10	30.19	22	CLR	NC		9.00		48	48	48	100	3	12	30.07	30.16		
			SUNRISE: 0649		NOV 17	SUNSET: 1646										SUNRISE: 0655		NOV 23	SUNSET: 1642										
01	OVC	034		10.00		50	46	48	86	0	00	30.08	30.16	01	FEW	NC		5.00	BR	45	45	45	100	3	08	30.10	30.19		
04	OVC	023		10.00		48	43	46	83	3	05	30.09	30.18	04	CLR	NC		4.00	BR	42	42	42	100	0	00	30.11	30.20		
07	OVC	013		10.00		48	45	47	89	0	00	30.12	30.20	07	CLR	NC		1.50	BR	40	40	40	100	3	32	30.13	30.22		
10	SCT	NC		8.00		51	47	49	86	3	25	30.14	30.23	10	VV	001		0.25	FG	47	47	47	100	3	08	30.16	30.25		
13	OVC	029		9.00		58	47	52	67	13	31	30.12	30.21	13	CLR	NC		10.00		56	49	52	77	5	10	30.11	30.20		
16	FEW	NC		7.00		56	45	50	67	12	31	30.13	30.22	16	CLR	NC		10.00		54	48	51	80	7	16	30.09	30.17		
19	CLR	NC		10.00		51	44	48	77	5	02	30.17	30.26	19	CLR	NC		10.00		49	48	48	97	5	14	30.08	30.17		
22	CLR	NC		5.00	BR	44	43	44	96	3	29	30.23	30.32	22	CLR	NC		10.00		46	45	46	96	3	07	30.06	30.15		
			SUNRISE: 0650		NOV 18	SUNSET: 1645										SUNRISE: 0656		NOV 24	SUNSET: 1642										
01	CLR	NC		6.00	BR	42	41	42	96	0	00	30.22	30.31	01	CLR	NC		0.50	FG	41	41	41	100	0	00	30.03	30.12		
04	OVC	005		4.00	BR	46	46	46	100	12	06	30.25	30.34	04	OVC	007		1.25	BR	43	43	43	100	3	36	30.02	30.10		
07	OVC	001		1.00	BR	45	45	45	100	6	07	30.26	30.35	07	OVC	002		1.00	BR	46	46	46	100	6	08	29.97	30.05		
10	OVC	005		2.00	BR	49	47	48	93	5	05	30.27	30.36	10	OVC	001		0.25	BR	49	49	49	100	9	11	29.94	30.02		
13	OVC	021		7.00		53	50	51	89	5	08	30.20	30.29	13	CLR	NC		10.00		59	53	56	81	16	15	29.83	29.92		
16	OVC	055		10.00																									

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 2003

ILG

WBAN # 13781

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
	SKY COVER	CEILING 100'S OFFT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OFFT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
NOVEMBER 2025																											
SUNRISE: 0658 NOV 25 SUNSET: 1641																											
01	OVC	090				38	32	36	79	17	30	29.91	30.00														
04	CLR	NC				34	24	30	67	12	31	29.96	30.05														
07	CLR	NC				33	22	29	64	13	31	30.04	30.13														
10	CLR	NC				37	23	32	57	13	31	30.10	30.19														
13	CLR	NC				43	24	36	47	8	31	30.08	30.16														
16	CLR	NC				41	25	35	53	10	28	30.07	30.16														
19	CLR	NC				37	25	33	62	5	28	30.10	30.19														
22	CLR	NC				37	26	33	65	0	00	30.09	30.18	3-HOURLY OBSERVATION NOTES													
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 Visiblity = 8/8. Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC= No ceiling detected. & = Original observation contained additional weather elements. See page 3 for additional notes.																											
SUNRISE: 0659 NOV 26 SUNSET: 1641																											
01	CLR	NC				34	30	32	85	3	28	30.09	30.18														
04	CLR	NC				32	30	31	92	0	00	30.09	30.19														
07	CLR	NC				30	28	29	92	3	31	30.13	30.22														
10	CLR	NC				40	32	37	73	0	00	30.16	30.25														
13	CLR	NC				47	32	41	56	8	19	30.09	30.18														
16	CLR	NC				47	33	41	59	6	18	30.11	30.20														
19	CLR	NC				44	35	40	71	5	13	30.13	30.22														
22	CLR	NC				42	36	39	79	0	00																
SUNRISE: 0660 NOV 27 SUNSET: 1640																											
01	CLR	NC				39	36	38	89	0	00																
04	CLR	NC				37	35	36	93	5	32																
07	CLR	NC				35	35	35	100	0	00																
10	CLR	NC				47	35	42	63	3	09	30.18	30.27														
13	CLR	NC				53	37	46	55	6	16	30.12	30.21														
16	CLR	NC				50	41	46	71	8	12	30.08	30.17														
19	CLR	NC				49	45	47	86	8	14	30.06	30.15														
22	BKN	110				50	49	49	96	6	14	29.98	30.06														
SUNRISE: 0701 NOV 28 SUNSET: 1640																											
01	OVC	033			8.00	-RA	49	48	48	97	3	12	29.95	30.03													
04	OVC	075			6.00	BR	49	48	48	97	7	12	29.88	29.97													
07	OVC	010			4.00	-RA BR	50	49	49	96	6	10	29.82	29.91													
10	VV	001			0.25	-RA FG	53	53	53	100	8	14	29.74	29.83													
13	BKN	014			2.00	BR	58	58	58	100	10	15	29.56	29.65													
16	OVC	095			10.00	-RA	58	57	57	97	8	14	29.39	29.47													
19	OVC	014			2.00	+RA BR	55	55	55	100	22	31	29.32	29.40													
22	OVC	029			9.00	RA	45	43	44	93	21	28	29.35	29.44													
SUNRISE: 0702 NOV 29 SUNSET: 1640																											
01	OVC	050			10.00		42	37	40	82	12	24	29.37	29.45													
04	BKN	045			10.00		40	28	35	63	22	26	29.44	29.52													
07	CLR	NC			10.00		36	24	32	62	16	24	29.53	29.61													
10	SCT	NC			10.00		40	25	34	55	20	24	29.59	29.67													
13	OVC	060			10.00		45	24	37	44	25	26	29.62	29.71													
16	BKN	055			10.00		43	24	36	47	23	27	29.74	29.83													
19	CLR	NC			10.00		40	24	34	53	13	26	29.86	29.95													
22	CLR	NC			10.00		37	24	32	60	10	23	29.91	30.01													
SUNRISE: 0703 NOV 30 SUNSET: 1639																											
01	FEW	NC			10.00		37	24	32	60	14	23	29.93	30.01													
04	CLR	NC			10.00		38	23	32	55	9	22	29.91	30.00													
07	OVC	110			10.00		38	26	33	62	9	20	29.91	30.00													
10	CLR	NC			10.00		40	27	35	60	8	22	29.93	30.02													
13	CLR	NC			10.00		50	24	40	36	17	24	29.86	29.95													
16	CLR	NC			10.00		48	26	39	42	10	21	29.86	29.95													
19	CLR	NC			10.00		41	31	37	67	6	22	29.86	29.95													
22	CLR	NC			10.00		41	31	37	67	0	00	29.81	29.90													

3-HOURLY OBSERVATION NOTES

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.

Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.

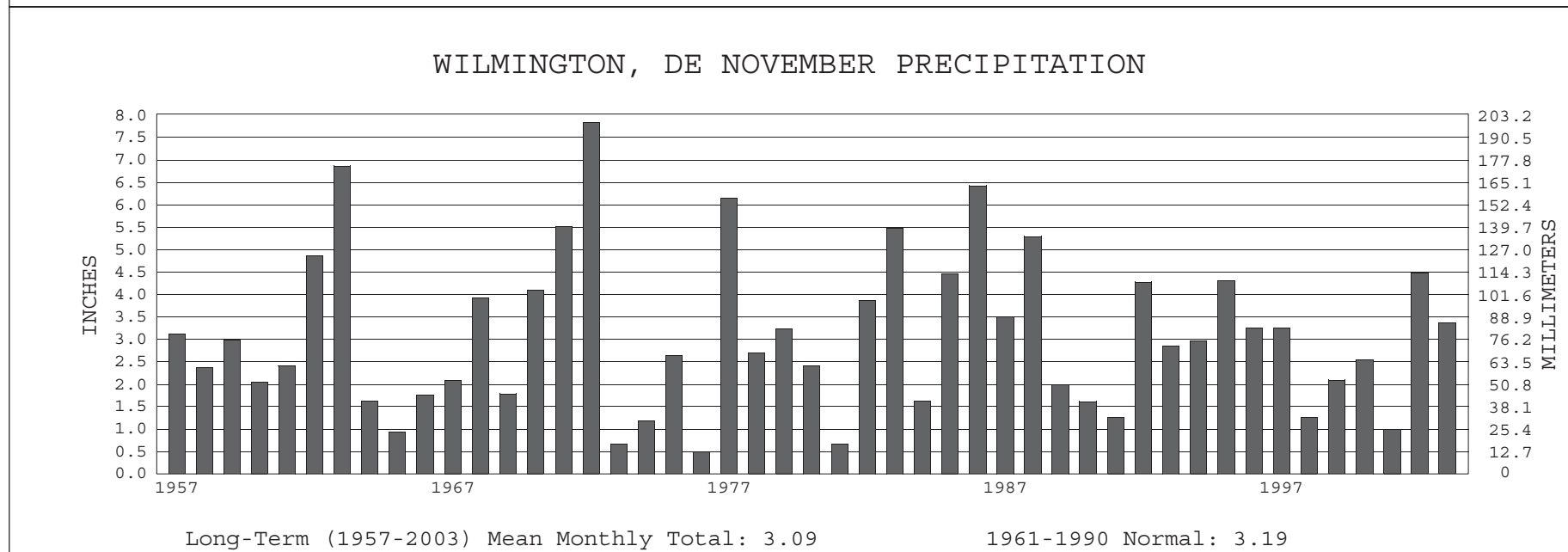
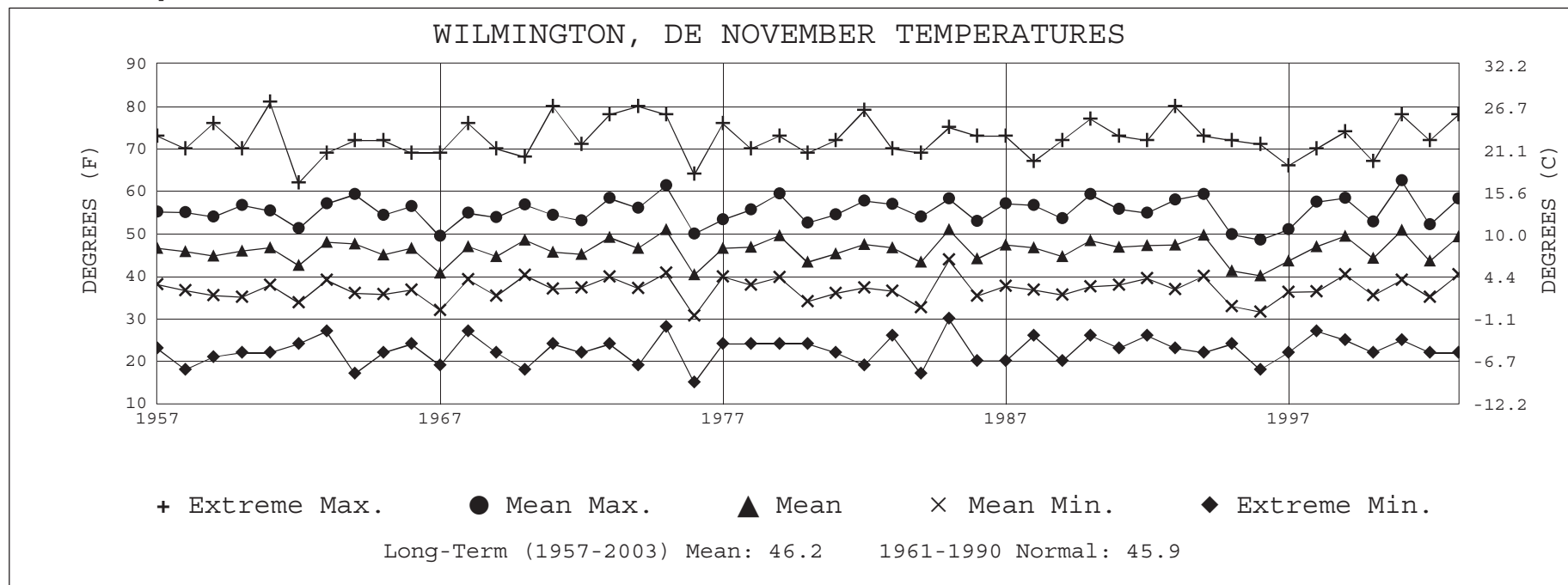
NC= No ceiling detected.

& = Original observation contained additional weather elements.

See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			46	41	44	84	30.00	30.08	7.34	6	4	29
02			46	40	44	84	30.00	30.09	7.43	7	4	29
03			45	40	43	83	30.00	30.09	7.16	7	3	28
04			45	40	43	84	30.00	30.09	7.24	7	3	29
05			45	40	43	85	30.01	30.10	7.27	7	3	29
06			44	39	42	84	30.01	30.10	6.96	7	4	29
07			44	39	42	84	30.03	30.11	7.04	7	4	29
08			45	40	43	84	30.04	30.13	6.72	8	3	28
09			48	42	45	79	30.05	30.14	6.84	8	3	30
10			50	41	47	74	30.05	30.14	7.03	10	3	29
11			53	42	48	69	30.04	30.12	8.03	10	3	25
12			54	42	49	65	30.01	30.10	8.58	9	4	26





NOVEMBER 2003

WILMINGTON, DE

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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