



NOVEMBER 1999

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

NOVEMBER 1999
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														
																			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	69	53	61	10	52	55	4	0	BR HZ				0.00	30.08	30.18	2.5	11	5.0	21	16	14	15	01												
02	68	52	60	9	59	60	5	0	RA FG+ BR				0.68	29.60	29.70	10.0	14	14.3	57*	13	44*	14	02												
03	56	39	48	-2	30	39	17	0					0.00	29.70	29.80	14.1	25	14.4	31	25	24	25	03												
04	54	37	46	-4	25	37	19	0					0.00	30.17	30.27	10.2	25	10.9	29	27	22	27	04												
05	65	32	49	-1	34	42	16	0					0.00	30.24	30.34	5.4	21	5.6	18	21	16	22	05												
06	71	48	60	11	44	51	5	0					0.00	30.06	30.16	7.9	27	8.9	26	29	22	29	06												
07	55	35	45	-4	28	38	20	0					0.00	30.12	30.22	11.1	31	11.6	29	32	24	30	07												
08	52	34	43	-6	29	37	22	0					0.00	30.16	30.26	5.0	30	5.4	17	29	15	30	08												
09	65	34	50	1	44	47	15	0					0.00	30.03	30.13	5.4	21	5.7	16	21	14	22	09												
10	74*	52	63*	15	53	57	2	0	BR HZ				0.00	29.84	29.93	8.7	23	8.8	25	24	21	24	10												
11	62	35	49	1	38	45	16	0					0.00	30.11	30.21	8.4	04	11.4	31	01	25	02	11												
12	51	33	42	-6	35	40	23	0					0.00	30.23	30.33	0.7	08	6.4	13	16	11	16	12												
13	59	42	51	4	44	47	14	0	BR HZ				0.00	30.00	30.10	3.3	29	4.8	20	29	16	29	13												
14	64	39	52	5	43	48	13	0	BR HZ				0.00	29.66	29.76	5.9	28	9.1	41	32	36	31	14												
15	50	40	45	-2	27	38	20	0					0.00	29.64	29.74	14.1	30	14.7	33	29	28	29	15												
16	43	31	37	-9	20	32	28	0					0.00	29.63	29.73	15.9	30	16.3	36	31	29	30	16												
17	44	29	37	-9	19	30	28	0					0.00	30.01	30.11	9.3	29	10.1	30	30	24	30	17												
18	53	25*	39	-7	29	36	26	0					0.00	30.23	30.33	3.0	22	3.6	15	20	13	23	18												
19	59	32	46	1	40	44	19	0	BR HZ				0.00	30.25	30.34	4.8	15	5.1	18	15	16	15	19												
20	69	40	55	10	51	53	10	0	RA BR				T	30.08	30.18	3.8	21	5.7	25	20	20	19	20												
21	65	46	56	11	53	54	9	0	FG+ BR				0.00	30.10	30.20	1.4	12	2.9	9	17	8	16	21												
22	59	53	56	12	56	56	9	0	RA FG+ BR				0.02	30.19	30.29	7.5	05	7.6	14	05	13	04	22												
23	61	55	58	14	57	57	7	0	RA FG+ BR				0.03	30.19	30.29	4.7	06	6.3	13	03	11	03	23												
24	62	54	58	15	58	58	7	0	FG+ BR				0.00	30.10	30.20	6.0	19	6.6	17	21	14	21	24												
25	58	50	54	11	53	53	11	0	RA FG+ BR				0.37	30.08	30.18	7.1	04	8.9	20	04	17	05	25												
26	67	50	59	16	57	57	6	0	RA FG BR				0.69	29.84	29.94	7.4	14	11.1	28	28	22	27	26												
27	57	45	51	9	41	47	14	0	RA BR				0.30	29.84	29.94	8.9	29	9.6	25	30	22	31	27												
28	51	37	44	2	31	39	21	0					0.00	30.10	30.20	9.8	29	10.2	24	29	21	30	28												
29	48	31	40	-1	25	34	25	0					0.00	30.25	30.35	9.5	28	10.0	29	30	23	28	29												
30	39	28	34*	-7	19	28	31	0					0.00	30.36	30.46	12.1	33	12.5	26	32	22	33	30												
										58.3		40.4	49.4	■ ■	39.8	45.3	15.4	0.0	< MONTHLY AVERAGES		TOTALS-->		2.09	30.03	30.13	3.3	28	8.8	<-- MONTHLY AVERAGES						
										2.8		3.4	3.1	■ ■	<----- DEPARTURE FROM NORMAL ----->										-1.18	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 0.97 DATE: 26-27										SEA LEVEL PRESSURE DATE TIME															
MONTHLY TOTAL DEPARTURE					SEASON TO DATE TOTAL DEPARTURE					GREATEST 24-HR SNOWFALL: DATE: DATE:					MAXIMUM MINIMUM					: 30.50 30 1951															
HEATING: 462 -99					839 -45					GREATEST SNOW DEPTH: DATE: DATE:					: 29.38 02 1751					PRECIPITATION ≥ 0.01 INCH : 6															
COOLING: 0 0					1209 163					NUMBER OF DAYS WITH →					MAXIMUM TEMP ≥ 90: 0					MINIMUM TEMP ≤ 32: 7					PRECIPITATION ≥ 0.10 INCH : 4										
															MAXIMUM TEMP ≤ 32 : 0					MINIMUM TEMP ≤ 0 : 0					SNOWFALL ≥ 1.0 INCH :										
															THUNDERSTORMS : 0					HEAVY FOG : 6															

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

WILMINGTON, DE

NOVEMBER 1999

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		0.68		
03													03												03		0.00		
04													04												04		0.00		
05													05												05		0.00		
06													06												06		0.00		
07													07												07		0.00		
08													08												08		0.00		
09													09												09		0.00		
10													10												10		0.00		
11													11												11		0.00		
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												19		0.00		
20													20												20		T		
21													21												21		0.00		
22													22												22		0.02		
23													23												23		0.03		
24													24												24		0.00		
25													25												25		0.37		
26													26												26		0.69		
27													27												27		0.30		
28													28												28		0.00		
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)												
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.

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 1999

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
			SUNRISE: 0631	NOV 01		SUNSET: 1701								SUNRISE: 0637	NOV 07		SUNSET: 1655										
01	OVC	080	5.00 BR		56	55	55	97	3	23	30.09	30.19	01	CLR	NC		10.00		52	28	42	40	14	29	30.04	30.14	
04	BKN	060	4.00 BR		54	53	53	97	0	00	30.10	30.19	04	CLR	NC		10.00		47	28	39	48	9	31	30.08	30.18	
07	FEW	NC	5.00 BR		56	52	54	87	0	00	30.13	30.23	07	CLR	NC		10.00		42	28	37	58	9	33	30.16	30.25	
10	CLR	NC	10.00		63	49	55	60	9	05	30.15	30.25	10	CLR	NC		10.00		48	28	40	46	16	33	30.16	30.25	
13	CLR	NC	10.00		68	48	57	49	5	VR	30.10	30.19	13	CLR	NC		10.00		49	27	40	43	14	30	30.11	30.21	
16	CLR	NC	10.00		64	51	57	63	12	15	30.04	30.14	16	CLR	NC		10.00		49	27	40	43	15	30	30.09	30.19	
19	CLR	NC	10.00		58	53	55	84	7	16	30.05	30.14	19	CLR	NC		10.00		43	27	37	53	6	28	30.12	30.22	
22	CLR	NC	9.00		56	51	53	84	3	08	30.01	30.11	22	CLR	NC		10.00		40	27	35	60	5	32	30.15	30.25	
			SUNRISE: 0632	NOV 02		SUNSET: 1700								SUNRISE: 0638	NOV 08		SUNSET: 1654										
01	CLR	NC	4.00 BR		55	54	54	96	0	00	29.96	30.06	01	CLR	NC		10.00		37	27	33	67	5	32	30.17	30.26	
04	OVC	001	1.50 BR		56	56	56	100	6	05	29.90	29.99	04	CLR	NC		10.00		38	26	33	62	6	31	30.16	30.26	
07	OVC	001	0.50 FG		58	58	58	100	7	06	29.84	29.94	07	BKN	120		10.00		36	25	32	64	3	29	30.18	30.29	
10	OVC	014	9.00		64	62	63	93	15	13	29.72	29.82	10	CLR	NC		10.00		47	29	40	50	12	33	30.20	30.30	
13	OVC	007	10.00		66	64	65	93	16	14	29.55	29.65	13	CLR	NC		10.00		50	28	41	43	10	31	30.14	30.24	
16	OVC	023	4.00 RA BR		66	64	65	93	26	14	29.40	29.49	16	CLR	NC		10.00		51	30	42	45	8	32	30.12	30.22	
19	BKN	020	9.00		64	63	63	96	21	15	29.31	29.40	19	CLR	NC		10.00		46	30	39	54	3	21	30.13	30.23	
22	CLR	NC	10.00		63	57	60	81	13	19	29.34	29.44	22	CLR	NC		7.00		40	32	37	73	0	00	30.16	30.26	
			SUNRISE: 0633	NOV 03		SUNSET: 1659								SUNRISE: 0640	NOV 09		SUNSET: 1653										
01	CLR	NC	10.00		53	40	47	61	13	25	29.42	29.52	01	CLR	NC		10.00		36	35	36	97	0	00	30.15	30.25	
04	CLR	NC	10.00		44	35	40	71	8	24	29.51	29.61	04	CLR	NC		10.00		36	34	35	93	0	00	30.13	30.23	
07	BKN	090	10.00		44	33	39	65	14	24	29.58	29.68	07	OVC	050		7.00		37	36	37	96	0	00	30.13	30.23	
10	BKN	042	10.00		48	33	41	56	16	25	29.65	29.74	10	CLR	NC		10.00		50	45	48	83	8	19	30.10	30.20	
13	OVC	055	10.00		49	28	40	45	17	25	29.67	29.76	13	CLR	NC		10.00		62	48	55	60	10	19	30.02	30.11	
16	BKN	075	10.00		48	23	38	37	17	25	29.75	29.85	16	CLR	NC		10.00		64	48	55	56	12	21	29.95	30.05	
19	FEW	NC	10.00		43	22	35	43	14	26	29.86	29.96	19	CLR	NC		10.00		57	48	52	72	7	21	29.94	30.04	
22	CLR	NC	10.00		40	25	34	55	13	23	29.96	30.06	22	CLR	NC		10.00		55	49	52	80	6	24	29.93	30.03	
			SUNRISE: 0634	NOV 04		SUNSET: 1658								SUNRISE: 0641	NOV 10		SUNSET: 1652										
01	CLR	NC	10.00		39	27	34	62	10	23	30.00	30.09	01	CLR	NC		7.00		54	51	52	90	7	23	29.91	30.01	
04	CLR	NC	10.00		37	28	34	70	9	23	30.05	30.15	04	CLR	NC		6.00 BR		52	51	52	97	6	22	29.91	30.01	
07	CLR	NC	10.00		38	24	33	57	12	24	30.13	30.22	07	CLR	NC		6.00 BR		54	52	53	93	9	23	29.91	30.00	
10	CLR	NC	10.00		46	22	37	38	15	25	30.20	30.30	10	CLR	NC		9.00		66	55	60	68	10	23	29.90	29.99	
13	CLR	NC	10.00		51	23	40	33	18	27	30.17	30.27	13	CLR	NC		10.00		73	54	62	51	12	24	29.79	29.89	
16	CLR	NC	10.00		53	22	41	30	12	27	30.18	30.28	16	CLR	NC		10.00		69	53	60	57	9	22	29.76	29.86	
19	CLR	NC	10.00		46	27	38	47	7	20	30.23	30.32	19	CLR	NC		10.00		64	52	57	65	7	23	29.77	29.86	
22	CLR	NC	10.00		43	29	37	58	5	22	30.27	30.37	22	CLR	NC		10.00		61	51	56	70	8	23	29.77	29.87	
			SUNRISE: 0635	NOV 05		SUNSET: 1657								SUNRISE: 0642	NOV 11		SUNSET: 1651										
01	CLR	NC	10.00		38	32	36	79	0	00	30.28	30.37	01	FEW	NC		10.00		61	50	55	67	8	25	29.78	29.88	
04	CLR	NC	10.00		36	33	35	89	0	00	30.30	30.40	04	CLR	NC		10.00		57	49	53	75	5	28	29.81	29.91	
07	CLR	NC	10.00		35	32	34	89	0	00	30.33	30.42	07	OVC	050		10.00		58	50	54	75	20	01	29.94	30.04	
10	CLR	NC	10.00		52	39	46	61	5	23	30.34	30.44	10	OVC	041		10.00		50	41	46	71	18	03	30.10	30.20	
13	CLR	NC	10.00		64	33	49	32	12	22	30.23	30.33	13	OVC	080		10.00		50	38	44	63	9	07	30.16	30.26	
16	CLR	NC	10.00		63	27	47	26	12	22	30.18	30.27	16	CLR	NC		10.00		50	32	42	50	13	07	30.21	30.31	
19	CLR	NC	10.00		53	30	43	41	6	21	30.18	30.28	19	CLR	NC		10.00		44	30	38	58	10	06	30.29	30.39	
22	CLR	NC	10.00		49	35	43	59	6	21	30.16	30.25	22	CLR	NC		10.00		40	22	33	49	9	06	30.35	30.44	
			SUNRISE: 0636	NOV 06		SUNSET: 1656								SUNRISE: 0643	NOV 12		SUNSET: 1650										
01	CLR	NC	10.00		48	39	44	71	6	22	30.14	30.24	01	CLR	NC		10.00		35	20	30	54	9	03	30.34	30.44	
04	CLR	NC	10.00		51	41	46	69	6	23	30.11	30.21	04	CLR	NC		10.00		35	24	31	64	6	36	30.33	30.42	
07	CLR	NC	10.00		49	40	45	71	7	23	30.12	30.22	07	OVC	070		10.00		37	27	33	67	7	01	30.33	30.43	
10	CLR	NC	10.00		62	45	53	54	7	27	30.13	30.22	10	OVC	065		10.00		42	32	38	68	7	03	30.33	30.43	
13	CLR	NC	10.00		69	51	59	53	16	28	30.04	30.13	13	OVC	047		10.00		49	37	44	64	6	13	30.24	30.34	
16	CLR	NC	10.00		69	52	59	55	8	27	29.97	30.06	16	OVC	039		10.00		50	41	46	71	9	17	30.17	30.27	
19	BKN	070	10																								

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 1999

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
				SUNRISE: 0644				NOV 13								SUNSET: 1649											
01	OVC	018		10.00							30.04	30.13	01	CLR	NC			10.00	41	33	38	74	0	00	30.27	30.37	
04	OVC	080		8.00							30.01	30.11	04	CLR	NC			10.00	37	33	35	86	3	13	30.26	30.36	
07	OVC	042		7.00							30.04	30.13	07	CLR	NC			7.00	34	33	34	97	0	00	30.29	30.39	
10	OVC	042		7.00							30.05	30.15	10	CLR	NC			8.00	50	39	45	66	0	00	30.31	30.41	
13	FEW	NC		8.00							30.00	30.09	13	CLR	NC			10.00	59	38	49	46	14	14	30.25	30.35	
16	CLR	NC		5.00	HZ						29.96	30.06	16	CLR	NC			10.00	55	39	47	55	12	15	30.21	30.30	
19	CLR	NC		6.00	HZ						29.98	30.08	19	CLR	NC			10.00	49	47	48	93	3	13	30.22	30.32	
22	CLR	NC		5.00	BR						29.95	30.05	22	CLR	NC			10.00	49	47	48	93	6	16	30.20	30.29	
				SUNRISE: 0645				NOV 14								SUNSET: 1648											
01	FEW	NC		4.00	BR						29.91	30.00	01	CLR	NC			1.75	BR	43	43	43	100	0	00	30.17	30.27
04	CLR	NC		4.00	BR						29.82	29.92	04	BKN	070			4.00	BR	43	43	43	100	0	00	30.14	30.24
07	CLR	NC		2.50	BR						29.75	29.84	07	BKN	080			3.00	BR	43	43	43	100	3	35	30.13	30.23
10	CLR	NC		3.00	BR						29.63	29.73	10	OVC	090			10.00	59	55	57	87	9	20	30.12	30.22	
13	CLR	NC		6.00	HZ						29.52	29.62	13	CLR	NC			10.00	67	56	61	68	14	20	30.03	30.13	
16	SCT	NC		6.00	HZ						29.51	29.60	16	CLR	NC			10.00	67	53	59	61	9	22	30.00	30.10	
19	CLR	NC		10.00							29.59	29.68	19	BKN	085			10.00	60	54	57	80	6	32	30.04	30.14	
22	OVC	065		10.00							29.67	29.77	22	BKN	085			10.00	58	56	57	93	0	00	30.07	30.16	
				SUNRISE: 0646				NOV 15								SUNSET: 1647											
01	SCT	NC		10.00							29.69	29.79	01	OVC	075			8.00	56	55	55	97	3	14	30.05	30.15	
04	OVC	060		10.00							29.70	29.80	04	CLR	NC			1.00	BR	50	50	50	100	0	00	30.06	30.16
07	OVC	060		10.00							29.71	29.80	07	OVC	002			0.25	FG	50	50	50	100	3	13	30.10	30.20
10	SCT	NC		10.00							29.70	29.80	10	VV	001			<.25	FG	53	53	53	100	5	35	30.14	30.24
13	BKN	060		10.00							29.64	29.74	13	CLR	NC			2.00	BR	61	57	59	87	0	00	30.09	30.19
16	FEW	NC		10.00							29.60	29.69	16	CLR	NC			10.00	65	55	59	70	0	00	30.08	30.18	
19	OVC	065		10.00							29.59	29.69	19	CLR	NC			10.00	56	54	55	93	7	16	30.11	30.21	
22	OVC	065		10.00							29.58	29.67	22	CLR	NC			6.00	BR	49	49	49	100	3	06	30.15	30.24
				SUNRISE: 0648				NOV 16								SUNSET: 1647											
01	OVC	060		10.00							29.55	29.65	01	VV	001			0.25	FG	53	53	53	100	7	05	30.14	30.24
04	BKN	060		10.00							29.56	29.65	04	VV	001			0.25	FG	54	54	54	100	5	06	30.16	30.25
07	CLR	NC		10.00							29.59	29.69	07	VV	001			0.50	FG	54	54	54	100	9	05	30.20	30.30
10	CLR	NC		10.00							29.62	29.72	10	OVC	001			0.75	BR	56	56	56	100	9	06	30.23	30.33
13	CLR	NC		10.00							29.60	29.70	13	OVC	003			2.00	BR	58	57	57	97	6	07	30.19	30.28
16	CLR	NC		10.00							29.61	29.71	16	OVC	005			3.00	BR	59	57	58	93	7	03	30.18	30.28
19	CLR	NC		10.00							29.68	29.78	19	OVC	004			2.00	BR	58	58	58	100	10	04	30.21	30.31
22	CLR	NC		10.00							29.75	29.85	22	OVC	002			2.50	BR	57	57	57	100	9	04	30.22	30.31
				SUNRISE: 0649				NOV 17								SUNSET: 1646											
01	CLR	NC		10.00							29.79	29.89	01	OVC	002			4.00	BR	56	56	56	100	7	05	30.19	30.29
04	CLR	NC		10.00							29.86	29.96	04	OVC	002			0.50	FG	55	55	55	100	6	03	30.19	30.29
07	CLR	NC		10.00							29.95	30.05	07	OVC	001			1.25	BR	56	56	56	100	7	05	30.21	30.31
10	CLR	NC		10.00							30.01	30.11	10	OVC	003			1.25	BR	57	57	57	100	6	03	30.24	30.34
13	CLR	NC		10.00							30.01	30.11	13	OVC	005			1.25	-RA BR	59	59	59	100	9	06	30.19	30.29
16	CLR	NC		10.00							30.05	30.15	16	OVC	014			2.00	-RA BR	60	59	59	96	10	05	30.15	30.25
19	CLR	NC		10.00							30.11	30.21	19	OVC	005			2.50	-RA BR	59	59	59	100	7	09	30.17	30.27
22	CLR	NC		10.00							30.15	30.25	22	VV	001			0.25	FG	57	57	57	100	3	19	30.17	30.26
				SUNRISE: 0650				NOV 18								SUNSET: 1645											
01	CLR	NC		10.00							30.17	30.27	01	VV	001			0.25	FG	56	56	56	100	6	16	30.14	30.23
04	CLR	NC		10.00							30.19	30.29	04	VV	001			0.50	FG	55	55	55	100	3	16	30.12	30.22
07	CLR	NC		9.00							30.23	30.33	07	VV	001			0.25	FG	56	56	56	100	5	15	30.12	30.22
10	CLR	NC		10.00							30.27	30.37	10	OVC	003			0.75	BR	59	59	59	100	7	21	30.13	30.23
13	CLR	NC		10.00							30.22	30.32	13	OVC	005			6.00	BR	61	59	60	93	9	21	30.09	30.19
16	CLR	NC		10.00							30.21	30.31	16	OVC	011			5.00	BR	61	58	59	90	9	20	30.07	30.17
19	CLR	NC		10.00							30.24	30.34	19	OVC	009			8.00		61	59	60	93	8	17	30.08	30.18
22	FEW	NC		10.00							30.27	30.37	22	OVC	003			3.00	BR	59	58	58	96	7	21	30.09	30.19

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

NOVEMBER 1999

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
				SUNRISE: 0658		NOV 25		SUNSET: 1641								SUNRISE:		NOV 31		SUNSET:					
01	OVC	002		0.75	BR	57	57	57	100	6	16	30.08	30.18												
04	VV	001		0.50	FG	57	57	57	100	0	00	30.06	30.16												
07	OVC	001		0.75	BR	57	57	57	100	0	00	30.07	30.17												
10	OVC	007		6.00	-RA BR	53	52	52	96	10	36	30.12	30.22												
13	OVC	007		6.00	BR	52	50	51	93	14	03	30.09	30.19												
16	OVC	007		5.00	BR	52	50	51	93	13	04	30.08	30.18												
19	OVC	003		5.00	BR	51	50	51	96	9	04	30.08	30.18												
22	OVC	001		2.00	-RA BR	50	50	50	100	10	06	30.07	30.17												

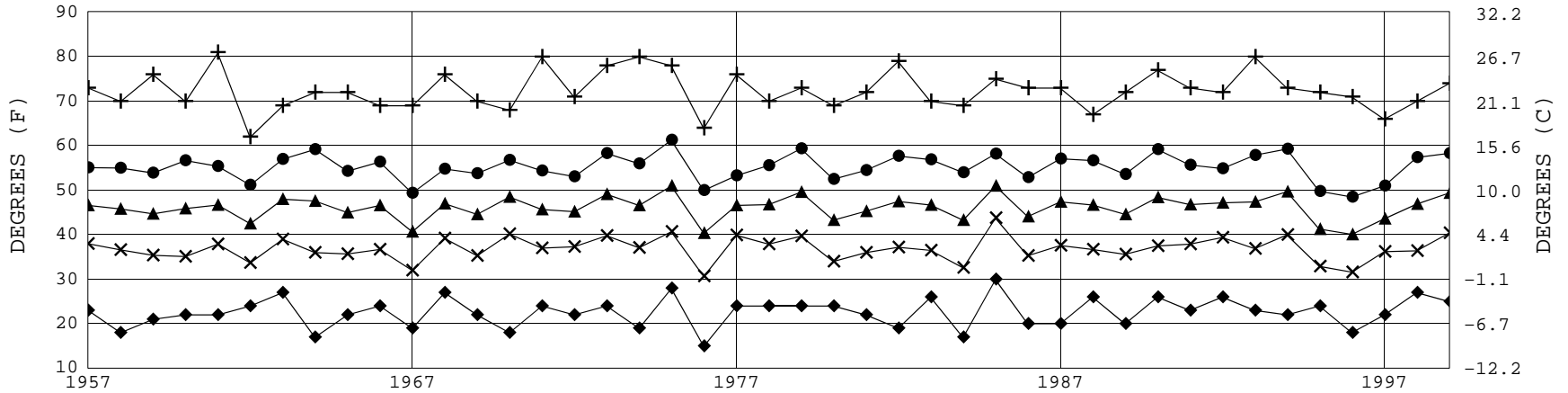
				SUNRISE: 0659		NOV 26		SUNSET: 1641								SUNRISE:		NOV 31		SUNSET:					
01	OVC	001		0.50	FG	51	51	51	100	9	07	30.01	30.11												
04	OVC	001		0.75	-RA BR	52	52	52	100	9	07	29.95	30.05												
07	OVC	001		1.75	BR	54	54	54	100	5	06	29.92	30.02												
10	OVC	026		9.00		60	60	60	100	13	15	29.90	30.00												
13	CLR	NC		10.00		66	61	63	84	16	15	29.80	29.89												
16	FEW	NC		10.00		61	59	60	93	12	16	29.74	29.84												
19	OVC	031		10.00		61	59	60	93	8	17	29.75	29.84												
22	OVC	049		7.00	-RA	59	59	59	100	9	16	29.73	29.83												
				SUNRISE: 0660		NOV 27		SUNSET: 1640								SUNRISE:		NOV 31		SUNSET:					
01	OVC	030		7.00	-RA	54	54	54	100	3	32	29.74	29.84												
04	OVC	031		5.00	RA BR	53	51	52	93	13	31	29.76	29.86												
07	CLR	NC		10.00		51	43	47	74	15	30	29.82	29.92												
10	FEW	NC		10.00		52	39	46	61	20	30	29.88	29.97												
13	CLR	NC		10.00		56	33	46	42	12	29	29.86	29.95												
16	CLR	NC		10.00		56	36	47	47	7	27	29.85	29.95												
19	CLR	NC		10.00		50	38	44	63	6	23	29.87	29.97												
22	CLR	NC		10.00		48	36	43	63	6	24	29.89	29.99												
				SUNRISE: 0701		NOV 28		SUNSET: 1640								SUNRISE:		NOV 31		SUNSET:					
01	CLR	NC		10.00		46	36	42	68	6	25	29.92	30.02												
04	CLR	NC		10.00		43	33	39	68	8	30	29.98	30.08												
07	CLR	NC		10.00		41	32	37	70	9	29	30.06	30.16												
10	CLR	NC		10.00		48	33	42	56	17	29	30.11	30.21												
13	CLR	NC		10.00		50	31	42	48	16	27	30.10	30.20												
16	CLR	NC		10.00		49	28	40	45	14	30	30.12	30.22												
19	CLR	NC		10.00		43	28	37	56	3	24	30.17	30.27												
22	CLR	NC		10.00		39	27	34	62	5	27	30.21	30.31												
				SUNRISE: 0702		NOV 29		SUNSET: 1640								SUNRISE:		NOV 31		SUNSET:					
01	CLR	NC		10.00		38	27	34	65	5	26	30.23	30.33												
04	CLR	NC		10.00		36	26	32	67	5	30	30.25	30.34												
07	CLR	NC		10.00		34	26	31	73	7	24	30.26	30.36												
10	CLR	NC		10.00		44	30	38	58	9	24	30.25	30.35												
13	SCT	NC		10.00		46	25	38	44	21	27	30.19	30.29												
16	FEW	NC		10.00		44	18	35	35	17	30	30.21	30.32												
19	CLR	NC		10.00		39	21	33	48	14	29	30.27	30.37												
22	CLR	NC		10.00		35	24	31	64	10	29	30.30	30.40												
				SUNRISE: 0703		NOV 30		SUNSET: 1639								SUNRISE:		NOV 31		SUNSET:					
01	CLR	NC		10.00		29	24	27	82	7	30	30.31	30.41												
04	CLR	NC		10.00		31	20	27	64	8	32	30.32	30.42												
07	CLR	NC		10.00		28	21	26	75	9	30	30.36	30.46												
10	SCT	NC		10.00		36	21	31	55	13	33	30.39	30.49												
13	BKN	043		10.00		37	19	31	48	15	35	30.34	30.44												
16	BKN	055		10.00		37	18	31	46	18	34	30.34	30.44												
19	CLR	NC		10.00		32	17	27	54	15	34	30.40	30.50												
22	CLR	NC		10.00		30	15	25	54	12	33	30.39	30.49												

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)	DIRECTION	SPEED	DIRECTION
							STATION	SEA LEVEL					
01			46	39	43	80	30.02	30.12	7.42	6	3	27	
02			46	40	43	81	30.03	30.12	7.39	7	3	28	
03			45	39	43	81	30.03	30.13	7.33	6	3	29	
04			45	39	42	81	30.03	30.12	6.87	5	3	30	
05			44	38	42	82	30.03	30.13	6.86	6	3	30	
06			44	39	42	82	30.04	30.14	7.08	6	3	30	
07			44	39	42	83	30.05	30.15	6.66	7	3	31	
08			46	40	43	80	30.07	30.16	6.60	8	4	30	
09			49	41	45	75	30.07	30.17	6.92	10	4	30	
10			51	41	47	70	30.07	30.17	8.13	11	5	30	
11			53	41	48	66	30.06	30.16	8.28	12	5	29	
12			55	41	48	62	30.03	30.13	8.42	12	5	28	
13			56	40	49	59	30.01	30.11	8.71	12	6	26	
14			56	40	49	58	30.00	30.10	9.08	12	5	27	
15			56	40	49	58	29.99	30.09	8.68	12	5	26	
16			55	39	48	58	29.99	30.09	8.67	11	4	26	
17			54	40	48	63	30.00	30.09	8.90	10	3	23	
18			52	40	47	66	30.01	30.10	9.10	9	3	22	
19			51	40	46	69	30.02	30.12	9.08	8	2	24	
20			50	40	46	72	30.03	30.12	8.73	8	3	26	
21			49	40	45	73	30.03	30.13	8.51	8	3	26	
22			47	39	44	74	30.04	30.13	8.39	7	3	27	
23			47	39	43	76	30.04	30.13	8.08	7	4	28	
24			46	38	43	76	30.04	30.13	8.07	7	3	29	

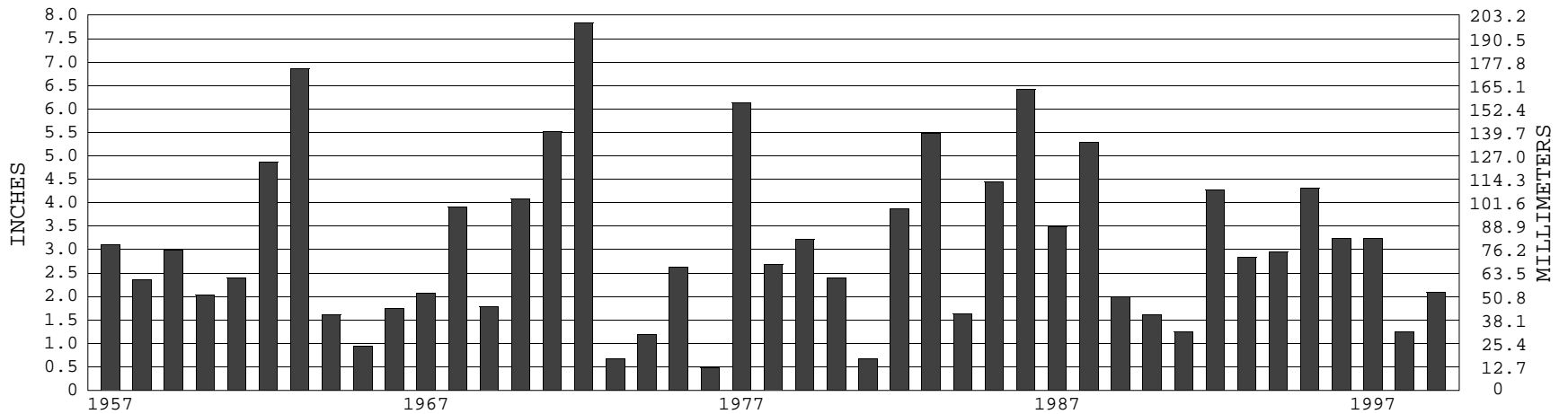
WILMINGTON, DE NOVEMBER TEMPERATURES



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

Long-Term (1957-1999) Mean: 46.1 1961-1990 Normal: 46.3

WILMINGTON, DE NOVEMBER PRECIPITATION



Long-Term (1957-1999) Mean Monthly Total: 3.12

1961-1990 Normal: 3.27



**NOVEMBER 1999
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.

DIRECTOR

NOTICE

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
828–271–4800 (voice), 828–271–4876 (fax),
828–271–4010(TDD)
or orders@ncdc.noaa.gov
Local Climatological Data is available at www.ncdc.noaa.gov

For address correction, please return a photocopy of this page to Subscription Services indicating changes

NATIONAL CLIMATIC DATA CENTER
151 PATTON AVE RM 120
ASHEVILLE, NC 28801 –5001

OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G–19