



JULY 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): 74 Feet
 Time Zone: EASTERN WBAN: 13781 ISSN #: 0198-117X

JULY 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	84	69	77	2	71	72	0	12	RA BR				0.17	29.95	30.03	7.3	18	8.8	29	18	22	19	01																																										
02	86	72	79	4	71	74	0	14	TS TSRA RA BR				0.12	29.97	30.05	11.5	21	12.8	30	30	24	30	02																																										
03	92	71	82	7	73	75	0	17	BR HZ				0.00	30.03	30.12	2.8	22	4.6	15	20	13	20	03																																										
04	97	76	87	12	73	77	0	22	BR HZ				0.00	29.96	30.04	8.9	26	9.4	24	26	20	27	04																																										
05	99	80	90*	15	72	77	0	25	HZ				0.00	29.88	29.96	10.3	27	10.6	25	29	21	29	05																																										
06	98	77	88	12	72	77	0	23	HZ				0.00	29.79	29.87	7.7	25	8.8	22	22	17	22	06																																										
07	91	72	82	6	60	69	0	17	HZ				0.00	29.82	29.90	7.8	30	9.1	25	28	18	28	07																																										
08	92	65	79	3	55	65	0	14					0.00	29.85	29.93	8.5	29	9.1	29	30	23	28	08																																										
09	92	63	78	2	62	69	0	13					0.00	29.82	29.90	5.8	17	8.6	20	20	17	14	09																																										
10	84	69	77	1	63	69	0	12	RA				T	29.78	29.86	9.3	28	11.6	28	29	24	28	10																																										
11	84	57	71	-5	49	59	0	6					0.00	30.06	30.14	7.1	34	8.3	21	01	15	32	11																																										
12	78	59	69*	-7	29	51	0	4	RA				T	30.16	30.24	6.4	09	7.9	18	13	15	13	12																																										
13	83	64	74	-2	58	63	0	9					0.00	30.09	30.18	5.9	09	9.8	20	16	16	16	13																																										
14	79	60	70	-6	60	64	0	5					0.00	30.13	30.21	5.7	09	6.1	16	07	13	10	14																																										
15	95	56*	76	-1	61	66	0	11					0.00	30.08	30.17	4.2	18	6.5	17	16	15	16	15																																										
16	94	67	81	4	69	72	0	16	BR				0.00	30.07	30.15	5.4	19	6.9	21	15	18	16	16																																										
17	96	70	83	6	70	74	0	18	BR				0.00	30.05	30.13	6.0	19	7.3	21	15	17	15	17																																										
18	98	72	85	8	73	76	0	20	BR HZ				0.00	30.00	30.08	6.2	16	7.5	23	16	21	16	18																																										
19	100*	74	87	10	72	76	0	22	RA BR HZ				T	29.88	29.96	5.5	25	7.0	22	33	17	31	19																																										
20	79	70	75	-2	70	72	0	10	RA FG BR HZ				0.45	29.96	30.04	1.9	09	5.7	15	04	13	04	20																																										
21	85	66	76	-1	67	70	0	11	BR				0.00	30.03	30.12	8.8	15	9.3	22	15	20	15	21																																										
22	88	72	80	3	72	74	0	15	RA BR HZ				0.15	29.89	29.97	3.4	19	5.7	15	17	13	16	22																																										
23	98	72	85	8	68	73	0	20	RA BR HZ				T	29.83	29.91	3.9	29	5.9	17	29	14	29	23																																										
24	93	76	85	8	73	76	0	20	RA BR HZ				T	29.73	29.81	8.0	22	8.5	21	24	17	25	24																																										
25	95	74	85	8	64	71	0	20	RA HZ				T	29.67	29.75	10.0	29	10.5	25	26	20	29	25																																										
26	92	69	81	4	63	69	0	16					0.00	29.68	29.77	8.7	31	9.2	22	31	18	31	26																																										
27	94	69	82	5	67	72	0	17					0.00	29.76	29.84	7.4	28	8.2	20	28	17	29	27																																										
28	96	70	83	6	65	71	0	18	RA				T	29.76	29.84	7.0	27	8.1	36*	24	28*	27	28																																										
29	91	67	79	2	67	71	0	14					0.00	29.63	29.71	5.1	24	6.8	18	25	14	24	29																																										
30	93	70	82	5	68	73	0	17	RA				T	29.61	29.69	4.5	27	5.5	15	22	14	24	30																																										
31	95	70	83	6	75	78	0	18	BR HZ				0.00	29.69	29.77	6.1	15	7.8	23	16	21	16	31																																										
91.0 69.0 80.0 ■■											65.6 70.8		0.0 15.4		< MONTHLY AVERAGES		TOTALS-->		0.89 29.89 29.97		1.8 28 8.1		<- MONTHLY AVERAGES																																										
5.4 1.9 3.6 ■■											<----- DEPARTURE FROM NORMAL ----->											-3.34				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																																							
DEGREE DAYS											GREATEST 24-HR PRECIPITATION: 0.45 DATE: 20											SEA LEVEL PRESSURE DATE TIME																																											
MONTHLY TOTAL DEPARTURE											SEASON TO DATE TOTAL DEPARTURE											GREATEST 24-HR SNOWFALL: DATE:											MAXIMUM : 30.28 12 1051																																
HEATING: 0 0											COOLING: 476 123 727 131											GREATEST SNOW DEPTH: DATE:											MINIMUM : 29.65 29 1851																																
HEATING: 0 0											COOLING: 476 123 727 131											NUMBER OF DAYS WITH =>											MAXIMUM TEMP ≥ 90: 21											MINIMUM TEMP ≤ 32: 0											PRECIPITATION ≥ 0.01 INCH : 4										
HEATING: 0 0											COOLING: 476 123 727 131											NUMBER OF DAYS WITH =>											MAXIMUM TEMP ≤ 32 : 0											MINIMUM TEMP ≤ 0 : 0											PRECIPITATION ≥ 0.10 INCH : 4										
HEATING: 0 0											COOLING: 476 123 727 131											NUMBER OF DAYS WITH =>											THUNDERSTORMS : 1											HEAVY FOG : 0											SNOWFALL ≥ 1.0 INCH :										

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

WILMINGTON, DE

JULY 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	0.01	T						0.02	0.02	0.01	0.04	0.02	01	0.05				T							01			0.17	
02													02						T	0.10	0.01				02			0.12	
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											T	T	10												10			T	
11													11												11			0.00	
12					T								12						T						12			T	
13													13							T	T	T			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			T	
20								0.03	0.41	T	T		20	0.01	T					T	T	T		20			0.45		
21													21												21			0.00	
22				T		T	0.08	0.04	T	0.03	T		22												22			0.15	
23													23												23			T	
24												T	24												24			T	
25													25												25		T	T	
26													26												26			0.00	
27													27												27			0.00	
28													28												28			T	
29													29												29			0.00	
30													30												30			T	
31													31												31			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

JULY 1999

ILG

WBAN # 13781

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING		OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING		OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		
SUNRISE: 0438 JUL 01 SUNSET: 1934																																	
01	OVC	009			8.00	-RA		70	68	69	93	3	10	29.94	30.03	01	CLR	NC				7.00				84	72	76	67	6	25	29.74	29.83
04	OVC	005			2.50	BR		69	68	68	96	0	00	29.94	30.03	04	CLR	NC				10.00				78	65	70	64	7	33	29.78	29.87
07	OVC	001			0.50	BR		70	70	70	100	0	00	29.98	30.07	07	CLR	NC				10.00				81	65	71	58	10	33	29.85	29.93
10	OVC	007			2.50	-RA BR		73	73	73	100	3	19	29.98	30.07	10	CLR	NC				10.00				85	59	69	42	13	32	29.86	29.95
13	FEW	NC			10.00	-RA		74	72	73	94	8	21	29.95	30.04	13	CLR	NC				10.00				90	53	67	28	15	29	29.83	29.92
16	BKN	033			9.00			83	75	77	77	13	17	29.92	30.00	16	CLR	NC				10.00				91	52	67	26	13	28	29.80	29.88
19	CLR	NC			10.00			81	71	74	72	12	18	29.92	30.01	19	CLR	NC				10.00				87	53	66	31	5	27	29.78	29.86
22	CLR	NC			10.00			78	69	72	74	16	18	29.93	30.02	22	CLR	NC				10.00				79	64	69	60	6	25	29.82	29.90
SUNRISE: 0439 JUL 02 SUNSET: 1934																																	
01	FEW	NC			10.00			77	70	72	79	13	19	29.93	30.01	01	BKN	090				10.00				74	57	64	56	3	33	29.81	29.90
04	CLR	NC			10.00			76	69	71	79	17	19	29.93	30.02	04	BKN	090				10.00				73	54	62	51	5	26	29.81	29.90
07	OVC	022			10.00			76	70	72	82	15	20	29.96	30.04	07	CLR	NC				10.00				73	58	64	59	7	25	29.86	29.94
10	OVC	022			10.00			81	71	74	72	15	21	29.96	30.04	10	CLR	NC				10.00				84	56	67	38	12	29	29.87	29.96
13	FEW	NC			7.00			84	72	76	67	23	21	29.95	30.04	13	CLR	NC				10.00				89	53	67	29	16	28	29.83	29.91
16	OVC	075			8.00			83	72	75	70	10	22	29.95	30.03	16	CLR	NC				10.00				89	51	66	27	17	29	29.81	29.90
19	OVC	065			9.00	-RA		82	72	75	72	9	21	29.97	30.06	19	CLR	NC				10.00				84	52	65	33	8	29	29.84	29.92
22	BKN	100			8.00			73	72	72	96	7	14	30.01	30.09	22	CLR	NC				10.00				77	54	63	45	0	00	29.89	29.97
SUNRISE: 0439 JUL 03 SUNSET: 1934																																	
01	CLR	NC			4.00	BR		73	72	72	96	0	00	29.99	30.08	01	CLR	NC				10.00				69	58	62	68	5	31	29.89	29.97
04	SCT	NC			4.00	BR		73	72	72	96	0	00	30.00	30.09	04	CLR	NC				10.00				66	58	61	75	5	28	29.90	29.98
07	OVC	004			2.50	BR		75	73	74	94	0	00	30.04	30.12	07	CLR	NC				10.00				74	58	64	57	3	36	29.91	29.99
10	SCT	NC			5.00	HZ		81	74	76	79	6	32	30.08	30.17	10	CLR	NC				10.00				83	53	65	36	8	13	29.89	29.97
13	BKN	039			5.00	HZ		88	73	77	61	5	31	30.05	30.14	13	CLR	NC				10.00				88	63	72	43	16	15	29.82	29.91
16	CLR	NC			6.00	HZ		91	72	78	54	5	VR	30.03	30.12	16	CLR	NC				8.00				86	72	76	63	14	15	29.76	29.84
19	CLR	NC			6.00	HZ		86	75	78	70	10	23	30.01	30.10	19	CLR	NC				10.00				87	64	72	46	9	16	29.71	29.79
22	CLR	NC			7.00			80	73	75	79	7	17	30.02	30.11	22	CLR	NC				9.00				83	68	73	61	12	21	29.72	29.80
SUNRISE: 0440 JUL 04 SUNSET: 1934																																	
01	CLR	NC			7.00			79	74	76	85	5	22	30.02	30.11	01	CLR	NC				7.00				83	70	74	65	13	21	29.69	29.78
04	CLR	NC			6.00	BR		76	74	75	94	6	25	30.00	30.08	04	CLR	NC				10.00				75	64	68	69	6	31	29.70	29.78
07	CLR	NC			5.00	BR		79	75	76	88	9	26	30.00	30.08	07	CLR	NC				10.00				81	65	71	58	12	28	29.73	29.82
10	CLR	NC			8.00			92	74	79	56	14	27	29.99	30.07	10	FEW	NC				10.00				79	61	68	54	12	31	29.78	29.86
13	CLR	NC			7.00			95	74	80	51	15	28	29.97	30.06	13	FEW	NC				10.00				81	67	72	62	13	24	29.75	29.83
16	CLR	NC			8.00			97	72	79	45	14	27	29.90	29.98	16	FEW	NC				10.00				83	68	73	61	15	28	29.73	29.81
19	CLR	NC			8.00			93	71	78	49	9	25	29.90	29.98	19	OVC	090				10.00				79	64	69	60	14	28	29.79	29.88
22	CLR	NC			6.00	HZ		85	73	77	68	6	24	29.92	30.01	22	SCT	NC				10.00				71	55	62	57	12	33	29.91	30.00
SUNRISE: 0440 JUL 05 SUNSET: 1933																																	
01	CLR	NC			7.00			83	72	75	70	9	28	29.91	29.99	01	CLR	NC				10.00				66	51	58	59	8	36	29.96	30.04
04	CLR	NC			6.00	HZ		81	72	75	74	8	25	29.91	30.00	04	CLR	NC				10.00				61	51	56	70	7	30	29.99	30.07
07	CLR	NC			5.00	HZ		84	73	76	70	12	25	29.92	30.01	07	CLR	NC				10.00				66	50	57	56	10	34	30.05	30.14
10	CLR	NC			10.00			92	74	79	56	12	29	29.91	29.99	10	CLR	NC				10.00				75	49	60	40	10	33	30.08	30.17
13	CLR	NC			10.00			97	74	80	48	14	28	29.87	29.96	13	CLR	NC				10.00				80	46	61	30	10	31	30.07	30.16
16	CLR	NC			10.00			98	70	78	40	16	29	29.83	29.92	16	CLR	NC				10.00				83	48	63	30	7	03	30.04	30.13
19	CLR	NC			9.00			94	71	78	48	8	26	29.82	29.91	19	CLR	NC				10.00				79	48	61	34	7	36	30.06	30.15
22	CLR	NC			9.00			87	72	77	61	9	27	29.84	29.93	22	CLR	NC				10.00				68	49	58	51	7	01	30.11	30.20
SUNRISE: 0441 JUL 06 SUNSET: 1933																																	
01	CLR	NC			7.00			81	71	74	72	8	28	29.84	29.93	01	CLR	NC				10.00				65	29	49	26	7	02	30.13	30.21
04	CLR	NC			6.00	HZ		78	71	73	79	5	27	29.83	29.91	04	CLR	NC				10.00				62	29	47	29	0	00	30.15	30.24
07	CLR	NC			5.00	HZ		84	72	76	67	7	25	29.87	29.95	07	CLR	NC				10.00				68	29	50	23	6	03	30.17	30.26
10	CLR	NC			8.00			93	73	79	52	12	29	29.83	29.91	10	CLR	NC				10.00				77	27	53	16	15	12	30.18	30.27
13	CLR	NC			8.00			96	74	80	49	12	23	29.77	29.85	13	FEW	NC				10.00				76	27	53	16	7	08	30.17	30.26
16	CLR	NC			9.00			97	72	79	45	14	22	29.73	29.81	16	CLR	NC				10.00				74	30	53	20	9	11	30.14	30.23
19	CLR	NC			7.00			94	72	78	49	12	26	29.71	29.80	19	BKN	090				10.00				71	31	52	23	7	09	30.14	30.23
22	SCT	NC			7.00			88	73	77	61	7	25	29.75	29.84	22	BKN	090				10.00				68	30	50	24	8	08	30.14	30.22

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

JULY 1999

ILG

WBAN # 13781

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		
	DRY BULB	DEW POINT		WET BULB	DRY BULB			DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB		DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG			STATION	SEA LEVEL							
SUNRISE: 0445 JUL 13 SUNSET: 1931								SUNRISE: 0450 JUL 19 SUNSET: 1927																								
01	OVC	070				10.00		67	61	63	81	10	08	30.12	30.21	01	CLR	NC					5.00	HZ	77	70	72	79	5	22	29.93	30.01
04	CLR	NC				10.00		64	56	59	75	12	05	30.08	30.17	04	CLR	NC					4.00	BR	75	72	73	90	0	00	29.92	30.00
07	CLR	NC				10.00		65	55	59	70	12	06	30.10	30.19	07	CLR	NC					3.00	HZ	78	72	74	82	6	25	29.93	30.02
10	CLR	NC				10.00		74	53	62	48	10	03	30.09	30.18	10	CLR	NC					4.00	HZ	92	71	77	51	6	VR	29.90	29.98
13	FEW	NC				10.00		80	53	64	39	0	00	30.07	30.15	13	CLR	NC					5.00	HZ	97	70	78	42	12	21	29.85	29.93
16	SCT	NC				10.00		79	58	66	49	9	15	30.05	30.14	16	CLR	NC					4.00	HZ	94	70	77	46	15	22	29.80	29.88
19	CLR	NC				10.00		73	65	68	76	14	16	30.08	30.16	19	BKN	060					6.00	HZ	84	72	76	67	8	30	29.83	29.92
22	FEW	NC				10.00		67	64	65	91	5	17	30.12	30.20	22	CLR	NC					5.00	HZ	79	73	75	82	7	28	29.86	29.95
SUNRISE: 0446 JUL 14 SUNSET: 1930								SUNRISE: 0451 JUL 20 SUNSET: 1927																								
01	CLR	NC				10.00		65	57	60	76	0	00	30.12	30.21	01	BKN	110					6.00	HZ	79	72	74	79	3	35	29.86	29.95
04	CLR	NC				10.00		65	59	61	81	5	08	30.13	30.21	04	FEW	NC					6.00	BR	75	71	72	88	5	02	29.86	29.95
07	CLR	NC				10.00		67	61	63	81	6	08	30.16	30.24	07	FEW	NC					8.00		77	69	72	77	12	05	29.92	30.01
10	CLR	NC				10.00		70	62	65	76	5	09	30.17	30.25	10	OVC	034					4.00	BR	73	72	72	96	5	06	29.98	30.06
13	BKN	034				10.00		75	61	66	62	14	07	30.15	30.24	13	OVC	025					6.00	-RA BR	73	70	71	90	3	15	29.99	30.07
16	SCT	NC				10.00		78	58	66	50	7	10	30.10	30.19	16	OVC	031					10.00		76	68	71	77	5	13	29.97	30.06
19	CLR	NC				10.00		73	59	65	62	8	10	30.09	30.18	19	CLR	NC					10.00		76	70	72	82	7	18	29.97	30.06
22	CLR	NC				10.00		68	60	63	76	3	10	30.10	30.19	22	CLR	NC					10.00		71	69	70	94	6	21	30.00	30.09
SUNRISE: 0447 JUL 15 SUNSET: 1930								SUNRISE: 0452 JUL 21 SUNSET: 1926																								
01	CLR	NC				10.00		61	58	59	90	0	00	30.10	30.19	01	CLR	NC					10.00		68	66	67	93	0	00	30.02	30.11
04	CLR	NC				10.00		56	55	55	97	5	30	30.10	30.18	04	OVC	011					8.00		67	67	67	100	0	00	30.04	30.13
07	CLR	NC				10.00		67	60	63	79	3	28	30.13	30.22	07	OVC	007					4.00	BR	71	70	70	96	6	08	30.06	30.15
10	CLR	NC				10.00		83	59	68	44	7	VR	30.11	30.19	10	FEW	NC					10.00		78	68	71	71	8	14	30.07	30.16
13	CLR	NC				10.00		87	61	70	42	12	13	30.07	30.16	13	CLR	NC					10.00		84	62	70	48	16	13	30.05	30.13
16	CLR	NC				10.00		91	59	70	34	9	19	30.04	30.12	16	CLR	NC					10.00		81	66	71	61	16	15	30.01	30.10
19	CLR	NC				10.00		78	68	71	71	13	16	30.04	30.13	19	SCT	NC					10.00		77	68	71	74	17	15	30.00	30.09
22	CLR	NC				10.00		73	68	70	84	6	17	30.07	30.16	22	CLR	NC					10.00		74	70	71	88	10	13	29.98	30.07
SUNRISE: 0448 JUL 16 SUNSET: 1929								SUNRISE: 0452 JUL 22 SUNSET: 1925																								
01	CLR	NC				10.00		70	63	66	79	3	23	30.07	30.15	01	OVC	047					10.00		73	69	70	87	9	18	29.98	30.07
04	CLR	NC				8.00		67	65	66	93	5	18	30.06	30.15	04	OVC	015					10.00		73	71	72	94	8	18	29.94	30.02
07	CLR	NC				6.00	BR	72	69	70	91	0	00	30.09	30.18	07	OVC	025					4.00	-RA BR	72	72	72	100	6	16	29.94	30.02
10	CLR	NC				10.00		87	72	77	61	8	22	30.08	30.17	10	OVC	007					7.00		75	74	74	96	3	17	29.93	30.02
13	BKN	060				10.00		92	69	76	47	9	20	30.07	30.15	13	BKN	040					10.00		81	73	75	77	5	VR	29.89	29.97
16	SCT	NC				10.00		91	73	78	56	15	15	30.04	30.13	16	CLR	NC					10.00		88	71	76	57	5	VR	29.83	29.91
19	CLR	NC				10.00		83	73	76	72	10	16	30.04	30.12	19	CLR	NC					7.00		82	73	76	74	0	00	29.81	29.90
22	CLR	NC				10.00		80	64	70	58	7	20	30.07	30.15	22	CLR	NC					6.00	BR	77	73	74	88	0	00	29.82	29.91
SUNRISE: 0448 JUL 17 SUNSET: 1929								SUNRISE: 0453 JUL 23 SUNSET: 1925																								
01	CLR	NC				10.00		74	66	69	76	5	20	30.06	30.15	01	CLR	NC					4.00	BR	75	73	74	94	5	34	29.83	29.92
04	CLR	NC				5.00	BR	71	70	70	96	5	19	30.07	30.15	04	CLR	NC					2.00	BR	73	72	72	96	6	02	29.82	29.91
07	CLR	NC				5.00	BR	74	71	72	91	7	22	30.09	30.18	07	OVC	003					1.00	BR	73	73	73	100	6	32	29.87	29.95
10	CLR	NC				9.00		87	73	77	63	8	21	30.09	30.17	10	CLR	NC					6.00	HZ	84	69	74	61	6	29	29.88	29.96
13	CLR	NC				9.00		95	70	77	44	7	19	30.04	30.13	13	CLR	NC					10.00		92	63	73	38	8	25	29.83	29.92
16	CLR	NC				10.00		92	73	79	54	15	15	30.00	30.09	16	CLR	NC					10.00		93	64	74	38	8	31	29.79	29.88
19	CLR	NC				10.00		86	67	73	53	6	16	30.00	30.09	19	CLR	NC					10.00		89	64	72	43	5	23	29.78	29.87
22	CLR	NC				10.00		80	66	71	62	5	20	30.04	30.12	22	CLR	NC					8.00		80	69	73	69	5	23	29.79	29.88
SUNRISE: 0449 JUL 18 SUNSET: 1928								SUNRISE: 0454 JUL 24 SUNSET: 1924																								
01	CLR	NC				9.00		75	70	72	84	6	19	30.04	30.12	01	CLR	NC					5.00	HZ	78	71	73	79	7	23	29.77	29.86
04	CLR	NC				6.00	BR	74	72	73	94	3	23	30.02	30.11	04	CLR	NC					4.00	BR	76	73	74	91	5	21	29.76	29.85
07	CLR	NC				6.00	BR	77	74	75	90	6	22	30.05	30.13	07	CLR	NC					2.00	BR	79	75	76	88	7	18	29.76	29.85
10	CLR	NC				6.00	HZ	93	74	79	54	6	16	30.03	30.11	10	CLR	NC					4.00	HZ	87	76	79	70	10	20	29.77	29.85
13	CLR	NC				8.00		96	70	78	43	12	13	29.99	30.07	13	CLR	NC					4.00	HZ	88	76	79	68	8	21	29.74	29.82
16	CLR	NC				7.00		91	74	79	57	21	15	29.94	30.02	16	CLR	NC					6.00	HZ	92	69	76	47	14	27	29.65	29.74
19	CLR	NC				6.00	HZ	84	76	78	77	10	16	29.95	30.03	19	CLR	NC					6.00	HZ	87	71	76	59	9	22	29.67	29.75
22	CLR	NC				7.00		81	72	75	74	6	23	29.96	30.05	22	CLR	NC					8.00		81	71	74	72	12	22	29.71	29.80

OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE

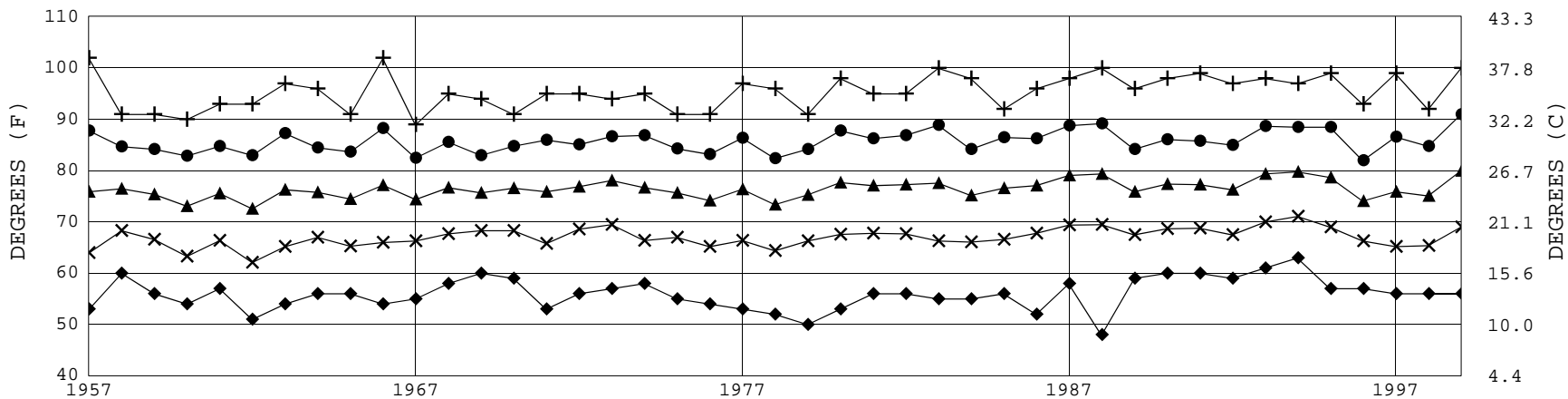
JULY 1999

ILG

WBAN # 13781

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
	SKY COVER	CEILING		OBSERVATION TIME (LST)	EFF CLD AMT Okltas		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER		CEILING	OBSERVATION TIME (LST)		EFF CLD AMT Okltas	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)
SUNRISE: 0455							JUL 25			SUNSET: 1923					SUNRISE: 0500							JUL 31			SUNSET: 1918				
01	CLR	NC			7.00		79	73	75	82	9	23	29.67	29.76	01	CLR	NC			7.00		74	72	73	94	5	32	29.66	29.74
04	CLR	NC			7.00		74	69	71	85	8	29	29.65	29.73	04	CLR	NC			4.00	BR	72	72	72	100	0	00	29.65	29.74
07	CLR	NC			7.00		79	68	72	69	12	29	29.69	29.78	07	CLR	NC			4.00	HZ	78	71	73	79	6	34	29.72	29.80
10	CLR	NC			10.00		87	66	73	50	14	31	29.71	29.80	10	CLR	NC			4.00	HZ	88	73	77	61	5	17	29.72	29.81
13	CLR	NC			10.00		92	61	72	36	10	31	29.67	29.75	13	FEW	NC			6.00	HZ	94	75	80	54	13	13	29.69	29.77
16	CLR	NC			10.00		95	54	69	25	17	28	29.62	29.71	16	CLR	NC			6.00	HZ	92	77	81	62	17	16	29.65	29.73
19	CLR	NC			10.00		88	59	69	38	7	28	29.63	29.72	19	CLR	NC			5.00	HZ	84	79	80	85	14	16	29.66	29.74
22	CLR	NC			10.00		80	62	69	54	6	29	29.67	29.75	22	CLR	NC			5.00	BR	82	79	80	91	7	17	29.69	29.77
SUNRISE: 0456							JUL 26			SUNSET: 1922					3-HOURLY OBSERVATION NOTES														
01	CLR	NC			10.00		73	65	68	76	7	29	29.67	29.75	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			10.00		72	64	67	76	5	30	29.65	29.73	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.														
07	CLR	NC			10.00		75	64	68	69	12	30	29.69	29.78	NC = No ceiling detected.														
10	CLR	NC			10.00		84	64	71	51	13	32	29.68	29.76	& = Original observation contained additional weather elements.														
13	FEW	NC			10.00		90	62	72	39	16	31	29.67	29.76	See page 3 for additional notes.														
16	SCT	NC			10.00		91	59	70	34	14	33	29.66	29.75															
19	CLR	NC			10.00		85	61	70	45	9	28	29.68	29.76															
22	CLR	NC			10.00		77	62	68	60	6	30	29.72	29.81															
SUNRISE: 0457							JUL 27			SUNSET: 1921																			
01	CLR	NC			10.00		75	62	67	64	3	29	29.73	29.82															
04	CLR	NC			10.00		70	63	66	79	3	30	29.74	29.83															
07	CLR	NC			10.00		76	64	68	67	5	30	29.79	29.87															
10	CLR	NC			10.00		86	65	72	50	9	29	29.79	29.87															
13	CLR	NC			10.00		90	66	74	45	14	29	29.76	29.85															
16	CLR	NC			10.00		93	67	75	42	13	29	29.73	29.82															
19	CLR	NC			10.00		87	71	76	59	9	23	29.73	29.81															
22	CLR	NC			10.00		81	73	75	77	9	23	29.77	29.86															
SUNRISE: 0458							JUL 28			SUNSET: 1920																			
01	CLR	NC			10.00		76	70	72	82	7	27	29.78	29.86															
04	CLR	NC			7.00		72	67	69	84	9	30	29.78	29.86															
07	CLR	NC			10.00		79	64	69	60	0	00	29.81	29.90															
10	CLR	NC			10.00		90	63	72	41	9	26	29.81	29.90															
13	CLR	NC			10.00		95	66	75	39	8	30	29.76	29.84															
16	CLR	NC			10.00		91	67	75	45	8	23	29.70	29.78															
19	FEW	NC			10.00		80	62	69	54	16	28	29.74	29.82															
22	CLR	NC			10.00		77	63	68	62	0	00	29.73	29.81															
SUNRISE: 0458							JUL 29			SUNSET: 1919																			
01	CLR	NC			10.00		72	66	68	82	7	23	29.70	29.79															
04	CLR	NC			10.00		69	66	67	90	7	26	29.67	29.76															
07	CLR	NC			10.00		71	64	67	79	7	25	29.68	29.76															
10	CLR	NC			10.00		81	66	71	61	5	05	29.65	29.73															
13	FEW	NC			10.00		86	65	72	50	7	VR	29.62	29.70															
16	FEW	NC			10.00		89	68	75	50	14	23	29.58	29.67															
19	CLR	NC			10.00		85	68	73	57	10	21	29.56	29.65															
22	CLR	NC			10.00		80	72	75	76	6	25	29.59	29.67															
SUNRISE: 0459							JUL 30			SUNSET: 1919																			
01	CLR	NC			10.00		76	68	71	77	5	29	29.59	29.67															
04	CLR	NC			10.00		72	67	69	84	5	32	29.58	29.66															
07	CLR	NC			10.00		79	66	70	65	5	33	29.61	29.69															
10	FEW	NC			10.00		84	68	73	59	5	24	29.63	29.71															
13	CLR	NC			10.00		90	65	73	44	10	25	29.60	29.69															
16	CLR	NC			10.00		91	69	76	49	9	24	29.57	29.66															
19	CLR	NC			10.00		86	69	74	57	5	23	29.59	29.67															
22	CLR	NC			10.00		81	70	74	69	6	21	29.63	29.72															

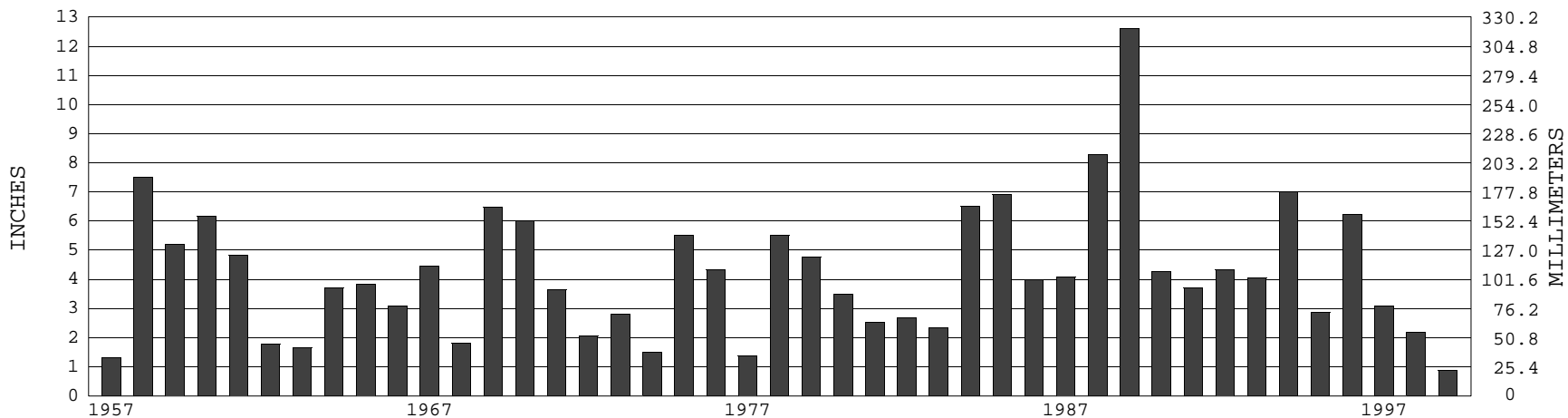
WILMINGTON, DE JULY TEMPERATURES



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

Long-Term (1957-1999) Mean: 76.4 1961-1990 Normal: 76.4

WILMINGTON, DE JULY PRECIPITATION



Long-Term (1957-1999) Mean Monthly Total: 4.22

1961-1990 Normal: 4.23



**JULY 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.

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