



# JANUARY 2009

## LOCAL CLIMATOLOGICAL DATA

### NOAA, National Climatic Data Center

WILMINGTON, DE  
 NEW CASTLE COUNTY AIRPORT (KILG)  
 Lat:39° 40'N Long: 75° 36'W Elev (Ground) 75 Feet  
 Time Zone : EASTERN WBAN: 13781 ISSN#: 0198-117X



**JANUARY 2009**  
**WILMINGTON, DE**

Date 1	Temperature °F						Deg Days BASE 65°		WEATHER 10	SNOW/ICE ON GND(IN)		PRECIPITATION ON GND(IN)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								Date 24
	MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEP FROM NORMAL 5	AVERAGE DEW PT 6	AVERAGE WET BULB 7	HEATING 8	COOLING 9		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			3-SEC		2-MIN			
																			SPEED 20	DIR 21	SPEED 22	DIR 23		
01	30	19	25	-8	4	19	40	0			0.0	0.00	30.17	30.28	9.3	32	10.3	35	32	28	31	01		
02	38	25	32	-1	21	28	33	0	SN		T	T	29.85	29.94	8.4	21	9.0	28	25	22	24	02		
03	40	26	33	1	15		32	0			0.0	0.00			9.7	30	10.1	32	30	23	30	03		
04	43	22	33	1	15	28	32	0	RA		T	T	30.03	30.12	3.7	25	4.5	13	26	9	23	04		
05	48	36	42*	10	26	36	23	0	RA		T	T	29.92	30.00	6.7	31	7.8	26	33	21	32	05		
06	39	32	36	4	19	30	29	0	RA BR UP		0.0	0.24	29.86	29.97	7.6	06	9.1	21	03	17	05	06		
07	41	33	37	5	36	37	28	0	RA BR		0.0	1.63	29.25	29.36	2.5	32	7.9	41	28	32	28	07		
08	41	29	35	3	21	30	30	0			0.0	0.00	29.50	29.59	15.4	27	16.6	41	27	33*	26	08		
09	36	25	31	-1	16	25	34	0			0.0	0.00	30.01	30.10	10.8	29	11.2	28	28	23	29	09		
10	36	29	33	1	22	29	32	0	RA SN BR		0.1	0.05	30.01	30.14	7.5	06	8.5	20	06	16	05	10		
11	35	23	29	-2	24	29	36	0	RA BR		0.0	0.08	29.81	29.94	9.7	32	10.4	29	31	23	30	11		
12	36	22	29	-2	17	25	36	0			0.0	0.00	30.14	30.22	5.8	31	6.6	25	30	18	29	12		
13	40	23	32	1	26	30	33	0	BR		0.0	0.00	29.94	30.03	2.4	16	4.5	21	30	15	30	13		
14	35	19	27	-4	5	20	38	0			0.0	0.00	30.02	30.11	9.1	31	11.1	37	30	30	30	14		
15	27	15	21	-10	6	18	44	0	SN		T	T	30.16	30.25	10.0	32	12.7	33	32	24	32	15		
16	19	7	13*	-18	-3	10	52	0			0.0	0.00	30.48	30.57	11.5	30	11.8	30	30	25	30	16		
17	24	5*	15	-16	0	11	50	0	SN UP		T	T	30.40	30.49	5.1	18	7.8	25	17	21	17	17		
18	36	24	30	-1	20	27	35	0	SN FG+ FZFG BR		0.1	0.01	29.78	29.91	7.9	16	8.8	26	17	22	16	18		
19	31	19	25	-6	25	26	40	0	SN FG+ FZFG BR		T	0.01	29.61	29.70	3.1	34	4.3	14	35	12	32	19		
20	30	15	23	-8	12	19	42	0			T	0.00	29.67	29.75	10.4	33	10.6	25	35	20	32	20		
21	29	16	23	-8	7	18	42	0			0.0	0.00	29.88	29.99	9.1	30	9.7	29	33	23	31	21		
22	42	20	31	0	10		34	0			0.0	0.00			6.9	24	7.2	23	26	18	26	22		
23	48*	20	34	3	22		31	0			0.0	0.00			3.4	17	4.1	22	17	18	17	23		
24	44	20	32	1	17	29	33	0			0.0	0.00	29.93	30.08	13.2	31	13.9	32	29	25	31	24		
25	30	14	22	-9	4	19	43	0			0.0	0.00	30.24	30.35	3.6	32	4.8	16	25	12	26	25		
26	29	21	25	-6	11	21	40	0			0.0	0.00	30.34	30.43	3.5	32	5.7	14	35	12	02	26		
27	30	26	28	-3	21	25	37	0	SN FZFG BR HZ		T	1.9	0.18	30.35	30.45	2.0	06	3.6	13	07	10	08	27	
28	42	25	34	2	29	31	31	0	RA FZRA SN FG+ FG BR UP		0.6	0.70	29.84	29.89	3.6	32	10.4	43*	27	31	29	28		
29	33	21	27	-5	16	24	38	0	BR HZ		1	0.0	29.89	30.00	8.6	30	9.1	25	30	20	31	29		
30	38	18	28	-4	19	24	37	0	SN BR HZ		0	T	29.86	29.96	4.6	27	5.2	35	30	29	29	30		
31	28	19	24	-8	10	20	41	0			0	0.00	29.96	30.07	8.8	29	10.3	30	29	24	29	31		
35.4		21.5	28.5	☼	15.9	24.6	36.3	0.0	< MONTHLY AVERAGES   TOTALS >		2.9	2.90	29.96	30.05	4.7	30	8.6	< MONTHLY AVERAGES						
-3.9		-2.2	-3.0		-----DEPARTURE FROM NORMAL ----->							-0.53	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3											
<b>DEGREE DAYS</b>									GREATEST 24-HR PRECIPITATION : 1.85 DATE : 06-07				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY									GREATEST 24-HR SNOWFALL : 1.9 DATE : 27				MAXIMUM : 30.64				17 0305							
SEASON TO DATE									GREATEST SNOW DEPTH : 2 DATE : 28				MINIMUM : 29.15				07 1351							
TOTAL DEPARTURE									NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 29		PRECIPITATION >= 0.01 INCH: 8							
HEATING : 1126 97 2835 21									MAXIMUM TEMP <= 32 : 11		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH: 4											
COOLING : 0 0 0 0									THUNDERSTORMS : 0		HEAVY FOG : 3		SNOWFALL >= 1.0 INCH : 1											

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

WILMINGTON, DE (KILG)  
JANUARY 2009

WBAN # 13781

Date	FOR HOUR (LST) ENDING AT												Date	FOR HOUR (LST) ENDING AT												Date	Sum of Hourly Data	2400 LST Water Equiv.
	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													01												01	0.00	0.00	
02													02	T	T										02	T	T	
03													03												03	0.00	0.00	
04													04												04	T	T	
05		T	T										05												05	T	T	
06													06	T	0.01	T	T	T	T	T	0.01	T	0.05	0.04	0.13	06	0.24	0.24
07	0.14	0.15	0.12	0.18	0.08	0.04	0.06	0.11	0.22	0.07	0.15	0.03	07	0.03		0.04	0.07	0.02	0.02	0.01	0.04	0.05	T		07	1.63	1.63	
08													08												08	0.00	0.00	
09													09												09	0.00	0.00	
10													10					0.01	0.02	T	T		0.01	0.01	10	0.05	0.05	
11	0.01	0.04	0.01	0.02									11												11	0.08	0.08	
12													12												12	0.00	0.00	
13													13												13	0.00	0.00	
14													14												14	0.00	0.00	
15								T	T				15	T											15	T	T	
16													16												16	0.00	0.00	
17													17	T	T										17	T	T	
18													18												18	0.01	0.01	
19													19	0.01	T	T									19	0.01	0.01	
20													20												20	0.00	0.00	
21													21												21	0.00	0.00	
22													22												22	0.00	0.00	
23													23												23	0.00	0.00	
24													24												24	0.00	0.00	
25													25												25	0.00	0.00	
26													26												26	0.00	0.00	
27					0.01	T	T	0.01	0.02	0.02	T	T	27								0.01	0.02	0.03	0.03	0.03	27	0.18	0.18
28	0.04	0.04	0.05	0.07	0.07	0.04	0.11	0.03	T	0.02	0.02	0.01	28			T	0.14	0.03	T	0.03					28	0.70	0.70	
29													29												29	0.00	0.00	
30													30												30	0.00*	T	
31													31												31	0.00	0.00	

\* Indicates sum of Hourly and Daily disagree.

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	0.06	0.08	0.09	0.11	0.15	0.21	0.26	0.29	0.33	0.35	0.41	0.47
Ending Date	07	07	07	07	07	07	07	07	07	07	07	07
Ending Time (Hr/Min)	0402	0405	0409	0415	0409	0830	0845	0907	0918	0918	0415	0415

Note : The hourly and daily precipitation totals are printed in the last 2 columns and hi-lighted in red when they disagree. 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.

Date and time are not entered for TRACE amounts.

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

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

# WILMINGTON, DE JANUARY 2009

Ceilometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR-SS), or midnight to midnight (MN-MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0-2 oktas, Partly Cloudy = 3-6 oktas, Cloudy = 7-8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

## ADDITIONAL NOTES:

Date	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			Sky Cover	Satellite	Sky Cover	Satellite			
01							10.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							3.00	10.00	
07							1.25	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							3.00	10.00	
11							1.75	10.00	
12							9.00	10.00	
13							5.00	10.00	
14							10.00	10.00	
15							5.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							0.50	10.00	
19							0.25	10.00	
20							6.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							7.00	10.00	
24							9.00	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							0.50	10.00	
28							0.25	10.00	
29							5.00	10.00	
30							3.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							6.76	10.00	
<b>SUNSHINE (Minutes)</b>									
Total : 0					Possible : 18136				
Percent Possible : 0									
<b>NUMBER OF DAYS WITH : SKY CONDITION</b>									
Clear		Partly CLDY			Cloudy			Missing	
<b>MINIMUM VISIBILITY (MILES)</b>									
<= .25			<= 3.0				>= 7.0		
2			9				18		

# OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE  
JANUARY 2009  
KILG

WBAN # 13781

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)						
			Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	STATION				SEA LEVEL	Observation Time (LST)			Eff Cld Amt Oktas	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL	
																														DRY BULB
SUNRISE: 0723 JAN 01 SUNSET: 1649													SUNRISE: 0723 JAN 07 SUNSET: 1654																	
01	SCT	050			10.00		24	6	19	46	16	32	30.02	30.11	01	OVC	006			3.00	+RA	BR	33	32	33	96	10	05	29.59	29.67
04	CLR	NC			10.00		22	3	17	44	21	32	30.10	30.19	04	OVC	008			4.00	+RA	BR	35	34	35	96	8	04	29.48	29.57
07	CLR	NC			10.00		19	1	15	45	17	32	30.22	30.30	07	OVC	004			4.00	RA	BR	36	35	36	96	5	05	29.36	29.44
10	CLR	NC			10.00		23	1	18	38	14	32	30.28	30.37	10	OVC	004			1.50	-RA	BR	37	37	37	100	3	04	29.31	29.39
13	CLR	NC			10.00		28	1	21	31	13	32	30.24	30.33	13	OVC	002			2.00	-RA	BR	38	37	38	96	9	13	29.12	29.20
16	CLR	NC			10.00		29	1	22	30	13	29	30.23	30.32	16	OVC	043			2.50	-RA	BR	39	38	39	96	0	00	29.13	29.21
19	CLR	NC			10.00		26	2	20	35	0	00	30.23	30.32	19	OVC	045			8.00	-RA		38	38	38	100	7	29	29.13	29.21
22	CLR	NC			10.00		22	9	19	57	0	00	30.17	30.26	22	OVC	060			10.00			40	37	39	89	14	26	29.18	29.26
SUNRISE: 0723 JAN 02 SUNSET: 1650													SUNRISE: 0723 JAN 08 SUNSET: 1655																	
01	CLR	NC			10.00		26	14	22	60	6	22	30.11	30.20	01	SCT	065			10.00			38	27	34	65	15	25	29.30	29.38
04	BKN	110			10.00		28	15	24	58	10	18	30.02	30.11	04	FEW	070			10.00			36	25	32	64	11	22	29.35	29.44
07	OVC	095			10.00		29	17	25	61	10	18	29.93	30.02	07	CLR	NC			10.00			36	27	33	70	10	22	29.41	29.49
10	SCT	060			10.00		33	17	28	52	8	22	29.90	29.98	10	BKN	110			10.00			39	21	32	48	21	26	29.49	29.57
13	OVC	028			10.00		36	16	29	44	17	24	29.83	29.92	13	FEW	055			10.00			40	17	32	39	21	26	29.46	29.54
16	CLR	NC			10.00		37	25	33	62	9	20	29.73	29.82	16	FEW	055			10.00			37	17	30	44	21	30	29.54	29.62
19	CLR	NC			10.00		32	24	29	72	5	19	29.72	29.80	19	FEW	050			10.00			33	17	28	52	17	29	29.64	29.72
22	FEW	120			10.00		32	28	31	85	7	24	29.72	29.81	22	CLR	NC			10.00			30	17	26	58	13	30	29.70	29.78
SUNRISE: 0723 JAN 03 SUNSET: 1651													SUNRISE: 0723 JAN 09 SUNSET: 1656																	
01	CLR	NC			10.00		32	26	30	79	8	25	29.77	29.85	01	CLR	NC			10.00			28	15	24	58	17	30	29.75	29.84
04	CLR	NC			10.00		34	16	28	48	14	31	29.88	29.96	04	CLR	NC			10.00			28	15	24	58	11	28	29.83	29.91
07	CLR	NC			10.00		27	15			9	31			07	CLR	NC			10.00			25	16	22	69	8	26	29.93	30.02
10	CLR	NC			10.00		34	14			13	28			10	CLR	NC			10.00			32	17	27	54	10	28	30.02	30.11
13	CLR	NC			10.00		38	11			15	30			13	OVC	045			10.00			34	15	28	46	20	30	30.01	30.10
16	CLR	NC			10.00		37	12	29	36	15	32	30.01	30.10	16	OVC	060			10.00			34	16	28	48	15	28	30.07	30.16
19	CLR	NC			10.00		30	13	25	49	6	32	30.06	30.15	19	CLR	NC			10.00			29	15	25	56	7	29	30.14	30.24
22	CLR	NC			10.00		29	15	25	56	6	29	30.07	30.16	22	CLR	NC			10.00			27	15	23	61	6	30	30.19	30.28
SUNRISE: 0723 JAN 04 SUNSET: 1651													SUNRISE: 0723 JAN 10 SUNSET: 1657																	
01	CLR	NC			10.00		27	16	24	63	6	26	30.07	30.16	01	OVC	055			10.00			29	15	25	56	7	35	30.19	30.28
04	CLR	NC			10.00		25	15	22	66	6	26	30.07	30.16	04	OVC	080			10.00			30	15	25	54	6	01	30.19	30.28
07	CLR	NC			10.00		23	15	21	71	5	29	30.07	30.16	07	OVC	070			10.00			30	17	26	58	7	07	30.22	30.30
10	CLR	NC			10.00		33	15	27	48	5	30	30.10	30.19	10	OVC	060			10.00			31	18	27	59	8	10	30.20	30.29
13	CLR	NC			10.00		43	10	32	26	0	00	30.03	30.12	13	OVC	080			10.00			34	19	29	54	8	09	30.07	30.16
16	OVC	044			10.00		42	13	32	31	6	23	30.01	30.09	16	FEW	080			10.00			35	24	31	64	16	05	29.98	30.06
19	OVC	033			10.00		41	17	33	38	5	25	30.01	30.09	19	OVC	048			10.00			33	30	32	89	10	06	29.91	30.00
22	OVC	032			10.00		41	20	33	43	6	23	29.98	30.06	22	OVC	049			5.00	BR		33	31	32	92	10	06	29.82	29.90
SUNRISE: 0723 JAN 05 SUNSET: 1652													SUNRISE: 0723 JAN 11 SUNSET: 1658																	
01	OVC	042			10.00		40	23	34	51	5	21	29.91	30.00	01	OVC	003			2.50	-RA	BR	33	32	33	96	6	01	29.72	29.81
04	OVC	038			10.00		39	32	36	76	3	27	29.90	29.98	04	OVC	039			3.00	BR		34	33	34	96	5	31	29.67	29.76
07	SCT	090			10.00		38	31	35	76	5	22	29.91	29.99	07	FEW	031			3.00	BR		33	31	32	92	8	31	29.75	29.84
10	FEW	060			10.00		44	33	39	65	7	32	29.94	30.03	10	OVC	030			9.00			35	27	32	73	18	30	29.88	29.96
13	FEW	050			10.00		46	29	39	52	16	31	29.90	29.98	13	OVC	032			10.00			34	22	30	62	15	32	29.91	29.99
16	CLR	NC			10.00		44	26	37	49	10	31	29.90	29.98	16	CLR	NC			10.00			32	19	28	59	13	32	29.91	30.00
19	FEW	120			10.00		40	23	34	51	7	31	29.94	30.03	19	BKN	030			10.00			28	18	25	66	15	33	29.96	30.04
22	OVC	070			10.00		40	17	32	39	6	30	29.96	30.05	22	CLR	NC			10.00			24	16	22	71	6	33	29.96	30.06
SUNRISE: 0723 JAN 06 SUNSET: 1653													SUNRISE: 0722 JAN 12 SUNSET: 1659																	
01	OVC	095			10.00		39	14	31	36	9	33	29.94	30.03	01	FEW	038			10.00			24	16	22	71	5	29	29.96	30.05
04	OVC	090			10.00		37	12	29	36	5	36	29.96	30.04	04	OVC	049			10.00			24	19	22	81	3	29	30.01	30.09
07	OVC	090			10.00		37	10	29	33	7	05	29.96	30.05	07	CLR	NC			10.00			27	17	24	66	10	29	30.06	30.15
10	BKN	050			10.00		37	7	28	28	10	09	29.96	30.05	10	CLR	NC			10.00			31	16	26	54	10	32	30.16	30.26
13	OVC	040			10.00	-RA	35	17	29	48	6	10	29.90	29.98	13	SCT	045			10.00			34	16	28	48	14	31	30.16	30.25
16	OVC	032			10.00	-RA	33	24	30	70	10	04	29.85	29.94	16	CLR	NC			10.00			34	17	28	50	7	33	30.16	30.25
19	OVC	024			3.00	UP BR	32	30	31	92	11	05	29.83	29.92	19	CLR	NC			10.00			30	17	26	58	0	00	30.22	30.31
22	OVC	004			4.00	-RA BR	33	31	32	92	15	06	29.72	29.81	22	CLR	NC			10.00			27	18	24	69	0	00	30.23	30.32

# OBSERVATIONS AT 3-HOURLY INTERVALS

**WILMINGTON, DE**  
**JANUARY 2009**  
**KILG**

**WBAN # 13781**

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)													
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)				STATION	SEA LEVEL		Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	STATION	SEA LEVEL								
																												Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	STATION
<b>SUNRISE: 0722</b>						<b>JAN 13</b>						<b>SUNSET: 1700</b>						<b>SUNRISE: 0720</b>						<b>JAN 19</b>						<b>SUNSET: 1707</b>					
01	CLR	NC			10.00						27	19	24	72	7	14	30.22	30.30	01	OVC	008			0.25	FZFG	28	27	28	96	7	10	29.64	29.72		
04	CLR	NC			9.00						26	20	24	78	3	14	30.17	30.26	04	OVC	001			1.75	BR	28	27	28	96	6	35	29.64	29.72		
07	CLR	NC			9.00						27	22	25	81	7	12	30.10	30.19	07	OVC	003			1.75	BR	27	26	27	96	0	00	29.62	29.71		
10	CLR	NC			7.00						33	29	31	85	5	15	30.03	30.12	10	OVC	003			2.00	BR	29	27	28	92	0	00	29.62	29.71		
13	CLR	NC			10.00						40	28	35	62	8	16	29.91	29.99	13	OVC	040			1.50	-SN BR	31	29	30	92	5	04	29.56	29.64		
16	CLR	NC			10.00						37	29	34	73	0	00	29.80	29.89	16	OVC	012			7.00		30	26	29	85	8	35	29.56	29.64		
19	CLR	NC			10.00						33	28	31	82	3	32	29.73	29.82	19	FEW	037			8.00		23	21	22	92	7	31	29.61	29.70		
22	CLR	NC			8.00						33	28	31	82	3	26	29.72	29.80	22	CLR	NC			5.00	BR	21	19	20	92	7	31	29.62	29.71		
<b>SUNRISE: 0722</b>						<b>JAN 14</b>						<b>SUNRISE: 0719</b>						<b>JAN 20</b>						<b>SUNSET: 1708</b>											
01	SCT	060			10.00						34	25	31	70	16	30	29.75	29.83	01	CLR	NC			6.00	HZ	20	15	19	81	9	31	29.65	29.74		
04	CLR	NC			10.00						26	9	21	48	24	30	29.91	29.99	04	CLR	NC			9.00		17	11	15	77	9	32	29.65	29.73		
07	CLR	NC			10.00						20	2	16	45	14	31	30.04	30.13	07	CLR	NC			8.00		16	9	14	74	5	31	29.64	29.72		
10	CLR	NC			10.00						22	3	17	44	17	31	30.11	30.20	10	CLR	NC			10.00		23	14	20	68	11	34	29.69	29.77		
13	FEW	120			10.00						25	1	19	35	10	32	30.09	30.17	13	CLR	NC			10.00		28	14	24	56	13	34	29.64	29.72		
16	FEW	090			10.00						24	1	18	37	5	25	30.06	30.15	16	CLR	NC			10.00		29	11	24	47	17	34	29.61	29.69		
19	OVC	110			10.00						24	3	19	40	5	24	30.07	30.16	19	CLR	NC			10.00		24	11	20	58	10	32	29.69	29.77		
22	OVC	080			10.00						25	8	20	48	5	09	30.06	30.14	22	CLR	NC			10.00		22	10	19	60	9	32	29.75	29.83		
<b>SUNRISE: 0721</b>						<b>JAN 15</b>						<b>SUNRISE: 0719</b>						<b>JAN 21</b>						<b>SUNSET: 1709</b>											
01	OVC	110			10.00						25	10	21	53	7	09	29.99	30.09	01	CLR	NC			10.00		19	10	17	68	6	31	29.78	29.86		
04	BKN	065			10.00						24	10	20	55	7	05	29.96	30.04	04	CLR	NC			10.00		18	9	16	68	5	28	29.82	29.91		
07	OVC	070			10.00						24	10	20	55	9	33	30.01	30.10	07	SCT	031			10.00		19	9	16	65	13	31	29.88	29.97		
10	FEW	065			10.00						23	14	20	68	17	31	30.14	30.22	10	CLR	NC			10.00		20	4	16	50	21	31	29.96	30.05		
13	BKN	041			10.00						26	6	21	42	21	32	30.16	30.25	13	CLR	NC			10.00		26	5	20	40	15	30	29.93	30.01		
16	BKN	055			10.00						22	1	17	40	15	30	30.22	30.31	16	CLR	NC			10.00		27	5	21	39	13	29	29.91	30.01		
19	CLR	NC			10.00						18	1	14	47	13	30	30.32	30.41	19	CLR	NC			10.00		25	6	20	44	3	25	29.94	30.03		
22	CLR	NC			10.00						16	-1	12	47	8	28	30.36	30.45	22	CLR	NC			10.00		23	8	19	52	7	25	29.96	30.04		
<b>SUNRISE: 0721</b>						<b>JAN 16</b>						<b>SUNRISE: 0718</b>						<b>JAN 22</b>						<b>SUNSET: 1710</b>											
01	CLR	NC			10.00						15	-0	12	51	8	28	30.38	30.47	01	CLR	NC			10.00		23	5			9	28				
04	CLR	NC			10.00						12	2	10	64	7	29	30.40	30.50	04	CLR	NC			10.00		23	6			7	27				
07	CLR	NC			10.00						11	-0	9	61	6	30	30.46	30.55	07	CLR	NC			10.00		22	7			6	23				
10	CLR	NC			10.00						15	-5	11	40	20	30	30.52	30.61	10	CLR	NC			10.00		33	12	27	42	10	26	30.01	30.09		
13	CLR	NC			10.00						17	-7	12	34	14	27	30.47	30.57	13	CLR	NC			10.00		40	12	31	32	14	22	29.93	30.02		
16	CLR	NC			10.00						17	-7	12	34	16	30	30.46	30.55	16	CLR	NC			10.00		41	13	32	32	8	24	29.93	30.01		
19	CLR	NC			10.00						13	-7	9	40	11	30	30.52	30.61	19	CLR	NC			10.00		34	10	27	37	6	22	29.96	30.04		
22	CLR	NC			10.00						9	-5	7	53	8	32	30.54	30.63	22	CLR	NC			10.00		31	10			0	00				
<b>SUNRISE: 0721</b>						<b>JAN 17</b>						<b>SUNRISE: 0717</b>						<b>JAN 23</b>						<b>SUNSET: 1711</b>											
01	CLR	NC			10.00						8	-5	6	55	7	29	30.54	30.63	01	CLR	NC			10.00		26	14			0	00				
04	CLR	NC			10.00						6	-4	4	63	5	26	30.53	30.63	04	CLR	NC			10.00		24	15			0	00				
07	CLR	NC			10.00						6	-3	4	66	6	25	30.52	30.61	07	CLR	NC			10.00		24	17			0	00				
10	CLR	NC			10.00						12	-3	9	51	6	27	30.54	30.63	10	CLR	NC			10.00		35	21	30	57	3	19	29.96	30.05		
13	CLR	NC			10.00					UP	18	-4	14	37	6	24	30.42	30.51	13	CLR	NC			10.00		47	23	38	39	11	17	29.83	29.92		
16	CLR	NC			10.00						19	-0	15	43	10	15	30.31	30.40	16	CLR	NC			10.00		44	23	36	44	13	17	29.78	29.86		
19	OVC	110			10.00						19	5	16	54	9	13	30.27	30.37	19	CLR	NC			10.00		36	29	33	76	3	14	29.75	29.83		
22	OVC	065			10.00						22	5	18	48	17	16	30.20	30.29	22	CLR	NC			10.00		38	29	34	70	0	00	29.70	29.79		
<b>SUNRISE: 0720</b>						<b>JAN 18</b>						<b>SUNRISE: 0717</b>						<b>JAN 24</b>						<b>SUNSET: 1712</b>											
01	OVC	060			10.00						25	15	22	66	18	17	30.09	30.17	01	CLR	NC			10.00		39	27	34	62	6	22	29.70	29.79		
04	OVC	055			10.00						27	16	24	63	11	18	29.98	30.08	04	SCT	120			10.00		44	29	38	56	20	31	29.78	29.85		
07	OVC	060			10.00						30	18	26	61	10	16	29.93	30.01	07	SCT	110			9.00		40	23	34	51	14	30	29.88	29.96		
10	OVC	065			10.00						32	18	27	56	11	16	29.90	29.98	10	CLR	NC			10.00		38	20	32	48	18	29	29.98	30.06		
13	SCT	100			10.00						36	18	30	48	13	17	29.78	29.87	13	FEW	045			10.00		38	15	30	39	20	33	30.01	30.09		
16	OVC	047			10.00						35	16	29	46	8	19	29.70	29.80	16	CLR	NC			10.00		34	8	26	34	20	31	30.07	30.16		
19	OVC	027			1.25						30	27	29	89	0	00	29.72	29.80	19	CLR	NC			10.00		27	9	22	47	11	32	30.17	30.26		
22	OVC	055			4.00						30	28	29	92	0	00	29.69	29.77	22	CLR	NC														

# OBSERVATIONS AT 3-HOURLY INTERVALS

WILMINGTON, DE  
JANUARY 2009  
KILG

WBAN # 13781

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)								
			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					
<b>SUNRISE: 0716      JAN 25      SUNSET: 1714</b>						01	CLR	NC			10.00	21	3	17	45	7	34	30.24	30.33
04	CLR	NC				10.00	20	3	16	47	3	34	30.28	30.37					
07	CLR	NC				10.00	18	2	14	49	3	02	30.27	30.35					
10	CLR	NC				10.00	24	3	19	40	5	28	30.31	30.40					
13	CLR	NC				10.00	28	5	22	37	7	VR	30.22	30.32					
16	CLR	NC				10.00	29	3	22	33	3	32	30.22	30.29					
19	OVC	070				10.00	29	8	23	41	0	00	30.25	30.34					
22	BKN	075				10.00	25	5	20	42	8	34	30.28	30.37					
<b>SUNRISE: 0715      JAN 26      SUNSET: 1715</b>						01	CLR	NC			10.00	23	9	19	55	6	34	30.30	30.40
04	OVC	110				10.00	23	8	19	52	7	01	30.32	30.41					
07	OVC	120				10.00	22	8	18	55	8	36	30.36	30.45					
10	CLR	NC				10.00	24	8	20	50	3	35	30.39	30.48					
13	OVC	095				10.00	27	8	22	44	5	25	30.35	30.43					
16	OVC	085				10.00	28	11	23	49	3	28	30.31	30.40					
19	OVC	080				10.00	28	14	24	56	5	29	30.35	30.44					
22	OVC	065				10.00	28	15	24	58	6	26	30.35	30.45					
<b>SUNRISE: 0715      JAN 27      SUNSET: 1716</b>						01	OVC	045			10.00	28	18	25	66	0	00	30.35	30.43
04	OVC	039				10.00	28	19	25	69	3	32	30.35	30.43					
07	OVC	028			-SN BR	2.50	26	23	25	88	3	36	30.38	30.47					
10	OVC	009			-SN BR	1.00	27	24	26	88	3	34	30.44	30.53					
13	BKN	085				10.00	29	19	26	66	0	00	30.38	30.47					
16	OVC	070				10.00	29	18	25	63	5	10	30.35	30.44					
19	OVC	040				10.00	29	20	26	69	5	13	30.35	30.43					
22	OVC	016			-SN BR	1.50	26	24	25	92	5	10	30.31	30.40					
<b>SUNRISE: 0714      JAN 28      SUNSET: 1717</b>						01	OVC	010			1.25	25	23	24	92	9	08	30.22	30.31
04	OVC	008			FZRA BR	5.00	27	24	26	88	10	06	30.14	30.22					
07	OVC	004			FZRA BR	4.00	29	28	29	96	8	06	29.99	30.09					
10	OVC	002			UP BR	1.00	32	31	32	96	6	05	29.83	29.91					
13	OVC	005			FG	0.25	33	33	33	100	0	00	29.62	29.70					
16	OVC	022			RA BR	2.50	34	33	34	96	14	26	29.54	29.63					
19	SCT	100				10.00	40	35	38	82	21	28	29.54	29.63					
22	CLR	NC				10.00	37	25	33	62	18	29	29.70	29.79					
<b>SUNRISE: 0713      JAN 29      SUNSET: 1718</b>						01	CLR	NC			10.00	30	18	26	61	14	30	29.83	29.91
04	CLR	NC				10.00	26	15	23	63	10	31	29.90	29.98					
07	CLR	NC				10.00	24	14	21	66	10	31	29.93	30.01					
10	CLR	NC				10.00	28	14	24	56	14	31	29.98	30.06					
13	CLR	NC				10.00	31	17	26	56	16	29	29.91	30.01					
16	CLR	NC				10.00	33	18	28	54	9	29	29.90	29.98					
19	CLR	NC				10.00	29	17	25	61	3	33	29.91	30.01					
22	CLR	NC				8.00	26	18	23	72	3	21	29.93	30.01					
<b>SUNRISE: 0712      JAN 30      SUNSET: 1720</b>						01	CLR	NC			4.00	20	17	19	88	0	00	29.91	29.99
04	CLR	NC			BR	5.00	22	19	21	88	0	00	29.91	29.98					
07	CLR	NC				7.00	20	18	19	92	0	00	29.88	29.97					
10	OVC	050			HZ	3.00	29	24	27	82	0	00	29.91	30.00					
13	OVC	055				7.00	33	25	30	72	3	22	29.83	29.92					
16	BKN	065				10.00	38	19	31	46	8	28	29.80	29.89					
19	BKN	080				10.00	30	18	26	61	15	28	29.85	29.94					
22	CLR	NC				10.00	28	10	23	47	16	28	29.88	29.98					

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)								
			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					
<b>SUNRISE: 0711      JAN 31      SUNSET: 1721</b>						01	CLR	NC			10.00	24	11	20	58	5	28	29.90	29.98
04	CLR	NC				10.00	20	13	18	74	9	30	29.91	30.01					
07	CLR	NC				10.00	19	8	16	62	11	30	29.96	30.05					
10	CLR	NC				10.00	24	7	20	48	21	30	30.02	30.11					
13	CLR	NC				10.00	26	9	21	48	16	31	29.98	30.07					
16	CLR	NC				10.00	28	7	22	41	10	28	30.01	30.09					
19	CLR	NC				10.00	27	8	22	44	7	26	30.02	30.11					
22	BKN	075				10.00	26	12	22	55	5	19	30.01	30.10					

## 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, W = 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.

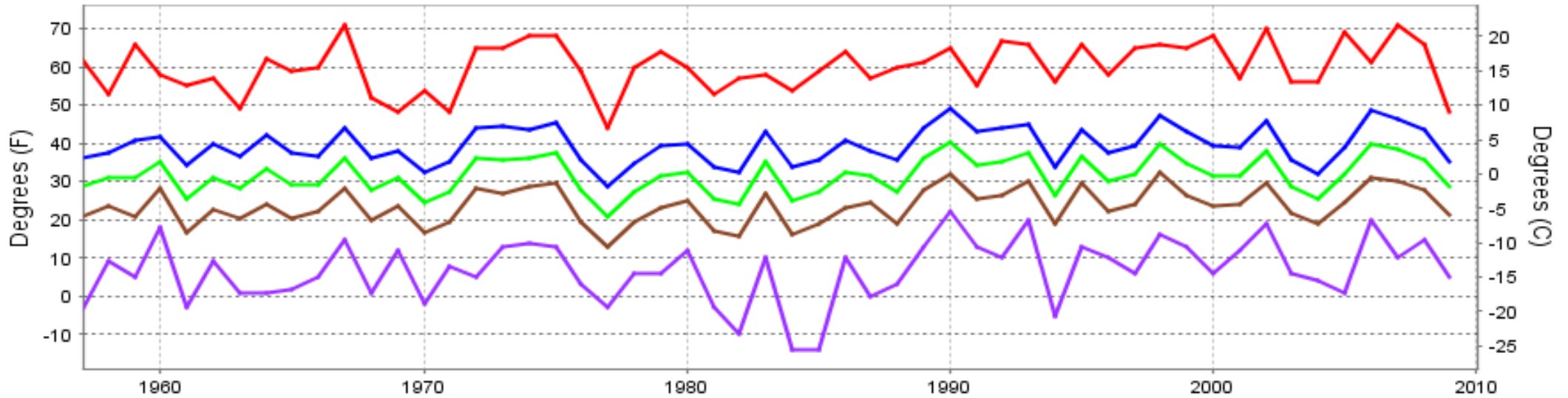
& = Original observation contained additional weather elements.

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			27	16	24	66	29.96	30.05	8.61	8	4	29
02			26	16	24	67	29.96	30.05	8.78	7	3	29
03			26	16	23	67	29.97	30.05	8.91	8	4	29
04			26	16	23	66	29.97	30.06	8.93	8	4	29
05			26	16	23	67	29.97	30.06	8.74	8	4	29
06			25	15	23	68	29.98	30.06	8.38	8	4	29
07			25	15	23	68	29.99	30.08	8.65	8	4	29
08			25	15	22	69	30.00	30.09	8.23	8	4	29
09			27	16	24	64	30.02	30.10	8.34	9	5	29
10			29	16	25	59	30.02	30.11	8.53	10	6	28
11			31	16	26	57	30.01	30.10	8.76	11	6	28
12			32	16	27	53	29.99	30.07	9.27	11	7	28
13			33	15	27	51	29.96	30.04	9.06	11	7	28
14			33	15	28	50	29.94	30.02	9.33	11	7	28
15			33	16	28	51	29.93	30.02	9.37	12	6	28
16			33	15	27	51	29.94	30.02	9.42	10	6	28
17			31	16	26	55	29.94	30.03	9.61	9	5	29
18			30	16	26	59	29.95	30.04	9.45	8	4	29
19			29	16	26	61	29.96	30.05	9.36	7	5	29
20			29	17	25	62	29.97	30.05	8.94	6	4	29
21			29	16	25	62	29.97	30.05	8.90	7	4	29
22			28	16	25	64	29.97	30.05	8.89	7	4	29
23			27	16	24	66	29.97	30.05	8.79	7	4	29
24			27	16	24	66	29.96	30.05	8.66	7	3	29

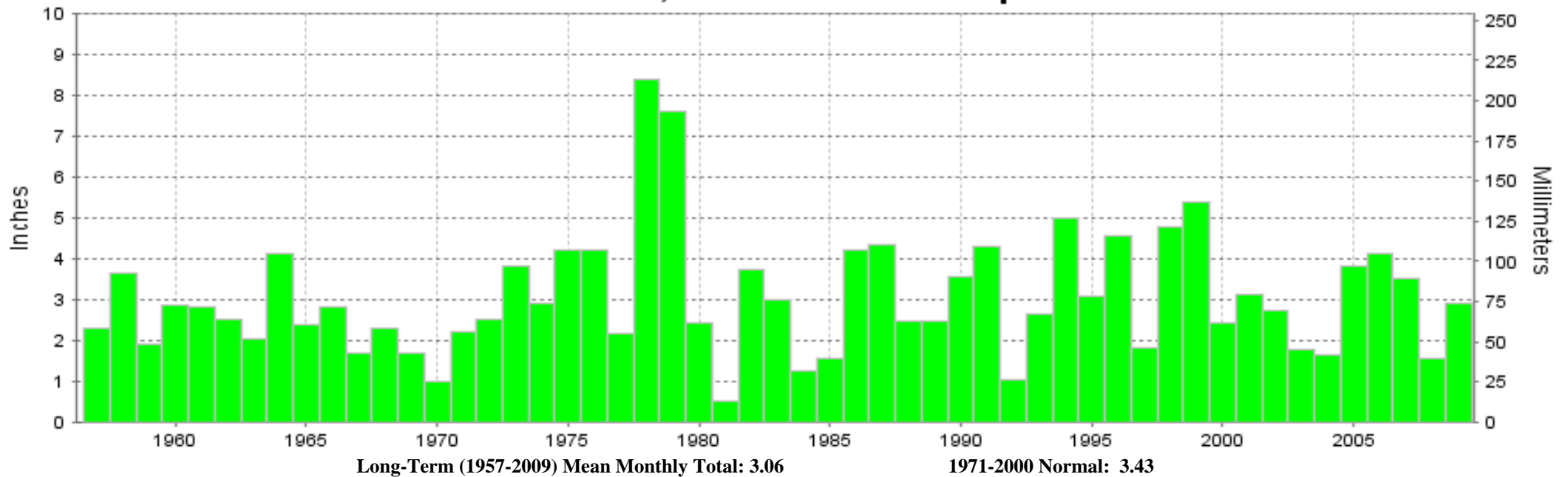
## WILMINGTON, DE JANUARY Temperatures



— Extreme Max — Mean Max — Mean — Mean Min — Extreme Min

Long-Term (1957-2009) Mean: 31.6  
1971-2000 Normal: 31.5

## WILMINGTON, DE JANUARY Precipitation



Long-Term (1957-2009) Mean Monthly Total: 3.06

1971-2000 Normal: 3.43



**JANUARY 2009  
WILMINGTON, DE**

**LOCAL CLIMATOLOGICAL DATA  
NOAA, National Climatic Data Center**

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*Thomas R. Karl*  
**DIRECTOR**

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