

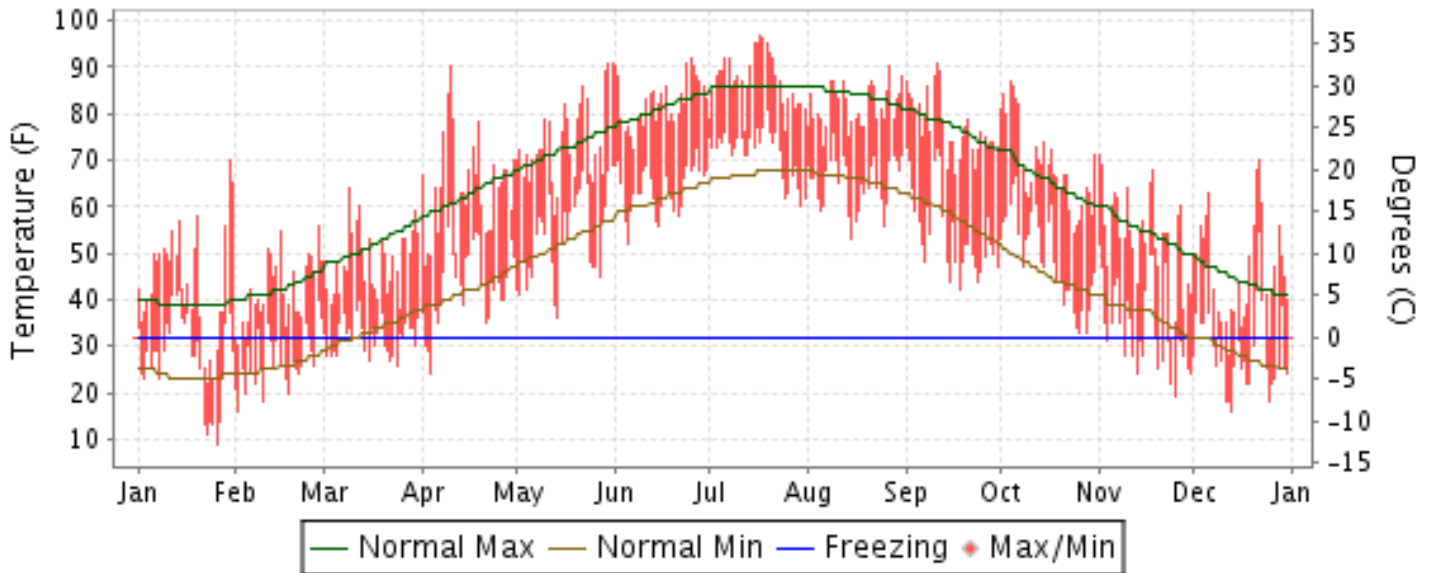


# 2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

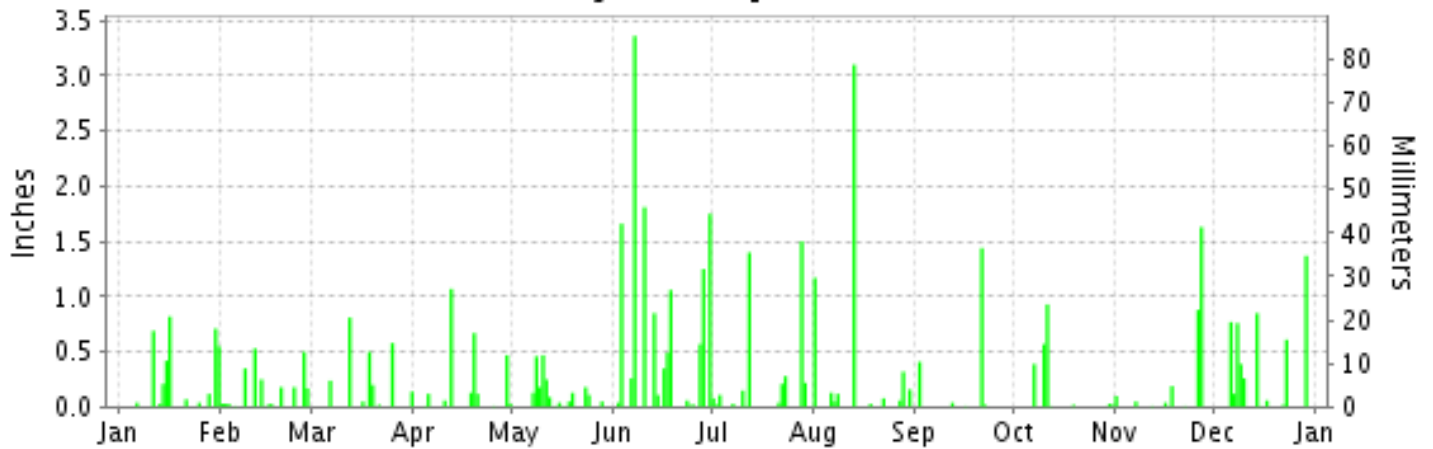
ISSN 0198-1145

## WILMINGTON, DELAWARE (KILG)

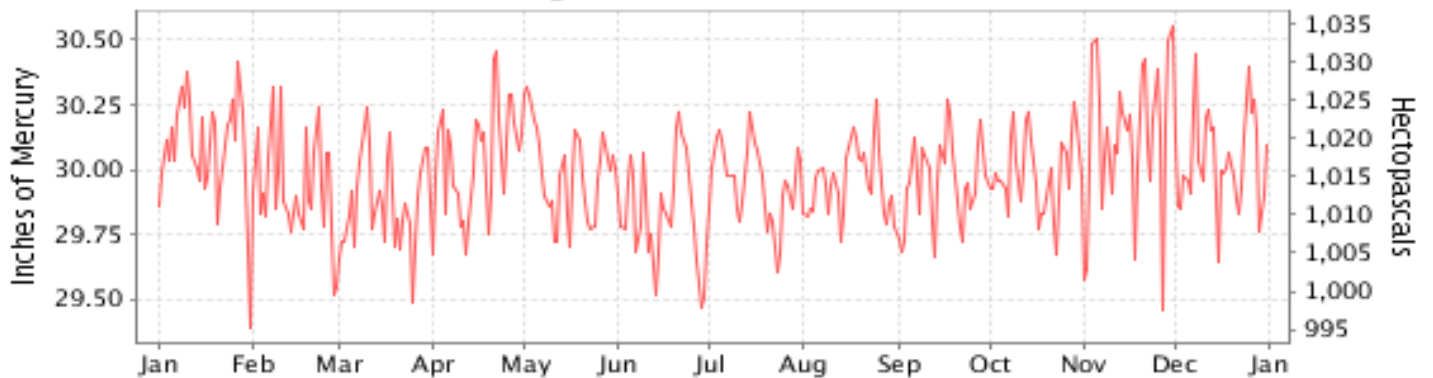
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



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NATIONAL  
CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2013

## WILMINGTON (KILG)

LATITUDE: 39° 40'N      LONGITUDE: 75° 36'W      ELEVATION (FT): GRND: 79 BARO: 77      TIME ZONE: EASTERN (UTC -5)      WBAN: 13781

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	43.6	42.0	48.5	64.4	73.8	82.5	87.2	81.7	77.4	69.1	53.7	45.8	64.1	
	HIGHEST DAILY MAXIMUM	70	56	64	90	91	92	97	90	91	87	71	70	97	
	DATE OF OCCURRENCE	30	27	09	10	31+	25	17	27	11	04	01	22	JUL 17	
	MEAN DAILY MINIMUM	27.6	27.1	32.0	43.5	53.5	63.9	71.7	65.3	54.8	49.0	34.1	29.3	46.0	
	LOWEST DAILY MINIMUM	9	16	26	24	36	52	60	53	42	33	19	16	9	
	DATE OF OCCURRENCE	26	02	24	04	14	05	30	15	18	28+	25	13	JAN 26	
	AVERAGE DRY BULB	35.6	34.5	40.3	54.0	63.7	73.2	79.5	73.5	66.1	59.0	43.9	37.6	55.1	
	MEAN WET BULB	32.4		35.0	47.3	56.9	66.6		67.5	60.0	53.8	38.6	34.8		
	MEAN DEW POINT	25.3		25.9	39.1	51.3	62.7		63.8	55.2	48.9	29.8	29.0		
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	1	2	4	10	1	1	0	0	0	0	19
MAXIMUM <= 32°	5	3	0	0	0	0	0	0	0	0	1	3	12		
MINIMUM <= 32°	20	23	15	3	0	0	0	0	0	0	17	22	100		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	903	847	759	340	125	0	0	0	69	227	625	843	4738	
	COOLING DEGREE DAYS	0	0	0	17	90	253	455	270	107	49	0	0	1241	
RH	MEAN (PERCENT)	67	66	59	61	68	72	73	74	69	72	60	71	68	
	HOUR 01 LST	73	72	66	72	82	84	86	86	84	83	68	78	78	
	HOUR 07 LST	72	74	66	65	72	73	76	77	74	78	67	77	73	
	HOUR 13 LST	55	55	48	47	52	58	60	60	49	54	47	60	54	
	HOUR 19 LST	67	67	57	59	65	74	74	74	70	74	59	69	67	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	3	2	1	1	3	4	1	1	0	3	2	4	25	
	THUNDERSTORMS	0	0	0	0	2	8	4	1	1	0	0	0	16	
PR	MEAN STATION PRESS. (IN.)	30.07	29.93	29.87	30.04	29.99	29.85	29.95	29.95	29.96	29.99	30.11	30.04	29.98	
	MEAN SEA-LEVEL PRESS. (IN.)	30.17	30.02	29.96	30.13	30.08	29.93	30.03	30.04	30.04	30.08	30.21	30.14	30.07	
WINDS	RESULTANT SPEED (MPH)	4.3	5.1	6.2	0.3	0.7	2.5	2.6	1.5	1.5	1.5	4.3	3.0	2.2	
	RES. DIR. (TENS OF DEGS.)	28	32	32	17	24	22	23	25	32	02	29	29	30	
	MEAN SPEED (MPH)	7.4	9.7	11.1	9.3	8.0	7.0	6.9	6.1	6.3	7.7	8.7	7.0	7.9	
	PREVAIL.DIR.(TENS OF DEGS.)	32	30	30	16	31	17	23	32	32	05	31	32	30	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	36	35	37	36	29	32	23	30	35	30	36	29	37	
	DIR. (TENS OF DEGS.)	28	30	04	35	31	29	04	35	31	25	31	31	04	
	DATE OF OCCURRENCE	31	01	06	10	25	25	12	13	02	07	24	24	MAR 06	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	47	43	48	46	39	43	33	39	45	38	45	37	48	
DIR. (TENS OF DEGS.)	29	29	03	21	30	30	29	35	33	25	31	30	03		
DATE OF OCCURRENCE	31	17	06	19	25	25	29	13	02	07	24	24	MAR 06		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	3.70	2.31	2.54	2.69	2.16	13.66	4.05	5.22	1.92	1.97	2.91	5.22	48.35	
	GREATEST 24-HOUR (IN.)	1.26	0.67	0.81	1.07	0.65	3.42	1.72	3.10	1.46	1.04	2.35	1.37	3.42	
	DATE OF OCCURRENCE	30-31	26-27	12	12	10-11	06-07	28-29	13	21-22	10-11	26-27	29	JUN 06-07	
	NUMBER OF DAYS WITH:														
PRECIPITATION 0.01	11	13	8	10	14	16	12	10	5	7	8	11	125		
PRECIPITATION 0.10	7	7	6	6	8	12	7	6	2	3	4	8	76		
PRECIPITATION 1.00	0	0	0	1	0	6	2	2	1	0	1	1	14		
SNOWFALL	SNOW,ICE PELLETS,HAIL	1.9	1.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	11.9	16.7	
	TOTAL (IN.)	1.0	0.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	8.5	8.5	
	GREATEST 24-HOUR (IN.)	21	03+	25								12	08	DEC 08	
	DATE OF OCCURRENCE	1	1	1	0	0	0	0	0	0	0	0	6	6	
	MAXIMUM SNOW DEPTH (IN.)	26+	03	25									09	DEC 09	
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	1	0	1	0	0	0	0	0	0	0	0	2	4		

# NORMALS, MEANS, AND EXTREMES WILMINGTON (KILG)

LATITUDE:  
39° 40'N

LONGITUDE:  
75° 36'W

ELEVATION (FT):  
GRND: 79 BARO: 77

TIME ZONE:  
EASTERN (UTC -5)

WBAN: 13781

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	40.2	43.5	52.4	63.5	73.0	81.8	86.1	84.2	77.4	66.2	55.7	44.6	64.1
	MEAN DAILY MAXIMUM	66	40.0	42.8	51.8	63.3	72.9	81.5	86.0	84.1	77.5	66.5	55.3	44.3	63.8
	HIGHEST DAILY MAXIMUM	66	75	78	86	94	96	100	103	101	100	91	85	75	103
	YEAR OF OCCURRENCE		1950	1985	1998	1985	2011	1994	2010	1955	1983	1951	1950	1998	JUL 2010
	MEAN OF EXTREME MAXS.	66	60.3	62.2	73.2	82.7	88.3	93.3	95.6	93.4	89.8	81.9	72.5	63.8	79.8
	NORMAL DAILY MINIMUM	30	24.6	26.8	33.6	43.0	52.6	62.6	67.6	66.1	58.2	46.1	37.4	28.7	45.6
	MEAN DAILY MINIMUM	66	24.1	25.7	33.1	42.3	52.2	61.6	67.0	65.5	58.0	46.1	36.8	28.1	45.0
	LOWEST DAILY MINIMUM	66	-14	-6	2	18	30	41	48	43	36	24	14	-7	-14
	YEAR OF OCCURRENCE		1985	1979	1984	1982	1978	1972	1988	1982	1974	1976	1955	1983	JAN 1985
	MEAN OF EXTREME MINS.	66	7.7	10.0	18.3	29.2	38.6	49.2	56.2	53.7	43.1	32.0	22.5	13.1	31.1
	NORMAL DRY BULB	30	32.4	35.1	43.0	53.3	62.8	72.2	76.8	75.2	67.8	56.2	46.6	36.7	54.8
	MEAN DRY BULB	66	32.1	34.3	42.4	52.8	62.6	71.7	76.6	74.9	67.8	56.3	46.0	36.2	54.5
	MEAN WET BULB	30	27.8	29.4	35.7	45.1	55.4	64.2	68.6	67.5	61.2	50.4	40.7	32.5	48.2
	MEAN DEW POINT	30	24.9	25.6	32.3	42.0	52.9	62.0	66.7	65.9	59.5	48.2	37.8	28.9	45.6
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.2	0.8	3.4	7.7	4.4	1.1	0.0	0.0	0.0	17.6
	MAXIMUM <= 32	30	6.4	3.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	13.1
	MINIMUM <= 32	30	23.8	20.8	13.1	1.9	0.0	0.0	0.0	0.0	0.0	0.8	8.4	20.6	89.4
MINIMUM <= 0	30	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	
H/C	NORMAL HEATING DEG. DAYS	30	1010	836	683	363	135	15	0	2	50	292	554	879	4819
	NORMAL COOLING DEG. DAYS	30	0	0	1	11	67	231	367	316	134	18	0	0	1145
RH	NORMAL (PERCENT)	30	68	65	63	63	68	69	70	72	73	72	69	69	68
	HOURLY 01 LST	30	73	71	70	71	79	81	81	83	84	82	76	74	77
	HOURLY 07 LST	30	76	74	73	72	76	77	79	83	85	85	80	76	78
	HOURLY 13 LST	30	60	55	51	50	54	55	55	57	57	55	56	59	55
	HOURLY 19 LST	30	67	62	59	57	63	64	64	68	71	69	67	67	65
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	3.3	2.5	2.4	1.6	1.7	1.3	1.0	1.3	1.5	3.0	2.9	2.9	25.4
	THUNDERSTORMS	66	0.2	0.3	1.0	2.0	3.7	5.3	5.8	5.1	2.3	0.7	0.5	0.2	27.1
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	1	2.0	2.0	6.0		8.0	9.0	3.0	7.0	5.0	9.0		5.0	
	PARTLY CLOUDY	1	1.0	1.0	6.0		4.0	5.0	1.0	4.0	3.0	2.0		2.0	
	CLOUDY	1	4.0	5.0	11.0		6.0	8.0		2.0	7.0	3.0		8.0	
PR	MEAN STATION PRESSURE(IN)	30	30.00	29.98	29.96	29.90	29.91	29.88	29.90	29.93	29.98	29.99	30.02	30.01	29.96
	MEAN SEA-LEVEL PRES. (IN)	30	30.09	30.07	30.05	29.98	29.99	29.97	29.98	30.02	30.06	30.08	30.11	30.10	30.04
WINDS	MEAN SPEED (MPH)	30	9.2	9.7	10.3	9.8	8.5	7.8	7.4	7.0	7.4	7.6	8.5	8.8	8.5
	PREVAIL.DIR(TENS OF DEGS)	38	31	31	31	31	17	17	31	19	32	32	31	31	31
	MAXIMUM 2-MINUTE: SPEED (MPH)	19	51	45	47	46	48	52	45	40	43	46	47	45	52
	DIR. (TENS OF DEGS)		15	30	24	33	24	31	32	14	13	16	29	16	31
	YEAR OF OCCURRENCE		1999	2011	2008	1995	1999	2009	1995	1997	2003	2012	2003	2012	JUN 2009
	MAXIMUM 3-SECOND SPEED (MPH)	19	61	60	56	60	61	76	56	56	53	58	61	62	76
	DIR. (TENS OF DEGS)		23	26	24	29	23	31	26	03	12	16	29	31	31
YEAR OF OCCURRENCE		1999	2009	2008	2007	1999	2009	2006	2011	2003	2012	2005	2010	JUN 2009	
PRECIPITATION	NORMAL (IN)	30	3.01	2.68	3.92	3.50	3.95	3.88	4.57	3.25	4.32	3.42	3.10	3.48	43.08
	MAXIMUM MONTHLY (IN)	66	8.41	7.02	9.17	8.55	7.38	13.66	12.63	14.70	12.68	8.01	7.84	8.58	14.70
	YEAR OF OCCURRENCE		1978	1979	2000	2007	1983	2013	1989	2011	1999	1995	1972	2009	AUG 2011
	MINIMUM MONTHLY (IN)	66	0.52	0.30	0.29	0.35	0.22	0.21	0.16	0.25	.44	0.08	0.49	0.19	0.08
	YEAR OF OCCURRENCE		1981	2009	2006	1985	1964	1988	1955	1972	2005	2000	1976	1955	OCT 2000
	MAXIMUM IN 24 HOURS (IN)	66	2.53	2.35	4.87	4.39	2.72	4.35	6.83	6.94	8.43	3.88	3.83	2.38	8.43
	YEAR OF OCCURRENCE		1998	2003	2000	2007	1990	1972	1989	2011	1999	2012	1956	2008	SEP 1999
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	10.5	9.4	10.7	11.3	11.2	10.3	9.9	8.1	8.5	8.3	9.2	10.3	117.7
	PRECIPITATION >= 1.00	30	0.8	0.5	1.1	0.8	0.9	1.0	1.3	0.9	1.2	1.0	0.8	1.0	11.3
SNOWFALL	NORMAL (IN)	30	5.9	8.3	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.4	20.2
	MAXIMUM MONTHLY (IN)	62	26.2	46.9	20.3	2.6	T	T	T	T	0.0	0.0	2.5	11.9	21.5
	YEAR OF OCCURRENCE		1996	2010	1958	1982	1991	1992	2007				1979	1953	1966
	MAXIMUM IN 24 HOURS (IN)	62	22.0	19.4	15.6	2.4	T	T	T	0.0	0.0	2.5	11.9	17.0	22.0
	YEAR OF OCCURRENCE'		1996	2010	1958	1987	1991	1992	1990				1979	1953	2009
	MAXIMUM SNOW DEPTH (IN)	57	13	25	8	2	0	0	0	0	0	T	9	13	25
	YEAR OF OCCURRENCE		1987	2003	1956	1987						1962	1953	2009	FEB 2003
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	1.8	1.8	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	5.4	

**PRECIPITATION (inches) 2013 WILMINGTON (KILG)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	1.25	4.27	5.40	4.24	5.03	4.54	6.53	1.56	2.02	3.31	1.63	1.94	41.72
1985	1.56	2.05	2.03	0.35	5.52	1.37	6.91	2.28	4.56	1.84	4.46	0.80	33.73
1986	4.21	2.77	1.19	2.77	1.69	4.05	3.99	2.88	2.75	4.04	6.42	6.11	42.87
1987	4.35	1.52	1.16	2.63	3.15	2.31	4.09	4.21	4.85	2.31	3.50	1.90	35.98
1988	2.46	4.14	1.82	2.59	4.95	0.21	8.29	3.03	2.18	1.94	5.29	0.90	37.80
1989	2.48	2.75	3.69	2.76	6.57	5.43	12.63	1.97	4.31	3.92	1.99	1.27	49.77
1990	3.56	1.35	2.15	3.42	7.03	3.94	4.27	6.15	2.64	2.85	1.61	5.16	44.13
1991	4.30	0.97	4.64	3.28	1.98	3.41	3.71	5.38	5.36	1.27	1.26	4.26	39.82
1992	1.05	1.81	4.36	1.76	4.48	3.14	4.34	2.21	4.30	1.11	4.27	4.21	37.04
1993	2.64	3.11	7.50	5.87	3.95	1.60	4.04	2.65	6.26	2.77	2.85	3.51	46.75
1994	5.00	3.55	7.36	2.85	3.69	2.11	7.01	5.68	2.10	0.85	2.96	2.24	45.40
1995	3.08	2.28	2.47	2.10	3.50	1.26	2.89	2.03	5.17	8.01	4.31	2.17	39.27
1996	4.58	1.19	3.63	4.98	3.27	5.00	6.25	3.04	4.05	4.70	3.25	7.96	51.90
1997	1.83	1.83	3.49	1.49	0.82	1.75	3.08	3.66	1.93	2.33	3.24	2.57	28.02
1998	4.80	2.95	4.86	2.91	4.13	4.66	2.18	3.14	1.76	2.80	1.26	1.01	36.46
1999	5.41	3.51	3.96	3.36	3.56	1.62	0.89	4.24	12.68	3.42	2.09	2.94	47.68
2000	3.83	2.00	9.17	3.43	2.94	4.83	4.64	2.47	7.30	0.08	2.54	2.80	46.03
2001	3.13	2.81	5.62	1.43	5.33	4.28	2.35	2.65	2.57	0.74	0.99	1.95	33.85
2002	2.72	0.43	4.05	2.26	3.40	4.96	1.40	2.03	3.42	6.16	4.47	4.50	39.80
2003	1.79	5.21	4.75	2.62	3.92	9.90	2.85	4.21	7.39	4.39	3.37	4.93	55.33
2004	1.66	2.33	2.96	5.61	4.41	6.98	8.24	5.33	9.29	2.43	4.65	2.84	56.73
2005	3.84	2.65	4.10	5.12	2.26	2.25	4.82	1.35	0.44	7.79	2.41	3.22	40.25
2006	4.14	2.38	0.29	4.36	2.22	9.40	6.05	2.59	6.18	5.56	4.31	1.93	49.41
2007	3.52	1.94	4.61	8.55	1.02	2.72	3.15	3.38	0.49	5.92	1.69	4.82	41.81
2008	1.57	4.32	4.00	1.97	5.12	2.71	4.69	1.16	5.19	1.81	3.51	4.39	40.44
2009	2.90	0.30	1.89	4.03	3.89	6.67	3.94	6.73	4.91	5.90	2.32	8.58	52.06
2010	2.52	5.87	5.37	2.43	2.32	1.83	6.15	1.34	5.95	5.48	2.29	2.41	43.96
2011	3.22	2.90	4.05	4.71	3.23	2.49	3.73	14.70	5.93	3.05	4.13	4.44	56.58
2012	2.55	2.09	0.92	2.56	2.25	3.62	3.05	2.81	5.29	6.25	0.98	3.92	36.29
2013	3.70	2.31	2.54	2.69	2.16	13.66	4.05	5.22	1.92	1.97	2.91	5.22	48.35
POR= 66 YRS	3.12	2.83	3.83	3.40	3.57	3.79	4.19	3.81	3.98	3.15	3.20	3.55	42.42

WBAN : 13781

**AVERAGE TEMPERATURE (°F) 2013 WILMINGTON (KILG)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	24.8	38.6	35.6	50.7	61.2	73.8	75.2	75.2	63.7	61.2	43.3	42.1	53.8
1985	27.5	37.4	47.1	58.0	65.9	70.6	76.6	74.4	69.1	58.3	51.0	32.9	55.7
1986	32.2	31.6	43.6	52.4	65.7	72.1	77.1	72.5	67.5	57.2	44.1	37.3	54.4
1987	31.4	31.9	44.6	52.3	63.1	73.5	79.1	74.3	68.3	51.7	47.4	38.6	54.7
1988	27.4	34.8	44.2	50.8	62.9	71.6	79.4	77.3	65.8	51.0	46.7	35.1	53.9
1989	36.0	34.3	42.1	51.6	62.1	74.3	75.9	74.4	68.4	57.6	44.6	25.0	53.9
1990	40.5	41.1	46.0	53.7	61.5	72.1	77.4	74.6	66.7	60.0	48.4	41.0	56.9
1991	34.3	39.7	44.9	54.7	69.1	73.6	77.3	76.7	67.2	57.6	46.8	39.5	56.8
1992	35.2	37.2	41.5	52.0	60.7	69.6	76.3	72.2	67.3	53.2	47.2	38.3	54.2
1993	37.6	31.0	39.0	52.8	65.3	72.8	79.4	77.8	68.7	55.7	47.4	36.4	55.3
1994	26.3	31.6	41.8	58.4	60.0	75.8	79.8	73.2	67.2	53.9	49.7	40.0	54.8
1995	36.6	30.3	45.3	51.5	62.2	72.0	78.7	77.1	68.2	59.3	41.3	31.3	54.5
1996	29.9	33.3	38.4	52.6	60.1	73.0	74.1	74.0	67.7	55.1	40.1	39.2	53.1
1997	31.8	38.9	43.2	50.3	58.6	69.6	75.9	72.8	65.5	55.6	43.6	37.6	53.6
1998	39.8	41.0	44.7	54.2	65.3	70.5	75.1	75.5	70.9	57.0	46.9	41.0	56.8
1999	34.8	36.9	41.7	52.7	62.9	71.6	80.0	75.8	68.1	53.8	49.4	38.8	55.5
2000	31.5	36.6	47.3	51.9	63.8	72.0	72.9	72.7	65.0	56.4	44.2	30.1	53.7
2001	31.6	36.2	39.8	53.3	62.7	73.0	72.7	77.3	65.6	56.7	50.8	42.5	55.2
2002	37.8	39.4	44.3	55.7	61.4	71.8	77.5	77.8	69.3	55.5	43.6	34.3	55.7
2003	28.7	28.7	42.8	51.0	58.1	68.8	75.7	76.5	68.5	54.2	49.3	35.8	53.2
2004	25.4	34.0	44.6	53.7	68.2	70.1	74.7	73.1	68.8	54.6	47.0	36.7	54.2
2005	31.8	35.1	38.6	53.8	57.5	72.9	77.0	77.9	71.8	57.7	47.9	33.7	54.6
2006	39.7	34.9	44.1	55.6	62.7	71.3	78.1	76.8	65.5	54.9	49.6	41.6	56.2
2007	38.3	28.1	43.6	50.6	64.8	73.1	76.6	76.4	70.5	63.5	45.4	37.6	55.7
2008	35.7	36.9	44.5	54.7	60.2	75.1	78.1	73.2	69.7	55.6	45.3	38.5	55.6
2009	28.5	36.5	42.3	54.5	63.4	70.5	73.5	76.7	66.6	55.3	49.7	35.4	54.4
2010	32.4	30.9	47.9	56.3	65.6	76.7	79.6	77.0	70.8	57.2	46.5	31.6	56.0
2011	28.5	35.9	42.3	56.0	66.3	74.0	80.8	75.0	69.8	56.1	49.6	41.4	56.3
2012	37.2	40.0	51.4	53.4	67.1	72.3	80.4	76.4	68.3	58.0	42.4	42.3	57.4
2013	35.6	34.5	40.3	54.0	63.7	73.2	79.5	73.5	66.1	59.0	43.9	37.6	55.1
POR= 66 YRS	32.1	34.3	42.4	52.8	62.6	71.7	76.6	74.9	67.8	56.3	46.0	36.2	54.5

**HEATING DEGREE DAYS (base 65°F) 2013 WILMINGTON (KILG)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0	2	113	149	641	701	1154	766	550	248	73	7	4404
1985-86	0	0	45	213	411	986	1011	930	653	373	99	11	4732
1986-87	0	27	36	276	619	848	1032	923	628	374	143	2	4908
1987-88	0	2	22	406	521	811	1159	869	637	419	121	38	5005
1988-89	3	0	52	434	541	923	893	854	710	395	142	0	4947
1989-90	0	2	54	236	605	1231	749	661	593	368	127	6	4632
1990-91	2	1	69	214	494	734	943	700	617	320	61	5	4160
1991-92	0	0	64	244	541	785	914	799	723	386	169	12	4637
1992-93	0	1	57	363	527	817	843	945	799	360	64	12	4788
1993-94	0	0	55	286	526	879	1193	929	715	223	189	2	4997
1994-95	0	0	29	343	454	770	875	967	598	401	122	0	4559
1995-96	0	0	41	208	703	1033	1083	912	816	378	206	10	5390
1996-97	0	0	43	304	741	794	1025	729	672	436	201	56	5001
1997-98	2	0	71	324	635	844	775	667	645	317	89	27	4396
1998-99	0	0	22	241	536	738	926	782	715	362	95	7	4424
1999-00	0	1	36	340	462	807	1032	816	544	390	117	15	4560
2000-01	0	2	99	274	619	1074	1029	801	776	361	110	10	5155
2001-02	1	0	73	271	418	691	836	712	633	324	159	7	4125
2002-03	0	1	11	325	636	945	1118	1011	683	419	215	49	5413
2003-04	0	0	21	330	466	898	1221	894	623	338	60	15	4866
2004-05	0	2	14	314	533	871	1024	831	810	334	225	13	4971
2005-06	0	0	15	243	507	964	777	834	640	277	122	9	4388
2006-07	0	0	53	321	454	718	820	1025	658	436	96	5	4586
2007-08	0	3	20	136	582	840	901	809	629	301	170	0	4391
2008-09	0	0	18	296	584	811	1126	789	697	347	107	19	4794
2009-10	0	0	33	302	453	910	1005	948	524	274	98	3	4550
2010-11	0	0	5	247	548	1029	1126	807	697	291	75	0	4825
2011-12	0	0	30	276	457	728	854	719	419	355	51	9	3898
2012-13	0	0	41	234	672	699	903	847	759	340	125	0	4620
2013-	0	0	69	227	625	843							

WBAN : 13781

**COOLING DEGREE DAYS (base 65°F) 2013 WILMINGTON (KILG)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	0	50	276	321	327	80	34	0	0	1088
1985	0	0	4	47	106	181	366	300	174	13	0	0	1191
1986	0	0	0	0	129	227	379	267	116	40	0	0	1158
1987	0	0	0	3	91	264	446	295	129	0	0	0	1228
1988	0	0	0	0	62	242	455	389	80	5	0	0	1233
1989	0	0	6	0	61	287	345	299	162	17	0	0	1177
1990	0	0	10	36	23	227	395	304	127	66	0	0	1188
1991	0	0	1	18	197	271	390	371	135	23	2	0	1408
1992	0	0	0	3	39	156	358	230	134	3	0	0	923
1993	0	0	0	1	79	252	452	405	176	3	4	0	1372
1994	0	0	0	32	41	334	466	260	99	4	0	0	1236
1995	0	0	0	4	42	218	434	381	148	39	1	0	1267
1996	0	0	0	13	64	254	291	285	129	2	0	0	1038
1997	0	0	0	0	9	204	348	248	92	40	0	0	941
1998	0	0	22	0	106	195	320	337	204	2	0	0	1186
1999	0	0	0	0	40	211	476	342	139	1	0	0	1209
2000	0	0	0	3	89	230	253	247	106	11	0	0	939
2001	0	0	0	16	46	257	247	388	100	21	0	0	1075
2002	0	0	0	51	53	219	397	405	147	39	0	0	1311
2003	0	0	0	8	10	169	337	362	133	3	0	0	1022
2004	0	0	0	6	168	173	308	261	132	1	0	0	1049
2005	0	0	0	6	3	258	377	408	228	26	0	0	1306
2006	0	0	0	4	58	204	412	370	76	12	0	0	1136
2007	0	0	1	8	96	254	368	362	192	96	0	0	1377
2008	0	0	0	1	28	311	413	259	166	12	0	0	1190
2009	0	0	0	39	66	190	271	369	89	7	0	0	1031
2010	0	0	0	20	122	360	462	378	190	11	0	0	1543
2011	0	0	0	30	122	278	496	319	183	8	0	0	1436
2012	0	0	3	14	122	236	482	361	143	26	0	0	1387
2013	0	0	0	17	90	253	455	270	107	49	0	0	1241

**SNOWFALL (inches) 2013 WILMINGTON (KILG)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0.0	0.0	0.0	0.0	T	0.3	14.2	0.7	T	0.4	0.0	0.0	15.6
1985-86	0.0	0.0	0.0	0.0	0.0	1.4	3.1	9.7	T	T	0.0	0.0	14.2
1986-87	0.0	0.0	0.0	0.0	T	0.3	21.4	15.7	0.2	2.4	0.0	0.0	40.0
1987-88	0.0	0.0	0.0	0.0	0.7	2.1	10.8	1.1	T	T	0.0	0.0	14.7
1988-89	0.0	0.0	0.0	0.0	T	0.2	6.7	2.9	1.2	0.0	0.0	0.0	11.0
1989-90	0.0	0.0	0.0	0.0	5.6	8.9	1.5	1.0	1.3	1.6	0.0	0.0	19.9
1990-91	T	0.0	0.0	0.0	0.0	6.4	5.2	0.6	0.9	T	T	0.0	13.1
1991-92	0.0	0.0	0.0	0.0	T	0.2	1.5	1.3	0.5	T	0.0	T	3.5
1992-93	0.0	0.0	0.0	0.0	T	0.1	1.4	10.0	13.9	0.0	0.0	0.0	25.4
1993-94	0.0	0.0	0.0	0.0	T	2.4	2.7	9.2	3.4	0.0	0.0	0.0	17.7
1994-95	0.0	0.0	0.0	0.0	T	0.0	T	8.3	T	0.0	0.0	0.0	8.3
1995-96	0.0	0.0	0.0	0.0	3.2	7.1	26.2	7.5	6.0	5.9	T	0.0	55.9
1996-97	0.0	0.0	0.0	0.0	0.0	T	0.8	5.6	6.5	2.8	0.0	0.0	15.7
1997-98	0.0	0.0	0.0	0.0	0.0	T	T	0.0	T	0.0	0.0	0.0	T
1998-99	0.0	0.0	0.0	0.0	0.0	2.0	4.5	0.0	2.0	0.0	0.0	0.0	8.5
1999-00	0.0	0.0	0.0	0.0	0.0	0.0	14.2	4.0	0.0	2.1	0.0	0.0	20.3
2000-01	0.0	0.0	0.0	0.0	0.0	2.1	4.8	5.0	0.7	T	0.0	0.0	12.6
2001-02	0.0	0.0	0.0	0.0	0.0	0.0	2.4	T	T	T	0.0	0.0	2.4
2002-03	0.0	0.0	0.0	T	T	9.0	5.4	31.6	T	T	0.0	0.0	46.0
2003-04	0.0	0.0	0.0	0.0	0.0	6.5	9.8	0.1	2.4	T	0.0	0.0	18.8
2004-05	0.0	0.0	0.0	0.0	0.0	0.3	12.1	13.5	1.0	0.0	0.0	0.0	26.9
2005-06	0.0	0.0	0.0	0.0	0.2	7.1	T	14.6	0.0	0.2	0.0	0.0	22.1
2006-07	0.0	0.0	0.0	0.0	0.0	T	1.5	7.3	3.8	T	0.0	0.0	12.6
2007-08	T	0.0	0.0	0.0	0.0	4.1	2.8	2.3	T	0.0	0.0	0.0	9.2
2008-09	0.0	0.0	0.0	0.0	0.2	1.0	2.9	1.5	10.5	T	0.0	0.0	16.1
2009-10	0.0	0.0	0.0	0.0	0.0	19.7	6.1	46.9	T	0.0	0.0	0.0	72.7
2010-11	0.0	0.0	0.0	0.0	T	4.0	18.0	5.0	T	0.0	0.0	0.0	27.0
2011-12	0.0	0.0	0.0	0.3	0.0	0.1	2.5	2.3	0.0	0.0	0.0	0.0	5.2
2012-13	0.0	0.0	0.0	0.0	T	0.4	1.9	1.6	1.3	0.0	0.0	0.0	5.2
2013-	0.0	0.0	0.0	0.0	T	11.9							
POR= 66 YRS	T	0.0	0.0	T	0.7	3.4	6.2	6.6	2.9	0.3	T	T	20.1

WBAN : 13781

**REFERENCE NOTES :**

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.</p> <p>GENERAL CONTINUED: WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN</p>	<p>PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY. ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED STATION HISTORY INFORMATION GO TO "Historical Observing Metadata Repository", URL IS: <a href="http://www.ncdc.noaa.gov/homr/">http://www.ncdc.noaa.gov/homr/</a> SNOWFALL STOPPED MONTH &amp; YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p><b>NOTE:</b> The "Period of Record:(POR)" for all "averages" is based on "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
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# 2013 WILMINGTON DELAWARE (KILG)

Delaware is part of the Atlantic Coastal Plain consisting mainly of flat low land with many marshes. Small streams and tidal estuaries comprise the drainage of the State. Wilmington, at the northern end of the State, marks the beginning of low rolling hills extending northward and northwestward into Pennsylvania. The Delaware River, the Delaware Bay, and the Atlantic Ocean are along the eastern boundary of the State. The broad Chesapeake Bay lies 35 miles, or less, to the west of the western boundary of nearly the entire State. These large water areas considerably influence the climate of the Wilmington, Delaware region.

Summers are warm and humid, winters are usually mild. During the summer maximum temperatures are usually in the 80s. The temperature reaches 100 degrees on the average once in six years. During January, the coldest month of the year, the daily average temperature is 32 degrees. Temperatures of zero may be expected once in four years. Most of the winter precipitation falls as rain. Seasonal snowfall has been as little as 1 inch, and as much as 50 inches. Snow is frequently mixed with rain and sleet, and seldom remains on the ground more than a few days.

The proximity of large water areas and the inflow of southerly winds cause the relative humidity to be quite high all year. During the summer months the relative humidity is approximately 75 percent. Fog is relatively frequent and may occur in any month. Light southeast winds blowing up the Delaware Bay favor the formation of fog. Light north-northeast winds bring in smoke from Philadelphia and from the heavy industry area located along the Delaware River north of Wilmington.

Rainfall distribution throughout the year is fairly uniform, however, the greatest amounts normally come during the summer months. Mostly, the summer rainfall comes in the form of thunderstorms. Moisture deficiencies for crops occur occasionally, but severe droughts are rare. During the fall, winter, and spring seasons, much of the rainfall comes from storms forming over the southern states or the South Atlantic and moving northward along the coast. During the late summer and early fall, hurricanes occasionally cause heavy rainfall, but winds seldom reach hurricane force in Wilmington. Heavy rains occasionally cause minor flooding, but the streams and rivers of northern Delaware are not subject to major flooding. Strong easterly and southeasterly winds sometimes cause high tides in the Delaware Bay and the Delaware River, resulting in the flooding of lowlands and damage to bay front and river front properties.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 29 and the average last occurrence in the spring is April 13.

# Station History

WILMINGTON, DE

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
WILMINGTON DUPONT AP	1942-04-27	1942-12-08	39° 46'	-76° 36'			AIRWAYS
WILMINGTON GREATER WILMINGTON AP	1961-12-01	1973-01-01	39° 40'	-75° 36'	74		AIRWAYS, COOP
WILMINGTON NEW CASTLE COUNTY AP	1947-11-07	1956-01-01	39° 40'	-75° 36'	79		AIRWAYS, COOP
WILMINGTON NEW CASTLE COUNTY AP	1990-08-28	1994-10-01	39° 40'	-75° 36'	74		COOP, WXSVC
WILMINGTON GREATER WILMINGTON AP	1973-01-01	1990-08-28	39° 40'	-75° 36'	74		COOP, WXSVC
WILMINGTON NEW CASTLE COUNTY AP	2011-09-15	Present	39° 40'	-75° 36'	79		ASOS, COOP
WILMINGTON NEW CASTLE COUNTY AP	1994-10-01	2003-03-03	39° 40'	-75° 36'	74		ASOS, COOP
WILMINGTON NEW CASTLE COUNTY AP	2003-03-03	2011-09-15	39° 40'	-75° 36'	79		ASOS, COOP
NEW CASTLE BELLANCA FIELD	1929-06-01	1930-03-01	39° 40'	-75° 36'			AIRWAYS
WILMINGTON NEW CASTLE COUNTY AP	1956-01-01	1961-12-01	39° 40'	-75° 36'	74		AIRWAYS, COOP

# Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	2011-09-15	Present	DAILY	2400	PCPNX		
PRECIP	1947-11-07	1970-10-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	2003-03-03	HOURLY	2400	UNIV	RCRD	
TEMP	2011-09-15	Present	DAILY	2400	ATEMP		
PRECIP	1970-10-01	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	1929-06-01	1930-03-01	DAILY	2400	UNIV	RCRD	
TEMP	1929-06-01	1930-03-01	DAILY	2400	HYGR		
TEMP	1947-11-07	1970-10-01	DAILY	2400	HYGR		
PRECIP	2011-09-15	Present	HOURLY	2400	AHTB	RCRD;HTD	
TEMP	1942-04-27	1942-12-08	DAILY	2400	HYGR		
TEMP	1970-10-01	1995-07-01	DAILY	2400	HYGR		
PRECIP	1995-07-01	2003-03-03	DAILY	2400	UNIV	RCRD	
PRECIP	1942-04-27	1942-12-08	DAILY	2400	UNIV	RCRD	
PRECIP	1970-10-01	1995-07-01	HOURLY	2400			
TEMP	1995-07-01	2003-03-03	DAILY	2400	HYGR		
PRECIP	2003-03-03	2011-09-15	HOURLY	2400	TB	RCRD	
PRECIP	2003-03-03	2011-09-15	DAILY	2400	TB	RCRD	
TEMP	2003-03-03	2011-09-15	DAILY	2400	HYGR		

\* For explanation of codes and abbreviations see Station Metadata link below.

Other Station Information can be found at:

ASOS Implementation by NWS: <http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm>

Station Metadata website: <http://www.ncdc.noaa.gov/homr>

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2

Fax Number : (828) 271-4876

TDD : (828) 271-4010

Email : [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

NOAA/National Climatic Data Center

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