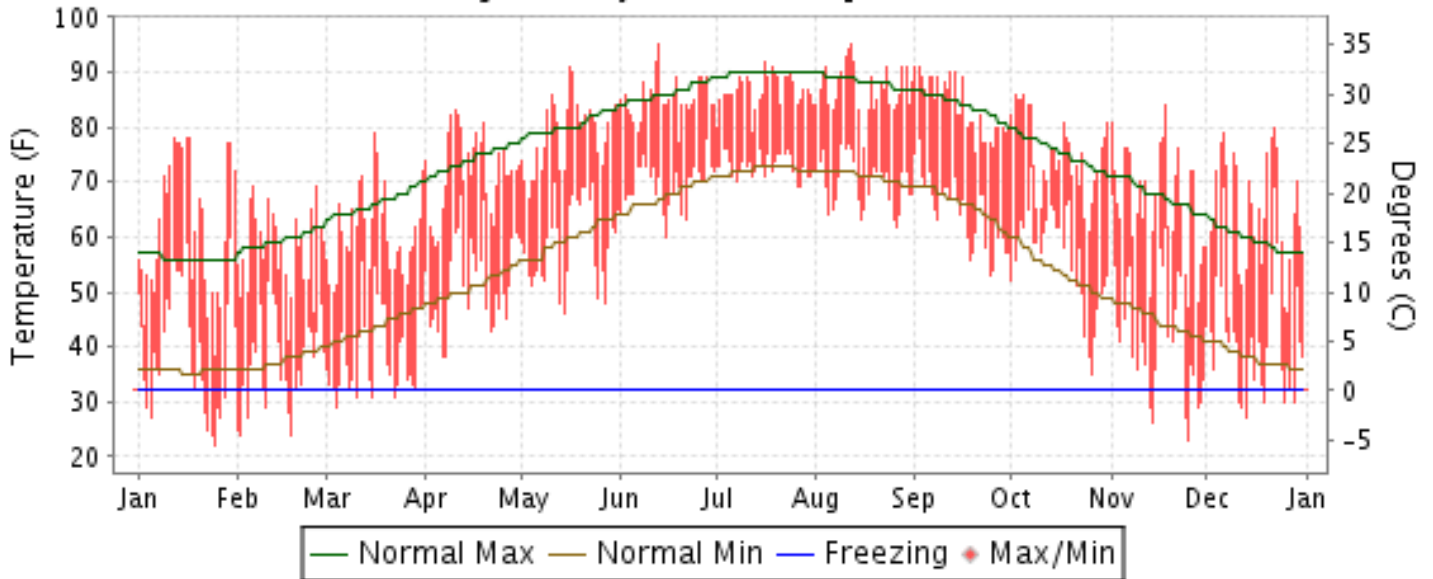




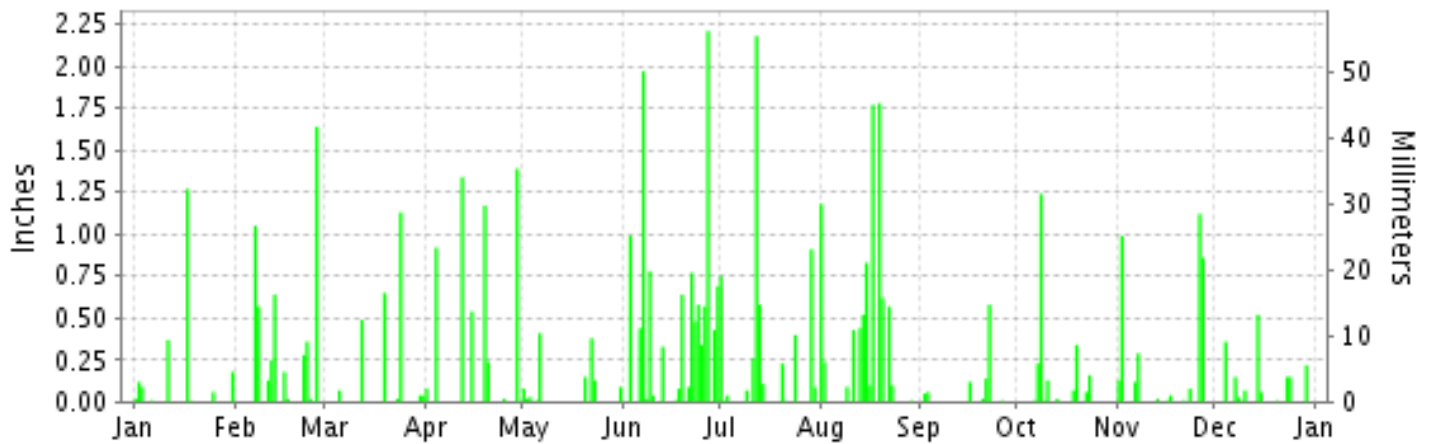
2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

ISSN 0198-3792

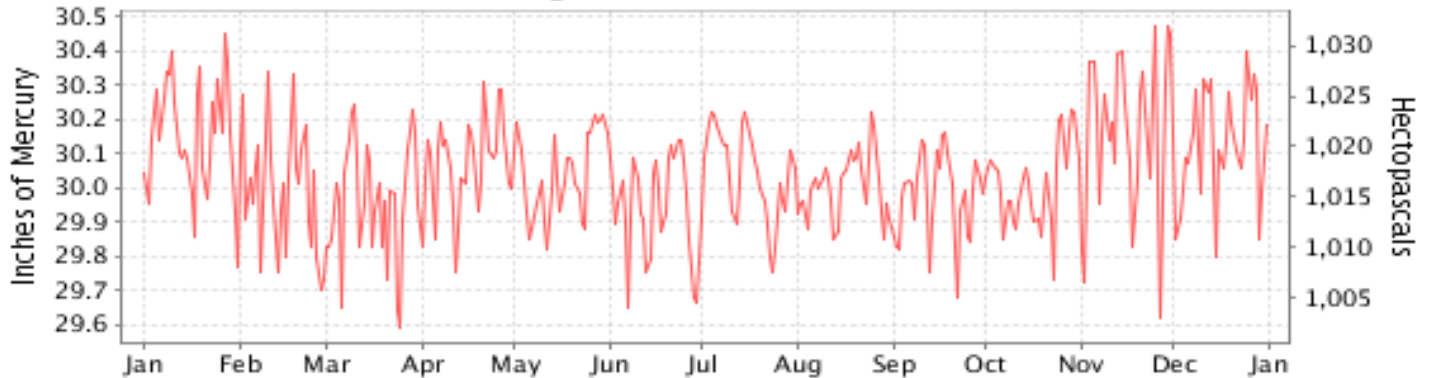
WILMINGTON, NORTH CAROLINA (KILM) Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

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NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

Thomas R. Karl
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2013

WILMINGTON (KILM)

LATITUDE: 34° 16'N LONGITUDE: 77° 53'W ELEVATION (FT): GRND: 33 BARO: 33 TIME ZONE: EASTERN (UTC -5) WBAN: 13748

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	61.8	57.8	60.8	71.8	78.9	85.3	86.7	86.6	83.6	75.0	66.5	64.0	73.2	
	HIGHEST DAILY MAXIMUM	78	69	79	83	91	95	92	95	91	86	84	80	95	
	DATE OF OCCURRENCE	17+	26+	16	10	16	13	16	12	02+	05+	18	22	AUG 12	
	MEAN DAILY MINIMUM	39.8	37.2	38.6	51.8	59.0	69.6	73.0	69.9	64.5	56.4	42.6	41.3	53.6	
	LOWEST DAILY MINIMUM	22	24	29	38	46	60	69	62	53	35	23	27	22	
	DATE OF OCCURRENCE	25	18+	04	07+	14	15	27+	26	24	26	25	13	JAN 25	
	AVERAGE DRY BULB	50.8	47.5	49.7	61.8	68.9	77.4	79.8	78.3	74.1	65.7	54.5	52.6	63.4	
	MEAN WET BULB	46.3	43.2	42.9	56.6	62.6	72.1	74.3	72.5	67.4	60.5	48.8	48.4	58.0	
	MEAN DEW POINT	41.3	37.1	33.8	52.2	58.1	69.6	72.1	70.2	64.0	57.2	42.3	43.5	53.5	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	2	2	4	10	4	0	0	0	0	22
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM <= 32°	10	8	7	0	0	0	0	0	0	0	6	7	38		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	446	483	470	136	33	0	0	0	0	72	330	398	2368	
	COOLING DEGREE DAYS	12	0	2	48	164	380	467	417	278	101	23	22	1914	
RH	MEAN (PERCENT)	73	70	58	73	71	79	80	80	75	78	67	73	73	
	HOUR 01 LST	83	82	71	87	85	90	90	91	88	89	76	81	84	
	HOUR 07 LST	82	77	66	78	72	80	81	84	79	83	72	81	78	
	HOUR 13 LST	54	52	40	56	53	65	69	64	56	59	48	55	56	
	HOUR 19 LST	78	74	61	76	72	82	81	83	80	86	74	78	77	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	7	0	0	1	1	1	1	4	1	3	2	6	27	
	THUNDERSTORMS	0	0	2	3	1	12	5	10	3	0	0	0	36	
PR	MEAN STATION PRESS. (IN.)	30.16	30.00	29.96	30.07	30.04	29.95	30.04	30.01	29.97	30.01	30.17	30.12	30.04	
	MEAN SEA-LEVEL PRESS. (IN.)	30.20	30.04	30.01	30.12	30.08	29.99	30.08	30.05	30.01	30.05	30.21	30.17	30.08	
WINDS	RESULTANT SPEED (MPH)	0.9	2.5	4.2	1.8	1.6	4.7	3.8	0.6	2.5	2.6	3.3	1.1	0.5	
	RES. DIR. (TENS OF DEGS.)	29	29	29	11	18	19	18	26	03	35	01	26	27	
	MEAN SPEED (MPH)	6.6	7.9	8.8	7.9	7.9	8.4	6.4	6.2	5.9	5.5	7.4	6.0	7.1	
	PREVAIL.DIR.(TENS OF DEGS.)	03	30	32	20	21	20	20	03	03	36	03	20	20	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	41	35	37	30	26	35	30	26	22	24	30	31	41	
	DIR. (TENS OF DEGS.)	24	09	33	21	33	17	26	26	03	02	02	18	24	
	DATE OF OCCURRENCE	31	08	06	19	24	07	20	13	27	08	12	29	JAN 31	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	49	43	49	41	33	48	38	32	32	32	39	39	49	
DIR. (TENS OF DEGS.)	17	10	28	22	07	18	25	27	03	33	18	20	28		
DATE OF OCCURRENCE	31	08	06	19	03	07	20	13	28	09	27	29	MAR 06		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	2.13	5.14	2.44	5.70	1.30	11.46	5.64	8.68	0.98	2.27	3.67	1.73	51.14	
	GREATEST 24-HOUR (IN.)	1.28	1.64	1.13	1.41	0.42	2.41	2.18	1.78	0.63	1.24	1.95	0.58	2.41	
	DATE OF OCCURRENCE	17-18	26	24	19-20	05-06	06-07	12	19	21-22	08	26-27	14-15	JUN 06-07	
	NUMBER OF DAYS WITH:														
PRECIPITATION 0.01	9	11	7	8	9	19	13	14	7	10	11	11	129		
PRECIPITATION 0.10	4	9	3	6	4	14	8	12	3	5	6	6	80		
PRECIPITATION 1.00	1	2	1	3	0	2	1	3	0	1	1	0	15		
SNOWFALL	SNOW,ICE PELLETS,HAIL	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T	
	TOTAL (IN.)	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T	
	GREATEST 24-HOUR (IN.)		17+									13+		NOV 13+	
	DATE OF OCCURRENCE	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0		

NORMALS, MEANS, AND EXTREMES WILMINGTON (KILM)

LATITUDE: 34° 16'N **LONGITUDE:** 77° 53'W **ELEVATION (FT):** GRND: 33 BARO: 33 **TIME ZONE:** EASTERN (UTC -5) **WBAN: 13748**

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	56.4	59.9	66.4	74.2	80.7	86.9	89.7	88.1	83.7	75.7	68.0	59.3	74.1
	MEAN DAILY MAXIMUM	81	56.6	57.8	65.5	73.2	80.5	85.7	88.9	87.9	83.0	75.3	66.6	59.0	73.3
	HIGHEST DAILY MAXIMUM	62	82	85	89	95	98	104	102	103	98	95	87	82	104
	YEAR OF OCCURRENCE		1975	1962	1974	1967	1953	1952	2011	1999	1975	1986	1974	1998	JUN 1952
	MEAN OF EXTREME MAXS.	81	74.0	76.2	81.6	87.8	91.8	96.2	96.7	95.8	92.1	86.3	81.0	75.4	86.2
	NORMAL DAILY MINIMUM	30	35.6	37.9	43.8	51.6	60.0	68.7	72.6	71.3	65.6	54.6	45.4	37.8	53.7
	MEAN DAILY MINIMUM	81	36.4	37.0	44.0	51.7	60.5	67.7	71.9	71.1	65.5	54.6	45.0	37.9	53.6
	LOWEST DAILY MINIMUM	62	5	11	9	29	38	48	55	55	44	27	20	0	0
	YEAR OF OCCURRENCE		1985	1996	1980	2007	1989	1983	1988	2004	1981	1962	1970	1989	DEC 1989
	MEAN OF EXTREME MINS.	81	19.6	22.4	28.2	36.1	46.1	56.5	64.0	62.4	53.4	38.1	29.1	21.4	39.8
	NORMAL DRY BULB	30	46.0	48.9	55.1	62.9	70.4	77.8	81.1	79.7	74.6	65.2	56.7	48.6	63.9
	MEAN DRY BULB	81	46.5	47.4	54.8	62.5	70.5	76.8	80.4	79.5	74.3	65.0	55.8	48.4	63.5
	MEAN WET BULB	30	40.4	42.1	47.7	54.9	63.0	70.4	73.8	73.0	68.0	58.6	50.2	43.1	57.1
	MEAN DEW POINT	30	37.7	39.6	45.1	52.4	61.2	69.1	72.9	72.0	66.9	56.9	48.1	40.5	55.2
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.6	1.9	8.8	14.9	10.4	3.4	0.2	0.0	0.0	40.2
	MAXIMUM <= 32	30	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5
MINIMUM <= 32	30	11.8	7.6	3.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	9.6	
MINIMUM <= 0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
H/C	NORMAL HEATING DEG. DAYS	30	591	454	323	130	27	2	0	0	5	92	272	515	2411
	NORMAL COOLING DEG. DAYS	30	2	3	16	67	193	385	501	456	294	97	23	5	2042
RH	NORMAL (PERCENT)	30	71	69	69	68	73	76	78	80	79	76	74	72	74
	HOURLY 01 LST	30	79	78	80	81	88	89	90	91	91	88	84	81	85
	HOURLY 07 LST	30	81	80	82	81	85	86	87	91	91	89	86	83	85
	HOURLY 13 LST	30	57	53	52	48	55	59	63	64	63	56	54	56	57
	HOURLY 19 LST	30	72	68	67	64	71	74	76	80	81	81	78	75	74
S	PERCENT POSSIBLE SUNSHINE	51	56	59	64	70	67	66	64	62	61	64	63	59	63
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	2.9	2.0	2.3	1.6	2.1	1.8	1.2	1.6	2.2	2.4	2.9	3.0	26.0
	THUNDERSTORMS	66	0.5	1.0	2.3	3.0	5.3	7.6	11.4	9.2	4.1	1.2	0.7	0.5	46.8
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	1	2.0	2.0	8.0		10.0	6.0							
	PARTLY CLOUDY			1.0	4.0		7.0	8.0							
	CLOUDY	1	5.0	3.0	9.0		2.0	7.0							
PR	MEAN STATION PRESSURE(IN)	30	30.09	30.06	30.02	29.97	29.98	29.96	29.98	29.98	29.99	30.03	30.08	30.10	30.02
	MEAN SEA-LEVEL PRES. (IN)	30	30.13	30.10	30.07	30.01	30.02	30.00	30.02	30.02	30.03	30.07	30.12	30.13	30.06
WINDS	MEAN SPEED (MPH)	30	8.0	8.4	9.0	9.1	8.2	7.6	7.2	6.5	7.1	6.8	7.1	7.4	7.7
	PREVAIL.DIR(TENS OF DEGS)	37	22	22	22	22	22	22	23	22	03	03	02	02	23
	MAXIMUM 2-MINUTE: SPEED (MPH)	18	41	44	60	48	44	49	53	56	67	37	38	43	67
	DIR. (TENS OF DEGS)		24	25	27	27	27	26	00	06	00	13	24	26	00
	YEAR OF OCCURRENCE		2013	2000	2005	2006	2002	2011	1996	1998	1996	2008	2002	2000	SEP 1996
	MAXIMUM 3-SECOND SPEED (MPH)	18	51	62	89	56	54	75	69	74	86	54	47	54	89
	DIR. (TENS OF DEGS)		28	24	27	26	27	26	00	17	00	12	03	27	27
	YEAR OF OCCURRENCE		2009	2000	2005	2006	2002	2011	1996	2004	1996	2008	2006	2000	MAR 2005
PRECIPITATION	NORMAL (IN)	30	3.76	3.62	4.21	2.82	4.49	5.18	7.48	7.41	7.84	3.89	3.29	3.62	57.61
	MAXIMUM MONTHLY (IN)	62	10.22	11.22	8.27	8.21	9.12	12.87	15.12	18.83	23.41	15.07	7.87	8.86	23.41
	YEAR OF OCCURRENCE		1991	1998	1994	1961	1956	1962	1966	2006	1999	2005	1972	2009	SEP 1999
	MINIMUM MONTHLY (IN)	62	0.68	1.01	0.93	0.16	0.95	0.89	1.65	1.66	0.70	0.17	0.49	0.48	0.16
	YEAR OF OCCURRENCE		2001	1976	1967	1995	1987	1984	1961	1968	1986	1953	1973	1955	APR 1995
	MAXIMUM IN 24 HOURS (IN)	62	3.08	5.00	4.81	3.52	5.02	7.73	6.58	9.56	14.84	8.15	4.82	3.88	14.84
	YEAR OF OCCURRENCE		1982	1998	1994	1961	1999	1966	1988	2006	1999	2005	1969	1980	SEP 1999
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	10.2	9.5	10.0	8.5	10.9	12.8	16.4	15.9	12.8	9.0	9.2	9.4	134.6
PRECIPITATION >= 1.00	30	1.0	1.0	1.3	0.8	1.2	1.5	2.2	2.5	2.3	1.1	1.0	0.9	16.8	
SNOWFALL	NORMAL (IN)	30	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.7
	MAXIMUM MONTHLY (IN)	62	6.1	12.5	6.6	T	T	T	T	T	T	T	T	15.3	15.3
	YEAR OF OCCURRENCE		2000	1973	1980	1996	1998	2011					2013	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	62	5.0	11.7	5.7	T	T	T	T	0.0	0.0	0.0	T	9.7	11.7
	YEAR OF OCCURRENCE		1988	1973	1980	1996	1998	2011	1996				2013	1989	FEB 1973
	MAXIMUM SNOW DEPTH (IN)	65	5	8	7	0	0	0	0	0	0	0	0	13	13
	YEAR OF OCCURRENCE		2000	1973	1980									1989	DEC 1989
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	

PRECIPITATION (inches) 2013 WILMINGTON (KILM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	2.58	4.82	4.43	3.23	6.45	0.89	9.01	4.79	18.94	0.49	1.16	1.32	58.11
1985	2.01	5.08	1.66	0.71	2.76	4.56	10.34	3.63	2.75	2.43	6.74	1.35	44.02
1986	2.12	2.52	4.13	0.48	7.09	5.58	11.28	11.44	0.70	3.35	4.44	6.28	59.41
1987	6.49	4.42	2.70	2.96	0.95	5.24	5.19	9.35	6.42	0.51	5.67	1.35	51.25
1988	5.41	2.00	4.05	3.56	7.54	2.93	14.49	9.61	2.80	1.81	3.14	0.59	57.93
1989	1.60	2.64	6.70	7.60	3.58	7.55	9.93	3.93	9.54	4.61	1.91	7.06	66.65
1990	2.34	2.31	5.11	2.21	8.04	2.17	6.59	11.42	1.40	7.10	2.09	2.65	53.43
1991	10.22	1.65	6.52	3.35	1.75	2.57	13.35	8.65	3.31	4.19	2.98	2.17	60.71
1992	5.75	3.45	5.65	3.12	7.55	7.00	3.18	13.56	2.23	3.09	7.14	4.48	66.20
1993	5.83	2.96	6.34	5.78	2.82	3.70	7.04	5.66	8.09	8.29	2.58	2.67	61.76
1994	7.03	3.26	8.27	0.80	2.67	2.75	4.76	6.03	7.09	8.53	3.27	6.91	61.37
1995	4.93	4.47	4.35	0.16	6.47	12.03	8.74	4.08	6.92	9.31	1.56	2.09	65.11
1996	3.09	1.12	4.70	2.50	3.00	8.02	13.42	5.19	13.35	6.06	1.22	2.75	64.42
1997	3.38	3.86	2.55	3.02	1.61	5.81	6.15	2.86	8.94	1.33	5.25	4.83	49.59
1998	7.29	11.22	2.06	2.80	7.58	4.31	3.79	13.48	5.38	1.36	0.97	3.96	64.20
1999	4.80	2.00	3.07	5.02	8.16	3.91	4.54	8.35	23.41	3.81	3.58	1.41	72.06
2000	4.66	1.31	2.61	4.64	3.70	6.23	7.83	8.38	7.77	0.38	4.67	1.64	53.82
2001	0.68	2.28	8.26	0.90	3.08	4.15	7.26	5.62	3.04	0.45	0.95	1.31	37.98
2002	1.82	1.97	5.62	0.53	2.42	4.21	7.78	12.09	4.95	2.34	3.06	2.53	49.32
2003	1.69	4.03	5.33	6.48	7.43	5.42	4.69	6.33	5.74	9.58	1.95	4.95	63.62
2004	2.18	5.28	1.85	1.35	3.81	2.66	7.14	10.03	9.93	1.90	2.92	1.68	50.73
2005	1.32	2.26	3.12	3.90	5.91	8.28	6.14	6.81	8.26	15.07	4.11	4.15	69.33
2006	1.88	3.35	1.28	3.06	2.30	7.83	3.67	18.83	5.67	5.66	6.01	4.26	63.80
2007	4.43	2.06	1.56	1.29	1.63	3.64	5.43	2.89	4.60	2.17	0.60	3.05	33.35
2008	3.24	3.93	3.21	2.25	4.07	4.08	12.43	7.19	9.69	3.04	4.65	3.02	60.80
2009	2.01	1.61	3.57	1.67	6.52	3.80	9.67	6.33	8.75	2.09	4.85	8.86	59.73
2010	3.42	4.23	3.71	0.77	4.01	5.59	5.34	2.70	22.72	1.48	0.96	3.63	58.56
2011	2.35	4.81	2.89	0.86	1.63	2.42	3.53	12.52	7.46	1.93	2.97	0.59	43.96
2012	1.77	2.16	3.58	1.46	7.28	1.88	2.31	11.60	5.00	4.39	4.43	4.60	50.46
2013	2.13	5.14	2.44	5.70	1.30	11.46	5.64	8.68	0.98	2.27	3.67	1.73	51.14
POR= 81 YRS	3.50	3.57	4.01	2.87	4.05	5.23	7.66	7.40	6.38	3.27	3.14	3.50	54.58

WBAN : 13748

AVERAGE TEMPERATURE (°F) 2013 WILMINGTON (KILM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	42.1	50.4	52.9	61.0	70.0	77.3	77.9	78.3	71.0	68.7	55.0	57.5	63.5
1985	43.2	50.4	59.1	66.3	71.8	78.7	81.4	78.9	75.0	71.1	66.6	47.0	65.8
1986	44.2	51.6	55.6	64.3	71.9	79.4	84.0	78.8	76.5	67.3	59.7	49.9	65.3
1987	45.0	45.5	52.4	59.7	70.6	78.6	81.9	81.4	76.6	60.3	57.6	50.0	63.3
1988	41.2	46.4	54.2	61.5	68.8	74.3	79.9	81.1	74.4	59.2	58.0	46.6	62.1
1989	51.7	50.7	55.5	61.3	68.7	79.6	80.5	78.8	75.3	65.8	57.1	38.6	63.6
1990	52.6	55.5	58.5	63.5	71.2	77.9	81.7	80.2	75.2	68.8	57.7	54.8	66.5
1991	48.3	51.4	57.5	66.5	74.9	77.8	82.9	80.2	75.0	64.9	54.0	51.0	65.4
1992	47.0	51.6	53.9	61.5	66.9	74.3	83.0	78.5	75.0	62.2	58.7	48.3	63.4
1993	50.5	45.8	52.7	59.8	71.2	78.1	84.1	79.8	77.7	66.5	57.6	46.1	64.2
1994	44.0	50.0	57.0	65.9	67.7	79.3	81.7	78.8	72.7	64.4	60.0	52.8	64.5
1995	47.0	46.4	55.6	65.1	71.2	75.5	81.1	79.8	73.4	67.5	51.4	43.9	63.2
1996	45.1	46.9	50.2	62.3	71.9	77.1	80.3	78.2	74.8	65.0	50.9	50.5	62.8
1997	45.8	51.0	59.1	59.8	66.9	73.2	79.7	77.7	73.8	63.9	53.1	47.3	62.6
1998	49.7	50.9	54.7	63.1	72.1	80.9	81.8	79.8	76.9	66.0	57.7	53.1	65.6
1999	51.6	50.9	51.8	65.5	70.5	77.1	83.4	82.6	74.3	65.4	60.2	49.8	65.3
2000	44.8	52.1	58.3	61.3	72.5	77.6	78.0	77.9	73.4	62.7	52.5	41.4	62.7
2001	45.6	51.4	53.0	63.9	70.1	79.0	78.3	79.6	71.4	62.7	60.6	53.9	64.1
2002	48.9	48.9	56.7	67.0	69.0	77.1	81.5	79.3	76.6	67.6	53.3	45.6	64.3
2003	41.2	47.0	58.0	61.6	70.8	77.3	80.4	80.3	72.9	63.7	59.8	45.0	63.2
2004	42.8	44.8	55.6	63.4	74.4	78.5	80.8	77.2	74.6	65.9	56.8	47.3	63.5
2005	47.3	48.2	52.5	61.0	66.8	77.0	82.3	80.8	77.9	66.5	57.9	46.0	63.7
2006	51.9	46.5	53.4	65.2	69.0	76.2	80.7	80.5	72.0	62.9	56.5	52.0	63.9
2007	49.4	45.0	57.3	61.9	68.6	77.1	79.2	81.9	75.6	70.6	55.0	53.5	64.6
2008	46.1	52.1	55.8	63.8	69.3	80.7	80.4	78.9	75.2	62.4	52.7	52.7	64.2
2009	45.2	47.1	53.7	63.2	71.8	78.7	79.6	80.6	73.5	64.5	57.8	47.7	63.6
2010	41.3	41.9	53.7	64.2	72.8	82.2	81.8	81.4	77.1	66.3	55.1	38.0	63.0
2011	39.9	50.0	54.5	65.3	71.4	81.2	82.7	81.5	75.4	63.7	58.3	52.7	64.7
2012	50.1	50.9	62.4	63.5	73.0	75.2	84.7	79.2	74.4	64.9	50.6	53.2	65.2
2013	50.8	47.5	49.7	61.8	68.9	77.4	79.8	78.3	74.1	65.7	54.5	52.6	63.4
POR= 81 YRS	46.5	47.4	54.8	62.5	70.5	76.8	80.4	79.5	74.3	65.0	55.8	48.4	63.5

HEATING DEGREE DAYS (base 65°F) 2013 WILMINGTON (KILM)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0	0	16	18	306	243	682	420	228	80	11	0	2004
1985-86	0	0	4	17	60	559	637	371	307	92	24	0	2071
1986-87	0	0	0	79	199	469	615	542	395	181	25	0	2505
1987-88	0	0	0	152	230	461	730	537	330	139	38	7	2624
1988-89	0	0	0	202	225	563	406	415	312	187	44	0	2354
1989-90	0	0	4	74	259	810	378	282	233	114	7	0	2161
1990-91	0	0	6	77	223	327	513	382	265	63	0	0	1856
1991-92	0	0	0	78	336	447	548	383	343	167	45	0	2347
1992-93	0	0	4	126	238	509	449	530	378	169	5	0	2408
1993-94	0	0	4	57	244	580	641	415	255	62	47	0	2305
1994-95	0	0	0	73	172	375	552	513	290	88	10	0	2073
1995-96	0	0	6	58	427	648	612	521	452	148	39	0	2911
1996-97	0	0	0	61	427	442	588	398	210	178	40	20	2364
1997-98	0	0	2	118	358	542	478	390	339	112	5	0	2344
1998-99	0	0	0	59	225	384	416	389	408	79	26	0	1986
1999-00	0	0	8	77	184	465	619	369	232	141	7	0	2102
2000-01	0	0	5	111	383	728	596	379	372	134	14	0	2722
2001-02	0	0	15	136	158	354	501	448	279	86	47	0	2024
2002-03	0	0	0	58	356	595	732	499	227	134	11	0	2612
2003-04	0	0	6	88	189	610	692	577	295	116	15	0	2588
2004-05	0	0	0	69	272	548	543	464	380	154	40	0	2470
2005-06	0	0	0	108	226	581	398	511	376	98	27	0	2325
2006-07	0	0	3	131	252	404	481	552	266	179	25	0	2293
2007-08	0	0	0	31	302	361	585	378	289	94	14	0	2054
2008-09	0	0	0	145	373	384	607	495	363	104	23	0	2494
2009-10	0	0	2	97	219	530	730	643	346	93	11	0	2671
2010-11	0	0	0	63	297	834	769	415	340	87	13	0	2818
2011-12	0	0	0	107	220	380	455	408	144	117	2	0	1833
2012-13	0	0	0	88	427	363	446	483	470	136	33	0	2446
2013-	0	0	0	72	330	398							

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COOLING DEGREE DAYS (base 65°F) 2013 WILMINGTON (KILM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	4	35	201	378	405	418	204	138	12	18	1813
1985	11	17	57	126	229	420	513	437	309	211	112	10	2452
1986	0	4	22	79	247	436	599	435	353	158	47	8	2388
1987	0	0	11	32	205	419	529	516	354	15	16	3	2100
1988	0	4	2	43	164	293	466	505	289	26	20	0	1812
1989	1	20	25	80	167	443	489	432	321	104	29	0	2111
1990	4	20	42	74	206	394	525	480	317	201	8	13	2284
1991	0	7	36	118	311	392	565	478	306	82	11	20	2326
1992	0	2	5	67	108	286	563	427	314	47	57	0	1876
1993	6	0	2	20	206	399	600	467	392	109	29	0	2230
1994	0	4	13	94	136	436	525	434	239	62	28	3	1974
1995	3	2	7	99	210	321	505	467	264	141	22	0	2041
1996	0	4	2	73	260	368	483	416	304	68	11	1	1990
1997	0	11	35	29	110	276	464	401	271	94	7	0	1698
1998	11	2	26	61	236	486	528	466	366	98	13	21	2314
1999	7	0	4	101	205	369	577	555	298	97	45	2	2260
2000	2	1	30	35	247	381	409	410	265	50	14	0	1844
2001	0	5	6	106	178	430	419	458	214	73	32	15	1936
2002	9	6	26	151	179	373	519	450	353	146	10	0	2222
2003	0	2	15	39	197	375	483	483	251	53	42	0	1940
2004	10	0	14	76	310	411	495	386	292	104	33	7	2138
2005	4	0	0	43	104	367	542	495	393	164	21	0	2133
2006	0	0	24	108	160	345	495	489	221	71	5	7	1925
2007	5	0	30	92	129	369	446	532	322	212	9	11	2157
2008	4	10	10	64	153	479	489	438	316	71	9	9	2052
2009	2	0	20	55	241	421	459	491	263	89	12	0	2053
2010	0	0	0	76	260	526	527	517	369	106	6	0	2387
2011	0	4	21	105	218	494	557	517	320	72	28	7	2343
2012	0	6	69	77	257	312	619	446	289	94	0	5	2174
2013	12	0	2	48	164	380	467	417	278	101	23	22	1914

SNOWFALL (inches) 2013 WILMINGTON (KILM)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	0.0	0.0	T
1985-86	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	0.0	T
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1987-88	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	5.4
1988-89	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.8	T	T	0.0	0.0	2.5
1989-90	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	T	15.3
1990-91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	1.4	T	T	0.0	0.0	0.0	1.4
1992-93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	T	T
1993-94	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T	T
1995-96	0.0	0.0	0.0	0.0	0.0	0.0	T	0.6	0.0	T	0.0	0.0	0.6
1996-97	T	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	T	1.2
1997-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	T
1998-99	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	0.0	T
1999-00	0.0	0.0	0.0	0.0	0.0	T	6.1	0.0	0.0	0.0	0.0	0.0	6.1
2000-01	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	T	T	0.2
2001-02	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.8
2002-03	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0
2003-04	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	0.0	T
2004-05	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2005-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006-07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007-08	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
2008-09	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.1	T	0.0	0.0	0.0	1.0
2009-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	3.8
2010-11	0.0	0.0	0.0	0.0	0.0	0.1	3.9	T	0.0	0.0	0.0	T	4.0
2011-12	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
2012-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
2013-	0.0	0.0	0.0	0.0	T	0.0							
POR= 81 YRS	T	0.0	0.0	0.0	T	0.4	0.4	0.5	0.2	T	T	T	1.5

WBAN : 13748

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 EIGHTHS(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: http://www.ncdc.noaa.gov/homr/ SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p>NOTE: 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 NORTH CAROLINA (KILM)

Wilmington is located in the tidewater section of southeastern North Carolina, near the Atlantic Ocean. The city proper is built adjacent to the east bank of the Cape Fear River. Because of the curvature of the coastline in this area, the ocean lies about 5 miles east and about 20 miles south. The surrounding terrain is typical of coastal Carolina. It is low-lying with an average elevation of less than 40 feet, and is characterized by level to gently rolling land with rivers, creeks, and lakes that frequently have considerable swamp or marshland adjoining them. Large wooded areas alternate with cultivated fields.

The maritime location makes the climate of Wilmington unusually mild for its latitude. All wind directions from the east-northeast through southwest have some moderating effects on temperatures throughout the year, because the ocean is relatively warm in winter and cool in summer. The daily range in temperatures is moderate compared to a continental type of climate. As a rule, summers are quite warm and humid, but excessive heat is rare. Sea breezes, arriving early in the afternoon, tend to alleviate the heat further inland. Long-term averages show afternoon temperatures reach 90 degrees or higher on one-third of the days in midsummer, but several years may pass without 100 degree weather. During the colder part of the year, numerous outbreaks of polar air masses reach the Atlantic Coast, causing sharp drops in temperatures. However, these cold outbreaks are significantly moderated by the long trajectories from the source regions, the effects of passing over the Appalachian Range, and the warming effects of the ocean air. As a result, most winters are short and quite mild. Even in the most severe cold spells, the temperature usually remains above zero. Normally, the temperature fails to rise above the freezing point during a 24-hour period only once each winter.

Rainfall in this area is usually ample and well-distributed throughout the year, the greatest amount occurring in the summer. Summer rainfall comes principally from thunderstorms, and is therefore usually of short duration, but often heavy and unevenly distributed. Thunderstorms occur about one out of three days from June through August. Winter rain is more likely to be of the slow, steady type, lasting one or two days. Generally, the winter rain is evenly distributed and associated with slow-moving, low-pressure systems. Seldom is there a winter without a few flakes of snow, but several years may pass without a measurable amount, and appreciable accumulation on the ground is rare. Hail occurs less than once a year. Sunshine is abundant, with the area receiving about two-thirds of the sunshine hours possible at its latitude.

Because of these many factors, the growing season is long, averaging 244 days, but records show the range is from 180 days to as long as 302 days. This area is exceptionally good for floriculture. Agricultural pursuits, principally field-grown flowers, nursery plantings, and vegetables, are an important part of the economy. Some types of plants continue to grow throughout the year.

In common with most Atlantic Coastal localities, the area is subject to the effects of coastal storms and occasional hurricanes which produce high winds, above normal tides, and heavy rains.

Station History

WILMINGTON, NC

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
WILMINGTON NEW HANOVER COUNTY AP	1973-01-01	1981-12-31	34° 16'	-77° 54'	30		COOP, WXSVC
WILMINGTON NEW HANOVER COUNTY AP	1981-12-31	1995-11-01	34° 16'	-77° 54'	30		COOP
WILMINGTON INTL AP	2004-12-10	Present	34° 16'	-77° 53'	33		ASOS, COOP
WILMINGTON WB CITY	1948-08-01	1951-10-02	34° 13'	-77° 57'	46		COOP, WXSVC
WILMINGTON NEW HANOVER COUNTY AP	1951-10-02	1963-07-01	34° 16'	-77° 55'	30		AIRWAYS, COOP
WILMINGTON NEW HANOVER COUNTY AP	1963-07-01	1973-01-01	34° 16'	-77° 54'	30		AIRWAYS, COOP
WILMINGTON INTL AP	1995-11-01	2004-12-10	34° 16'	-77° 54'	30		ASOS, COOP
WILMINGTON WB CITY	1888-08-01	1948-08-01	34° 13'	-77° 57'			WXSVC

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1995-07-01	2004-12-10	DAILY	2400	UNIV	RCRD	
PRECIP	1963-07-01	1991-08-28	DAILY	2400	UNIV	RCRD	
PRECIP	1991-08-28	1995-07-01	HOURLY	2400			
TEMP	1991-08-28	1995-07-01	DAILY	2400	HYGR		
PRECIP	1995-07-01	2004-12-10	HOURLY		UNIV	RCRD	
PRECIP	2004-12-10	Present	DAILY	2400	PCPNX		
TEMP	2004-12-10	Present	DAILY	2400	HYGR		
TEMP	1963-07-01	1991-08-28	DAILY	2400	MXMN		
PRECIP	1991-08-28	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	2004-12-10	Present	HOURLY	2400	TB	RCRD	
PRECIP	1963-07-01	1991-08-28	HOURLY	2400			
TEMP	1995-07-01	2004-12-10	DAILY	2400	HYGR		
PRECIP	1951-10-02	1963-07-01	HOURLY	2400			

* 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

NOAA/National Climatic Data Center

Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

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