

THE STATE OF NEW HAMPSHIRE

SITE EVALUATION COMMITTEE

Docket No. 2015-02

**APPLICATION OF ANTRIM WIND ENERGY, LLC
FOR A CERTIFICATE OF SITE AND FACILITY**

**APPLICANT'S RESPONSES TO SITE EVALUATION COMMITTEE
DATA REQUEST**

Date Request Received: September 20, 2016
Request No.: Committee 1-1

Date of Response: September 28, 2016
Witness: Robert O'Neal

REQUEST: Please provide information relied on to determine the "Percent possible sunshine" used to determine hours of shadow flicker expected.

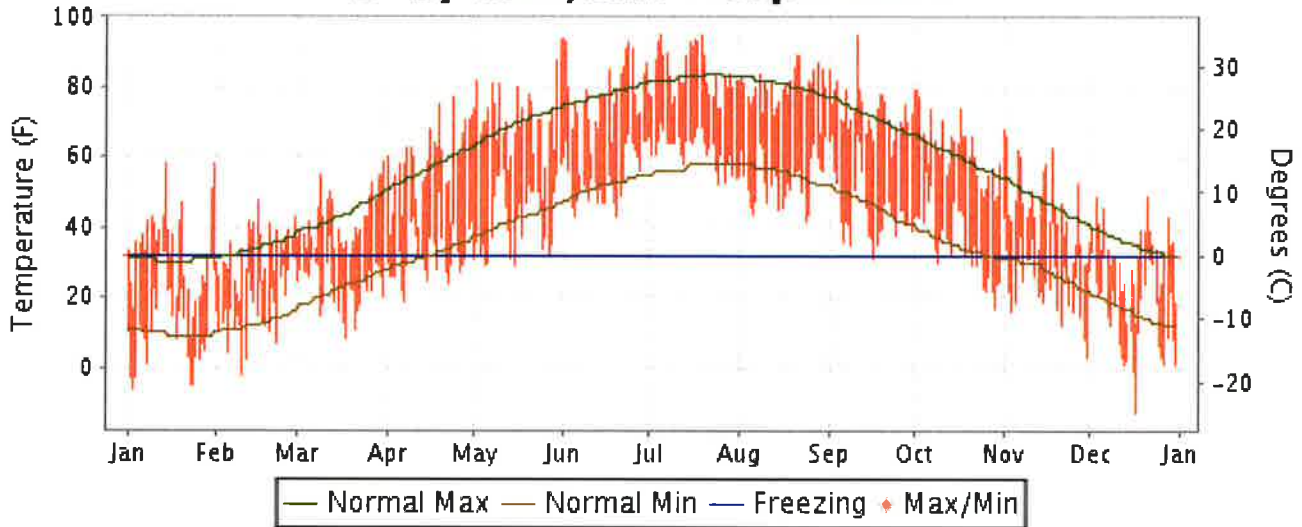
Response: Please see the attached Local Climatological Data for Concord, New Hampshire, used as an example to illustrate how "Percent Possible Sunshine" is calculated. This information was obtained from the National Climatic Data Center ("NCDC") website. On page 3 of the attached Report, Percent Possible Sunshine is included. As is evident from the table, the percent is calculated by adding up the "Mean No. Days with: Clear" or "Partly Cloud" conditions and dividing that number of days by the total number of days in the month. Based on this information, "Percent Possible Sunshine," which was included in Epsilon's shadow flicker report, includes both clear and partly cloudy days. These monthly percentages differ very slightly from the NCDC data obtained by Epsilon in 2014 for the shadow flicker calculations, which is also attached to this response for reference.



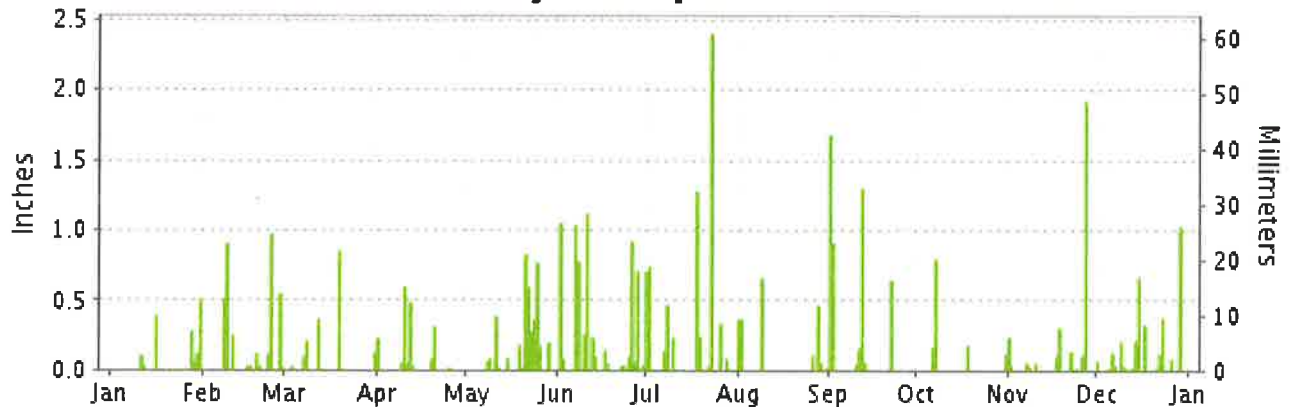
2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

ISSN 0198-3369

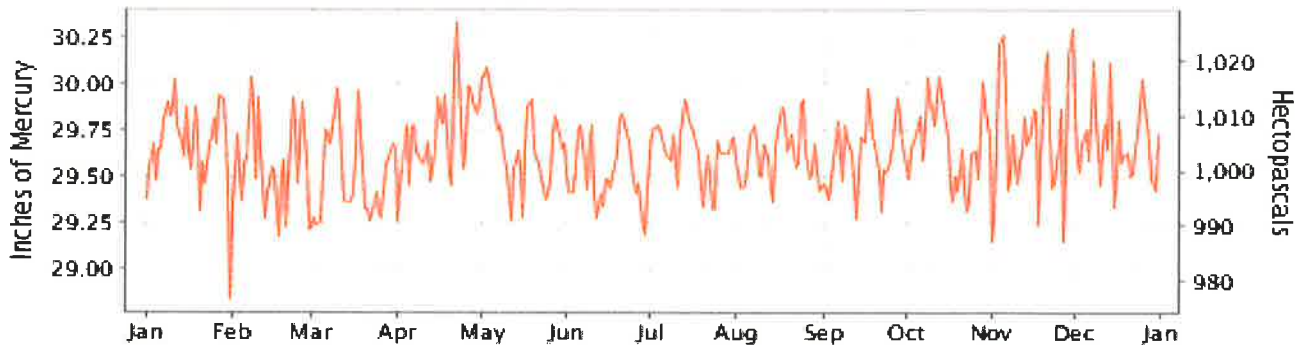
CONCORD, NEW HAMPSHIRE (KCON) Daily Max/Min Temperature



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.

NATIONAL
OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL
ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE

NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

Thomas R. Karl
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2013

CONCORD (KCON)

LATITUDE: 43° 11'N LONGITUDE: 71° 30'W ELEVATION (FT): GRND: 346 BARO: 343 TIME ZONE: EASTERN (UTC -5) WBAN: 14745

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	33.4	33.3	42.5	58.5	71.0	77.9	84.2	80.1	73.4	62.3	45.7	32.3	57.9	
	HIGHEST DAILY MAXIMUM	58	48	59	77	94	94	95	89	95	79	68	49	95	
	DATE OF OCCURRENCE	31+	15	31	24	31	01	19+	22+	11	02+	01	21+	SEP 11	
	MEAN DAILY MINIMUM	12.2	17.0	23.2	32.0	42.4	54.0	62.3	53.6	45.8	35.7	24.5	14.7	34.8	
	LOWEST DAILY MINIMUM	-6	-2	8	19	29	43	52	42	31	17	3	-13	-13	
	DATE OF OCCURRENCE	03	10	18	07	15+	20+	25	24	17	29	30	17	DEC 17	
	AVERAGE DRY BULB	22.8	25.1	32.9	45.2	56.7	66.0	73.3	66.9	59.6	49.0	35.1	23.5	46.3	
	MEAN WET BULB	21.2	22.9	29.6	38.9	50.3	60.1	67.8	61.5	55.0	44.9	31.9	22.5	42.2	
	MEAN DEW POINT	13.8	15.2	22.0	28.7	44.4	56.2	65.2	57.5	51.0	40.4	24.9	18.1	36.5	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	1	5	8	0	1	0	0	0	0	15
MAXIMUM <= 32°	13	12	1	0	0	0	0	0	0	0	4	14	44		
MINIMUM <= 32°	29	28	30	18	7	0	0	0	1	12	25	29	179		
MINIMUM <= 0°	5	1	0	0	0	0	0	0	0	0	0	2	8		
H/C	HEATING DEGREE DAYS	1299	1110	988	585	271	72	2	28	199	486	887	1278	7205	
	COOLING DEGREE DAYS	0	0	0	0	21	109	266	95	46	0	0	0	537	
RH	MEAN (PERCENT)	68	67	66	57	71	76	79	75	77	76	66	79	71	
	HOUR 01 LST	77	73	80	75	92	95	96	95	94	93	77	85	86	
	HOUR 07 LST	76	78	73	61	74	75	81	78	84	85	75	84	77	
	HOUR 13 LST	54	55	47	37	46	54	61	49	52	51	48	66	52	
	HOUR 19 LST	68	67	64	53	70	78	81	78	83	81	70	81	73	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	7	9	3	0	6	3	8	3	10	9	4	9	71	
	THUNDERSTORMS	0	0	0	0	1	3	5	1	4	0	0	0	14	
PR	MEAN STATION PRESS. (IN.)	29.67	29.56	29.51	29.73	29.67	29.53	29.64	29.62	29.62	29.68	29.81	29.69	29.64	
	MEAN SEA-LEVEL PRESS. (IN.)	30.06	29.96	29.89	30.12	30.05	29.91	30.02	29.99	30.00	30.07	30.18	30.08	30.03	
WINDS	RESULTANT SPEED (MPH)	4.2	4.6	4.2	2.4	1.1	1.3	0.9	1.5	1.6	1.2	3.5	2.6	2.3	
	RES. DIR. (TENS OF DEGS.)	29	31	32	28	28	26	27	26	29	26	29	30	30	
	MEAN SPEED (MPH)	6.3	6.9	7.4	7.3	5.4	4.6	3.6	3.8	4.2	3.1	6.3	4.3	5.3	
	PREVAIL.DIR.(TENS OF DEGS.)	31	31	31	32	31	31	33	16	32	17	31	32	31	
	MAXIMUM 2-MINUTE WIND SPEED (MPH)	30	39	28	29	28	38	38	22	29	40	26	24	40	
	DIR. (TENS OF DEGS.)	30	33	28	26	30	31	27	30	31	23	19	32	23	
	DATE OF OCCURRENCE	17	09	23	02	16	17	19	10	11	07	01	25	OCT 07	
	MAXIMUM 3-SECOND WIND: SPEED (MPH)	48	52	39	41	38	47	56	31	40	56	58	32	58	
	DIR. (TENS OF DEGS.)	25	30	30	28	33	33	27	30	30	25	31	29	31	
DATE OF OCCURRENCE	31	17	17	01	26	17	19	14	11	07	24	16	NOV 24		
PRECIPITATION	WATER EQUIVALENT: TOTAL (IN.)	1.55	3.54	1.72	1.88	4.07	6.78	6.70	2.05	4.81	1.28	3.02	3.39	40.79	
	GREATEST 24-HOUR (IN.)	0.53	1.37	0.85	0.60	1.42	1.81	2.42	0.73	2.48	0.84	2.02	1.03	2.48	
	DATE OF OCCURRENCE	30-31	08-09	19	10	21-22	07-08	22-23	01-02	01-02	06-07	26-27	29	SEP 01-02	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	12	12	9	9	14	20	14	7	7	5	11	18	138	
	PRECIPITATION 0.10	5	7	5	4	9	11	9	5	5	4	6	8	78	
PRECIPITATION 1.00	0	0	0	0	0	3	2	0	2	0	1	1	9		
SNOWFALL	SNOW,ICE PELLETS,HAIL TOTAL (IN.)	9.2	43.6	16.0	0.2	0.0	0.0	0.0	0.0	0.0	T	0.2	19.9	89.1	
	GREATEST 24-HOUR (IN.)	4.4	16.2	11.0	0.2	0.0	0.0	0.0	0.0	0.0	T	0.1	7.0	16.2	
	DATE OF OCCURRENCE	16	09	19	12						30	24	15	FEB 09	
	MAXIMUM SNOW DEPTH (IN.)	7	19	15	T	0	0	0	0	0	T	12	19	19	
	DATE OF OCCURRENCE	29	25+	08	13+						26+	18	18	FEB 25+	
	NUMBER OF DAYS WITH: SNOWFALL >= 1.0	2	6	3	0	0	0	0	0	0	0	0	5	16	

NORMALS, MEANS, AND EXTREMES CONCORD (KCON)

		LATITUDE: 43° 11'N	LONGITUDE: 71° 30'W	ELEVATION (FT): GRND: 346 BARO: 343		TIME ZONE: EASTERN (UTC -5)						WBAN: 14745			
ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	30.8	34.9	43.8	57.4	68.9	77.4	82.3	80.9	72.6	60.5	48.4	36.3	57.9
	MEAN DAILY MAXIMUM	93	31.1	32.8	42.9	55.9	68.6	76.5	82.3	80.1	71.5	60.9	47.3	35.2	57.1
	HIGHEST DAILY MAXIMUM	72	69	67	89	95	97	98	102	101	98	90	80	73	102
	YEAR OF OCCURRENCE		2007	1997	1998	1976	1962	2008	1966	1975	1953	1963	1950	1998	JUL 1966
	MEAN OF EXTREME MAXS.	93	50.7	52.2	65.0	80.2	88.3	92.5	93.8	92.1	88.3	79.4	68.0	55.4	75.5
	NORMAL DAILY MINIMUM	30	10.4	13.8	22.5	32.7	42.6	52.5	57.7	56.1	47.4	35.8	28.2	17.2	34.7
	MEAN DAILY MINIMUM	93	10.7	12.3	22.7	32.1	42.4	51.5	57.3	55.2	46.7	36.2	27.8	16.3	34.3
	LOWEST DAILY MINIMUM	72	-33	-37	-16	8	21	30	35	29	21	10	-5	-22	-37
	YEAR OF OCCURRENCE		1984	1943	1967	2003	1966	1972	1965	1947	1972	1972	1989	1951	FEB 1943
	MEAN OF EXTREME MINS.	93	-12.3	-10.2	1.2	18.3	27.6	36.9	44.1	40.7	30.4	19.7	10.6	-5.2	16.8
	NORMAL DRY BULB	30	20.6	24.3	33.1	45.1	55.8	64.9	70.0	68.5	60.0	48.2	38.3	26.8	46.3
	MEAN DRY BULB	93	20.9	22.6	32.9	44.0	55.5	64.1	69.8	67.7	59.1	48.6	37.6	25.8	45.7
	MEAN WET BULB	30	18.0	19.9	27.2	37.1	48.1	57.9	62.9	61.7	54.4	43.1	33.3	23.4	40.6
	MEAN DEW POINT	30	14.9	15.8	23.6	33.3	44.9	55.4	61.0	59.9	52.6	40.6	30.6	20.3	37.7
	NORMAL NO. DAYS WITH:														
	MAXIMUM >= 90	30	0.0	0.0	0.0	0.2	0.6	2.1	3.7	2.7	0.6	0.0	0.0	0.0	9.9
MAXIMUM <= 32	30	16.9	10.2	3.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.0	10.6	42.4	
MINIMUM <= 32	30	30.0	26.7	26.1	15.0	3.5	0.1	0.0	0.0	1.5	12.0	20.3	28.4	163.6	
MINIMUM <= 0	30	6.9	3.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	13.7	
H/C	NORMAL HEATING DEG. DAYS	30	1376	1138	987	600	303	85	17	31	187	524	801	1186	7235
	NORMAL COOLING DEG. DAYS	30	0	0	0	2	16	84	172	139	37	2	0	0	452
RH	NORMAL (PERCENT)	30	69	66	64	62	66	70	72	75	76	73	72	72	70
	HOURLY 01 LST	30	75	73	73	76	83	87	89	91	91	86	80	78	82
	HOURLY 07 LST	30	77	76	77	75	77	80	83	88	90	87	83	80	81
	HOURLY 13 LST	30	59	54	52	46	47	51	51	53	54	52	58	60	53
	HOURLY 19 LST	30	67	62	59	55	58	62	64	70	76	72	71	71	66
S	PERCENT POSSIBLE SUNSHINE	58	52	55	53	52	54	57	63	60	56	53	43	47	54
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI) THUNDERSTORMS	50 66	3.1 0.0	2.8 0.1	3.6 0.2	2.0 0.8	3.0 2.5	3.5 4.5	4.2 5.3	5.3 4.2	8.1 1.8	6.2 0.5	3.8 0.2	3.6 0.1	49.2 20.2
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	55	5.0	5.0	5.1	5.3	5.4	5.0	4.9	4.6	4.7	4.6	5.3	5.0	5.0
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.7	4.6	4.7	4.9	5.0	4.7	4.6	4.4	4.6	4.4	5.0	4.8	4.7
	MEAN NO. DAYS WITH:														
	CLEAR	55	9.0	7.5	7.7	7.0	6.1	6.1	6.5	8.1	8.4	9.0	6.2	7.7	89.3
PARTLY CLOUDY	55	7.1	7.6	8.0	8.1	9.9	11.6	12.2	11.1	8.9	8.7	7.5	7.7	108.4	
CLOUDY	55	14.9	13.2	15.3	14.9	15.0	12.2	11.7	11.3	12.2	12.7	15.8	15.1	164.3	
PR	MEAN STATION PRESSURE(IN)	30	29.62	29.61	29.62	29.58	29.60	29.56	29.58	29.63	29.68	29.67	29.67	29.64	29.62
	MEAN SEA-LEVEL PRES. (IN)	30	30.01	30.01	30.00	29.96	29.97	29.93	29.95	30.00	30.05	30.05	30.06	30.03	30.00
WINDS	MEAN SPEED (MPH)	30	6.5	7.2	7.3	7.1	6.3	5.7	5.2	4.7	4.9	5.4	6.0	6.4	6.1
	PREVAIL.DIR(TENS OF DEGS)	33	32	32	32	32	32	32	32	33	32	32	32	32	32
	MAXIMUM 2-MINUTE: SPEED (MPH)	17	38	46	40	39	38	43	43	30	36	40	36	39	46
	DIR. (TENS OF DEGS)		33	07	32	29	29	33	32	13	06	23	31	32	07
	YEAR OF OCCURRENCE		2000	2010	2005	2004	2002	2004	1999	2011	1999	2013	2009	1999	FEB 2010
	MAXIMUM 3-SECOND SPEED (MPH)	17	48	68	52	53	47	66	56	52	47	56	58	52	68
	DIR. (TENS OF DEGS)		25	06	31	29	30	34	27	13	33	25	31	32	06
YEAR OF OCCURRENCE		2013	2010	2005	2004	2002	2007	2013	2011	2002	2013	2013	1999	FEB 2010	
PRECIPITATION	NORMAL (IN)	30	2.70	2.62	3.27	3.41	3.66	3.69	3.74	3.18	3.38	4.04	3.72	3.20	40.61
	MAXIMUM MONTHLY (IN)	72	8.09	8.96	7.81	7.22	11.09	10.10	7.55	7.52	9.44	14.57	7.36	7.52	14.57
	YEAR OF OCCURRENCE		1979	2008	1953	2007	2006	1944	2009	2011	1999	2005	1983	1973	OCT 2005
	MINIMUM MONTHLY (IN)	72	0.40	0.03	0.86	0.83	0.50	0.64	0.96	0.06	0.41	0.59	0.50	0.58	0.03
	YEAR OF OCCURRENCE		1970	1987	1981	1999	2008	1979	1955	1996	1948	1947	2012	1943	FEB 1987
	MAXIMUM IN 24 HOURS (IN)	72	2.12	2.98	2.57	2.88	5.60	4.47	2.76	3.97	5.20	5.24	2.89	3.31	5.60
	YEAR OF OCCURRENCE		1979	2008	2011	2007	2006	1944	2008	1991	2008	2005	1947	1969	MAY 2006
	NORMAL NO. DAYS WITH:														
PRECIPITATION >= 0.01	30	10.8	9.5	11.5	11.8	12.4	12.7	10.9	9.8	9.3	10.1	11.2	10.9	130.9	
PRECIPITATION >= 1.00	30	0.4	0.5	0.6	0.7	0.7	0.8	1.0	0.8	0.8	1.2	0.8	0.8	9.1	
SNOWFALL	NORMAL (IN)	30	18.1	12.3	11.1	2.8	0.0	0.0	0.0	0.0	0.0	2.6	14.5	61.4	
	MAXIMUM MONTHLY (IN)	72	45.4	49.8	38.3	15.3	5.0	T	0.0	0.0	T	23.0	18.4	44.5	
	YEAR OF OCCURRENCE		1987	1969	1956	1982	1945	1993			1992	2011	1971	2007	FEB 1969
	MAXIMUM IN 24 HOURS (IN)	72	19.0	16.2	18.1	13.9	5.0	T	0.0	0.0	T	13.6	9.5	15.6	19.0
	YEAR OF OCCURRENCE		1944	2013	2001	1982	1945	1993			1992	2011	1961	2005	JAN 1944
	MAXIMUM SNOW DEPTH (IN)	63	29	42	45	25	1	0	0	0	0	17	10	26	45
	YEAR OF OCCURRENCE		2008	2008	2008	2008	1966					2011	1971	1970	MAR 2008
	NORMAL NO. DAYS WITH:														
SNOWFALL >= 1.0	30	4.6	3.1	2.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.8	15.9	

PRECIPITATION (inches) 2013 CONCORD (KCON)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	1.89	5.06	2.92	3.74	9.52	2.83	4.44	0.97	1.08	4.42	2.67	2.70	42.24
1985	0.95	1.99	2.86	1.02	2.05	3.05	2.83	2.51	3.78	3.62	4.58	1.65	30.89
1986	4.78	2.23	3.58	1.85	1.44	4.95	4.77	3.72	2.27	1.71	4.48	4.50	40.28
1987	3.00	0.03	3.47	4.71	1.08	5.77	3.77	2.84	3.94	4.14	2.50	1.55	36.80
1988	1.97	2.24	1.32	2.75	3.35	0.80	6.53	5.44	1.56	1.23	5.06	1.05	33.30
1989	0.74	2.05	2.18	3.40	5.11	4.25	3.62	3.55	4.22	4.86	3.34	0.91	38.23
1990	2.82	2.63	1.64	3.00	5.09	2.51	1.79	7.19	2.31	4.93	3.25	4.12	41.28
1991	1.85	1.42	3.01	2.61	2.51	1.72	1.80	7.26	5.52	3.32	4.84	3.62	39.48
1992	1.97	1.30	2.77	1.78	2.39	3.28	3.50	2.13	2.48	2.41	3.54	2.23	29.78
1993	1.51	1.63	3.04	3.77	0.97	1.95	2.10	1.97	4.01	3.58	3.72	3.36	31.61
1994	3.48	0.80	5.03	2.38	4.33	1.94	4.02	2.85	3.55	0.91	2.67	4.19	36.15
1995	3.39	2.03	2.46	1.64	3.56	1.36	4.01	2.42	2.70	7.31	5.58	1.95	38.41
1996	4.87	2.58	1.55	6.11	4.81	3.09	5.17	.06	3.05	8.11	2.06	5.84	47.30
1997	3.29	2.20	4.04	3.66	2.29	0.70	3.80	3.67	1.68	1.44	5.63	1.95	34.35
1998	3.62	2.85	3.70	2.21	3.97	7.95	1.90	1.41	1.63	3.58	2.20	0.92	35.94
1999	5.38	2.84	2.82	0.83	2.79	1.94	4.35	3.45	9.44	2.47	2.66	1.35	40.32
2000	2.26	2.83	3.34	4.82	2.89	3.14	4.33	1.89	3.54	2.29	3.42	2.99	37.74
2001	1.44	2.57	6.44	0.84	2.33	5.74	3.29	0.67	3.51	0.99	1.10	2.24	31.16
2002	2.01	1.98	3.48	2.97	4.38	5.33	2.24	1.96	3.63	3.07	5.31	3.57	39.93
2003	2.52	3.38	3.16	4.08	4.71	1.64	1.91	6.78	4.99	4.22	2.23	5.31	44.93
2004	0.67	1.10	2.81	6.61	5.13	2.30	3.89	4.62	6.11	1.66	3.20	4.05	42.15
2005	3.32	2.69	4.03	5.76	3.91	5.07	2.69	3.18	2.39	14.57	5.12	4.47	57.20
2006	3.60	2.60	1.31	2.64	11.09	8.85	4.16	3.45	2.27	6.94	4.80	3.53	55.24
2007	2.72	1.54	3.24	7.22	3.83	3.05	5.54	1.71	3.09	3.85	3.40	5.06	44.25
2008	2.66	8.96	5.87	3.74	0.50	4.89	6.48	4.76	8.56	3.05	3.87	4.63	57.97
2009	3.03	1.72	2.90	4.00	3.96	6.46	7.55	4.18	0.92	5.15	3.32	4.02	47.21
2010	2.88	3.58	6.58	2.13	1.50	2.79	1.28	2.75	1.57	5.99	3.30	3.58	37.93
2011	3.14	3.95	4.29	4.37	4.56	3.91	1.22	7.52	7.12	6.93	3.68	4.08	54.77
2012	2.86	1.38	1.64	2.69	4.76	4.01	3.29	6.34	4.04	4.21	0.50	4.24	39.96
2013	1.55	3.54	1.72	1.88	4.07	6.78	6.70	2.05	4.81	1.28	3.02	3.39	40.79
POR= 93 YRS	2.78	2.50	3.18	3.18	3.25	3.45	3.42	3.14	3.35	3.21	3.62	3.17	38.25

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AVERAGE TEMPERATURE (°F) 2013 CONCORD (KCON)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	16.0	30.5	28.2	44.6	52.9	65.9	68.7	69.3	57.8	50.4	38.3	30.3	46.1
1985	15.9	25.8	35.7	45.2	56.1	62.2	70.3	66.7	60.5	49.2	38.5	22.0	45.7
1986	23.0	21.3	35.5	48.2	57.5	61.3	67.3	66.1	57.3	47.4	34.1	29.0	45.7
1987	20.0	22.0	34.5	46.8	56.7	64.4	70.6	65.1	58.7	45.8	36.9	28.1	45.8
1988	18.5	23.5	33.4	43.9	57.3	62.9	72.6	70.5	57.8	44.9	39.1	23.2	45.6
1989	25.7	22.6	31.8	41.4	58.3	65.0	69.5	67.7	60.8	49.1	35.8	11.9	45.0
1990	28.6	24.6	34.7	45.6	52.8	65.3	70.8	69.8	59.7	51.8	40.1	30.9	47.9
1991	20.2	28.3	36.0	47.6	60.2	65.6	69.2	69.9	57.7	50.8	39.7	25.5	47.6
1992	23.3	26.0	30.2	42.5	55.0	64.0	66.0	67.1	59.7	44.9	35.6	26.5	45.1
1993	23.5	15.7	30.5	45.7	56.9	64.9	71.4	70.0	58.8	45.3	36.4	26.8	45.5
1994	11.3	16.7	31.9	45.8	54.4	67.9	73.4	66.4	58.2	49.3	41.5	30.6	45.6
1995	28.1	20.7	36.0	41.5	55.1	66.1	73.0	69.4	56.9	52.0	34.2	22.9	46.3
1996	21.2	23.4	29.6	43.9	53.7	65.2	68.4	69.3	60.6	46.3	33.4	31.3	45.5
1997	21.8	28.3	29.8	42.3	51.6	65.9	69.1	68.1	59.8	46.8	36.2	28.0	45.6
1998	27.3	30.9	36.8	46.3	59.2	64.3	69.8	69.6	61.2	49.4	39.0	31.1	48.7
1999	20.7	27.8	34.5	44.9	57.0	68.4	71.7	67.2	63.4	46.3	41.9	29.7	47.8
2000	20.1	25.4	38.5	45.4	55.2	65.1	67.2	67.4	58.6	49.2	38.4	22.5	46.1
2001	19.5	23.5	29.4	44.0	56.4	66.7	66.6	72.1	60.3	49.2	40.8	32.1	46.7
2002	28.8	27.8	34.3	46.9	53.4	62.7	70.4	71.0	63.4	45.4	35.6	24.8	47.0
2003	12.6	18.5	31.2	41.1	53.9	64.8	71.5	71.0	61.6	47.9	40.6	27.9	45.2
2004	14.2	25.0	35.8	46.6	57.8	62.8	69.1	69.0	61.1	48.9	38.9	27.6	46.4
2005	18.6	23.7	28.6	46.9	51.2	68.4	70.6	71.0	63.2	51.1	37.9	24.0	46.3
2006	28.8	24.6	33.0	47.0	56.1	66.8	72.6	66.6	59.5	48.6	43.3	33.9	48.4
2007	25.5	18.8	32.0	42.5	57.9	65.2	69.5	68.6	61.7	54.2	35.9	23.7	46.3
2008	23.2	24.4	30.5	46.0	54.2	66.4	71.1	66.4	61.0	46.8	37.2	27.0	46.2
2009	14.3	24.4	33.0	47.2	55.7	63.0	66.5	69.2	57.7	45.5	41.7	25.2	45.3
2010	22.9	28.8	39.4	48.7	59.6	66.1	73.8	69.6	63.1	48.2	38.5	26.4	48.8
2011	18.3	21.2	32.3	46.1	58.2	64.4	72.0	69.1	63.9	49.4	42.5	31.4	47.4
2012	25.6	30.1	42.1	47.3	59.6	64.7	71.7	70.9	59.5	51.8	36.0	30.8	49.2
2013	22.8	25.1	32.9	45.2	56.7	66.0	73.3	66.9	59.6	49.0	35.1	23.5	46.3
POR= 93 YRS	20.9	22.6	32.9	44.0	55.5	64.1	69.8	67.7	59.1	48.6	37.6	25.8	45.7

HEATING DEGREE DAYS (base 65°F) 2013 CONCORD (KCON)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	19	27	238	446	792	1072	1514	1092	901	588	286	106	7081
1985-86	9	38	166	485	785	1326	1295	1216	907	499	267	140	7133
1986-87	41	67	251	538	919	1109	1390	1199	939	542	296	77	7368
1987-88	18	89	201	589	837	1138	1436	1194	971	626	254	137	7490
1988-89	19	60	219	622	769	1289	1211	1182	1022	703	219	80	7395
1989-90	6	53	169	484	865	1639	1121	1121	933	585	369	67	7412
1990-91	22	15	183	409	737	1049	1381	1024	893	517	186	58	6474
1991-92	19	7	238	438	754	1216	1286	1123	1070	669	319	90	7229
1992-93	52	33	203	617	875	1190	1277	1372	1062	574	248	85	7588
1993-94	6	15	229	600	851	1177	1661	1345	1021	568	338	50	7861
1994-95	1	54	210	479	699	1059	1137	1235	893	697	309	46	6819
1995-96	6	17	257	397	918	1298	1352	1198	1093	625	358	54	7573
1996-97	10	6	171	572	943	1038	1334	1023	1086	675	409	83	7350
1997-98	16	18	178	560	858	1138	1161	950	870	554	186	91	6580
1998-99	5	15	144	475	773	1044	1365	1037	940	598	249	51	6696
1999-00	10	38	116	571	687	1087	1387	1142	815	583	316	98	6850
2000-01	20	26	217	486	790	1310	1403	1157	1095	627	276	68	7475
2001-02	43	1	167	484	719	1011	1116	1038	943	551	370	123	6566
2002-03	26	20	111	608	876	1238	1619	1296	1038	710	335	96	7973
2003-04	6	28	112	521	723	1143	1568	1153	900	552	240	115	7061
2004-05	6	28	133	491	773	1154	1432	1151	1121	538	424	65	7316
2005-06	6	7	98	433	804	1263	1119	1123	987	531	294	58	6723
2006-07	0	48	176	502	643	957	1218	1285	1019	667	251	78	6844
2007-08	20	46	143	334	866	1274	1289	1170	1064	565	334	48	7153
2008-09	1	27	158	556	827	1171	1564	1130	985	536	288	89	7332
2009-10	36	36	223	597	691	1229	1297	1005	786	481	200	66	6647
2010-11	13	14	127	514	788	1187	1442	1222	1011	563	244	93	7218
2011-12	0	7	100	474	669	1034	1214	1005	704	534	187	88	6016
2012-13	1	5	196	404	861	1053	1299	1110	988	585	271	72	6845
2013-	2	28	199	486	887	1278							

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COOLING DEGREE DAYS (base 65°F) 2013 CONCORD (KCON)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	0	15	117	139	165	28	0	0	0	464
1985	0	0	0	0	16	27	184	93	36	1	0	0	357
1986	0	0	0	0	44	37	118	109	23	0	0	0	331
1987	0	0	0	1	45	64	198	96	21	0	0	0	425
1988	0	0	0	0	19	81	262	238	7	4	0	0	611
1989	0	0	0	0	17	87	153	141	50	0	0	0	448
1990	0	0	0	10	0	80	210	170	30	8	0	0	508
1991	0	0	0	2	44	84	157	166	29	4	0	0	486
1992	0	0	0	2	15	66	90	105	52	0	0	0	330
1993	0	0	0	0	7	90	212	176	49	0	0	0	534
1994	0	0	0	0	18	143	269	104	11	0	0	0	545
1995	0	0	0	0	9	84	264	159	22	0	0	0	538
1996	0	0	0	2	15	65	122	149	48	0	0	0	401
1997	0	0	0	0	2	113	149	119	28	3	0	0	414
1998	0	0	5	0	13	80	157	165	36	0	0	0	456
1999	0	0	0	0	9	157	228	112	76	0	0	0	582
2000	0	0	0	0	20	106	93	107	32	0	0	0	358
2001	0	0	0	5	18	123	101	226	32	0	0	0	505
2002	0	0	0	14	15	60	205	212	71	8	0	0	585
2003	0	0	0	0	0	97	217	220	15	0	0	0	549
2004	0	0	0	4	24	56	142	156	23	0	0	0	405
2005	0	0	0	2	0	172	189	200	49	7	0	0	619
2006	0	0	0	0	26	119	235	104	18	0	0	0	502
2007	0	0	0	0	35	90	167	163	50	5	0	0	510
2008	0	0	0	0	6	97	198	79	48	0	0	0	428
2009	0	0	0	10	8	37	91	173	10	0	0	0	329
2010	0	0	0	0	39	103	294	165	77	1	0	0	679
2011	0	0	0	2	39	80	224	142	74	0	0	0	561
2012	0	0	0	9	28	83	214	196	38	1	0	0	569
2013	0	0	0	0	21	109	266	95	46	0	0	0	537

SNOWFALL (inches) 2013 CONCORD (KCON)

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	16.5	11.6	11.0	12.4	1.0	0.0	0.0	52.5
1985-86	0.0	0.0	0.0	0.0	8.3	11.2	15.1	11.5	4.4	T	T	0.0	50.5
1986-87	0.0	0.0	0.0	0.0	14.4	7.7	45.4	0.6	7.0	9.4	0.0	0.0	84.5
1987-88	0.0	0.0	0.0	0.0	5.8	12.0	19.3	23.7	4.6	0.1	0.0	0.0	65.5
1988-89	0.0	0.0	0.0	T	0.5	5.0	5.6	7.0	10.2	0.8	T	0.0	29.1
1989-90	0.0	0.0	0.0	0.0	4.7	12.0	23.1	22.0	1.3	T	0.0	0.0	63.1
1990-91	0.0	0.0	0.0	0.0	0.6	8.8	11.2	6.8	6.0	0.2	0.0	0.0	33.6
1991-92	0.0	0.0	0.0	0.0	1.3	13.5	3.8	5.3	6.8	4.5	0.0	0.0	35.2
1992-93	0.0	0.0	T	T	1.1	10.9	19.7	24.0	35.8	6.6	0.0	T	98.1
1993-94	0.0	0.0	0.0	T	0.2	10.0	36.8	14.4	23.6	T	0.0	0.0	85.0
1994-95	0.0	0.0	0.0	0.0	4.3	3.2	8.1	18.2	0.7	T	0.0	0.0	34.5
1995-96	0.0	0.0	0.0	0.0	7.0	28.0	27.3	15.6		14.3	T	0.0	
1996-97	0.0	0.0	0.0	0.0	2.2	20.0	14.3	14.1	22.7	3.4	0.0	0.0	76.7
1997-98	0.0	0.0	0.0	0.0	12.4	17.3	16.3	3.3	9.6	0.0	0.0	0.0	58.9
1998-99	0.0	0.0	0.0	0.0	0.6	5.5	18.0	1.9	12.5	T	0.0	0.0	38.5
1999-00	0.0	0.0	0.0	0.0	T	T	16.6	15.1					
2000-01							13.5	20.9	37.5	T	0.0	0.0	
2001-02	0.0	0.0	0.0	0.0	0.0	6.0	14.4	0.8	12.6	1.0	0.0	0.0	34.8
2002-03	0.0	0.0	0.0	1.4	6.8	18.7	28.0	18.9	2.8	12.2	0.0	0.0	88.8
2003-04	0.0	0.0	0.0	T	T	33.9	6.2	7.0	8.2	T	0.0	0.0	55.3
2004-05	0.0	0.0	0.0	0.0	0.1	8.0	27.5	23.4	22.4	T	0.0	0.0	81.4
2005-06	0.0	0.0	0.0	0.0	4.0	20.8	14.9	9.7	0.3	T	0.0	0.0	49.7
2006-07	0.0	0.0	0.0	0.0	0.0	1.8	2.5	15.0	17.2	12.0	0.0	0.0	48.5
2007-08	0.0	0.0	0.0	0.0	2.1	44.5	22.9	33.1	14.1	1.3	0.0	0.0	118.0
2008-09	0.0	0.0	0.0	0.0	1.0	27.6	33.1	11.5	16.0	0.0	0.0	0.0	89.2
2009-10	0.0	0.0	0.0	T	0.0	16.4	22.5	12.9	T	T	0.0	0.0	51.8
2010-11	0.0	0.0	0.0	0.0	T	8.1	37.3	30.9	4.7	4.0	0.0	0.0	85.0
2011-12	0.0	0.0	0.0	23.0	2.7	0.6	10.2	3.0	9.4	0.0	0.0	0.0	48.9
2012-13	0.0	0.0	0.0	0.0	1.0	13.4	9.2	43.6	16.0	0.2	0.0	0.0	83.4
2013-	0.0	0.0	0.0	T	0.2	19.9							
POR= 66 YRS	0.0	0.0	T	0.4	3.5	13.2	17.9	15.0	11.2	2.8	0.1	T	64.1

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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.</p> <p>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 CONCORD NEW HAMPSHIRE (KCON)

Concord, the Capital of New Hampshire, is situated near the geographical center of New England at an altitude of approximately 300 feet above sea level on the Merrimack River. Its surroundings are hilly with many lakes and ponds. The countryside is generously wooded, mostly on land reclaimed from fields which were formerly cleared for farming. From the coast about 50 miles to the southeast, the terrain slopes gently upward to the city. West of the city, the land rises some 2,000 feet higher in only half that distance. Mount Washington, at an elevation of 6,288 feet is in the White Mountains 75 miles north of town.

Northwesterly winds are prevalent. They bring cold, dry air during the winter and pleasantly cool, dry air in the summer. Stronger southerly winds occur during July and August, and easterly winds usually accompany summer and winter storms. Winter breezes are somewhat lighter, and winds are frequently calm during the night and early morning hours. Low temperatures, as a rule, do not interrupt normal out-of-doors activity because winds are calm or light, producing a low wind chill factor.

Very hot summer weather is infrequent. During any month, temperatures considerably above the average maxima and much below the normal minima are observed.

The average amount of precipitation for the warmer half of the year differs little from that for the colder half. Precipitation occurrences average approximately one day of three for the year, with a somewhat higher frequency for the April-May period, offsetting the lower frequency of August-October. The more significant rains and heavier snowfalls are associated with easterly winds, especially northeasterly winds. The first snowfall of an inch or more is likely to come between the middle of November and the middle of December. The snow cover normally lasts from mid-December until the last week of March, but bare ground is not rare in the winter, nor is a snowscape rare earlier or later in the season. Rain, sleet, or freezing rain may also occur.

Agriculture is neither intensive nor large-scale in the vicinity of the station. Potatoes and other frost-resistant vegetables, hardy fruits such as apples, forage for the dairy industry, and maple sugar are the principal crops.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is September 22 and the average last occurrence in the spring is May 23. Freezing temperatures have occurred as late as June and as early as August.

Station History

CONCORD, NH

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
CONCORD MUNICIPAL AP	1933-10-01	1948-01-01	43° 12'	+71° 31'			AIRWAYS
CONCORD MUNICIPAL AP	1962-01-01	1973-01-01	43° 12'	-71° 30'	342		AIRWAYS, COOP
CONCORD MUNICIPAL AP	1996-03-01	2008-03-05	43° 11'	-71° 30'	346		ASOS, COOP
CONCORD MUNICIPAL AP	1948-01-01	1962-01-01	43° 12'	-71° 31'	354		AIRWAYS, COOP
CONCORD MUNICIPAL AP	2008-03-05	Present	43° 11'	-71° 30'	346		ASOS, COOP
CONCORD MUNICIPAL AP	1973-01-01	1981-12-31	43° 12'	-71° 30'	342		COOP, WXSVC
CONCORD MUNICIPAL AP	1981-12-31	1991-02-01	43° 12'	-71° 30'	342		COOP
CONCORD MUNICIPAL AP	1991-02-01	1996-03-01	43° 12'	-71° 30'	346		COOP

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1970-10-01	1995-01-12	HOURLY	2400			
TEMP	1970-10-01	1995-01-12	DAILY	2400			
PRECIP	1995-01-12	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	2008-03-05	DAILY	2400	UNIV	RCRD	
WIND	2008-03-05	Present	DAILY	2400	WIND		
PRECIP	1995-01-12	1995-07-01	HOURLY	2400			
PRECIP	2008-03-05	Present	DAILY	2400	PCPNX		
PRECIP	1970-10-01	1995-01-12	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	2008-03-05	HOURLY	2400	UNIV	RCRD	
TEMP	2008-03-05	Present	DAILY	2400	ATEMP		
PRECIP	1933-10-01	1970-10-01	DAILY	2400	UNIV	RCRD	
TEMP	1995-07-01	2008-03-05	DAILY	2400	HYGR		
TEMP	1933-10-01	1970-10-01	DAILY	2400			
TEMP	1995-01-12	1995-07-01	DAILY	2400	HYGR		
PRECIP	2008-03-05	Present	HOURLY	2400	AWPAG	RCRD;HTD	
DEWPNTTEMP	2008-03-05	Present	DAILY	2400	ATEMP		

* 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>

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NOAA/National Climatic Data Center

Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

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DATA THROUGH 2012	YRS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
03883BIRMINGHAM C.O.,AL	10	48	48	62	61	64	63	60	62	57	63	49	52	57
13876BIRMINGHAM AP,AL	34	42	50	54	63	66	65	59	63	61	66	55	46	58
13895MONTGOMERY, AL	45	47	52	59	65	63	62	61	63	62	64	55	49	59
26451ANCHORAGE, AK	40	34	42	50	50	50	46	43	39	38	36	32	27	41
25309JUNEAU, AK	33	32	32	37	39	39	34	31	32	26	19	23	20	30
26617NOME, AK	40	40	55	54	54	50	43	37	32	36	34	31	34	42
03103FLAGSTAFF, AZ	15	77	73	76	82	88	86	75	76	81	79	75	73	78
23183PHOENIX, AZ	101	78	80	84	89	93	94	85	85	89	88	83	77	85
23160TUCSON, AZ	53	80	82	86	90	92	93	78	80	87	88	84	79	85
23195YUMA, AZ	42	84	87	90	94	95	97	91	91	93	92	87	82	90
13964FORT SMITH, AR	51	50	55	56	60	62	69	73	72	66	65	54	50	61
13963LITTLE ROCK, AR	32	46	54	57	62	68	73	71	73	68	69	56	48	62
03952NORTH LITTLE ROCK, AR	32	66	66	74	78	76	81	82	80	81	76	67	63	74
24213EUREKA, CA	84	43	46	52	57	58	59	55	51	55	50	44	41	51
93193FRESNO, CA	46	47	65	77	85	90	95	97	96	94	88	66	46	79
93134LOS ANGELES C.O., CA	32	69	72	73	70	66	65	82	83	79	73	74	71	73
24257REDDING, CA	10	72	82	85	90	91	94	97	97	94	92	84	73	88
23232SACRAMENTO, CA	46	48	65	74	82	90	94	97	96	93	86	66	49	78
23188SAN DIEGO, CA	56	72	71	70	68	59	58	68	70	69	68	75	73	68
23272SAN FRANCISCO C.O., CA	38	56	62	69	73	72	73	66	65	72	70	62	53	66
03017DENVER, CO	49	71	69	69	67	64	70	71	71	74	72	64	67	69
23066GRAND JUNCTION, CO	56	61	65	65	70	73	81	79	77	79	74	63	61	71
93058PUEBLO, CO	61	75	74	74	74	73	78	79	78	80	79	72	71	76
14740HARTFORD, CT	42	53	56	57	55	57	60	62	62	59	57	45	47	56
13743WASHINGTON NAT'L AP, D.C.	50	46	50	55	57	58	64	62	62	61	59	51	46	56
12832APALACHICOLA, FL	57	58	61	65	74	77	71	64	64	66	74	67	57	67
13889JACKSONVILLE, FL	50	58	62	68	73	70	66	65	64	58	60	60	54	63
12836KEY WEST, FL	38	74	77	82	84	82	76	77	76	72	71	71	70	76
12839MIAMI, FL	20	66	68	74	76	72	68	72	71	70	70	67	63	70
13899PENSACOLA, FL	5	48	53	61	63	67	67	57	58	60	71	64	49	60
12842TAMPA, FL	58	65	66	71	75	75	67	62	62	62	66	64	61	66
13874ATLANTA, GA	65	49	54	58	66	68	67	63	64	62	66	58	50	60
03813MACON, GA	48	56	61	65	73	71	70	67	71	67	69	64	57	66
03822SAVANNAH, GA	46	54	57	62	71	68	65	64	62	58	63	61	55	62
21504HILO, HI	56	46	46	42	37	38	44	41	42	43	39	33	37	41
22521HONOLULU, HI	46	65	68	72	70	72	74	76	77	77	70	65	63	71
22516KAHULUI, HI	37	64	64	64	63	68	72	71	71	73	68	62	63	67
22536IHOE, HI	58	55	57	59	55	61	63	62	65	68	60	49	49	59
24131BOISE, ID	60	40	50	62	68	70	75	87	85	82	69	43	38	64
24156POCATELLO, ID	54	40	53	61	66	67	75	83	81	80	72	47	40	64
93809CAIRO, IL	45	45	50	56	62	65	72	74	75	69	67	51	44	61
94846CHICAGO, IL	16	44	49	51	50	58	67	66	62	59	55	38	43	54
14923MOLINE, IL	53	48	50	50	53	57	63	68	66	62	58	42	40	55
14842PEORIA, IL	52	47	50	51	55	60	67	69	67	64	61	43	42	56
93822SPRINGFIELD, IL	48	48	52	51	56	63	68	71	70	68	63	48	44	59
93817EVANSVILLE, IN	56	42	48	55	60	64	71	73	73	69	65	48	42	59
14827FORT WAYNE, IN	52	46	51	55	60	68	74	75	74	68	62	42	38	59
93819INDIANAPOLIS, IN	53	40	49	50	54	60	65	66	68	65	61	41	38	55
14933DES MOINES, IA	57	51	54	57	56	61	68	72	70	66	62	49	45	59
14943SIOUX CITY, IA	55	57	56	57	59	61	67	73	70	66	63	51	50	61
13984CONCORDIA, KS	34	64	63	63	65	67	76	78	76	70	68	59	57	67
13985DODGE CITY, KS	66	67	65	65	68	67	74	79	78	74	73	66	65	70
13996TOPEKA, KS	53	56	55	57	58	61	66	71	70	66	64	54	52	61
03928WICHITA, KS	55	58	61	62	64	64	69	76	75	68	64	58	57	65
93814GREATER CINCINNATI AP, KY	13	33	40	48	56	57	61	61	61	61	54	36	31	50
93821LOUISVILLE, KY	48	41	48	51	56	60	66	67	66	64	61	46	40	56
03816PADUCAH, KY	19	45	49	55	62	64	61	71	71	64	65	51	42	58
03937LAKE CHARLES, LA	19	62	66	74	71	72	78	83	81	78	75	67	59	72
12916NEW ORLEANS, LA	22	46	50	56	62	62	63	58	61	61	64	54	48	57
13957SHREVEPORT, LA	53	51	56	58	60	63	70	75	74	70	68	60	54	63
14764PORTLAND, ME	55	56	59	56	54	54	59	63	63	62	58	48	53	57
93721BALTIMORE, MD	40	51	55	56	56	56	62	64	62	60	58	51	49	57
14753BLUE HILL, MA	115	46	50	48	49	52	55	57	58	56	55	47	46	52
14739BOSTON, MA	61	53	56	57	56	58	63	65	65	63	60	50	52	58
94849ALPENA, MI	37	36	45	53	52	59	63	65	59	51	42	28	28	48
94847DETROIT, MI	31	40	46	52	54	61	66	68	67	61	51	35	31	53
94860GRAND RAPIDS, MI	37	28	39	46	51	56	62	64	61	55	44	27	23	46
14836LANSING, MI	42	36	44	49	52	61	65	69	64	59	50	31	29	51
94850MARQUETTE, MI	24	37	44	50	52	62	66	67	63	57	46	36	35	51
14847SAULT STE. MARIE, MI	55	36	47	55	54	57	58	62	58	45	38	24	27	47
14913DULUTH, MN	48	48	53	55	56	57	58	65	61	52	46	35	39	52
14922MINNEAPOLIS-ST. PAUL, MN	58	53	59	57	58	61	66	72	69	62	55	39	42	58
03940JACKSON, MS	33	49	54	60	66	63	70	66	67	65	70	57	49	61
93862TUPELO, MS	13	53	53	61	73	72	74	75	73	72	62	51	46	64
03945COLUMBIA, MO	27	50	49	50	55	57	64	67	64	60	59	47	45	56
03947KANSAS CITY, MO	23	58	55	58	62	61	66	72	67	66	60	49	49	60
13994ST. LOUIS, MO	37	50	52	54	56	59	66	68	65	63	60	46	43	57
13995SPRINGFIELD, MO	57	50	52	56	59	60	65	71	71	67	64	52	48	60
24033BILLINGS, MT	57	47	53	61	60	61	64	76	75	68	61	46	45	60
24143GREAT FALLS, MT	46	49	56	66	62	62	65	79	76	67	61	46	44	61
24144HELENA, MT	55	46	55	61	59	60	64	78	74	67	60	44	42	59
24153MISSOULA, MT	57	33	44	54	57	59	63	81	77	69	55	34	29	55
14939LINCOLN, NE	40	58	57	57	58	61	69	73	70	66	63	53	52	61
24023NORTH PLATTE, NE	54	63	63	62	64	65	71	77	75	72	70	60	61	67
94918OMAHA (NORTH), NE	57	55	53	54	58	61	67	74	70	68	65	51	48	60
24032VALENTINE, NE	29	63	62	59	59	62	69	76	76	71	68	60	60	65
23154ELY, NV	56	68	68	71	70	72	80	80	81	82	75	67	67	73
23169LAS VEGAS, NV	47	77	81	83	87	88	93	88	88	91	87	81	78	85
23185RENO, NV	45	65	68	75	80	81	85	92	92	91	83	70	64	79
24128WINNEMUCCA, NV	42	51	56	60	66	72	77	86	85	82	74	54	52	68
14745CONCORD, NH	58	52	55	53	53	55	58	62	60	56	53	42	47	54
14755MT. WASHINGTON, NH	74	32	35	34	34	36	32	30	31	35	38	29	30	33

93730ATLANTIC CITY AP, NJ	36	50	53	55	56	56	60	61	65	61	59	51	47	56
23050ALBUQUERQUE, NM	63	72	72	73	77	79	83	76	75	79	79	76	71	76
23009ROSWELL, NM	7	60	68	75	77	80	83	77	73	72	77	73	71	74
14735ALBANY, NY	64	46	52	54	54	56	60	64	61	57	52	37	39	53
04725BINGHAMTON, NY	51	37	42	46	50	56	62	64	61	55	49	32	29	49
14733BUFFALO, NY	67	31	38	46	51	56	65	67	64	57	50	29	27	48
94728NEW YORK C.PARK, NY	109	51	55	57	58	61	64	65	64	62	61	52	49	58
14768ROCHESTER, NY	57	35	41	49	53	59	66	69	66	59	49	31	30	51
14771SYRACUSE, NY	60	33	39	47	49	55	59	63	59	54	44	27	25	46
03812ASHEVILLE, NC	32	55	59	61	66	61	62	60	54	56	61	58	55	59
93729CAPE HATTERAS, NC	33	48	52	60	67	65	65	65	65	64	60	56	48	60
130881CHARLOTTE, NC	48	54	58	61	68	67	67	67	65	64	65	58	55	62
13723GREENSBORO-WNSTN-SALM-HGHPT,NC	68	51	56	60	63	63	64	62	61	62	64	57	53	60
13722RALEIGH, NC	42	52	56	60	63	59	60	60	58	58	60	57	53	58
13748WILMINGTON, NC	51	56	59	64	70	67	66	64	62	61	64	63	59	63
24011BISMARCK, ND	63	53	53	58	58	61	64	73	72	65	58	43	47	59
14914FARGO, ND	54	50	56	58	60	61	62	71	69	60	54	40	43	57
94014WILLISTON, ND	46	52	57	61	60	62	66	74	74	67	59	46	50	61
14820CLEVELAND, OH	66	31	37	45	53	58	65	67	63	60	52	33	26	49
14821COLUMBUS, OH	45	36	42	44	51	56	60	60	60	61	56	37	31	50
93815DAYTON, OH	53	40	44	48	52	58	66	66	67	65	59	40	36	53
94830TOLEDO, OH	41	41	46	50	52	60	64	65	63	61	54	37	33	52
13967OKLAHOMA CITY, OK	42	60	60	65	68	66	75	79	79	72	70	61	58	68
13968TULSA, OK	55	53	56	58	60	60	66	74	73	66	64	56	53	62
24229PORTLAND, OR	46	28	38	48	52	57	56	69	66	62	44	28	23	48
14737ALLEN TOWN, PA	12	43	48	53	46	53	62	57	61	58	57	49	45	53
14751HARRISBURG, PA	53	49	54	58	59	60	65	68	67	62	58	47	44	58
14711MIDDLE TOWN/HARRISBURG I APT, PA	62	48	54	57	58	59	64	67	66	61	58	47	44	57
13739PHILADELPHIA, PA	61	49	53	55	56	57	62	61	62	59	60	52	49	56
94823PITTSBURGH, PA	49	32	36	43	46	50	55	57	56	55	51	36	28	45
14777AVOCA, PA	41	41	47	50	53	57	61	62	61	55	52	36	34	51
14765PROVIDENCE, RI	42	56	58	58	57	58	61	63	62	62	61	50	52	58
13880CHARLESTON AP, SC	39	56	59	66	72	68	66	67	64	61	63	59	56	63
13883COLUMBIA, SC	46	55	59	64	70	68	67	67	66	65	67	63	59	64
03870GREENVILLE-SPARTANBURG AP, SC	39	54	57	63	66	62	62	60	61	62	66	58	54	60
14936HURON, SD	55	57	59	59	61	65	70	76	74	69	63	50	49	63
24090RAPID CITY, SD	55	57	60	63	62	60	65	73	74	70	66	55	55	63
13882CHATTANOOGA, TN	65	43	49	53	61	65	65	62	63	64	63	53	44	57
13891KNOXVILLE, TN	57	40	47	53	63	64	65	64	63	61	61	49	40	56
13893MEMPHIS, TN	35	50	54	56	64	69	74	74	75	69	70	58	50	64
13897NASHVILLE, TN	55	41	47	52	59	60	65	63	63	62	62	50	42	56
13962ABILENE, TX	49	62	64	70	72	70	78	80	78	71	72	67	62	71
23047AMARILLO, TX	61	69	68	72	74	71	78	79	77	73	75	72	67	73
13958AUSTIN/CITY, TX	61	49	51	55	54	56	69	74	74	66	64	54	49	60
13904AUSTIN/BERGSTROM, TX	64	49	51	55	54	56	69	75	74	66	63	56	49	60
12919BROWNSVILLE, TX	59	41	48	53	58	63	73	80	76	68	65	51	42	60
12924CORPUS CHRISTI, TX	62	44	49	54	56	59	72	79	76	68	67	54	43	60
03927DALLAS-FORT WORTH, TX	197	52	54	58	61	57	67	75	73	67	63	57	52	61
23044EL PASO, TX	54	78	82	86	89	90	90	82	81	83	84	83	77	84
12923GALVESTON, TX	103	48	51	56	61	67	75	73	71	68	71	59	48	62
12960HOUSTON, TX	27	45	50	54	58	62	68	70	68	66	64	52	51	59
23042LUBBOCK, TX	25	65	66	73	74	71	76	77	76	71	75	69	65	72
23023MIDLAND-ODESSA, TX	22	66	69	73	78	78	81	81	77	77	72	74	65	74
12917PORT ARTHUR, TX	26	42	52	52	62	64	69	65	63	62	67	57	47	58
12921SAN ANTONIO, TX	53	47	50	57	56	56	67	74	74	67	64	54	48	60
23176MILFORD, UT	16	58	64	63	69	73	82	77	79	80	76	62	60	70
24127SALT LAKE CITY, UT	64	45	54	64	68	72	80	83	82	82	72	53	42	66
14742BURLINGTON, VT	65	41	48	51	49	56	59	64	60	54	47	31	33	49
13733LYNCHBURG, VA	52	52	56	58	62	62	65	62	62	61	62	56	53	59
13737NORFOLK, VA	32	53	56	60	63	62	67	62	62	61	59	56	54	60
13740RICHMOND, VA	46	54	58	62	66	66	70	68	66	65	63	59	54	63
94240QUILLAYUTE, WA	30	22	30	34	35	37	35	43	44	47	34	21	19	33
24281SEATTLE C.O., WA	31	28	34	42	47	52	49	63	56	53	37	28	23	43
24233SEATTLE SEA-TAC AP, WA	30	28	40	50	52	56	56	65	65	62	43	28	23	47
24157SPOKANE, WA	48	28	41	55	61	65	67	80	78	72	55	29	23	55
13729ELKINS, WV	11	29	32	39	46	44	48	44	44	45	46	37	28	40
14898GREEN BAY, WI	60	49	52	54	56	61	65	66	63	57	48	38	40	54
14837MADISON, WI	50	47	51	52	52	58	64	67	64	60	54	39	40	54
14839MILWAUKEE, WI	55	44	47	50	53	60	65	69	66	59	54	39	38	54
24018CHEYENNE, WY	64	64	67	67	63	61	67	69	68	70	69	61	60	66
24022LLANDER, WY	50	65	68	70	66	64	72	75	75	72	67	58	61	68
24029SHERIDAN, WY	55	57	60	63	60	60	65	75	75	68	62	53	55	63
41415GUAM, PC	41	48	53	57	57	56	51	40	36	38	38	40	38	46
21603JOHNSTON ISLAND, PC	22	70	74	74	70	74	78	79	76	73	65	59	62	71
40309KOROR, PC	46	53	53	62	61	52	44	45	44	51	46	50	49	51
40710MAJURO- MARSHALL IS, PC	45	61	64	66	59	58	55	56	61	59	55	53	53	58
61705PAGO PAGO- AMER SAMOA, PC	42	45	47	47	42	34	35	40	44	51	45	46	47	44
40504POHNPEI- CAROLINE IS., PC	46	38	41	45	42	41	40	44	44	44	40	39	36	41
40505CHUUK- E. CAROLINE IS., PC	46	50	55	55	49	46	43	47	47	44	42	43	42	47
41606WAKE ISLAND, PC	28	68	71	76	75	75	76	72	68	68	68	65	64	71
40308YAP- W CAROLINE IS., PC	47	57	59	66	66	63	52	47	45	49	47	52	48	54
11641SAN JUAN, PR	51	68	70	76	71	64	65	69	68	62	64	59	61	66