

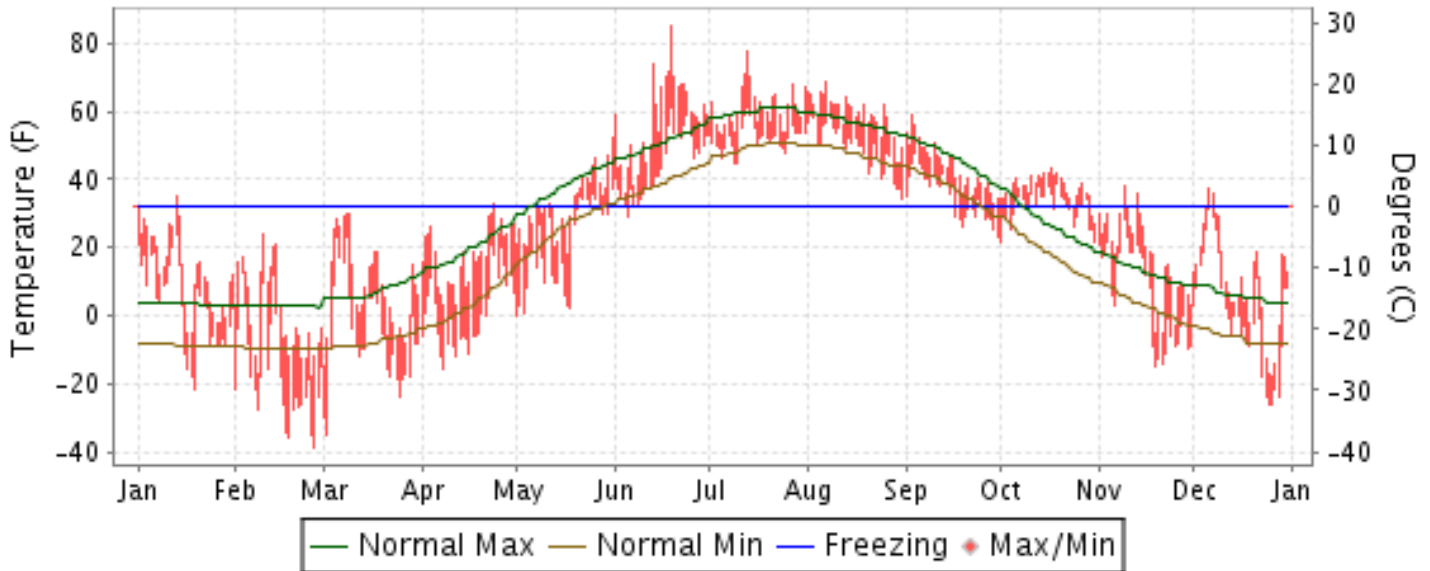


# 2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

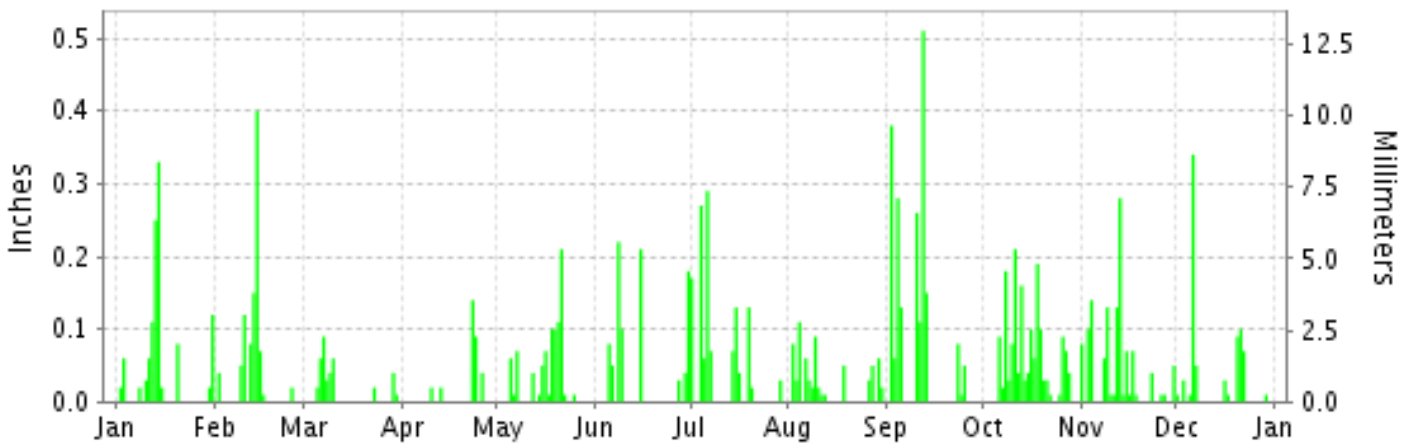
ISSN 0197-9825

## KOTZEBUE, ALASKA (PAOT)

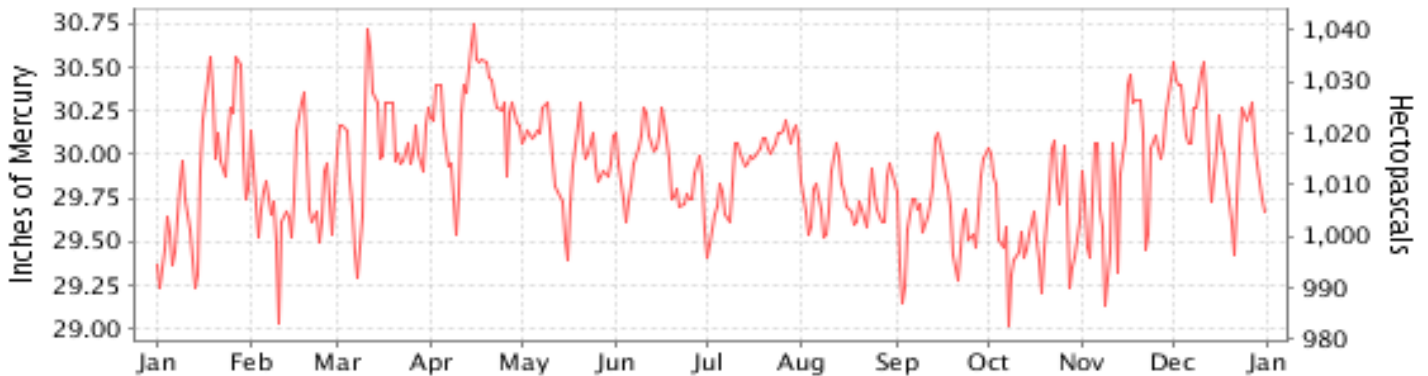
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



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CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2013

## KOTZEBUE (PAOT)

LATITUDE: 66° 52'N      LONGITUDE: 162° 37'W      ELEVATION (FT): GRND: 30 BARO: 19      TIME ZONE: ALASKA (UTC -9)      WBAN: 26616

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	13.8	0.4	8.8	18.0	32.4	57.5	60.9	59.0	43.7	37.3	17.7	10.8	30.0	
	HIGHEST DAILY MAXIMUM	35	24	30	33	52	85	78	69	59	43	38	37	85	
	DATE OF OCCURRENCE	13	10	09+	24	31	19	13	07	03	17	09	06	JUN 19	
	MEAN DAILY MINIMUM	3.5	-16.9	-5.6	0.8	20.4	44.1	52.1	49.1	35.0	31.7	6.0	0.9	18.4	
	LOWEST DAILY MINIMUM	-22	-39	-35	-16	0	29	45	34	23	22	-15	-26	-39	
	DATE OF OCCURRENCE	19	26	02	08	01	05	10+	31	30	31+	19	26+	FEB 26	
	AVERAGE DRY BULB	8.7	-8.3	1.6	9.4	26.4	50.8	56.5	54.0	39.4	34.5	11.9	5.9	24.2	
	MEAN WET BULB	8.3		2.3	9.0	25.4	46.4	53.0	51.1	36.8	33.4	11.5	5.3		
	MEAN DEW POINT	2.5		-2.3	4.4	22.6	42.9	50.6	47.6	32.6	31.4	7.9	1.1		
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 70	0	0	0	0	0	5	3	0	0	0	0	0	0	8
	MAXIMUM <= 32°	30	28	31	29	17	0	0	0	0	3	28	29	195	
MINIMUM <= 32°	31	28	31	30	24	2	0	0	13	14	30	31	234		
MINIMUM <= 0°	11	23	21	16	1	0	0	0	0	0	13	17	102		
H/C	HEATING DEGREE DAYS	1738	2045	1957	1659	1192	425	262	332	762	938	1584	1825	14719	
	COOLING DEGREE DAYS	0	0	0	0	0	8	5	0	0	0	0	0	13	
RH	MEAN (PERCENT)	74	77	76	77	85	79	82	78	77	89	81	79	80	
	HOUR 03 LST	73	77	78	79	87	84	87	85	82	89	80	79	82	
	HOUR 09 LST	75	77	77	78	86	80	83	80	82	91	81	79	81	
	HOUR 15 LST	74	76	73	73	84	75	79	69	70	86	82	78	77	
	HOUR 21 LST	73	78	77	78	83	74	80	75	76	89	82	77	79	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	0	0	0	1	3	1	1	0	0	2	3	0	11	
	THUNDERSTORMS	0	0	0	0	0	0	0	0	0	0	0	0	0	
PR	MEAN STATION PRESS. (IN.)	29.87		30.06	30.26	29.98	29.92	29.94	29.73	29.66	29.60	29.91	30.09		
	MEAN SEA-LEVEL PRESS. (IN.)	29.91		30.08	30.28	30.00	29.95	29.96		29.68	29.62	29.94	30.11		
WINDS	RESULTANT SPEED (MPH)	8.6	2.7	4.2	2.6	3.7	2.4	4.2	1.5	4.9	8.9	4.6	8.0	2.7	
	RES. DIR. (TENS OF DEGS.)	08	06	09	35	21	24	21	08	01	10	11	10	10	
	MEAN SPEED (MPH)	12.3	6.6	11.4	9.1	11.3	7.2	9.4	9.4	11.5	13.3	13.6	11.8	10.6	
	PREVAIL.DIR.(TENS OF DEGS.)	09	01	11	28	14	29	16	10	36	11	11	12	11	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	44	36	39	35	38	29	29	31	31	33	51	38	51	
	DIR. (TENS OF DEGS.)	09	15	09	31	31	16	16	10	35	11	09	11	09	
	DATE OF OCCURRENCE	12	10	07	26	12	30	14	26	28	05	07	05	NOV 07	
	MAXIMUM 3-SECOND WIND:														
SPEED (MPH)	53	40	45	39	43	35	36	44	37	39	59	46	59		
DIR. (TENS OF DEGS.)	10	09	11	31	31	16	17	10	36	07	09	11	09		
DATE OF OCCURRENCE	12	10	07	26	12	30	14	26	28	08	07	05	NOV 07		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	1.12	0.94	0.37	0.31	0.86	0.91	1.28	0.67	2.02	1.61	1.22	0.75	12.06	
	GREATEST 24-HOUR (IN.)	0.46	0.40	0.12	0.23	0.21	0.32	0.33	0.11	0.62	0.27	0.38	0.37	0.62	
	DATE OF OCCURRENCE	13-14	14	07-08	23-24	21	08-09	06-07	04	12-13	10-11	12-13	06-07	SEP 12-13	
	NUMBER OF DAYS WITH:														
PRECIPITATION 0.01	12	9	9	5	14	8	11	15	11	21	18	11	144		
PRECIPITATION 0.10	4	3	0	1	4	4	5	1	7	6	5	2	42		
PRECIPITATION 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	10.8	9.4	3.7	3.1	6.3	0.0	0.0	0.0	0.4	0.5	10.8	7.2	52.2	
	GREATEST 24-HOUR (IN.)	3.3	4.0	0.7	1.4	1.1	0.0	0.0	0.0	0.3	0.3	2.4	2.0	4.0	
	DATE OF OCCURRENCE	14	14	08	23	20				25	10	13	22+	FEB 14	
	MAXIMUM SNOW DEPTH (IN.)	10	19	11	6	8	T	0	0	T	T	6	7	19	
	DATE OF OCCURRENCE	31+	15	15+	02+	20	02+			23	26+	18+	31+	FEB 15	
	NUMBER OF DAYS WITH:														
SNOWFALL >= 1.0	5	3	0	1	3	0	0	0	0	0	5	4	21		

# NORMALS, MEANS, AND EXTREMES KOTZEBUE (PAOT)

LATITUDE: 66° 52'N      LONGITUDE: 162° 37'W      ELEVATION (FT): GRND: 30 BARO: 19      TIME ZONE: ALASKA (UTC -9)      WBAN: 26616

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	3.9	6.3	8.8	21.2	37.8	51.5	59.5	56.1	46.7	28.5	14.2	8.7	28.6	
	MEAN DAILY MAXIMUM	84	3.0	4.0	8.5	21.2	37.5	50.0	59.0	56.3	45.8	28.7	13.0	4.9	27.7	
	HIGHEST DAILY MAXIMUM	71	39	40	39	48	74	85	85	80	69	54	40	37	85	
	YEAR OF OCCURRENCE		1961	1989	1973	1988	1947	2013	1958	1968	1978	2003	2003	2013	2013	JUN 2013
	MEAN OF EXTREME MAXS.	84	29.0	27.8	29.7	38.0	55.0	68.6	73.4	69.0	58.7	42.2	31.1	28.8	45.9	
	NORMAL DAILY MINIMUM	30	-9.5	-7.8	-6.7	5.4	26.0	39.9	49.7	47.3	37.9	20.1	4.0	-4.1	16.9	
	MEAN DAILY MINIMUM	84	-9.6	-9.6	-7.2	4.5	24.4	37.8	48.2	46.2	36.2	19.6	2.8	-6.9	15.5	
	LOWEST DAILY MINIMUM	71	-49	-52	-48	-44	-18	20	30	29	13	-19	-36	-47	-52	
	YEAR OF OCCURRENCE		1989	1968	1956	1943	1945	1948	1976	1994	1992	1975	1948	1974	1974	FEB 1968
	MEAN OF EXTREME MINS.	84	-31.4	-31.8	-27.4	-17.1	7.9	28.6	39.6	38.2	25.5	1.8	-16.1	-27.8	-0.7	
	NORMAL DRY BULB	30	-2.8	-0.8	1.1	13.3	31.9	45.7	54.6	51.7	42.3	24.3	9.1	2.3	22.7	
	MEAN DRY BULB	84	-3.2	-2.6	0.6	12.9	31.0	44.2	53.6	51.3	41.1	24.2	7.9	-0.8	21.7	
	MEAN WET BULB	26	-0.9	-0.9	-1.1	11.8	28.9	41.8	50.5	48.1	38.6	22.8	6.8	1.0	20.6	
	MEAN DEW POINT	26	-4.3	-4.6	-3.7	9.6	27.1	40.3	48.9	46.8	36.8	21.0	4.9	-1.5	18.4	
	NORMAL NO. DAYS WITH: MAXIMUM >= 70	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	
	MAXIMUM <= 32	30	30.0	26.8	30.4	22.9	7.7	0.0	0.0	0.0	0.4	18.8	28.2	29.8	195.0	
	MINIMUM <= 32	30	30.9	27.9	31.0	28.9	23.0	3.0	0.0	0.1	5.9	27.4	29.8	31.0	238.9	
MINIMUM <= 0	30	21.4	18.5	21.2	11.7	0.6	0.0	0.0	0.0	0.0	0.8	12.6	19.5	106.3		
H/C	NORMAL HEATING DEG. DAYS	30	2102	1841	1982	1551	1026	580	325	413	681	1262	1677	1944	15384	
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	1	3	1	0	0	0	0	5	
RH	NORMAL (PERCENT)	30	74	74	73	78	82	81	80	81	78	80	78	76	78	
	HOURLY 03 LST	30	73	75	74	80	86	86	84	86	82	81	78	76	80	
	HOURLY 09 LST	30	74	75	73	78	82	82	81	83	81	82	78	77	79	
	HOURLY 15 LST	30	74	74	70	74	78	78	76	76	72	76	78	77	75	
	HOURLY 21 LST	30	74	74	74	79	81	78	77	80	78	81	78	77	78	
S	PERCENT POSSIBLE SUNSHINE															
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	0.9	0.9	0.7	1.7	4.1	4.1	1.6	0.9	0.9	0.5	0.6	0.7	17.6	
	THUNDERSTORMS	65	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.6	
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)	53	4.6	4.2	4.3	4.6	5.0	5.3	5.7	6.2	5.8	5.5	5.1	4.7	5.1	
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.0	3.5	3.8	4.2	4.6	4.9	5.7	5.9	5.5	5.1	4.6	4.3	4.7	
	MEAN NO. DAYS WITH: CLEAR	53	11.3	12.3	12.2	10.2	7.8	5.6	4.3	3.4	5.6	7.6	8.6	10.6	99.5	
	PARTLY CLOUDY	53	4.1	3.4	5.6	6.7	8.9	10.5	8.0	6.3	5.0	4.5	4.0	4.2	71.2	
	CLOUDY	53	15.6	12.6	13.2	13.1	14.2	13.8	18.6	20.7	18.9	18.4	16.8	15.6	191.5	
PR	MEAN STATION PRESSURE(IN)	30	29.86	29.90	29.95	29.91	29.91	29.86	29.86	29.81	29.75	29.76	29.79	29.76	29.84	
	MEAN SEA-LEVEL PRES. (IN)	30	29.87	29.91	29.97	29.93	29.92	29.88	29.88	29.83	29.76	29.78	29.81	29.78	29.86	
WINDS	MEAN SPEED (MPH)	30	11.8	12.5	10.7	10.8	10.3	10.6	11.5	12.2	12.3	12.9	13.2	12.6	11.8	
	PREVAIL.DIR(TENS OF DEGS)	33	11	11	11	12	29	29	29	30	10	11	11	11	29	
	MAXIMUM 2-MINUTE: SPEED (MPH)	16	51	59	49	56	39	35	45	39	43	53	66	52	66	
	DIR. (TENS OF DEGS)		10	21	11	08	15	29	15	13	12	10	11	22	11	
	YEAR OF OCCURRENCE		2005	2006	2009	2001	2009	2006	2009	1998	2005	2004	2011	2004	NOV 2011	
	MAXIMUM 3-SECOND SPEED (MPH)	16	58	68	61	60	47	43	51	47	51	61	76	60	76	
	DIR. (TENS OF DEGS)		11	21	11	08	15	10	15	13	10	09	11	21	11	
YEAR OF OCCURRENCE		2009	2006	2009	2001	2009	2005	2009	1998	2005	2004	2011	2004	NOV 2011		
PRECIPITATION	NORMAL (IN)	30	0.62	0.66	0.44	0.54	0.41	0.58	1.45	2.18	1.58	1.01	0.77	0.76	11.00	
	MAXIMUM MONTHLY (IN)	71	1.77	4.04	2.18	1.84	1.38	1.76	3.51	5.26	4.31	3.20	2.22	2.34	5.26	
	YEAR OF OCCURRENCE		1973	2009	2009	2002	2004	1998	1981	1998	1977	1993	1990	2004	AUG 1998	
	MINIMUM MONTHLY (IN)	71	T	0.00	T	T	T	0.01	0.01	0.08	0.03	0.04	0.01	0.02	0.00	
	YEAR OF OCCURRENCE		1966	1979	1986	1943	1979	1956	1977	1991	1967	1999	1999	1956	FEB 1979	
	MAXIMUM IN 24 HOURS (IN)	71	0.81	1.37	0.64	0.55	0.56	1.23	1.78	1.48	1.65	1.32	1.00	19.00	19.00	
	YEAR OF OCCURRENCE		1963	2011	2009	2001	1963	1998	1946	1954	1978	1997	2008	2003	DEC 2003	
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	9.0	8.6	6.6	7.0	6.3	5.8	11.1	14.1	12.5	10.9	9.8	11.0	112.7	
PRECIPITATION >= 1.00	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1		
SNOWFALL	NORMAL (IN)	30	9.1	9.6	5.9	5.1	1.2	0.0	0.0	0.0	0.8	6.1	10.5	11.5	59.8	
	MAXIMUM MONTHLY (IN)	70	36.9	47.4	21.9	19.6	12.0	2.4	0.2	0.3	7.4	19.4	45.6	34.9	47.4	
	YEAR OF OCCURRENCE		2007	2009	1954	1999	1964	1963	2002	1962	1957	2011	2003	2011	FEB 2009	
	MAXIMUM IN 24 HOURS (IN)	70	10.7	9.9	8.6	8.5	4.7	2.1	0.2	0.3	5.7	7.9	11.3	11.0	11.3	
	YEAR OF OCCURRENCE'		1999	2011	1954	1999	1984	1963	2002	1962	1996	2011	2003	1995	NOV 2003	
	MAXIMUM SNOW DEPTH (IN)	64	51	79	79	62	43	8	0	0	4	11	22	50	79	
	YEAR OF OCCURRENCE		2012	2011	2011	2011	1973	1966			1957	2011	1993	2011	MAR 2011	
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	3.4	3.0	2.2	1.8	0.4	0.0	0.0	0.0	0.3	1.8	3.5	3.9	20.3		

**PRECIPITATION (inches) 2013 KOTZEBUE (PAOT)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	0.54	0.01	0.11	0.24	0.64	0.38	2.11	2.98	1.70	0.35	0.50	0.69	10.25
1985	0.39	0.11	0.77	0.46	0.50	0.60	0.06	2.03	2.18	2.39	0.69	0.56	10.74
1986	0.43	0.44	T	0.22	0.01	0.34	1.42	2.39	3.29	0.26	0.30	0.87	9.97
1987	0.47	0.57	0.21	0.09	0.05	0.71	1.15	0.66	1.99	0.41	0.34	1.40	8.05
1988	0.19	0.31	0.77	0.05	0.83	0.15	0.91	2.35	0.99	0.64	0.28	1.37	8.84
1989	0.27	1.23	0.14	1.41	1.05	0.25	2.41	3.17	1.80	1.04	0.36	0.55	13.68
1990	0.36	0.55	0.75	0.45	0.37	0.85	0.92	2.30	3.01	1.91	2.22	1.07	14.76
1991	1.01	0.56	1.00	0.51	0.22	0.12	1.99	0.08	1.07	1.69	0.12	0.29	8.66
1992	0.26	0.80	0.88	0.10	0.40	0.50	0.37	3.00	0.59	0.84	1.16	0.92	9.82
1993	0.59	0.25	0.64	0.08	0.18	0.93	0.69	1.78	2.45	3.20	2.00	0.62	13.41
1994	0.47	0.18	0.91	0.29	0.39	0.24	3.07	4.70	0.86	1.10	0.75	0.63	13.59
1995	0.52	0.39	0.13	1.22	0.92	1.18	0.71	0.87	1.11	1.12	0.56	0.64	9.37
1996	0.43	1.24	0.18	0.08	0.58	0.88	1.18	1.73	1.69	.83	1.10	.35	10.27
1997	0.84	0.67	0.03	0.81	0.62	0.07	1.11	3.23	2.83	2.19	0.84	0.49	13.73
1998	0.30	0.44	0.20	1.02	0.90	1.76	1.15	5.26	1.66	0.57	0.31	0.62	14.19
1999	0.96	0.27	0.23	1.49	0.08	0.12	1.93	0.70	2.18	T	0.01	0.42	8.39
2000	1.38	0.56	0.10	0.04	0.22	0.49	1.80	3.38	1.82	0.63	0.72	0.82	11.96
2001	0.70	0.91	0.07	1.42	0.09	0.50	1.41	3.09	0.70	0.87	0.02	0.35	10.13
2002	0.96	0.55	0.34	1.84	0.15	0.28	1.46	0.73	2.16	0.54	0.63	0.72	10.36
2003	0.21	0.78	0.47	0.59	0.46	0.80	2.06	2.16	1.12	1.45	1.84	0.65	12.59
2004	0.15	0.51	0.12	0.11	1.38	0.74	0.89	2.05	0.82	0.70	0.51	2.34	10.32
2005	0.49	1.06	0.63	0.17	0.52	0.35	0.94	2.46	1.97	0.72	0.15	1.07	10.53
2006	0.06	0.92	0.20	0.13	0.50	1.21	1.61	0.75	2.33	2.25	0.42	0.35	10.73
2007	1.40	0.03	0.02	0.49	0.06	0.95	0.48	1.04	1.18	0.27	0.99	0.66	7.57
2008	1.09	0.78	0.46	0.57	0.02	1.12	2.29	0.99	0.32	0.38	1.43	0.53	9.98
2009	1.38	4.04	2.18	0.87	0.42	0.48	0.84	3.18	0.59	0.86	0.88	0.85	16.57
2010	0.05	0.25	0.38	0.69	0.06	0.24	2.14	2.38	0.90	0.43	1.30	1.31	10.13
2011	1.18	3.67	0.08	0.67	0.08	1.08	2.75	2.10	0.49	1.75	0.66	1.87	16.38
2012	0.05	0.90	0.26	0.20	0.37	0.20	3.48	4.36	2.04	1.12	0.07	0.22	13.27
2013	1.12	0.94	0.37	0.31	0.86	0.91	1.28	0.67	2.02	1.61	1.22	0.75	12.06
POR= 76 YRS	0.50	0.49	0.35	0.42	0.35	0.57	1.46	1.96	1.36	0.77	0.55	0.52	9.30

WBAN : 26616

**AVERAGE TEMPERATURE (°F) 2013 KOTZEBUE (PAOT)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	-3.3	-21.0	5.8	0.4	24.1	42.2	51.3	47.0	45.0	28.2	8.0	5.1	19.4
1985	16.2	-7.0	-4.3	-5.4	26.6	39.3	54.1	53.4	40.3	20.8	10.9	12.9	21.5
1986	-3.0	7.1	-4.9	4.1	29.7	43.6	53.3	50.0	41.2	21.3	9.6	9.8	21.8
1987	-2.0	-0.4	4.2	7.8	32.7	47.9	56.6	53.4	37.7	30.7	5.3	-2.6	22.6
1988	7.5	1.4	-2.3	17.7	34.4	44.7	52.2	52.0	42.9	18.1	1.5	3.9	22.8
1989	-19.9	17.7	5.3	21.0	29.6	44.1	54.2	53.9	45.6	23.6	0.4	5.6	23.4
1990	-8.6	-24.1	1.8	15.9	38.3	45.7	58.8	56.8	40.1	24.5	4.0	-6.9	20.5
1991	-3.0	-4.7	-2.9	14.5	33.1	50.3	54.4	51.8	45.8	29.3	7.6	-4.7	22.6
1992	1.2	-8.7	-4.9	9.3	23.2	43.8	57.4	49.9	32.2	18.8	6.6	-2.4	18.9
1993	-9.0	4.5	0.7	19.5	33.5	47.8	59.0	49.4	38.4	29.0	11.2	8.9	24.4
1994	0.8	2.8	-7.3	11.4	32.8	43.7	55.6	50.6	39.9	18.3	2.5	-2.8	20.7
1995	-0.5	2.3	-7.3	15.0	36.3	44.9	55.8	50.7	47.6	26.1	6.6	-0.3	23.1
1996	-3.5	-3.5	8.3	10.8	34.7	46.1	54.6	48.8	38.2	16.9	12.4	-1.6	21.9
1997	-3.7	3.7	-4.5	17.9	37.4	47.7	54.2	53.6	47.2	19.0	15.7	-2.2	23.8
1998	-5.2	-2.7	13.5	24.1	33.5	46.9	56.0	48.5	43.4	29.3	13.9	1.1	25.2
1999	-13.7	-8.9	-5.3	10.5	28.0	45.1	52.6	52.9	44.6	21.0	2.6	-12.5	18.1
2000	-8.9	10.0	6.5	11.5	25.3	44.0	49.3	47.8	38.8	23.9	14.3	12.9	23.0
2001	8.7	13.4	1.5	15.5	21.6	43.1	54.1	49.8	44.6	18.0	6.7	-6.7	22.5
2002	-6.9	1.6	12.4	12.8	37.6	45.1	53.0	50.2	43.8	32.1	20.2	10.2	26.0
2003	5.7	5.9	-1.8	21.2	33.1	50.7	51.0	51.5	40.6	31.1	13.5	-6	25.2
2004	-1.4	-1.7	3.1	24.9	39.4	53.4	59.9	58.6	38.9	28.4	13.2	2.0	26.6
2005	-3	-4.4	8.0	8.1	35.2	47.9	56.4	55.8	45.0	25.9	1.8	-2	23.3
2006	-17.3	5.3	-0.3	7.5	31.0	43.4	52.7	48.0	47.0	32.7	10.2	3.5	22.0
2007	0.5	1.5	-9.3	18.4	27.2	46.4	57.4	58.1	47.1	23.9	16.5	6.6	24.5
2008	-6.8	-10.6	-0.8	13.7	34.1	43.6	53.5	50.8	43.5	19.5	5.6	4.6	20.9
2009	-9.2	-6.2	-0.0	12.9	32.7	46.9	60.0	49.8	41.5	29.2	1.3	10.1	22.4
2010	-7.8	1.1	-3.9	15.5	31.0	46.4	50.8	54.9	47.3	26.3	14.7	-2.4	22.8
2011	4.1	2.7	5.2	13.9	32.6	51.6	53.5	50.8	44.7	26.7	1.1	2.8	24.1
2012	-22.4	2.0	-8.8	14.3	26.5	43.2	54.2	51.1	40.8	28.7	4.5	-3.1	19.3
2013	8.7	-8.3	1.6	9.4	26.4	50.8	56.5	54.0	39.4	34.5	11.9	5.9	24.2
POR= 84 YRS	-3.2	-2.6	0.6	12.9	31.0	44.2	53.6	51.3	41.1	24.2	7.9	-0.8	21.6

**HEATING DEGREE DAYS (base 65°F) 2013 KOTZEBUE (PAOT)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	418	550	591	1133	1706	1858	1509	2019	2153	2115	1184	765	16001
1985-86	333	352	737	1363	1617	1610	2112	1619	2171	1825	1088	634	15461
1986-87	354	458	709	1345	1661	1710	2080	1830	1883	1712	993	508	15243
1987-88	263	356	811	1054	1787	2094	1784	1846	2089	1418	944	603	15049
1988-89	390	395	658	1447	1905	1894	2635	1321	1844	1313	1090	619	15511
1989-90	331	336	577	1275	1936	1843	2283	2499	1961	1468	822	580	15911
1990-91	199	249	739	1249	1827	2229	2107	1952	2106	1509	986	451	15603
1991-92	321	403	568	1098	1719	2164	1977	2135	2166	1667	1291	627	16136
1992-93	236	460	977	1423	1752	2090	2297	1693	1995	1361	970	511	15765
1993-94	184	476	788	1110	1609	1733	1991	1745	2244	1606	991	630	15107
1994-95	290	440	746	1441	1873	2102	2027	1755	2243	1495	880	595	15887
1995-96	278	435	517	1198	1750	2021	2130	1991	1756	1626	929	562	15193
1996-97	312	496	796	1484	1574	2057	2123	1709	2149	1407	849	514	15470
1997-98	330	347	527	1416	1471	2076	2168	1889	1589	1220	971	536	14540
1998-99	280	505	641	1102	1525	1971	2435	2062	2174	1627	1140	591	16053
1999-00	376	371	606	1356	1865	2397	2281	1589	1809	1597	1222	625	16094
2000-01	477	526	779	1267	1515	1608	1740	1442	1962	1479	1342	648	14785
2001-02	332	462	606	1452	1744	2216	2220	1769	1625	1558	841	587	15412
2002-03	363	451	630	1015	1336	1692	1830	1649	2065	1307	984	423	13745
2003-04	426	414	724	1045	1538	2025	2052	1926	1912	1197	787	353	14399
2004-05	165	201	778	1126	1550	1946	2017	1939	1762	1699	916	506	14605
2005-06	269	279	594	1207	1888	2015	2548	1666	2019	1715	1044	640	15884
2006-07	374	518	531	998	1639	1899	1993	1770	2297	1390	1166	555	15130
2007-08	230	211	531	1264	1448	1803	2224	2188	2034	1532	952	639	15056
2008-09	361	433	637	1405	1775	1870	2296	1994	2010	1558	996	536	15871
2009-10	161	465	698	1103	1906	1693	2251	1783	2132	1478	1047	552	15269
2010-11	433	306	524	1192	1506	2079	1881	1737	1846	1525	997	399	14425
2011-12	350	438	602	1181	1910	1919	2709	1819	2284	1514	1184	647	16557
2012-13	329	423	719	1115	1809	2109	1738	2045	1957	1659	1192	425	15520
2013-	262	332	762	938	1584	1825							

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**COOLING DEGREE DAYS (base 65°F) 2013 KOTZEBUE (PAOT)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	3	1	0	0	0	0	4
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	5	9	0	0	0	0	0	14
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	4	15	1	0	0	0	0	20
1991	0	0	0	0	0	17	1	0	0	0	0	0	18
1992	0	0	0	0	0	0	8	0	0	0	0	0	8
1993	0	0	0	0	0	0	9	0	0	0	0	0	9
1994	0	0	0	0	0	0	3	1	0	0	0	0	4
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	5	0	0	0	0	0	5
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	13	15	11	0	0	0	0	39
2005	0	0	0	0	0	0	11	3	0	0	0	0	14
2006	0	0	0	0	0	0	1	0	0	0	0	0	1
2007	0	0	0	0	0	0	2	2	0	0	0	0	4
2008	0	0	0	0	0	0	11	0	0	0	0	0	11
2009	0	0	0	0	0	0	14	0	0	0	0	0	14
2010	0	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	1	0	0	0	0	0	0	1
2012	0	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	8	5	0	0	0	0	0	13

## SNOWFALL (inches) 2013 KOTZEBUE (PAOT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0.0	0.0	T	5.6	7.8	9.4	5.3	1.6	9.3	5.3	4.4	0.0	48.7
1985-86	0.0	0.0	1.5	4.1	8.0	6.5	10.1	3.3	T	3.8	T	0.0	37.3
1986-87	0.0	0.0	2.0	4.1	2.9	11.6	6.0	9.2	3.7	1.0	T	T	40.5
1987-88	0.0	0.0	T	3.8	4.7	21.7	2.8	4.8	9.4	0.6	T	T	47.8
1988-89	0.0	0.0	0.4	6.6	4.9	23.6	4.3	11.3	2.0	16.0	3.4	T	72.5
1989-90	0.0	0.0	T	8.8	4.7	8.6	5.8	6.7	9.5	5.1	0.4	0.0	49.6
1990-91	0.0	0.0	3.1	9.6	22.8	15.4	12.7	6.2	13.4	6.9	0.4	T	90.5
1991-92	0.0	0.0	0.0	6.6	1.1	4.4	5.7	6.8	14.0	1.7	3.7	0.0	44.0
1992-93	0.0	0.0	0.4	10.0	14.8	10.8	7.2	3.1	10.2	1.3	0.3	T	58.1
1993-94	0.0	0.0	5.0	4.1	24.3	11.0	7.0	1.9	10.4	3.7	0.6	T	68.0
1994-95	0.0	0.0	T	14.9	8.2	7.8	5.1	4.0	1.4	2.6	0.5	T	44.5
1995-96	0.0	0.0	0.0	7.1	7.6	17.9	6.5	19.1	2.1	1.9	T	T	62.2
1996-97	0.0	0.0	6.3	9.2	12.4	3.8	11.3	6.4	0.3	7.9	0.1	0.0	57.7
1997-98	0.0	0.0	0.0	7.5	12.6	5.2	3.2	4.9	2.6	10.5	3.1	T	49.6
1998-99	0.0	0.0	0.0	2.5	6.6	6.4	22.8	10.0	4.5	19.6	1.7	T	74.1
1999-00	0.0	0.0	T	T	0.4	4.3	18.9	7.3	1.1	0.6	1.0	0.0	33.6
2000-01	T	0.0	T	7.1	10.4	9.3	13.7	9.6	1.5	15.1	1.2	0.8	68.7
2001-02	0.0	0.0	0.6	2.1	0.6	6.9	22.4	16.7	5.1	18.4	1.0	T	73.8
2002-03	0.2	0.0	0.9	0.9	10.8	12.8	8.0	22.2	7.7	4.4	T	0.0	67.9
2003-04	0.0	0.0	T	4.6	45.6	19.0	4.0	11.6	2.9	2.7	T	0.0	90.4
2004-05	0.0	0.0	0.7	7.0	17.4	34.0	10.5	31.8	15.9	2.2	0.3	T	119.8
2005-06	0.0	0.0	0.0	6.9	5.2	21.1	2.8	12.7	7.4	2.7	3.0	0.5	62.3
2006-07	0.0	0.0	0.0	7.1	8.9	8.5	36.9	1.2	0.3	3.4	T	0.0	66.3
2007-08	0.0	0.0	0.5	3.3	12.0	12.6	24.8	16.5	11.0	6.3	T	T	87.0
2008-09	0.0	0.0	0.0	4.6	7.3	6.9	13.6	47.4	21.8	3.6	1.5	0.0	106.7
2009-10	0.0	0.0	0.6	5.6	11.4	11.6	0.6	1.3	4.1	6.7	0.5	T	42.4
2010-11	0.0	0.0	0.2	3.2	10.3	15.5	17.8	43.4	1.1	12.3	T	0.0	103.8
2011-12	0.0	0.0	T	19.4	8.3	34.9	1.7	11.6	5.8	2.2	2.2	0.0	86.1
2012-13	0.0	0.0	T	0.7	0.9	2.5	10.8	9.4	3.7	3.1	6.3	0.0	37.4
2013-	0.0	0.0	0.4	0.5	10.8	7.2							
POR= 73 YRS	T	0.0	1.0	6.1	8.2	8.2	8.3	7.9	6.3	5.2	1.4	0.2	52.8

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### REFERENCE NOTES :

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).

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).

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.

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

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.

### 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.

# 2013 KOTZEBUE ALASKA (PAOT)

Kotzebue is located 26 miles inside the Arctic Circle and very near the north end of a long narrow peninsula bounded on the north and west by Kotzebue Sound and on the east by Hotham Inlet, known locally as Kobuk Lake. These water bodies produce a maritime type of climate when the water is ice-free, which is roughly from late May to late October, although the western portion of the sound is not completely frozen until about December and not completely free of ice again until the middle of July. Local topography is nearly uniform with a general low relief, so that there are no significant terrain barriers in the immediate area to impede surface air flow or produce pronounced local variations in temperature and precipitation. The mountainous Seward Peninsula to the south, however, does deflect some low pressure systems which originate in or beyond the Bering Sea area and move toward this region.

During the ice-free period cloudy skies prevail, fog occurs, daily temperatures are relatively uniform, relative humidity is high, and westerly winds predominate. These normal conditions are altered only by cyclonic storms or by pressure systems strong enough to overcome local circulation tendencies.

When the water surrounding the peninsula becomes frozen, the climatic characteristics approach the continental type. The change from maritime to approximately continental conditions becomes progressively more pronounced as the ice cover advances across the sound toward the Arctic Ocean. A similar, but inverse, change occurs as the ice diminishes.

Average winter temperatures are not as severe as might be expected at this latitude. Cyclonic storms and the influence of the Arctic Ocean, which is often relatively free of ice, moderate the winter temperatures.

Precipitation is very light. Snow generally falls in every month of the year except July and August. The total for a normal year is 8 inches.

Cyclonic storms are frequent, especially from October to April, and many of them are accompanied by high winds and blizzard conditions during the winter months. The absence of pronounced sheltering terrain results in unimpeded air movement throughout the year. Windy weather, somewhat characteristic of the area, results largely from the numerous cyclonic storms and uneven heat radiation of adjoining land and water areas.

# Station History

KOTZEBUE, AK

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
KOTZEBUE FAA AP	1942-10-26	1946-09-01	66° 52'	-162° 37'			AIRWAYS
KOTZEBUE RALPH WEIN MEMORIAL AP	1997-12-01	2010-11-25	66° 53'	-162° 35'	10		ASOS, COOP
KOTZEBUE RALPH WEIN MEMORIAL AP	1982-01-01	1997-12-01	66° 52'	-162° 37'	10		COOP
KOTZEBUE RALPH WEIN MEMORIAL AP	2010-11-25	Present	66° 52'	-162° 37'	30		AIRWAYS, ASOS, COOP
KOTZEBUE FAA AP	1946-09-01	1962-12-01	66° 52'	-162° 37'	20		AIRWAYS, COOP
KOTZEBUE RALPH WEIN MEMORIAL AP	1962-12-01	1969-01-01	66° 52'	-162° 37'	20		AIRWAYS, COOP
KOTZEBUE RALPH WEIN MEMORIAL AP	1969-01-01	1981-12-31	66° 52'	-162° 37'	20		COOP, WXSVC
RALPH WEIN MEMORIAL AP	1930-09-01	1942-10-26	66° 52'	-162° 37'			AIRWAYS
KOTZEBUE RALPH WEIN MEMORIAL AP	1981-12-31	1982-01-01	66° 52'	-162° 37'	20		COOP

# Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
TEMP	1930-09-01	1978-12-06	DAILY	2400	MXMN		
PRECIP	1978-12-06	2010-11-25	DAILY	2400	SRG		
TEMP	1978-12-06	2010-11-25	DAILY	2400	HYGR		
PRECIP	1930-09-01	1978-12-06	DAILY	2400	SRG		
PRECIP	2010-11-25	Present	DAILY	2400	PCPNX		
PRECIP	2010-11-25	Present	HOURLY	2400	AWPAG	RCRD;HTD	
TEMP	2010-11-25	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>

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

Attn: User Engagement & Services Branch

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