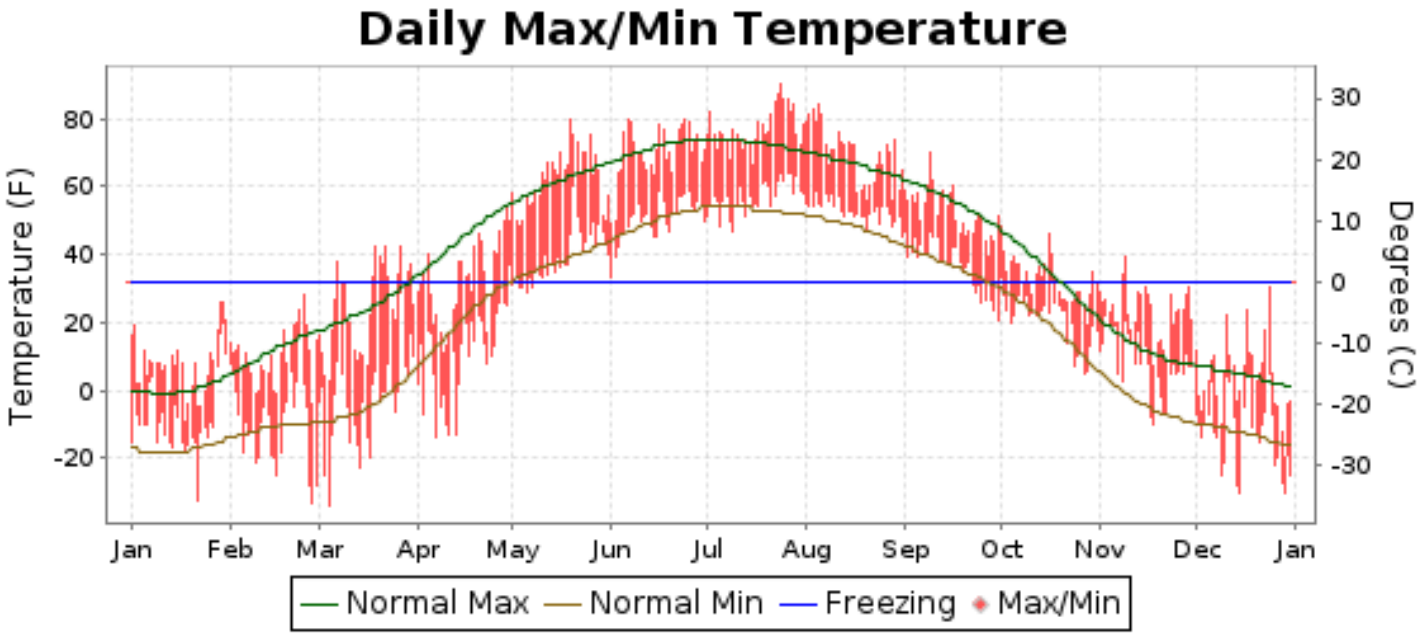
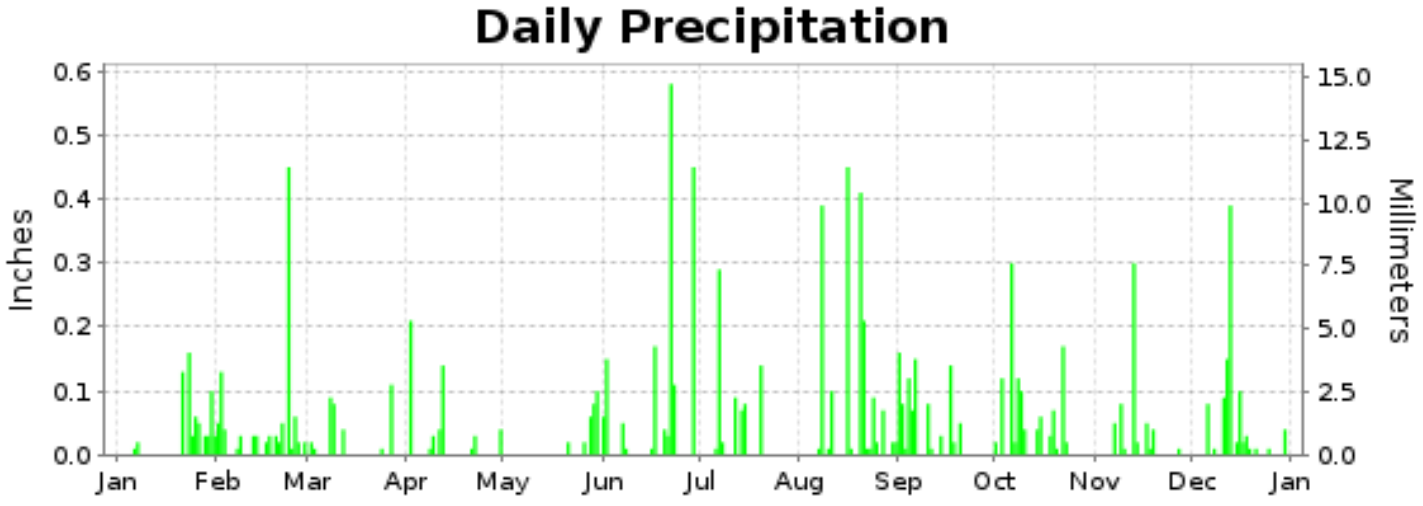
2023
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA

ISSN 0197-9728

FAIRBANKS,
ALASKA (PAFA)





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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CENTERS for ENVIRONMENTAL INFORMATION (NCEI) ASHEVILLE, NORTH CAROLINA

DIRECTOR NCEI

METEOROLOGICAL DATA FOR 2023
FAIRBANKS (PAFA)

LATITUDE: 64° 48'N **LONGITUDE:** 147° 52'W **ELEVATION (FT):** GRND: 430.14 BARO: 464 **TIME ZONE:** ALASKA (UTC -9) **WBAN:** 26411

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	7.7	10.4	24.7	32.5	62.5	70.3	77.2	69.6	52.6	32.8	23.2	4.1	39.0
	HIGHEST DAILY MAXIMUM	26	28	42	54	80	80	90	84	70	48	39	30	90
	DATE OF OCCURRENCE	30+	24	27+	29	19	24+	24	05	09	01	09	24	JUL 24
	MEAN DAILY MINIMUM	-7.9	-9.7	-2.3	10.4	39.4	50.6	56.9	52.8	36.7	21.1	8.2	-12.0	20.4
	LOWEST DAILY MINIMUM	-32	-33	-34	-14	29	33	47	45	21	5	-10	-30	-34
	DATE OF OCCURRENCE	22	27	04	07	05	01	09	31	30	27	18	29+	MAR 04
	AVERAGE DRY BULB	-0.1	0.3	11.2	21.5	50.9	60.5	67.1	61.2	44.7	27.0	15.7	-3.9	29.7
	MEAN WET BULB		1.1	11.0	19.4	43.2	52.1	59.1	55.7	41.0	24.9		-4.5	
	MEAN DEW POINT	-4.4	-4.0	3.4	10.1	32.3	44.0	52.8	51.6	36.8	20.5		-10.0	
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 70	0	0	0	0	7	19	29	19	1	0	0	0	75
	MAXIMUM <= 32°	31	28	20	14	0	0	0	0	0	15	28	31	167
	MINIMUM <= 32°	31	28	31	29	5	0	0	0	9	30	30	31	224
	MINIMUM <= 0°	25	22	19	7	0	0	0	0	0	0	5	25	103
H/C	HEATING DEGREE DAYS	2009	1806	1659	1299	431	149	23	134	602	1171	1469	2132	12884
	COOLING DEGREE DAYS	0	0	0	0	3	20	94	23	0	0	0	0	140
RH	MEAN (PERCENT)	76	75	65	59	51	57	62	74	76	76		73	
	HOUR 03 LST	75	75	72	68	70	77	79	86	86	79		73	
	HOUR 09 LST	76	75	70	61	53	58	67	77	82	78		72	
	HOUR 15 LST	76	72	53	50	36	40	46	59	61	70		72	
	HOUR 21 LST	75	76	66	56	46	54	57	75	78	77		73	
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	0	0	0	0	0	1	0	0	1	2	0	0	4
	THUNDERSTORMS	0	0	0	0	0	4	0	3	0	0	0	0	7
PR	MEAN STATION PRESS. (IN.)	29.12	29.26	29.49	29.34	28.53	29.33	29.44	29.33	29.18	29.44		29.01	
	MEAN SEA-LEVEL PRESS. (IN.)	29.73	29.80	30.01	29.86	29.81	29.81	29.94	29.83	29.69	29.95		29.54	
WINDS	RESULTANT SPEED (MPH)	1.5	1.0	0.8	2.2	1.4	1.1	1.6	1.0	0.2	0.9		0.4	
	RES. DIR. (TENS OF DEGS.)	04	04	35	01	23	23	24	21	06	33		03	
	MEAN SPEED (MPH)	2.3	2.7	4.0	6.3	6.0	5.1	4.2	4.0	4.3	4.2	3.4	1.9	4.0
	PREVAIL.DIR.(TENS OF DEGS.)	04	04	04	03	23	24	23	22	04	36		03	
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	21	21	22	30	28	24	18	26	28	29	20	16	30
	DIR. (TENS OF DEGS.)	23	24	26	05	27	27	24	29	24	26	02	19	05
	DATE OF OCCURRENCE	26	25	09	23	16	13	10	27	01	19	03	24	APR 23
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	25	26	29	36	37	32	26	34	36	40	40	23	40
	DIR. (TENS OF DEGS.)	23	25	25	05	27	22	27	29	24	25	07	21	07
	DATE OF OCCURRENCE	26	25	24	23	16	25	08	27	01	19	13	24	NOV 13
PRECIPITATION	WATER EQUIVALENT:	0.65	1.03	0.36	0.51	0.28	1.66	0.70	1.83	0.92	1.12	0.57	0.96	10.59
	TOTAL (IN.)	0.18	0.46	0.16	0.21	0.13	0.69	0.31	0.53	0.22	0.30	0.32	0.54	0.69
	GREATEST 24-HOUR (IN.)	23-24	23-24	08-09	02	28-29	22-23	07-08	20-21	05-06	06	13-14	12-13	JUN 22-23
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:	11	17	7	8	5	11	7	15	12	14	9	13	129
	PRECIPITATION 0.01	3	2	1	2	1	5	2	5	4	5	1	3	34
	PRECIPITATION 0.10	0	0	0	0	0	0	0	0	0	0	0	0	0
	PRECIPITATION 1.00													
SNOWFALL	SNOW,ICE PELLETS,HAIL	12.2	21.1	5.8	8.6	0.0	T	0.0	0.0	0.0	14.9	11.0	17.1	90.7
	TOTAL (IN.)	4.5	5.6	2.2	4.8	0.0	T	0.0	0.0	0.0	3.5	4.2	3.7	5.6
	GREATEST 24-HOUR (IN.)	23	23	09	02		02				22	13	13	FEB 23
	DATE OF OCCURRENCE	21	28	27	28	10	0	0	0	0	9	14	19	28
	MAXIMUM SNOW DEPTH (IN.)	29+	27+	11+	13+	01					24+	20	31+	APR 13+
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:	4	6	3	2	0	0	0	0	0	4	5	7	31
	SNOWFALL >= 1.0													

NORMALS, MEANS, AND EXTREMES
FAIRBANKS (PAFA)

LATITUDE: 64° 48'N **LONGITUDE:** 147° 52'W **ELEVATION (FT):** GRND: 430.14 BARO: 464 **TIME ZONE:** ALASKA (UTC -9) **WBAN:** 26411

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	0.6	11.6	24.9	45.6	62.1	71.8	72.7	66.4	55.3	34.1	12.3	4.3	38.5
	MEAN DAILY MAXIMUM	75	0.1	9.3	24.2	42.7	60.5	70.6	72.4	66.4	54.7	33.0	12.1	2.5	37.4
	HIGHEST DAILY MAXIMUM	72	52	47	56	76	89	96	94	93	84	72	49	47	96
	YEAR OF OCCURRENCE		2009	1987	1994	2009	1960	1969	1975	1994	1957	2003	1997	2011	JUN 1969
	MEAN OF EXTREME MAXS.	75	29.3	33.4	44.4	60.1	75.5	83.7	85.4	80.6	69.0	52.7	33.9	31.0	56.6
	NORMAL DAILY MINIMUM	30	-17.2	-11.2	-3.4	21.7	38.6	50.2	53.1	47.6	36.2	18.4	-4.1	-13.0	18.1
	MEAN DAILY MINIMUM	75	-16.8	-12.2	-2.6	20.1	38.0	49.3	52.3	47.1	35.8	18.2	-3.6	-13.5	17.7
	LOWEST DAILY MINIMUM	72	-61	-58	-49	-29	-1	29	35	27	3	-27	-46	-62	-62
	YEAR OF OCCURRENCE		1969	1993	1956	2021	1964	2006	1959	1987	1992	1992	1990	1961	DEC 1961
	MEAN OF EXTREME MINS.	75	-40.4	-35.2	-25.9	-3.2	26.4	38.7	43.4	35.4	23.0	-3.4	-25.0	-36.3	-0.1
	NORMAL DRY BULB	30	-8.3	0.2	10.7	33.7	50.3	61.0	62.9	57.0	45.8	26.2	4.1	-4.3	28.3
	MEAN DRY BULB	75	-8.2	-1.4	10.8	31.4	49.3	60.2	62.3	56.7	45.3	25.6	4.2	-5.4	27.6
	MEAN WET BULB	27	-2.3	-0.4	7.5	23.4	37.3	49.1	53.3	49.8	39.0	22.1	1.7	-2.4	23.2
	MEAN DEW POINT	26	-5.1	-3.6	6.1	22.4	36.3	48.2	52.7	49.3	38.6	21.5	1.2	-3.5	22.0
	NORMAL NO. DAYS WITH:														
	MAXIMUM >= 70	30	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.4
	MAXIMUM <= 32	30	29.8	26.1	21.3	4.2	0.2	0.0	0.0	0.0	0.3	14.2	27.9	30.1	154.1
	MINIMUM <= 32	30	31.0	28.0	30.9	26.4	6.2	0.1	0.0	0.2	9.3	28.8	30.0	31.0	221.9
	MINIMUM <= 0	30	25.7	21.2	18.2	2.0	0.0	0.0	0.0	0.0	0.0	2.8	18.2	25.6	113.7
H/C	NORMAL HEATING DEG. DAYS	30	2272	1814	1682	941	455	147	98	255	578	1201	1827	2150	13420
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	1	27	33	7	0	0	0	0	68
RH	NORMAL (PERCENT)		72	70	63	54	49	57	65	72	71	76	75	74	67
	HOUR 03 LST	30	71	71	70	68	67	76	82	86	82	79	75	74	75
	HOUR 09 LST	30	71	71	68	56	50	59	68	76	76	79	76	74	69
	HOUR 15 LST	30	71	66	52	41	35	42	49	55	55	66	74	75	57
	HOUR 21 LST	30	71	71	65	53	46	52	61	73	74	77	76	75	66
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	60	3.0	1.3	0.3	0.3	0.2	0.2	0.5	1.3	1.2	1.6	0.7	1.7	12.3
	THUNDERSTORMS	75	0.3	0.2	0.0	0.0	0.4	3.2	2.9	1.0	0.1	0.0	0.1	0.1	8.3
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	46	5.0	5.0	4.7	5.3	5.5	5.8	5.9	6.2	6.1	6.3	5.5	5.6	5.6
	MIDNIGHT-MIDNIGHT (OKTAS)	33	4.8	4.5	4.4	5.0	5.4	5.8	5.9	6.0	5.8	6.0	5.2	5.2	5.3
	MEAN NO. DAYS WITH:														
	CLEAR	46	9.1	8.1	9.9	6.7	4.6	3.0	3.3	2.8	4.1	3.8	6.8	6.7	68.9
	PARTLY CLOUDY	46	5.9	6.0	7.0	7.9	11.0	10.4	8.9	6.8	6.1	4.9	5.0	5.7	85.6
	CLOUDY	46	16.0	14.2	14.1	15.4	15.4	16.6	18.2	20.9	19.3	21.5	17.6	18.0	207.2
PR	MEAN STATION PRESSURE(IN)	40	29.33	29.39	29.39	29.34	29.33	29.35	29.40	29.36	29.28	29.27	29.30	29.24	29.33
	MEAN SEA-LEVEL PRES. (IN)	40	29.87	29.93	29.91	29.85	29.87	29.85	29.90	29.86	29.79	29.78	29.83	29.79	29.85
WINDS	MEAN SPEED (MPH)	40	2.4	3.0	4.6	5.7	6.3	5.7	5.2	5.0	4.7	4.0	2.8	2.3	4.3
	PREVAIL.DIR(TENS OF DEGS)	51	04	04	04	36	36	24	24	24	36	36		03	36
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	26	32	37	35	38	32	31	31	33	28	29	41	37	41
	DIR. (TENS OF DEGS)		26	25	03	26	25	09	01	27	24	26	26	26	26
	YEAR OF OCCURRENCE		2017	2015	2013	2015	2014	2005	2002	2022	2023	2023	2013	2016	NOV 2013
	MAXIMUM 3-SECOND														
	SPEED (MPH)	26	43	53	45	59	47	39	45	43	36	42	55	51	59
	DIR. (TENS OF DEGS)		25	28	25	05	10	11	21	26	24	25	27	26	05
	YEAR OF OCCURRENCE		2017	2011	2020	2003	2019	2012	2022	2022	2023	2022	2013	2016	APR 2003
PRECIPITATION	NORMAL (IN)	30	0.61	0.52	0.40	0.34	0.54	1.48	2.26	2.10	1.35	0.76	0.74	0.57	11.67
	MAXIMUM MONTHLY (IN)	72	2.40	1.75	2.24	3.06	1.96	3.56	5.96	6.20	3.74	2.44	3.32	5.73	6.20
	YEAR OF OCCURRENCE		1993	1966	1991	2002	2004	2014	2003	1967	2015	2017	1970	2021	AUG 1967
	MINIMUM MONTHLY (IN)	72	0.01	0.01	T	T	0.04	0.19	0.06	.24	0.15	0.02	T	T	0.01
	YEAR OF OCCURRENCE		2016	2000	1987	1991	2011	1966	2009	2005	1968	2016	1953	1969	JAN 2016
	MAXIMUM IN 24 HOURS (IN)	72	0.75	0.97	1.17	1.06	0.88	1.52	2.83	3.42	2.24	1.54	0.92	1.94	3.42
	YEAR OF OCCURRENCE		1993	1966	1991	2002	1955	1955	2014	1967	2014	2017	2020	2021	AUG 1967
	NORMAL NO. DAYS WITH:														
	PRECIPITATION >= 0.01	30	8.7	6.9	5.7	3.7	6.2	10.8	12.8	13.5	10.7	9.8	9.5	8.8	107.1
	PRECIPITATION >= 1.00	30	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.5
SNOWFALL	NORMAL (IN)	30	10.2	10.0	6.5	3.1	0.9	0.0	0.0	0.0	2.3	8.2	12.5	10.9	64.6
	MAXIMUM MONTHLY (IN)	72	40.2	43.1	30.4	16.7	14.1	T	T	0.1	24.4	25.9	54.0	50.7	54.0
	YEAR OF OCCURRENCE		1993	1966	1991	2021	1992	2023	2010	1995	1992	1982	1970	1984	NOV 1970
	MAXIMUM IN 24 HOURS (IN)	72	10.1	20.1	12.6	7.0	9.4	T	T	0.1	11.2	10.4	14.6	14.7	20.1
	YEAR OF OCCURRENCE'		1993	1966	1963	2021	1992	2023	2010	1995	2015	1974	1970	1968	FEB 1966
	MAXIMUM SNOW DEPTH (IN)	74	46	52	54	49	17	0	T	0	12	16	42	46	54
	YEAR OF OCCURRENCE		1993	1966	1991	1991	2013		2021		1992	1982	1970	1990	MAR 1991
	NORMAL NO. DAYS WITH:														
	SNOWFALL >= 1.0	30	3.2	2.8	1.9	1.1	0.2	0.0	0.0	0.0	0.6	3.3	4.4	3.5	21.0

PRECIPITATION (inches) 2023 FAIRBANKS (PAFA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1994	0.47	0.32	0.17	0.07	0.22	2.41	1.11	1.38	0.61	0.82	1.67	0.48	9.73
1995	0.25	0.29	0.18	0.17	0.73	1.91	1.32	2.10	1.33	0.31	0.20	0.06	8.85
1996	0.32	1.40	0.53	0.05	0.14	1.56	1.07	2.83	1.06	1.13	.81	.46	11.36
1997	0.25	0.34	0.06	0.01	0.07	1.03	1.08	1.70	0.48	0.94	0.26	0.52	6.74
1998	0.08	0.11	T	0.05	0.41	1.33	3.35	3.18	1.19	0.27	0.21	0.56	10.74
1999	0.22	0.21	0.19	0.04	0.31	1.30	2.11	1.85	1.83	0.90	0.58	0.73	10.27
2000	1.97	T	0.10	T	0.74	0.72	1.29	3.04	1.48	0.91	0.37	0.16	10.78
2001	0.40	0.66	0.43	0.16	0.62	0.65	2.45	2.01	0.25	0.55	0.06	0.24	8.48
2002	0.54	0.18	0.14	3.06	0.38	0.78	2.63	3.02	1.09	1.05	0.05	0.41	13.33
2003	0.28	0.89	0.02	0.05	0.27	0.61	5.96	1.89	1.27	0.34	1.68	0.59	13.85
2004	0.33	0.33	0.29	0.03	1.96	0.31	1.13	0.37	1.34	1.12	0.63	0.75	8.59
2005	1.17	0.25	0.26	0.18	1.26	1.93	3.44	0.24	1.72	0.45	0.75	0.15	11.80
2006	0.22	0.76	0.22	0.40	0.18	0.71	2.24	2.16	0.56	0.56	0.09	0.48	8.58
2007	0.50	0.12	0.20	0.10	0.86	1.88	3.67	1.52	1.58	0.51	0.11	0.31	11.36
2008	0.93	0.18	0.10	1.27	0.50	2.08	4.12	2.66	0.64	0.76	0.28	0.50	14.02
2009	0.52	0.59	1.09	0.09	0.05	1.55	0.06	2.72	0.53	0.50	0.31	0.36	8.37
2010	0.03	0.15	0.09	0.29	0.24	1.36	3.11	1.46	1.19	0.45	1.71	0.23	10.31
2011	0.19	1.62	0.15	0.07	0.04	1.77	1.70	1.60	0.65	0.32	0.46	0.95	9.52
2012	0.69	0.42	0.74	0.07	0.73	1.39	1.72	1.45	0.55	1.38	0.29	1.19	10.62
2013	0.79	0.48	0.26	0.66	0.15	0.43	1.01	2.02	1.74	0.59	1.74	0.78	10.65
2014	0.22	0.40	0.21	0.20	0.06	3.56	5.78	2.29	2.89	0.44	0.18	0.93	17.16
2015	0.15	0.48	0.49	0.16	0.29	1.03	2.78	2.58	3.74	0.83	1.78	0.07	14.38
2016	0.01	0.05	0.53	0.52	0.78	3.29	4.97	1.56	2.08	0.02	0.29	1.99	16.09
2017	0.96	1.24	0.17	0.09	0.59	1.73	1.94	2.15	1.42	2.44	1.36	0.38	14.47
2018	1.10	1.56	0.58	0.15	1.15	0.57	1.01	4.15	1.86	0.52	0.68	0.42	13.75
2019	0.65	0.79	0.45	0.59	1.01	1.51	0.89	5.58	1.04	1.68	1.83	0.38	16.40
2020	0.42	0.50	1.59	1.27	0.49	3.09	2.31	2.12	1.21	0.70	1.38	0.22	15.30
2021	0.04	1.37	0.89	1.35	0.36	1.06	2.18	3.67	0.37	1.31	0.41	5.73	18.74
2022	0.20	1.44	0.13	0.02	1.09	0.53	0.51	1.39	1.45	0.77	0.64	1.13	9.30
2023	0.65	1.03	0.36	0.51	0.28	1.66	0.70	1.83	0.92	1.12	0.57	0.96	10.59
POR= 75 YRS	0.56	0.51	0.37	0.31	0.57	1.42	2.06	1.98	1.14	0.80	0.71	0.77	11.20

WBAN : 26411

AVERAGE TEMPERATURE (°F) 2023 FAIRBANKS (PAFA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1994	-1.5	-6.4	10.5	34.7	51.6	58.4	64.7	59.6	43.7	21.0	0.3	-8.5	27.3
1995	-9.4	-0.2	3.8	40.1	53.5	60.9	63.1	57.3	52.8	28.0	-2.7	-9.0	28.2
1996	-16.8	-2.6	15.5	33.3	49.1	59.5	63.4	53.4	42.0	13.2	-1.9	-13.4	24.6
1997	-16.2	13.0	4.7	35.4	49.0	63.1	64.9	58.7	49.7	17.5	10.6	-7.0	28.6
1998	-13.6	2.1	18.4	38.6	50.0	58.8	62.7	53.0	46.1	26.1	5.0	-5.8	28.5
1999	-17.0	-16.7	7.2	32.7	46.9	61.4	61.5	58.0	45.2	19.5	-4.7	-12.8	23.4
2000	-9.9	6.7	17.6	31.9	44.4	61.5	59.6	51.7	41.7	22.3	8.7	.3	28.0
2001	7.8	7.0	9.9	33.3	44.5	61.1	60.0	57.3	47.5	22.0	.6	-10.5	28.4
2002	3.5	-.5	9.9	23.2	50.4	58.2	61.8	54.6	47.4	31.7	19.2	4.9	30.4
2003	-3.3	11.0	8.6	33.1	47.2	60.2	60.7	56.2	41.8	32.0	9.2	-9.1	29.0
2004	-15.9	1.1	6.0	35.1	52.3	66.9	64.5	62.2	38.8	29.7	7.1	-3.3	28.7
2005	-9.1	-2.3	19.6	32.2	55.6	61.5	62.2	57.3	46.3	27.4	-5.1	.9	28.9
2006	-22.0	5.6	3.0	29.5	49.7	58.1	61.3	54.4	49.5	31.7	-9.8	-1.9	25.8
2007	-6.5	-6.6	-6.4	37.6	51.1	61.6	64.4	60.5	47.1	21.2	11.5	-3.2	27.7
2008	-9.1	-5.8	15.4	29.5	49.9	60.2	60.6	55.0	46.7	15.1	-1.3	-7.7	25.7
2009	-11.8	-1.4	5.6	31.2	51.6	60.3	66.5	54.5	48.5	30.7	-1.1	-2.7	27.7
2010	-13.6	2.9	10.8	39.5	54.0	59.8	62.7	59.9	47.1	27.5	11.9	-17.9	28.7
2011	-6.0	-6.6	7.3	31.8	52.4	60.5	61.8	57.2	49.0	28.9	-8.2	4.0	27.7
2012	-26.9	5.9	4.5	36.9	47.9	61.6	60.9	56.3	45.6	22.5	-8.8	-17.3	24.1
2013	-2.6	-1.4	7.1	18.0	44.3	66.8	64.3	59.4	43.8	36.1	6.1	-4.5	28.1
2014	7.6	-4.4	13.9	33.9	51.3	58.4	61.0	59.1	46.4	25.2	10.8	8.0	30.9
2015	-6.5	1.0	15.5	36.8	55.3	59.8	62.2	54.6	42.4	31.8	9.1	-2.2	30.0
2016	3.5	7.9	19.8	42.4	53.4	60.0	63.4	61.1	46.2	26.7	3.7	-8.4	31.6
2017	-9.5	0.7	-3.0	36.1	49.8	62.8	65.7	58.8	48.0	31.2	4.8	9.0	29.5
2018	-6.0	2.6	15.6	31.3	49.7	58.8	63.9	55.5	48.2	34.5	11.7	0.1	30.5
2019	-6.9	5.5	27.6	37.0	53.8	63.5	66.0	55.6	48.4	31.7	13.2	-5.4	32.5
2020	-21.4	-6.0	8.8	30.5	53.3	59.8	61.0	59.7	47.6	27.4	2.0	0.2	26.9
2021	-1.5	-9.3	5.9	26.6	51.9	63.1	64.8	56.8	44.1	30.8	0.6	1.5	27.9
2022	-7.6	-0.1	13.4	28.3	48.7	62.7	63.4	59.0	47.8	28.3	9.1	-4.5	29.0
2023	-0.1	0.3	11.2	21.5	50.9	60.5	67.1	61.2	44.7	27.0	15.7	-3.9	29.7
POR= 75 YRS	-8.2	-1.4	10.8	31.4	49.3	60.2	62.3	56.7	45.3	25.6	4.2	-5.4	27.5

HEATING DEGREE DAYS (base 65°F) 2023 FAIRBANKS (PAFA)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1994-95	56	217	634	1357	1941	2280	2310	1827	1896	739	354	143	13754
1995-96	92	235	365	1141	2033	2299	2541	1962	1528	946	486	171	13799
1996-97	71	353	681	1600	2010	2424	2509	1450	1862	880	485	106	14431
1997-98	40	204	453	1467	1624	2224	2429	1755	1437	786	460	199	13078
1998-99	103	365	563	1200	1793	2188	2535	2282	1784	963	553	131	14460
1999-00	147	221	584	1403	2084	2403	2315	1680	1467	987	631	112	14034
2000-01	165	407	693	1318	1682	2001	1764	1616	1701	940	629	126	13042
2001-02	164	231	521	1326	1926	2333	1899	1828	1700	1246	453	197	13824
2002-03	121	324	524	1023	1366	1857	2110	1505	1742	950	547	141	12210
2003-04	154	265	689	1015	1667	2289	2502	1847	1823	889	388	44	13572
2004-05	49	125	780	1085	1730	2112	2290	1876	1401	977	283	127	12835
2005-06	81	248	554	1158	2093	1981	2692	1658	1914	1058	464	202	14103
2006-07	118	323	458	1026	2241	2067	2215	2003	2208	816	427	113	14015
2007-08	44	144	533	1351	1597	2111	2293	2050	1529	1057	460	146	13315
2008-09	158	305	544	1538	1986	2248	2380	1856	1832	1008	409	144	14408
2009-10	27	323	488	1055	1979	2096	2435	1733	1673	758	342	150	13059
2010-11	85	185	529	1157	1587	2558	2193	1996	1783	990	397	140	13600
2011-12	107	233	475	1114	2186	1886	2839	1707	1870	834	522	115	13888
2012-13	135	263	576	1311	2204	2539	2088	1853	1786	1404	646	71	14876
2013-14	69	190	630	886	1762	2147	1771	1937	1576	925	416	192	12501
2014-15	137	184	549	1228	1620	1757	2207	1785	1527	841	296	181	12312
2015-16	104	321	671	1022	1670	2072	1899	1647	1396	671	355	161	11989
2016-17	84	118	555	1181	1832	2266	2301	1793	2099	860	465	94	13648
2017-18	24	199	504	1040	1798	1729	2191	1740	1523	1005	468	187	12408
2018-19	70	288	498	939	1594	2004	2221	1661	1152	835	339	84	11685
2019-20	37	283	488	1024	1548	2172	2670	2053	1735	1026	357	154	13547
2020-21	119	157	515	1158	1880	2000	2052	2073	1825	1143	400	83	13405
2021-22	57	281	621	1055	1923	1963	2246	1820	1592	1094	498	79	13229
2022-23	109	180	509	1128	1666	2144	2009	1806	1659	1299	431	149	13089
2023-	23	134	602	1171	1469	2132							

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COOLING DEGREE DAYS (base 65°F) 2023 FAIRBANKS (PAFA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1994	0	0	0	0	0	19	55	55	0	0	0	0	129
1995	0	0	0	0	5	24	41	0	4	0	0	0	74
1996	0	0	0	0	0	11	29	0	0	0	0	0	40
1997	0	0	0	0	0	56	46	15	0	0	0	0	117
1998	0	0	0	0	0	18	37	1	0	0	0	0	56
1999	0	0	0	0	0	27	45	11	0	0	0	0	83
2000	0	0	0	0	0	16	5	0	0	0	0	0	21
2001	0	0	0	0	0	15	14	0	0	0	0	0	29
2002	0	0	0	0	8	0	30	7	0	0	0	0	45
2003	0	0	0	0	0	3	27	1	0	0	0	0	31
2004	0	0	0	0	0	108	40	45	0	0	0	0	193
2005	0	0	0	0	0	27	5	18	0	0	0	0	50
2006	0	0	0	0	0	1	11	0	0	0	0	0	12
2007	0	0	0	0	3	19	32	12	0	0	0	0	66
2008	0	0	0	0	0	10	30	0	0	0	0	0	40
2009	0	0	0	0	0	6	79	3	0	0	0	0	88
2010	0	0	0	0	7	1	22	36	0	0	0	0	66
2011	0	0	0	0	15	11	13	0	0	0	0	0	39
2012	0	0	0	0	0	21	13	0	0	0	0	0	34
2013	0	0	0	0	13	135	54	24	0	0	0	0	226
2014	0	0	0	0	0	1	19	7	0	0	0	0	27
2015	0	0	0	0	2	31	24	5	0	0	0	0	62
2016	0	0	0	0	6	19	43	8	0	0	0	0	76
2017	0	0	0	0	0	35	55	14	0	0	0	0	104
2018	0	0	0	0	0	10	44	0	0	0	0	0	54
2019	0	0	0	0	1	47	75	0	0	0	0	0	123
2020	0	0	0	0	2	5	3	3	0	0	0	0	13
2021	0	0	0	0	0	32	56	37	0	0	0	0	125
2022	0	0	0	0	0	15	66	2	0	0	0	0	83
2023	0	0	0	0	3	20	94	23	0	0	0	0	140

SNOWFALL (inches) 2023 FAIRBANKS (PAFA)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1995-96	0.0	0.1	0.0	7.1	3.2	0.8	5.4	29.3	9.6	0.7	0.0	0.0	56.2
1996-97	0.0	T	7.1	16.2	18.4	9.4	4.9	8.8	2.3	0.4	0.0	T	67.5
1997-98	0.0	0.0	0.0	19.3	7.6	13.1	1.3	3.2	0.9	0.5	0.1	0.0	46.0
1998-99	0.0	0.0	T	6.2	4.6	8.5	4.2	2.7	3.5	0.9	0.4	0.0	31.0
1999-00	0.0	0.0	3.0	11.1	11.2	13.8	27.9	0.2	3.0	T	T	0.0	70.2
2000-01	0.0	0.0	1.4	9.8	7.5	2.7	6.7	10.7	8.6	2.2	7.0	0.0	56.6
2001-02	0.0	0.0	0.3	6.4	2.8	4.6	11.4	4.2	2.2	15.4	1.8	0.0	49.1
2002-03	0.0	T	T	14.7	1.6	9.6	6.9	7.8	0.8	T	T	0.0	41.4
2003-04	0.0	0.0	0.1	2.6	27.6	9.6	8.5	8.4	5.2	0.2	T	0.0	62.2
2004-05	0.0	0.0	1.8	17.0	11.9	15.0	17.8	4.5	5.2	4.5	0.0	0.0	77.7
2005-06	0.0	T	0.3	6.4	14.3	4.2	4.0	13.2	4.7	3.3	0.0	T	50.4
2006-07	0.0	0.0	0.4	4.6	1.4	7.8	8.9	1.6	3.3	T	0.0	0.0	28.0
2007-08	0.0	0.0	0.0	9.5	4.2	6.0	14.4	5.4	1.4	14.7	0.0	0.0	55.6
2008-09	0.0	T	1.8	12.2	6.5	12.2	9.2	14.1	15.5	T	0.0	0.0	71.5
2009-10	0.0	0.0	0.2	5.3	7.4	6.8	1.0	2.5	1.6	T	0.1	0.0	24.9
2010-11	T	0.0	0.0	T	11.6	4.1	3.1	30.3	2.9	1.7	T	0.0	53.7
2011-12	0.0	0.0	T	4.2	9.2	12.2	9.6	7.5	14.7	T	T	0.0	57.4
2012-13	0.0	0.0	T	7.1	4.2	18.6	9.9	10.7	6.2	9.9	2.0	0.0	68.6
2013-	0.0	0.0	0.7	0.7	17.6	14.3							
2013-14	0.0	0.0	0.7	0.7	17.6	14.3	2.5	7.1	3.1	2.9	T	0.0	48.9
2014-15	0.0	0.0	0.3	5.7	3.8	15.2	4.6	4.0	8.1	2.1	0.0	0.0	43.8
2015-16	0.0	0.0	20.9	3.8	25.4	1.1	0.8	0.6	3.7	3.7	T	0.0	60.0
2016-17	0.0	0.0	T	0.8	4.4	33.5	17.0	23.3	3.5	1.2	T	0.0	83.7
2017-18	0.0	0.0	T	5.2	24.6	7.0	14.1	23.4	8.9	1.8	0.7	T	85.7
2018-19	0.0	0.0	0.0	0.7	13.5	7.5	11.5	16.1	2.8	5.4	T	T	57.5
2019-20	0.0	0.0	0.0	3.3	23.7	6.9	7.3	8.0	27.5	7.9	0.0	0.0	84.6
2020-21	0.0	0.0	0.0	8.8	24.7	3.6	0.5	21.9	15.1	16.7	0.0	T	91.3
2021-22	0.0	0.0	2.3	8.0	6.2	49.7	3.2	22.5	1.6	0.5	1.3	0.0	95.3
2022-23	0.0	0.0	0.0	5.0	9.8	15.4	12.2	21.1	5.8	8.6	0.0	T	77.9
2023-	0.0	0.0	0.0	14.9	11.0	17.1							
POR= 76 YRS	T	T	1.5	9.4	12.7	12.9	10.1	9.6	6.3	3.4	0.6	0.1	66.6

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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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.
STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED SATION 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.

2023
FAIRBANKS
ALASKA (PAFA)

Fairbanks is located in the Tanana Valley, in the interior of Alaska. It has a distinctly continental climate, with large variation of temperature from winter to summer.

The climate in Fairbanks is conditioned mainly by the response of the land mass to large changes in solar heat received by the area during the year. The sun is above the horizon from 18 to 21 hours during June and July. During this period, daily average maximum temperatures reach the lower 70s. Temperatures of 80 degrees or higher occur on about 10 days each summer. In contrast, from November to early March, when the period of daylight ranges from 10 to less than 4 hours per day, the lowest temperature readings normally fall below zero quite regularly. Low temperatures of -40 degrees or colder occur each winter. The range of temperatures in summer is comparatively low, from the lower 30s to the mid 90s. In winter, this range is larger, from about 65 below to 45 degrees above. This large winter range of temperature reflects the great difference between frigid weather associated with dry northerly airflow from the Arctic to mild temperatures associated with southerly airflow from the Gulf of Alaska, accompanied by chinook winds off the Alaska Range, 80 miles to the south of Fairbanks.

Snow cover is persistent in Fairbanks, without interruption, from October through April. Snowfalls of 4 inches or more in a day occur only three times during winter. Blizzard conditions are almost never seen, as winds in Fairbanks are above 20 miles an hour less than 1 percent of the time. Precipitation normally reaches a minimum in spring, and a maximum in August, when rainfall is common. During summer, thunderstorms occur in Fairbanks on an average of about eight days. Thunderstorms are about three times more frequent over the hills to the north and east of Fairbanks. Damaging hail or wind rarely accompany thunderstorms around Fairbanks.

There are rolling hills reaching elevations up to 2,000 feet above Fairbanks to the north and east of the city. During winter, the uplands are often warmer than Fairbanks, as cold air settles into the valley. In some months, temperatures in the uplands will average more than 10 degrees warmer than Fairbanks. During summer, the uplands are a few degrees cooler than the city. Precipitation in the uplands around Fairbanks is heavier than it is in the city by roughly 20 to 50 percent. Fairbanks exhibits an urban heat island, especially during winter. Low lying areas nearby, such as the community of North Pole, are often colder than the city, sometimes by as much as 15 degrees.

During winter, with temperatures of -20 degrees or colder, ice fog frequently forms in the city. Cold snaps accompanied by ice fog generally last about a week, but can last three weeks in unusual situations. The fog is almost always less than 300 feet deep, so that the surrounding uplands are usually in the clear, with warmer temperatures. Visibility in the ice fog is sometimes quite low, and this can hinder aircraft operations for as much as a day in severe cases. Aside from the low visibility in winter ice fog, flying weather in Fairbanks is quite favorable, especially from February through May, when crystal clear weather is common and the length of daylight is rapidly increasing.

Hardy vegetables and grains grow luxuriantly. Freezing of local rivers normally begins in the first week of October. The date when ice will normally support a persons weight is October 27. Rivers remain frozen and safe for travel until early April. Breakup of the river ice usually occurs in the first week of May.

Station History

FAIRBANKS, AK

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
FAIRBANKS WEEKS FIELD	1946-09-01	1951-08-22	64° 49'	-147° 43'	443		AIRWAYS,COOP
FAIRBANKS AP	1951-08-22	1952-01-01	64° 49'	-147° 43'	443		AIRWAYS,COOP
FAIRBANKS AP	1952-01-01	1955-01-01	64° 49'	-147° 52'	443		AIRWAYS,COOP
FAIRBANKS AP	1955-01-01	1955-04-13	64° 49'	-147° 52'	440		AIRWAYS,COOP
FAIRBANKS INTL AP	1955-04-13	1970-01-01	64° 49'	-147° 52'	440		AIRWAYS,COOP
FAIRBANKS INTL AP	1970-01-01	1973-01-01	64° 49'	-147° 52'	456		AIRWAYS,COOP
FAIRBANKS INTL AP	1973-01-01	1979-01-01	64° 49'	-147° 52'	456		COOP,WXSVC
FAIRBANKS INTL AP	1979-01-01	1981-12-31	64° 49'	-147° 52'	436		COOP,WXSVC
FAIRBANKS INTL AP	1981-12-31	1997-12-01	64° 49'	-147° 52'	436		COOP
FAIRBANKS INTL AP	1997-12-01	2004-06-01	64° 48'	-147° 52'	432	1.2 MI SSW	ASOS,COOP
FAIRBANKS INTL AP	2004-06-01	2010-01-25	64° 48'	-147° 52'	432		ASOS,COOP
FAIRBANKS INTL AP	2010-01-25	2015-02-01	64° 48'	-147° 52'	432		ASOS,COOP
FAIRBANKS INTL AP	2015-02-01	2017-10-01	64° 48'	-147° 52'	432		ASOS,COOP
FAIRBANKS INTL AP	2017-10-01	2021-11-22	64° 48'	-147° 52'	432		ASOS,COOP,PLCD
FAIRBANKS INTL AP	2021-11-22	Present	64° 48'	-147° 52'	430.14		ASOS,COOP,PLCD

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1929-07-15	1942-12-31	DAILY	2400	UNIV	RCRD	
TEMP	1929-07-15	1942-12-31	DAILY	2400			
PRECIP	1943-05-01	1997-01-01	DAILY	2400	UNIV	RCRD	
TEMP	1943-05-01	1997-01-01	DAILY	2400			
PRECIP	1997-01-01	1997-12-01	DAILY	2400	UNIV	RCRD	
PRECIP	1997-01-01	1997-12-01	HOURLY	2400	UNIV	RCRD	
TEMP	1997-01-01	1997-12-01	DAILY	2400			
PRECIP	1997-12-01	2004-06-01	DAILY	2400	TB	RCRD	
PRECIP	1997-12-01	2004-06-01	HOURLY	2400	TB	RCRD	
TEMP	1997-12-01	2004-06-01	DAILY	2400	HYGR		
WIND	1997-12-01	2004-06-01	HOURLY	UNKN	ANEMCUP		
PRECIP	2004-06-01	2006-08-23	DAILY	2400	PCPNX		
PRECIP	2004-06-01	2006-08-23	HOURLY	2400	TB	RCRD	
TEMP	2004-06-01	2006-08-23	DAILY	2400	HYGR		
WIND	2004-06-01	2006-08-23	HOURLY	UNKN	ANEMCUP		
PRECIP	2006-08-23	2010-01-25	HOURLY	2400	TB	RCRD	
PRECIP	2006-08-23	2010-01-25	DAILY	2400	PCPNX		
TEMP	2006-08-23	2010-01-25	DAILY	2400	HYGR		
WIND	2006-08-23	2010-01-25	HOURLY	UNKN	ANEMSONIC		
PRECIP	2010-01-25	2016-04-19	HOURLY	2400	AWPAG	RCRD;HTD	
PRECIP	2010-01-25	2016-04-19	HOURLY	VAR	AWPAG	RCRD;HTD	
PRECIP	2010-01-25	2016-04-19	DAILY	2400	PLASTIC		
TEMP	2010-01-25	2016-04-19	DAILY	2400	ATEMP		
WIND	2010-01-25	2016-04-19	HOURLY	UNKN	ANEMSONIC		
PRECIP	2016-04-19	Present	DAILY	2400	PLASTIC		
PRECIP	2016-04-19	Present	HOURLY	2400	AWPAG	RCRD;HTD	
SNOWDPTH	2016-04-19	Present	DAILY	2400	SNOWSTAKE		
SNOWDPTH	2016-04-19	Present	DAILY	2400	SNOWBOARD		
SNOWFALL	2016-04-19	Present	DAILY	2400	SNOWSTAKE		
SNOWFALL	2016-04-19	Present	DAILY	2400	SNOWBOARD		
TEMP	2016-04-19	Present	DAILY	2400	ATEMP		
WIND	2016-04-19	Present	HOURLY	UNKN	ANEMSONIC		

* For explanation of codes and abbrevitions 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

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