

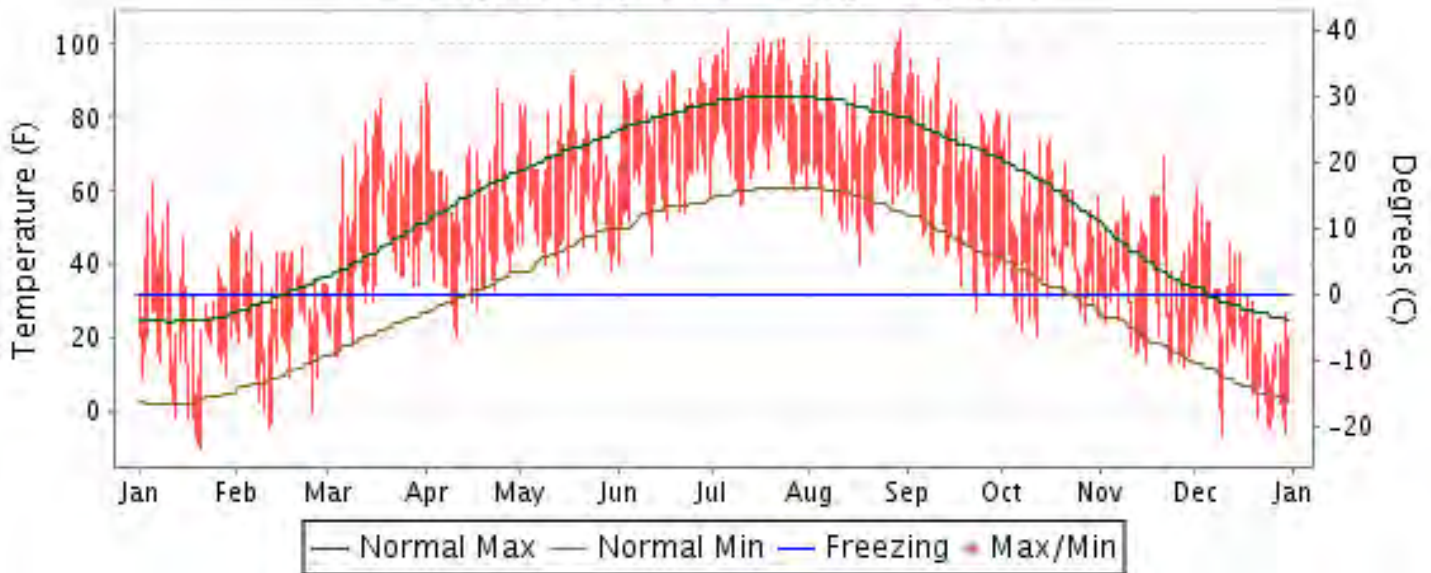


2012 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

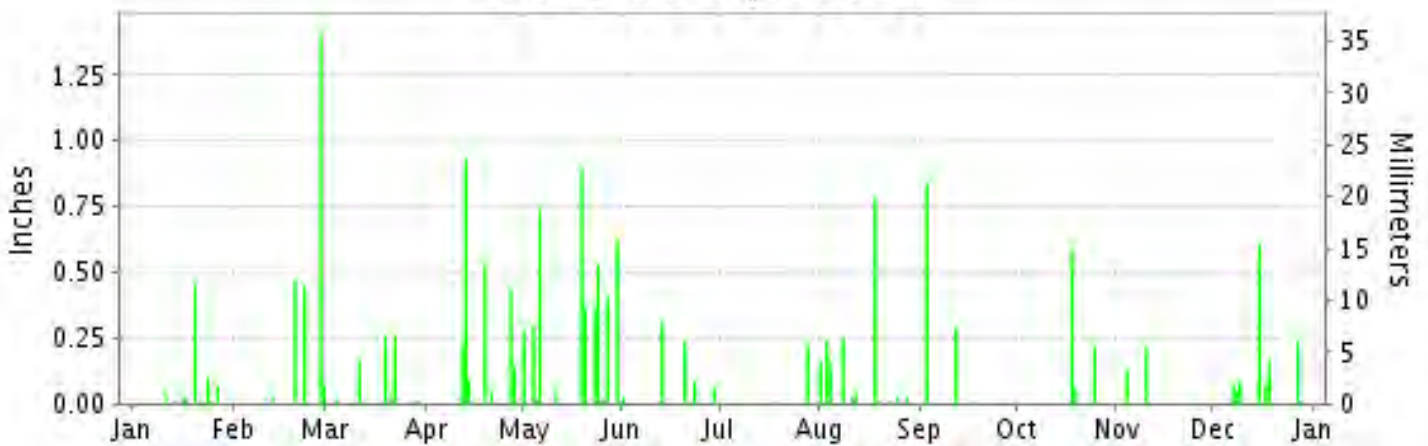
ISSN 0198-4748

SIOUX FALLS, SOUTH DAKOTA (KFSD)

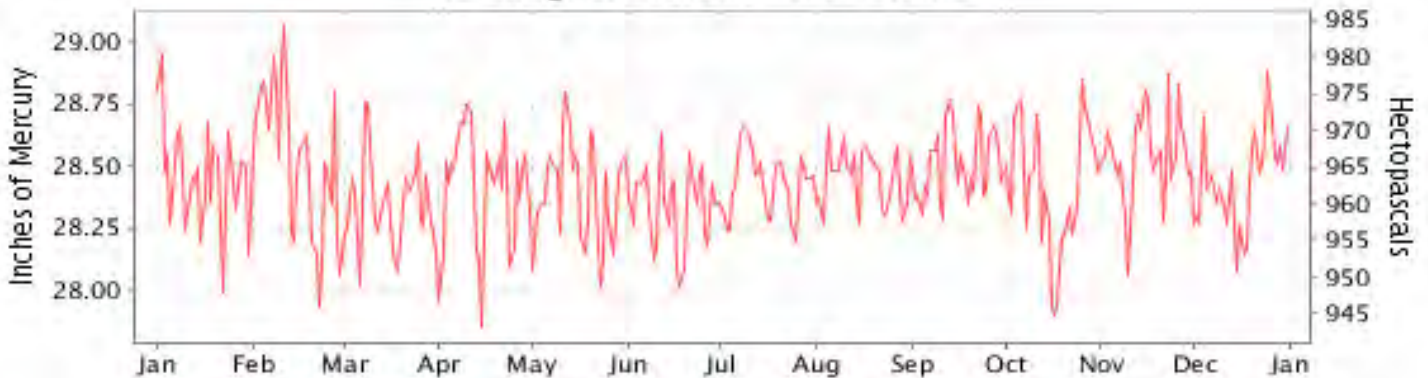
Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



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NATIONAL
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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 2012

SIOUX FALLS (KFSD)

LATITUDE: 43° 34'N LONGITUDE: 96° 45'W ELEVATION (FT): GRND: 1428 BARO: 1428 TIME ZONE: CENTRAL (UTC -6) WBAN: 14944

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	34.6	36.4	63.5	64.2	73.6	84.7	94.0	86.1	78.9	58.1	46.9	31.5	62.7	
	HIGHEST DAILY MAXIMUM	62	50	85	89	91	96	104	104	96	80	70	61	104	
	DATE OF OCCURRENCE	05	01	18	01	18+	27	06	30	11+	03	21	02	AUG 30	
	MEAN DAILY MINIMUM	13.3	16.7	36.1	39.1	49.8	59.5	68.7	58.7	46.5	34.5	24.8	11.6	38.3	
	LOWEST DAILY MINIMUM	-10	-5	15	20	37	40	56	40	27	20	12	-7	-10	
	DATE OF OCCURRENCE	21	11	04+	11	13	01	10	17	23	12	28	10	JAN 21	
	AVERAGE DRY BULB	24.0	26.6	49.8	51.7	61.7	72.1	81.4	72.4	62.7	46.3	35.9	21.6	50.5	
	MEAN WET BULB	21.8	23.7	43.7	44.2	54.5	62.9	69.8	62.7	51.7	40.2	32.3	20.4	44.0	
	MEAN DEW POINT	15.3	18.4	37.3	35.2	47.5	56.1	63.8	56.5	41.7	32.3	26.5	16.1	37.2	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	2	6	23	11	5	0	0	0	0	47
MAXIMUM <= 32°	13	8	2	0	0	0	0	0	0	0	3	17	43		
MINIMUM <= 32°	31	28	10	5	0	0	0	0	3	15	23	31	146		
MINIMUM <= 0°	6	4	0	0	0	0	0	0	0	0	0	7	17		
H/C	HEATING DEGREE DAYS	1265	1109	478	407	152	21	0	18	145	572	868	1337	6372	
	COOLING DEGREE DAYS	0	0	14	14	58	241	514	257	84	0	0	0	1182	
RH	MEAN (PERCENT)	70	74	67	58	62	58	58	62	51	63	70	78	64	
	HOUR 00 LST	76	79	76	65	70	70	71	74	64	71	76	80	73	
	HOUR 06 LST	76	81	82	77	78	73	77	84	76	78	83	83	79	
	HOUR 12 LST	63	68	58	49	51	47	43	45	34	51	58	74	53	
	HOUR 18 LST	66	67	54	43	50	44	42	44	32	52	62	77	53	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	0	3	2	1	0	0	0	0	0	0	0	0	6	
	THUNDERSTORMS	0	1	3	4	9	4	6	8	3	0	1	0	39	
PR	MEAN STATION PRESS. (IN.)	28.45	28.52	28.34	28.42	28.39	28.35	28.43	28.46	28.51	28.42	28.54	28.44	28.44	
	MEAN SEA-LEVEL PRESS. (IN.)	30.03	30.10	29.87	29.95	29.89	29.84	29.91	29.95	30.02	29.97	30.11	30.03	29.97	
WINDS	RESULTANT SPEED (MPH)	4.2	1.7	3.4	2.5	1.1	3.7	3.9	1.9	0.7	3.2	1.1	0.5	0.9	
	RES. DIR. (TENS OF DEGS.)	29	31	18	09	19	17	16	16	23	30	25	34	21	
	MEAN SPEED (MPH)	9.4	9.6	10.7	11.8	10.5	10.1	8.7	8.1	7.4	11.0	9.4	7.8	9.5	
	PREVAIL.DIR.(TENS OF DEGS.)	32	30	18	12	18	17	19	18	20	32	18	33	18	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	40	33	36	39	36	32	28	32	35	39	37	35	40	
	DIR. (TENS OF DEGS.)	32	08	13	11	34	19	33	18	35	31	32	33	32	
	DATE OF OCCURRENCE	01	28	26	27	11	17	26	28	04	18	22	03	JAN 01	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	54	46	47	53	46	46	43	45	43	52	48	45	54	
DIR. (TENS OF DEGS.)	33	27	12	35	35	17	33	19	20	31	32	32	33		
DATE OF OCCURRENCE	01	26	26	15	11	17	26	28	10	18	22	03	JAN 01		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.75	2.43	0.77	2.40	4.60	0.74	0.24	1.75	1.14	0.86	0.35	1.31	17.34	
	GREATEST 24-HOUR (IN.)	0.46	1.46	0.30	0.95	1.23	0.32	0.23	0.79	0.84	0.60	0.22	0.61	1.46	
	DATE OF OCCURRENCE	20	28-29	21-22	12-13	19-20	12-13	28	18	03	18-19	10	15	FEB 28-29	
	NUMBER OF DAYS WITH:														
PRECIPITATION 0.01	9	5	7	8	14	6	2	12	3	3	2	8	79		
PRECIPITATION 0.10	2	3	3	5	9	2	1	5	2	2	2	3	39		
PRECIPITATION 1.00	0	1	0	0	0	0	0	0	0	0	0	0	1		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	8.2	6.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.1	T	12.7	29.2	
	GREATEST 24-HOUR (IN.)	4.6	5.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.1	T	4.3	5.6	
	DATE OF OCCURRENCE	20	23	04							25	26+	27	FEB 23	
	MAXIMUM SNOW DEPTH (IN.)	5	5	1	0	0	0	0	0	0	1	0	7	7	
	DATE OF OCCURRENCE	27+	25+	01							25		28	DEC 28	
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	2	1	0	0	0	0	0	0	0	1	0	5	9		

PRECIPITATION (inches) 2012 SIOUX FALLS (KFSD)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1983	0.52	0.22	3.35	2.88	2.92	6.75	1.82	2.00	1.92	0.71	2.95	0.73	26.77
1984	0.37	1.10	1.83	5.79	2.95	8.43	1.63	0.76	1.62	4.11	0.03	1.02	29.64
1985	0.45	0.05	2.37	5.18	3.29	2.52	2.70	4.07	3.34	0.75	1.97	0.47	27.16
1986	0.72	0.05	1.50	5.15	2.42	3.93	2.59	2.77	9.26	1.22	0.89	T	30.50
1987	0.19	0.26	3.27	0.28	2.94	1.78	3.16	1.36	2.05	0.31	1.66	1.40	18.66
1988	1.54	0.25	0.63	3.00	1.54	0.91	0.49	4.02	4.39	0.02	1.98	0.37	19.14
1989	0.23	0.51	1.07	1.59	1.42	2.50	1.37	2.46	3.38	0.10	0.91	0.25	15.79
1990	0.08	0.31	1.57	1.86	4.07	4.86	1.77	1.17	0.47	1.82	0.61	0.61	19.20
1991	0.22	0.34	0.86	2.21	6.20	6.36	2.26	1.41	3.95	1.65	1.78	0.20	27.44
1992	0.75	1.76	2.36	2.01	1.80	2.44	8.41	5.29	3.06	2.72	1.04	0.83	32.47
1993	0.70	0.81	2.04	2.61	8.26	6.43	7.86	3.10	1.88	0.62	1.50	0.30	36.11
1994	0.97	0.63	0.20	3.34	1.26	6.03	1.70	2.66	2.36	2.36	1.03	0.33	22.87
1995	0.18	0.13	4.06	5.83	4.76	2.70	2.55	5.11	1.86	2.76	0.38	0.10	30.42
1996	0.99	0.16	0.82	0.55	5.27	1.14	0.98	1.79	2.82	1.63	2.91	.78	19.84
1997	0.41	1.39	0.23	2.43	3.58	3.77	2.94	1.58	1.59	1.75	0.35	0.24	20.26
1998	0.50	0.67	4.08	3.57	1.92	4.52	2.66	3.29	1.19	6.28	2.20	0.24	31.12
1999	0.35	0.28	1.15	4.32	6.20	2.57	4.81	0.80	0.84	0.37	0.05	0.17	21.91
2000	0.68	1.04	0.91	2.27	5.56	3.26	3.22	3.17	1.34	1.79	2.52	0.35	26.11
2001	1.50	0.65	0.78	6.97	1.92	3.13	5.88	1.37	2.25	0.86	4.76	0.11	30.18
2002	0.17	0.27	1.41	2.29	1.82	2.57	1.80	8.26	1.39	3.85	0.09	0.15	24.07
2003	0.30	0.64	0.22	3.69	2.64	3.54	1.64	1.82	4.74	0.92	0.59	1.07	21.81
2004	0.52	1.11	2.03	1.28	8.10	6.00	1.40	3.58	5.12	0.86	0.81	0.11	30.92
2005	0.44	1.12	1.53	3.33	5.22	3.72	4.59	1.36	4.76	1.66	2.95	1.03	31.71
2006	0.76	0.14	2.67	6.17	1.02	3.81	0.68	4.33	3.88	0.33	1.00	1.95	26.74
2007	0.45	1.29	4.97	1.93	2.63	3.98	0.32	6.18	2.27	5.98	0.04	1.30	31.34
2008	0.23	0.57	1.34	2.68	3.34	3.95	2.52	1.91	1.78	5.44	1.01	0.70	25.47
2009	0.32	0.41	1.31	1.95	1.43	3.07	3.71	1.93	1.21	5.52	0.17	2.03	23.06
2010	1.25	1.29	1.02	2.65	2.03	7.83	8.55	6.26	4.46	0.91	0.47	1.54	38.26
2011	1.17	0.95	0.74	3.09	5.42	4.26	5.76	1.40	0.20	0.63	0.04	0.62	24.28
2012	0.75	2.43	0.77	2.40	4.60	0.74	0.24	1.75	1.14	0.86	0.35	1.31	17.34
POR= 81 YRS	0.59	0.80	1.60	2.61	3.42	3.90	2.95	3.20	2.70	1.72	1.06	0.70	25.25

WBAN : 14944

AVERAGE TEMPERATURE (°F) 2012 SIOUX FALLS (KFSD)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1983	20.1	26.2	33.1	41.5	55.1	66.7	77.1	78.3	63.5	49.6	34.9	2.1	45.7
1984	17.4	27.8	24.6	45.8	55.9	68.1	73.6	74.2	57.2	50.4	36.2	20.4	46.0
1985	13.4	19.9	37.8	52.8	62.7	64.2	71.5	66.3	58.2	46.6	20.7	9.5	43.6
1986	20.7	16.9	36.9	48.2	58.8	69.6	75.0	66.5	59.6	48.6	28.7	25.2	46.2
1987	24.0	32.8	37.8	52.6	64.9	71.4	77.0	68.8	62.8	43.9	38.1	24.4	49.9
1988	9.6	15.0	36.4	46.4	65.1	76.3	77.4	74.8	62.6	44.6	34.2	22.1	47.0
1989	25.5	9.2	29.8	47.8	58.0	66.9	77.3	72.0	60.2	49.5	29.5	11.5	44.8
1990	28.2	24.9	36.7	46.4	56.4	70.1	71.2	72.9	66.5	48.0	35.6	15.3	47.7
1991	13.7	29.8	37.0	50.0	62.5	73.5	73.1	72.8	62.0	46.1	25.7	26.0	47.7
1992	26.5	30.0	36.7	43.7	60.5	67.0	65.5	66.1	60.3	48.7	30.4	19.2	46.2
1993	14.0	15.0	29.0	44.1	57.1	65.1	71.4	71.4	56.8	47.1	29.9	21.9	43.6
1994	6.2	13.3	36.6	46.5	63.9	71.6	70.8	69.5	65.2	52.4	36.5	21.8	46.2
1995	17.7	23.5	34.8	41.8	55.7	70.0	75.1	76.9	60.4	48.3	29.2	23.7	46.4
1996	10.9	22.6	27.4	42.4	54.9	68.8	69.1	70.0	59.4	47.7	23.5	10.3	42.3
1997	8.6	17.9	30.6	40.6	51.5	68.8	72.4	68.9	62.4	49.4	27.9	26.1	43.8
1998	19.6	31.8	28.0	46.5	61.7	63.1	71.9	71.0	66.3	50.6	35.5	24.0	47.5
1999	14.0	29.9	33.8	45.7	58.5	66.9	75.1	70.6	59.7	48.5	42.1	25.1	47.5
2000	17.3	30.4	39.4	46.0	59.2	65.7	71.7	71.6	61.4	51.1	25.0	7.7	45.5
2001	18.8	11.1	26.7	48.1	59.1	68.7	75.7	72.2	61.3	48.2	43.6	25.0	46.5
2002	24.8	29.6	23.4	47.3	54.1	72.2	77.7	70.6	63.3	40.9	33.0	26.6	47.0
2003	17.6	18.8	33.0	47.9	55.5	66.3	73.0	73.3	60.0	50.8	31.9	25.6	46.1
2004	14.9	20.3	38.5	49.0	57.8	64.8	70.5	65.5	65.8	49.8	37.5	25.7	46.7
2005	16.0	28.6	33.4	52.1	56.3	70.4	75.0	70.0	67.4	50.5	36.8	17.9	47.9
2006	31.1	23.3	33.3	51.8	59.6	69.0	76.0	71.3	58.2	46.4	34.4	28.2	48.6
2007	18.5	13.6	39.0	45.5	62.4	69.9	75.0	72.6	63.5	53.5	35.1	17.5	47.2
2008	13.7	14.9	29.2	43.3	56.4	68.2	74.6	71.6	62.9	49.5	34.6	15.3	44.5
2009	14.3	23.7	33.4	45.3	58.7	65.9	68.6	68.0	63.5	42.5	41.3	15.1	45.0
2010	10.6	14.7	37.5	52.2	56.8	67.6	73.5	74.3	60.0	51.3	33.9	16.4	45.7
2011	10.3	16.8	29.9	43.9	56.5	67.1	77.4	71.1	59.6	53.2	36.3	26.9	45.8
2012	24.0	26.6	49.8	51.7	61.7	72.1	81.4	72.4	62.7	46.3	35.9	21.6	50.5
POR= 81 YRS	15.3	20.4	32.3	46.8	58.7	68.4	74.2	71.6	61.7	49.5	33.2	20.5	46.0

HEATING DEGREE DAYS (base 65°F) 2012 SIOUX FALLS (KFSD)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1983-84	1	0	160	476	894	1947	1468	1072	1247	569	285	23	8142
1984-85	2	12	265	451	857	1376	1594	1260	836	378	124	101	7256
1985-86	5	44	269	562	1327	1721	1363	1341	865	498	204	17	8216
1986-87	0	54	180	504	1082	1227	1265	896	835	387	96	23	6549
1987-88	5	54	110	649	801	1252	1715	1448	878	554	83	1	7550
1988-89	0	22	126	628	916	1321	1219	1559	1083	514	235	61	7684
1989-90	0	5	192	481	1056	1655	1131	1117	871	586	268	39	7401
1990-91	11	7	109	527	875	1538	1587	977	859	455	192	7	7144
1991-92	6	3	180	583	1171	1200	1186	1009	871	636	187	35	7067
1992-93	35	63	159	500	1030	1414	1576	1397	1109	621	244	74	8222
1993-94	2	19	257	557	1046	1331	1821	1443	872	563	140	8	8059
1994-95	5	15	100	386	849	1332	1461	1157	931	689	281	55	7261
1995-96	3	0	198	523	1068	1275	1674	1224	1159	672	334	44	8174
1996-97	8	4	228	535	1237	1691	1738	1313	1060	727	413	7	8961
1997-98	20	26	130	497	1105	1202	1402	922	1138	549	147	117	7255
1998-99	4	2	79	440	881	1262	1574	976	961	572	208	72	7031
1999-00	0	4	199	505	686	1229	1471	997	789	565	205	80	6730
2000-01	23	8	167	425	1195	1771	1424	1501	1185	516	203	43	8461
2001-02	7	7	161	522	637	1234	1239	986	1283	540	368	27	7011
2002-03	2	18	148	739	953	1184	1462	1285	986	516	293	63	7649
2003-04	1	12	201	443	987	1216	1546	1291	813	483	250	71	7314
2004-05	18	67	85	464	820	1211	1511	1015	971	386	283	2	6833
2005-06	7	15	65	462	838	1453	1047	1164	978	396	217	26	6668
2006-07	1	4	222	594	912	1134	1433	1431	796	597	132	23	7279
2007-08	0	1	135	377	892	1467	1582	1448	1102	643	273	5	7925
2008-09	2	1	122	475	906	1535	1565	1150	970	593	225	85	7629
2009-10	11	35	89	691	704	1541	1679	1404	844	380	300	16	7694
2010-11	0	1	151	415	925	1499	1688	1343	1083	625	278	45	8053
2011-12	0	0	199	397	854	1176	1265	1109	478	407	152	21	6058
2012-	0	18	145	572	868	1337							

WBAN : 14944

COOLING DEGREE DAYS (base 65°F) 2012 SIOUX FALLS (KFSD)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1983	0	0	0	0	15	122	381	420	120	2	0	0	1060
1984	0	0	0	0	10	120	276	305	36	4	0	0	751
1985	0	0	0	19	59	85	212	93	72	0	0	0	540
1986	0	0	0	0	20	163	318	108	25	0	0	0	634
1987	0	0	0	20	100	219	381	178	53	0	0	0	951
1988	0	0	0	1	94	349	393	330	61	0	0	0	1228
1989	0	0	0	6	25	125	387	228	56	7	0	0	834
1990	0	0	0	31	11	198	209	258	160	7	0	0	874
1991	0	0	0	11	119	265	264	249	100	5	0	0	1013
1992	0	0	0	4	53	103	58	103	25	5	0	0	351
1993	0	0	0	0	5	85	208	223	16	9	0	0	546
1994	0	0	0	13	113	212	191	160	113	2	0	0	804
1995	0	0	0	0	0	214	324	375	68	11	0	0	992
1996	0	0	0	0	27	163	140	167	63	4	0	0	564
1997	0	0	0	0	1	128	255	152	62	20	0	0	618
1998	0	0	0	0	54	69	225	196	123	0	0	0	667
1999	0	0	0	0	14	136	319	185	48	3	0	0	705
2000	0	0	0	0	31	106	240	219	64	4	0	0	664
2001	0	0	0	14	29	163	345	237	58	8	0	0	854
2002	0	0	0	16	36	247	403	197	105	0	0	0	1004
2003	0	0	0	9	5	109	254	276	60	11	0	0	724
2004	0	0	0	10	33	72	196	90	114	0	0	0	515
2005	0	0	0	5	21	171	323	178	145	19	0	0	862
2006	0	0	0	6	57	154	350	207	23	22	0	0	819
2007	0	0	0	22	58	177	318	244	100	23	0	0	942
2008	0	0	0	0	15	107	306	214	67	0	0	0	709
2009	0	0	0	9	35	120	134	133	50	0	0	0	481
2010	0	0	1	2	52	100	270	297	5	2	0	0	729
2011	0	0	0	0	23	117	388	196	46	37	0	0	807
2012	0	0	14	14	58	241	514	257	84	0	0	0	1182

SNOWFALL (inches) 2012 SIOUX FALLS (KFSD)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1983-84	0.0	0.0	0.0	T	19.0	13.7	5.0	11.9	19.4	6.0	0.0	0.0	75.0
1984-85	0.0	0.0	T	T	T	4.7	7.4	0.7	16.1	2.5	0.0	0.0	31.4
1985-86	0.0	0.0	0.9	0.2	21.9	9.1	9.1	0.9	8.2	0.3	0.0	0.0	50.6
1986-87	0.0	0.0	0.0	T	5.4	T	2.4	0.3	T	T	0.0	0.0	8.1
1987-88	0.0	0.0	0.0	0.1	7.5	13.3	17.9	7.3	2.5	11.3	0.0	0.0	59.9
1988-89	0.0	0.0	0.0	T	10.9	2.2	2.0	10.0	16.0	0.7	T	0.0	41.8
1989-90	0.0	0.0	0.0	0.0	2.4	4.0	0.2	5.8	0.7	T	0.0	T	13.1
1990-91	0.0	0.0	0.0	1.2	8.4	8.8	5.4	5.4	3.2	T	T	T	32.4
1991-92	0.0	0.0	0.0	10.0	10.8	0.2	3.8	11.2	8.4	3.5	T	T	47.9
1992-93	0.0	0.0	0.0	T	4.7	8.4	8.6	13.1	14.9	2.2	T	T	51.9
1993-94	T	0.0	T	T	8.8	4.6	16.8	13.0	1.1	14.9	0.0	T	59.2
1994-95	0.0	0.0	0.0	0.0	9.7	7.0	0.5	2.4	8.8	12.5	0.0	0.0	40.9
1995-96	T	0.0	0.0	7.4	5.1	1.9	15.4	1.7	6.9				
1996-97			0.0	T	11.3	19.8	8.8	16.5	1.3	6.0	T	0.0	
1997-98	0.0	0.0	0.0	0.4	5.0	3.3	11.7	6.9	21.4	0.3	0.0	T	49.0
1998-99	0.0	0.0	0.0	0.0	14.8	9.0	9.9	7.9	11.2	2.4	T	0.0	55.2
1999-00	T	0.0	T	2.7	T	3.2	6.0	1.2	4.5	5.6	T	0.0	23.2
2000-01	T	0.0	0.0	0.0	19.6	11.4	13.9	8.4	3.2	1.4	0.0	T	57.9
2001-02	0.0	T	0.0	T	13.8	2.9	3.2	2.8	17.1	4.9	T	0.0	44.7
2002-03	0.0	T	0.0	6.3	1.0	0.8	4.1	6.3	4.6	9.0	0.0	0.0	32.1
2003-04	0.0	0.0	0.0	0.1	7.6	13.4	12.3	15.8	7.4	T	T	0.0	56.6
2004-05	0.0	0.0	0.0	0.0	T	0.5	9.5	4.0	13.4	T	T	0.0	27.4
2005-06	T	T	0.0	T	14.3	8.5	0.7	2.3	9.3	T	0.0	T	35.1
2006-07	0.0	0.0	0.0	1.6	0.8	1.7	8.1	15.9	8.0	8.2	0.0	0.0	44.3
2007-08	0.0	0.0	0.0	0.0	0.6	11.4	4.1	7.5	14.5	7.6	0.0	0.0	45.7
2008-09	0.0	0.0	0.0	T	3.4	12.5	6.5	2.6	3.2	6.6	0.0	0.0	34.8
2009-10	0.0	T	0.0	3.5	T	27.8	8.4	16.9	0.5	0.0	0.0	0.0	57.1
2010-11	0.0	0.0	T	T	1.1	17.9	14.8	7.4	3.0	0.9	0.0	T	45.1
2011-12	0.0	0.0	0.0	0.0	0.1	0.4	8.2	6.9	0.3	0.0	0.0	0.0	15.9
2012-	0.0	0.0	0.0	1.1	T	12.7							
POR= 80 YRS	T	T	T	0.7	5.0	7.2	6.9	8.2	8.6	2.8	0.1	T	39.5

WBAN : 14944

REFERENCE NOTES :

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.</p> <p>GENERAL CONTINUED: WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN</p>	<p>PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY. ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED STATION HISTORY INFORMATION GO TO "Historical Observing Metadata Repository", URL IS: http://www.ncdc.noaa.gov/homr/ SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p>NOTE:</p> <p>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> <p>The 2012 Annual Publications were reproduced on 6/05/13 to correct two problems that occurred when the Publications were first produced on 02/28/13.</p> <ol style="list-style-type: none"> 1) A small number of stations did not correctly show number of days with thunderstorms and heavy fog. 2) Climate Normals in the Annual Publications were based on a first edition of the 1981-2010 Normals release. With the release of Service Pack 1 (SP1) new normals for 83 stations are available and now included. Additional information on SP1 is available at: http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/status.txt.
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2012 SIOUX FALLS SOUTH DAKOTA (KFSD)

Sioux Falls is located in the Big Sioux River Valley in southeast South Dakota. The surrounding terrain is gently rolling. The land slopes upward for about 100 miles north and northwest to an elevation about 400 feet higher than the city. To the southeast, the land slopes downward 200 to 300 feet over the same distance. Little change in elevation occurs in the remaining directions.

The climate is of the continental type. There are frequent weather changes from day to day or week to week as the locality is visited by differing air masses. Cold air masses arrive from the interior of Canada, cool, dry air from the northern Pacific, warm, moist air from the Gulf of Mexico, or hot, dry air from the southwest.

Temperatures fluctuate frequently as cold air masses move in very rapidly. During the late fall and winter, cold fronts accompanied by strong, gusty winds drop temperatures by 20 to 30 degrees in a 24-hour period. Severe cold spells usually last only a few days. The winter months of December through February have experienced cold spells with average temperatures under 8 degrees and more than 60 consecutive days below 32 degrees.

Temperatures of 100 degrees and above occur about one in every three years, and will most likely happen in July. Summer nights are usually comfortable with temperatures below 70 degrees.

Rainfall is heavier during the spring and summer with lighter amounts in winter. Nearly 64 percent of the normal yearly precipitation falls during the growing season of April through August.

One or two very heavy snows usually fall each winter. Eight to 12 inches of snow may fall in 24 hours. There have been a few snows in excess of 15 inches and almost 30 inches have fallen during a severe winter storm. Strong winds often cause drifting snow, and blizzard conditions may block highways for a day or so.

Southerly winds prevail from late spring to early fall with northwest winds the remainder of the year. Strong winds of 70 mph with gusts to 90 mph have occurred.

Thunderstorms are frequent during the late spring and summer with June and July the most active months. The thunderstorms usually occur during the late afternoon and evening with a secondary peak of activity between 2 and 5 in the morning. Some of the most severe thunderstorms with damaging winds, hail and an occasional tornado, occur most frequently June.

There is occasional flooding in the lower areas of Sioux Falls along the Big Sioux River and Skunk Creek. Runoff from the melting snow in the spring often causes substantial rises in the rivers. A diversion canal around Sioux Falls has reduced the threat of damaging floods.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 1 and the average last occurrence in the spring is May 10.

Station History

SIoux FALLS, SD

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
SIoux FALLS MUNICIPAL AP	1946-01-01	1947-09-24	43° 34'	-96° 43'			AIRWAYS
SIoux FALLS FOSS FIELD	1947-09-24	1948-01-01	43° 34'	-96° 43'			AIRWAYS
SIoux FALLS FOSS FIELD	1996-04-01	1998-10-08	43° 34'	-96° 45'	1422	1 MI SW	ASOS, COOP, WXSVC
FOSS FIELD	1939-01-01	1942-08-31	43° 34'	-96° 43'			AIRWAYS
SIoux FALLS FOSS FIELD	1948-01-01	1971-01-01	43° 34'	-96° 43'	1424		AIRWAYS, COOP
SIoux FALLS FOSS FIELD	1973-01-01	1977-01-01	43° 34'	-96° 43'	1430		COOP, WXSVC
SIoux FALLS FOSS FIELD	2011-01-01	Present	43° 34'	-96° 45'	1428		ASOS, COOP, WXSVC
SIoux FALLS FOSS FIELD	1998-10-08	2011-01-01	43° 34'	-96° 45'	1428		ASOS, COOP, WXSVC
SIoux FALLS FOSS FIELD	1971-01-01	1973-01-01	43° 34'	-96° 43'	1430		AIRWAYS, COOP
SIoux FALLS FOSS FIELD	1977-01-01	1996-04-01	43° 34'	-96° 43'	1418		COOP, WXSVC
FOSS FIELD	1932-01-01	1939-01-01	43° 31'	-96° 46'			AIRWAYS

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
TEMP	1982-01-01	1992-05-12	DAILY	2400			
PRECIP	1982-01-01	1992-05-12	DAILY	2400	UNIV	RCRD	
PRECIP	1992-05-12	1995-07-01	DAILY	2400	UNIV	RCRD	
EVAP	2002-02-05	2003-08-01	DAILY	0830	EVAP-C		
PRECIP	2002-02-05	2003-08-01	HOURLY	2400	AHTB	RCRD;HTD	
TEMPATOB	2002-02-05	2003-08-01	TWICE DAILY - AM/PM	0600	FRONTIER		
PRECIP	2003-08-01	2011-01-01	HOURLY	2400	AHTB	RCRD;HTD	
PRECIP	2011-01-01	2011-10-14	DAILY	2400	PCPNX		
TEMP	1932-01-01	1982-01-01	DAILY	2400			
EVAP	1992-05-12	1995-07-01	DAILY	2400			
EVAP	1996-04-01	2002-02-05	DAILY	2400	EVAP-C		
PRECIP	1996-04-01	2002-02-05	DAILY	2400	UNIV	RCRD	
EVAP	1932-01-01	1982-01-01	DAILY	2400			
PRECIP	1995-07-01	1996-04-01	DAILY	2400	UNIV	RCRD	
TEMP	2002-02-05	2003-08-01	DAILY	2400			
PRECIP	1982-01-01	1992-05-12	HOURLY	2400			
EVAP	1995-07-01	1996-04-01	DAILY	2400			
TEMP	2011-01-01	2011-10-14	DAILY	2400	ATEMP		
TEMP	2011-10-14	Present	DAILY	2400	ATEMP		
PRECIP	2011-10-14	Present	DAILY	2400	PCPNX		
EVAP	1982-01-01	1992-05-12	DAILY	2400			
PRECIP	2003-08-01	2011-01-01	DAILY	2400	PCPNX		
TEMP	1992-05-12	1995-07-01	DAILY	2400	MXMN		
TEMP	1995-07-01	1996-04-01	DAILY	2400	MXMN		
PRECIP	1995-07-01	1996-04-01	HOURLY	2400	UNIV	RCRD	
PRECIP	1996-04-01	2002-02-05	HOURLY	2400	UNIV	RCRD	
TEMP	1996-04-01	2002-02-05	DAILY	2400	HYGR		
TEMP	2003-08-01	2011-01-01	DAILY	2400	ATEMP		
PRECIP	2011-01-01	2011-10-14	HOURLY	2400	AWPAG	RCRD;HTD	
TEMPATOB	2002-02-05	2003-08-01	TWICE DAILY - AM/PM	1800	FRONTIER		
WIND	2011-10-14	Present	DAILY	2400	WINDX		
DEWPNTTEMP	2011-10-14	Present	DAILY	2400	TEMPX		
PRECIP	1932-01-01	1982-01-01	DAILY	2400	UNIV	RCRD	
PRECIP	1992-05-12	1995-07-01	HOURLY	2400			
PRECIP	2002-02-05	2003-08-01	DAILY	2400	TB	RCRD	
PRECIP	2011-10-14	Present	HOURLY	2400	AWPAG	RCRD;HTD	

* 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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