

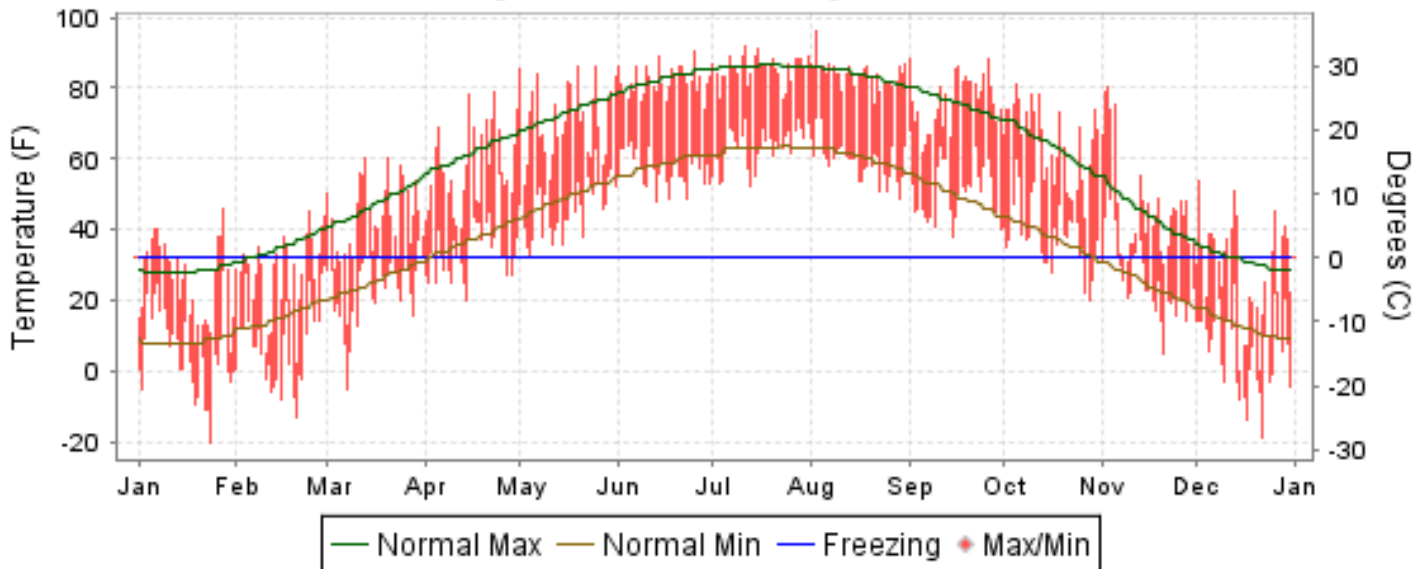


2008 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

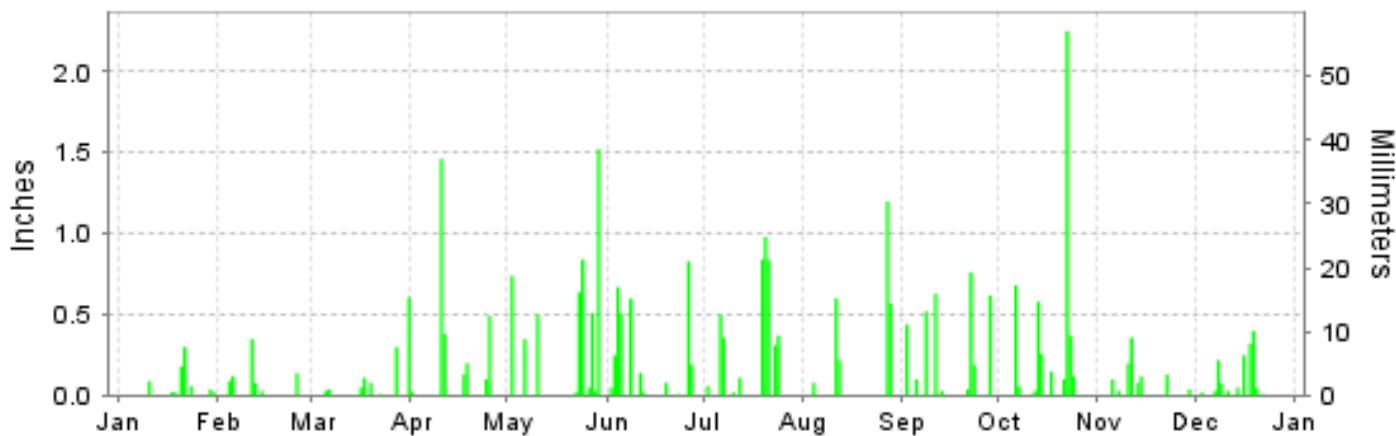
ISSN 0198-2095

SIOUX CITY, IOWA (KSUX)

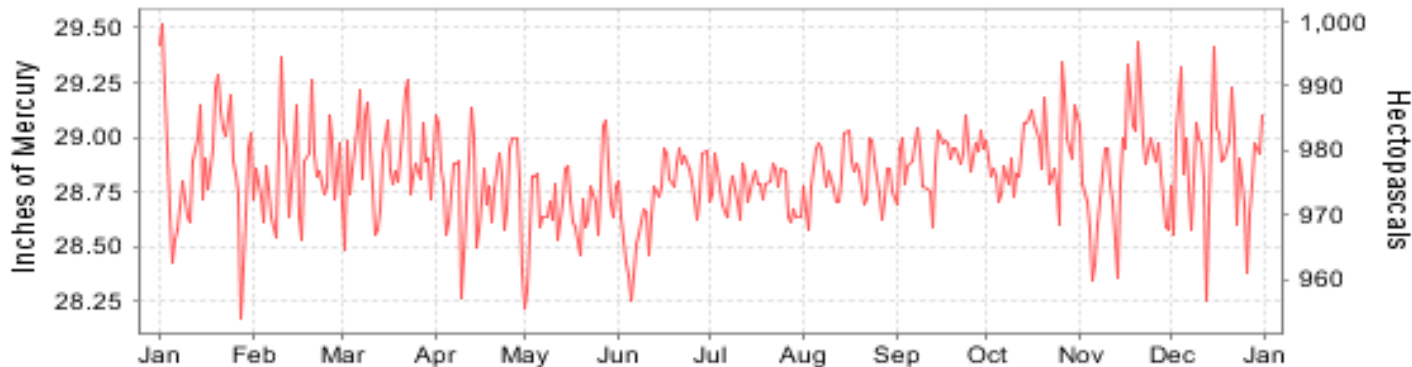
Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



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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 2008

SIOUX CITY (KSUX)

LATITUDE: 42 ° 23'N LONGITUDE: -96 ° 22'W ELEVATION (FT): GRND: 1090 BARO: 1139 TIME ZONE: CENTRAL (UTC -6) WBAN: 14943

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	25.5	27.9	42.9	57.6	70.8	81.8	85.5	83.8	76.3	64.6	46.6	28.3	57.6	
	HIGHEST DAILY MAXIMUM	46	45	60	79	86	90	92	96	88	81	80	54	96	
	DATE OF OCCURRENCE	28	24	20+	23	25+	25	11	03	26+	05	03	02	AUG 03	
	MEAN DAILY MINIMUM	5.4	8.0	23.3	34.0	46.1	57.1	63.6	59.5	51.0	39.2	26.2	5.6	34.9	
	LOWEST DAILY MINIMUM	-20	-13	-5	20	33	48	52	49	38	20	5	-19	-20	
	DATE OF OCCURRENCE	24	20	07	14	04	13	13	29	15	28	21	22	JAN 24	
	AVERAGE DRY BULB	15.5	18.0	33.1	45.8	58.5	69.5	74.6	71.7	63.7	51.9	36.4	17.0	46.3	
	MEAN WET BULB	14.2	16.8	30.3	40.3	51.5	62.0	68.7	65.5	57.8	46.6	33.4	15.8	41.9	
	MEAN DEW POINT	9.5	12.4	25.4	33.4	44.3	56.9	65.5	62.0	53.8	40.3	28.8	10.9	36.9	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	1	2	1	0	0	0	0	4	
	MAXIMUM <= 32°	22	18	5	0	0	0	0	0	0	0	3	16	64	
MINIMUM <= 32°	31	29	30	14	0	0	0	0	0	7	23	31	165		
MINIMUM <= 0°	10	9	1	0	0	0	0	0	0	0	0	11	31		
H/C	HEATING DEGREE DAYS	1527	1357	983	569	220	2	0	0	99	412	851	1483	7503	
	COOLING DEGREE DAYS	0	0	0	0	26	144	304	213	64	14	2	0	767	
RH	MEAN (PERCENT)	75	77	75	66	63	67	74	74	74	70	75	75	72	
	HOUR 00 LST	80	81	83	76	72	79	84	89	85	80	80	78	81	
	HOUR 06 LST	79	80	85	83	79	86	90	94	91	86	84	78	85	
	HOUR 12 LST	70	74	67	54	53	54	63	58	60	55	64	70	62	
	HOUR 18 LST	71	73	65	52	49	49	62	57	57	58	69	74	61	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	3	4	4	2	0	2	4	4	4	2	0	3	32	
	THUNDERSTORMS	0	0	1	1	6	8	12	5	3	1	1	0	38	
CLOUDNESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
SATELLITE (> 12,000 FT.)															
NUMBER OF DAYS WITH:															
CLEAR															
PARTLY CLOUDY															
CLOUDY															
PR	MEAN STATION PRESS. (IN.)	28.89	28.85	28.87	28.77	28.69	28.71	28.76	28.82	28.91	28.93	28.85	28.87	28.83	
	MEAN SEA-LEVEL PRESS. (IN.)	30.13	30.09	30.09	29.96	29.87	29.87	29.91	29.98	30.08	30.12	30.06	30.11	30.02	
WINDS	RESULTANT SPEED (MPH)	2.1	3.0	2.7	1.6	1.6	0.5	3.2	3.2	1.7	1.6	2.9	3.3	0.8	
	RES. DIR. (TENS OF DEGS.)	35	36	01	01	01	30	15	14	15	09	32	32	02	
	MEAN SPEED (MPH)	10.5	10.9	10.3	13.4	11.5	9.1	7.8	6.9	8.4	9.2	10.7	12.4	10.1	
	PREVAIL.DIR.(TENS OF DEGS.)	33	33	33	33	32	30	15	11	15	13	33	31	33	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	47	40	39	43	44	48	63	32	29	43	36	40	63	
	DIR. (TENS OF DEGS.)	33	33	32	19	17	05	34	35	16	33	34	32	34	
	DATE OF OCCURRENCE	29	09	12	15	29	04	20	12	22	26	14	14	JUL 20	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	55	47	48	55	56	56	74	39	38	56	41	54	74	
DIR. (TENS OF DEGS.)	33	32	32	17	17	03	35	35	34	30	33	32	35		
DATE OF OCCURRENCE	29	09	12	15	29	04	20	12	14	26	14	14	JUL 20		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.73	0.81	1.23	2.79	5.20	3.35	4.39	2.67	3.34	4.61	1.06	1.46	31.64	
	GREATEST 24-HOUR (IN.)	0.48	0.43	0.61	1.81	1.52	1.18	1.82	1.77	0.80	2.53	0.56	0.72	2.53	
	DATE OF OCCURRENCE	20-21	11-12	31	10-11	29	04-05	20-21	27-28	21-22	22-23	10-11	18-19	OCT 22-23	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	8	6	8	8	10	11	10	5	10	11	8	11	106	
PRECIPITATION 0.10	2	3	3	6	7	7	8	4	7	8	5	4	64		
PRECIPITATION 1.00	0	0	0	1	1	0	0	1	0	1	0	0	4		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	14.5	10.4	6.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	2.9	22.6	57.1	
	GREATEST 24-HOUR (IN.)	6.1	4.9	3.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3	6.1	6.1	
	DATE OF OCCURRENCE	21	11	27	25+							22	19	DEC 19	
	MAXIMUM SNOW DEPTH (IN.)	12	9	2	T	0	0	0	0	0	0	1	16	16	
	DATE OF OCCURRENCE	24+	16+	27	12							23	24+	DEC 24+	
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	5	3	1	0	0	0	0	0	0	0	2	6	17		

NORMALS, MEANS, AND EXTREMES

SIOUX CITY (KSUX)

LATITUDE:
42 ° 23'N

LONGITUDE:
-96 ° 22'W

ELEVATION (FT):
GRND: 1090 BARO: 1139

TIME ZONE:
CENTRAL (UTC -6)

WBAN: 14943

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	28.7	35.0	47.3	61.7	73.2	82.5	86.2	83.7	76.0	63.7	44.8	31.7	59.5
	MEAN DAILY MAXIMUM	113	27.6	31.5	45.0	59.9	72.1	80.0	86.4	84.0	74.6	63.9	45.4	32.5	58.6
	HIGHEST DAILY MAXIMUM	68	71	71	91	97	102	108	108	104	103	94	82	70	108
	YEAR OF OCCURRENCE		2002	2000	1968	1980	1967	1988	1995	1955	2000	1997	2006	1998	JUL 1995
	MEAN OF EXTREME MAXS.	113	50.8	56.0	71.4	85.9	90.7	96.0	97.3	95.5	91.6	84.6	69.4	54.3	78.6
	NORMAL DAILY MINIMUM	30	8.5	15.3	25.7	37.3	49.2	58.5	62.9	60.6	50.1	38.0	24.8	12.8	37.0
	MEAN DAILY MINIMUM	113	8.8	13.3	25.2	37.4	49.7	58.6	64.5	62.2	51.5	40.4	26.0	14.7	37.7
	LOWEST DAILY MINIMUM	68	-26	-26	-22	-2	25	38	42	37	24	12	-9	-24	-26
	YEAR OF OCCURRENCE		1970	1962	1960	1975	1997	1950	1971	1950	1945	1993	1991	1989	JAN 1970
	MEAN OF EXTREME MINS.	113	-13.9	-8.5	3.7	21.5	34.0	45.9	51.9	49.5	34.4	22.4	7.1	-7.1	20.1
	NORMAL DRY BULB	30	18.6	25.1	36.5	49.5	61.2	70.5	74.6	72.1	63.1	50.8	34.8	22.3	48.3
	MEAN DRY BULB	113	18.2	22.4	35.1	48.7	60.9	69.4	75.5	73.1	63.0	52.2	35.7	23.7	48.2
	MEAN WET BULB	25	18.8	22.6	32.1	42.5	53.4	62.7	67.7	66.1	56.7	44.4	31.2	21.3	43.3
	MEAN DEW POINT	25	15.1	18.8	27.3	36.9	48.8	59.0	65.2	63.7	53.0	39.6	27.5	18.1	39.4
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.5	1.0	5.6	9.2	6.5	2.4	0.2	0.0	0.0	25.4
	MAXIMUM <= 32	30	18.0	12.5	4.4	0.4	0.0	0.0	0.0	0.0	0.0	0.1	5.1	15.2	55.7
MINIMUM <= 32	30	30.6	26.6	22.4	8.9	0.6	0.0	0.0	0.0	0.7	7.6	23.2	30.2	150.8	
MINIMUM <= 0	30	8.5	4.4	0.7	*	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.3	19.6	
H/C	NORMAL HEATING DEG. DAYS	30	1439	1131	885	473	172	25	3	10	128	434	891	1309	6900
	NORMAL COOLING DEG. DAYS	30	0	0	0	11	53	198	311	246	87	8	0	0	914
RH	NORMAL (PERCENT)	30	74	74	70	63	64	66	71	74	70	67	74	77	70
	HOURLY 00 LST	30	77	79	77	71	72	75	80	84	80	75	79	80	77
	HOURLY 06 LST	30	78	80	81	79	80	82	87	89	87	82	82	82	82
	HOURLY 12 LST	30	69	67	61	52	54	56	59	61	56	54	65	72	61
	HOURLY 18 LST	30	71	68	60	50	50	51	57	61	56	55	68	75	60
S	PERCENT POSSIBLE SUNSHINE	56	57	56	57	59	61	67	73	70	66	63	51	50	61
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	45	2.2	2.5	2.1	0.9	0.7	0.6	1.0	2.2	1.6	1.3	2.3	3.4	20.8
	THUNDERSTORMS	61	0.0	0.3	1.2	3.2	6.6	8.2	7.9	7.1	4.6	1.7	0.5	0.1	41.4
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	1	3.0		6.0		1.0	4.0							
	PARTLY CLOUDY	1	3.0		5.0		10.0	8.0							
PR	MEAN STATION PRESSURE(IN)	25	28.91	28.91	28.85	28.77	28.76	28.76	28.80	28.83	28.84	28.85	28.86	28.90	28.84
	MEAN SEA-LEVEL PRES. (IN)	25	30.14	30.14	30.06	29.95	29.93	29.91	29.95	29.99	30.01	30.04	30.07	30.13	30.03
WINDS	MEAN SPEED (MPH)	25	11.2	11.1	11.9	12.6	11.7	10.1	8.6	8.3	9.5	10.2	11.0	10.9	10.6
	PREVAIL.DIR(TENS OF DEGS)	37	33	33	33	33	33	17	17	14	16	33	33	33	33
	MAXIMUM 2-MINUTE: SPEED (MPH)	13	55	51	57	53	52	62	63	48	48	51	52	49	63
	DIR. (TENS OF DEGS)		33	32	33	32	18	33	34	30	20	32	33	33	34
	YEAR OF OCCURRENCE		1996	2003	1996	1996	2004	2000	2008	2001	1998	1996	2005	2000	JUL 2008
	MAXIMUM 3-SECOND SPEED (MPH)	13	66	57	68	64	77	74	74	63	57	61	62	58	77
	DIR. (TENS OF DEGS)		33	31	33	21	19	32	35	30	21	32	29	33	19
	YEAR OF OCCURRENCE		2005	1996	1996	2001	1998	2000	2008	2001	1998	1996	1998	2000	MAY 1998
PRECIPITATION	NORMAL (IN)	30	0.59	0.62	2.00	2.75	3.75	3.61	3.30	2.90	2.42	1.99	1.40	0.66	25.99
	MAXIMUM MONTHLY (IN)	68	2.44	2.66	5.90	6.73	8.46	8.78	10.33	9.07	9.69	5.30	4.10	2.56	10.33
	YEAR OF OCCURRENCE		1949	1971	1987	1984	1959	1967	1972	2007	1965	1979	1948	2006	JUL 1972
	MINIMUM MONTHLY (IN)	68	0.11	0.07	0.04	0.45	0.60	0.53	0.36	0.12	0.07	T	0.01	0.01	T
	YEAR OF OCCURRENCE		1986	1996	1994	1942	1955	1988	2006	1971	1950	1958	1967	1943	OCT 1958
	MAXIMUM IN 24 HOURS (IN)	68	1.09	2.15	2.75	2.11	2.70	3.89	5.50	4.28	2.94	4.55	3.45	1.18	5.50
	YEAR OF OCCURRENCE		1982	1971	1987	2007	1992	1957	1972	1961	1965	1979	1948	1959	JUL 1972
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	6.6	6.3	8.5	10.1	11.4	10.1	9.3	9.2	8.1	6.8	7.1	6.5	100.0
	PRECIPITATION >= 1.00	30	*	0.1	0.5	0.6	0.8	1.1	0.7	0.7	0.6	0.3	0.3	0.0	5.7
	SNOWFALL	NORMAL (IN)	30	6.3	5.5	5.8	1.9	0.*	0.0	0.0	0.0	0.*	0.8	4.8	6.3
MAXIMUM MONTHLY (IN)		67	29.1	24.5	26.2	9.7	4.0	T	T	0.0	0.4	9.8	16.5	22.6	29.1
YEAR OF OCCURRENCE			1982	1993	1962	1983	1945	1996	1992		1961	1991	1983	2008	JAN 1982
MAXIMUM IN 24 HOURS (IN)		67	17.4	15.2	18.4	6.8	4.0	T	T	0.0	0.4	8.8	12.4	9.4	18.4
YEAR OF OCCURRENCE			1982	1993	2004	1957	1945	1996	1992		1961	1991	1983	1994	MAR 2004
MAXIMUM SNOW DEPTH (IN)		60	19	27	28	7	0	0	0	0	0	4	13	16	28
YEAR OF OCCURRENCE			1982	2004	1962	1957						1982	1983	2008	MAR 1962
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0		30	1.7	1.8	1.7	0.6	0.0	0.0	0.0	0.0	0.0	0.2	1.6	2.0	9.6

PRECIPITATION (inches) 2008 SIOUX CITY (KSUX)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1979	1.09	0.35	3.27	2.34	4.43	3.39	1.91	6.28	2.02	5.30	1.90	0.21	32.49
1980	0.59	0.41	1.03	1.37	3.88	1.21	0.50	5.68	1.40	1.39	0.03	0.22	17.71
1981	0.37	0.32	1.78	0.47	1.98	3.07	4.36	1.72	0.97	2.89	1.90	0.57	20.40
1982	1.58	0.38	1.53	0.64	6.93	1.82	3.63	1.54	3.64	4.83	1.75	2.23	30.50
1983	0.39	0.68	4.91	2.19	4.41	4.58	1.27	1.16	3.07	2.09	3.08	0.45	28.28
1984	0.17	1.14	1.79	6.73	5.54	6.79	2.56	0.79	0.71	4.59	1.85	1.36	34.02
1985	0.29	0.12	2.20	5.04	3.24	1.15	0.41	3.69	4.50	1.20	1.01	0.52	23.37
1986	0.11	0.63	3.03	5.73	3.00	5.35	3.26	1.86	5.06	2.56	1.13	0.21	31.93
1987	0.23	0.41	5.90	0.61	4.20	3.09	3.08	3.94	1.44	0.44	0.90	0.48	24.72
1988	0.73	0.43	0.59	2.50	2.47	0.53	2.93	5.16	5.17	0.08	2.08	0.58	23.25
1989	0.96	0.36	0.86	0.94	1.51	1.83	5.76	2.01	4.33	0.19	0.24	0.40	19.39
1990	0.30	0.31	2.18	1.61	7.48	4.20	3.22	1.34	0.86	1.48	0.87	0.78	24.63
1991	0.46	0.38	2.02	3.48	3.87	5.27	0.77	2.17	2.17	2.04	2.70	0.87	26.20
1992	0.60	0.77	3.52	1.13	3.56	2.74	4.81	4.60	2.82	3.69	0.95	0.80	29.99
1993	0.70	2.08	0.85	3.66	3.06	4.23	6.71	6.43	1.29	1.84	1.03	0.53	32.41
1994	1.09	0.65	0.04	2.37	0.88	3.44	4.53	3.33	4.59	2.01	2.24	1.04	26.21
1995	0.31	0.18	2.09	4.74	4.81	2.18	1.36	2.04	3.52	2.22	0.64	0.31	24.40
1996	1.17	0.07	1.09	0.84	6.22	4.39	7.33	4.69	2.65	0.86	1.83	0.43	31.57
1997	0.35	0.34	0.46	2.42	3.71	3.09	1.94	0.63	2.43	1.29	0.26	0.20	17.12
1998	0.80	0.46	4.01	6.06	2.87	5.67	1.49	3.55	0.42	3.49	1.82	0.15	30.79
1999	0.33	0.81	0.89	4.66	5.21	7.90	3.30	4.57	0.52	0.24	0.67	0.35	29.45
2000	0.40	0.76	0.71	1.87	3.91	5.66	3.14	1.78	1.06	2.23	1.55	0.69	23.76
2001	1.72	0.61	0.87	5.21	5.87	2.57	2.18	3.40	3.39	1.20	3.05	0.45	30.52
2002	0.44	0.38	0.95	2.99	2.60	3.69	4.16	5.67	1.27	2.64	0.22	0.13	25.14
2003	0.22	0.94	1.67	3.15	3.79	4.04	3.72	1.67	6.65	0.63	1.16	0.55	28.19
2004	0.83	1.09	4.36	1.36	4.32	4.12	2.93	0.97	3.42	0.58	1.44	0.12	25.54
2005	0.45	1.12	0.80	4.18	3.39	4.13	2.51	1.45	2.84	2.48	1.91	0.77	26.03
2006	0.24	0.38	2.61	3.37	0.87	3.23	0.36	6.98	5.45	0.82	0.47	2.56	27.34
2007	0.87	1.90	4.19	4.64	4.74	2.70	2.19	9.07	3.67	3.88	0.03	1.70	39.58
2008	0.73	0.81	1.23	2.79	5.20	3.35	4.39	2.67	3.34	4.61	1.06	1.46	31.64
POR= 113 YRS	0.64	0.82	1.54	2.52	3.68	3.99	3.23	2.97	2.94	1.76	1.14	0.76	25.99

WBAN : 14943

AVERAGE TEMPERATURE (°F) 2008 SIOUX CITY (KSUX)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1979	3.9	9.2	31.3	46.6	57.6	70.0	74.4	72.4	65.2	50.1	34.1	30.1	45.4
1980	21.6	20.3	33.6	51.5	61.2	70.7	78.6	73.8	64.3	48.2	39.9	24.4	49.0
1981	24.4	28.3	40.5	56.6	59.2	72.0	74.5	71.0	65.1	49.5	40.1	20.7	50.2
1982	6.4	20.4	34.0	46.5	62.4	65.4	76.4	72.4	63.1	53.2	34.2	26.3	46.7
1983	22.5	28.1	36.5	43.2	56.5	68.1	77.2	80.9	66.3	52.6	38.2	6.0	48.0
1984	20.7	31.7	29.3	46.8	57.8	70.4	73.7	74.9	60.4	51.8	37.9	24.4	48.3
1985	17.8	23.7	41.5	54.7	64.5	67.9	74.5	69.3	61.4	51.4	25.9	13.8	47.2
1986	28.0	23.0	41.0	51.2	61.8	72.9	76.8	68.6	64.0	51.9	31.9	27.0	49.8
1987	26.9	34.8	40.5	54.8	66.4	74.3	76.9	70.1	64.0	46.6	41.6	28.9	52.2
1988	16.0	20.8	39.4	49.0	67.5	76.5	76.4	76.1	64.9	47.4	37.5	27.2	49.9
1989	29.9	15.3	34.0	52.2	61.1	69.4	77.4	72.7	61.9	52.6	32.9	14.3	47.8
1990	30.4	28.4	40.2	49.2	58.3	73.4	73.4	73.6	67.8	51.2	40.0	19.6	50.5
1991	15.7	33.1	40.2	52.9	65.0	73.9	74.5	74.0	64.3	49.0	28.3	28.9	50.0
1992	30.7	34.7	40.4	46.7	60.8	68.1	68.6	66.8	62.1	51.1	33.3	24.0	48.9
1993	17.5	18.5	31.6	46.5	59.1	67.7	73.1	72.5	58.4	49.4	32.2	25.6	46.0
1994	12.1	17.7	39.5	49.1	63.8	72.6	70.9	69.9	66.7	54.0	38.5	23.4	48.2
1995	20.6	28.8	36.4	45.8	56.9	70.1	74.9	77.0	60.7	50.1	31.7	25.6	48.2
1996	14.6	26.2	29.0	46.1	57.4	71.4	70.5	70.4	60.6	51.2	28.2	15.3	45.1
1997	14.6	24.8	37.9	42.8	55.5	71.8	74.1	70.7	64.8	52.4	32.4	28.5	47.5
1998	23.2	34.8	30.6	50.2	65.2	66.5	74.6	73.5	70.1	54.2	40.5	27.8	50.9
1999	18.9	32.5	37.0	49.2	61.4	68.5	77.7	70.9	61.0	50.5	44.2	28.8	50.1
2000	22.1	33.5	42.4	50.8	64.4	68.2	73.6	73.8	64.4	53.0	27.2	11.5	48.7
2001	21.9	15.6	30.8	51.6	61.6	70.4	75.8	71.6	61.3	50.5	46.5	28.6	48.9
2002	27.6	29.1	28.8	51.0	57.9	74.8	77.8	71.5	64.9	44.5	34.8	28.6	49.3
2003	20.7	22.1	36.6	50.8	58.0	68.5	74.4	74.4	60.1	53.2	35.0	28.4	48.5
2004	18.7	21.6	41.1	52.3	61.4	67.0	71.8	68.2	68.4	52.2	38.8	28.9	49.2
2005	20.1	32.2	38.9	54.0	61.2	74.9	77.4	74.0	70.1	52.9	39.1	21.1	51.3
2006	33.5	25.1	35.7	53.9	63.4	72.2	77.6	72.8	59.7	48.0	36.9	30.2	50.8
2007	19.3	17.0	42.7	48.1	65.7	71.9	76.5	74.5	63.8	54.5	36.9	18.8	49.1
2008	15.5	18.0	33.1	45.8	58.5	69.5	74.6	71.7	63.7	51.9	36.4	17.0	46.3
POR= 113 YRS	18.2	22.4	35.1	48.7	60.9	69.4	75.5	73.1	63.0	52.2	35.7	23.7	48.2

HEATING DEGREE DAYS (base 65°F) 2008 SIOUX CITY (KSUX)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1979-80	1	13	81	457	922	1075	1339	1287	966	419	170	11	6741
1980-81	0	0	108	516	746	1254	1253	1023	752	269	200	3	6124
1981-82	10	4	81	471	741	1367	1816	1245	955	547	116	61	7414
1982-83	0	17	132	366	916	1197	1310	1027	879	648	270	44	6806
1983-84	0	0	113	390	799	1825	1365	956	1098	543	235	7	7331
1984-85	0	5	194	405	805	1254	1459	1149	720	336	86	45	6458
1985-86	1	13	221	414	1168	1581	1142	1172	737	409	124	1	6983
1986-87	0	27	79	396	984	1172	1178	840	752	332	76	6	5842
1987-88	1	44	80	563	693	1111	1514	1276	786	475	47	6	6596
1988-89	0	9	75	542	818	1165	1083	1387	956	428	164	35	6662
1989-90	0	7	161	389	956	1567	1065	1018	759	500	218	21	6661
1990-91	0	2	85	431	744	1401	1521	887	759	379	148	2	6359
1991-92	0	0	150	488	1092	1115	1056	872	757	551	173	21	6275
1992-93	15	45	140	437	944	1262	1466	1297	1032	550	194	49	7431
1993-94	0	12	211	499	978	1217	1633	1322	782	488	136	9	7287
1994-95	1	12	73	338	790	1285	1372	1006	878	567	245	47	6614
1995-96	4	1	198	468	994	1214	1560	1122	1109	562	273	28	7533
1996-97	5	0	181	427	1098	1533	1557	1119	834	660	302	0	7716
1997-98	9	19	85	431	974	1127	1288	841	1062	441	83	79	6439
1998-99	0	0	34	334	723	1146	1423	902	861	465	145	55	6088
1999-00	0	3	164	449	621	1117	1322	908	695	419	98	36	5832
2000-01	7	2	131	368	1128	1652	1328	1377	1053	418	160	31	7655
2001-02	0	7	149	449	548	1122	1153	998	1115	437	274	3	6255
2002-03	0	7	106	628	901	1122	1364	1197	873	430	223	33	6884
2003-04	0	0	188	373	894	1128	1429	1254	734	391	176	52	6619
2004-05	12	40	41	398	778	1112	1385	910	801	336	179	1	5993
2005-06	1	1	43	412	768	1355	972	1109	901	337	147	9	6055
2006-07	0	2	185	547	836	1073	1412	1336	686	523	77	9	6686
2007-08	0	0	121	343	836	1428	1527	1357	983	569	220	2	7386
2008-	0	0	99	412	851	1483							

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COOLING DEGREE DAYS (base 65°F) 2008 SIOUX CITY (KSUX)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1979	0	0	0	3	33	186	299	249	95	0	0	0	865
1980	0	0	0	24	57	185	430	279	90	4	0	0	1069
1981	0	0	0	25	26	222	309	199	89	0	0	0	870
1982	0	0	0	3	41	79	358	254	85	7	0	0	827
1983	0	0	0	0	16	144	385	502	158	9	0	0	1214
1984	0	0	0	4	16	180	279	320	61	3	0	0	863
1985	0	0	0	35	77	134	302	153	120	1	0	0	822
1986	0	0	2	3	34	246	367	142	55	0	0	0	849
1987	0	0	0	34	132	292	377	210	56	0	0	0	1101
1988	0	0	0	3	132	356	363	361	80	0	0	0	1295
1989	0	0	0	53	49	175	391	254	71	12	0	0	1005
1990	0	0	0	33	14	278	267	272	176	10	0	0	1050
1991	0	0	0	22	156	276	302	287	135	1	0	0	1179
1992	0	0	0	7	49	119	133	108	57	13	0	0	486
1993	0	0	0	0	18	135	261	247	17	18	0	0	696
1994	0	0	0	20	104	242	188	172	130	2	0	0	858
1995	0	0	0	0	1	207	320	380	73	12	0	0	993
1996	0	0	0	1	43	227	179	178	55	7	0	0	690
1997	0	0	0	0	13	212	298	204	89	49	0	0	865
1998	0	0	0	2	95	135	304	271	191	5	0	0	1003
1999	0	0	0	0	39	168	402	193	52	7	0	0	861
2000	0	0	0	2	85	140	284	284	119	4	0	0	918
2001	0	0	0	24	64	202	343	218	45	6	0	0	902
2002	0	0	0	23	60	305	401	216	109	0	0	0	1114
2003	0	0	0	14	15	144	303	297	47	13	0	0	833
2004	0	0	0	16	71	120	227	147	148	6	0	0	735
2005	0	0	0	14	70	307	390	285	202	43	0	0	1311
2006	0	0	0	12	106	234	398	251	33	29	0	0	1063
2007	0	0	1	24	106	224	362	302	92	27	0	0	1138
2008	0	0	0	0	26	144	304	213	64	14	2	0	767

SNOWFALL (inches) 2008 SIOUX CITY (KSUX)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1979-80	0.0	0.0	0.0	0.1	4.0	1.5	4.7	4.3	5.8	1.3	0.0	0.0	21.7
1980-81	0.0	0.0	0.0	3.0	0.2	2.5	5.5	5.5	0.4	0.0	0.0	0.0	17.1
1981-82	0.0	0.0	0.0	2.0	6.8	6.8	29.1	3.7	4.5	3.9	0.0	0.0	56.8
1982-83	0.0	0.0	0.0	8.0	0.3	12.4	3.2	6.8	19.1	9.7	0.0	0.0	59.5
1983-84	0.0	0.0	0.0	0.0	16.5	9.4	1.8	10.2	17.8	5.1	0.0	0.0	60.8
1984-85	0.0	0.0	0.0	T	2.2	6.2	3.7	0.9	10.8	T	0.0	0.0	23.8
1985-86	0.0	0.0	T	T	9.4	9.0	1.4	1.9	5.4	2.1	0.0	0.0	29.2
1986-87	0.0	0.0	0.0	T	5.1	2.1	3.5	3.4	7.7	T	0.0	0.0	21.8
1987-88	0.0	0.0	0.0	T	5.4	1.9	7.5	5.5	1.0	4.4	0.0	0.0	25.7
1988-89	0.0	0.0	0.0	0.0	9.1	1.9	3.3	6.2	6.3	0.3	T	0.0	27.1
1989-90	T	0.0	0.0	0.0	2.4	7.1	5.5	3.8	3.0	0.1	T	T	21.9
1990-91	0.0	0.0	0.0	0.4	5.7	7.7	6.7	3.9	8.5	T	0.0	T	32.9
1991-92	0.0	0.0	0.0	9.8	8.4	0.5	1.2	1.8	2.1	6.2	T	0.0	30.0
1992-93	T	0.0	0.0	T	1.7	6.9	7.8	24.5	2.4	0.3	0.0	0.0	43.6
1993-94	0.0	0.0	T	T	10.2	9.1	7.9	12.9	0.4	2.9	T	T	43.4
1994-95	0.0	0.0	0.0	0.0	8.4	13.9	2.6	1.9	8.5	0.3	0.0	0.0	35.6
1995-96	0.0	0.0	0.0	0.0	1.5	2.7	8.1	0.1	4.7	2.0	T	T	
1996-97	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0	1.6	0.0	0.0	0.0	
1997-98	0.0	0.0	0.0	0.3	0.9	1.6	5.7	3.0	11.5	0.1	0.0	T	
1998-99	0.0	0.0	0.0	0.0	4.1	5.0	7.3	13.6	9.4	0.8	0.0	0.0	40.2
1999-00	T	0.0	0.0	T	1.5	4.6	4.1	4.0	1.0	1.9	0.0	0.0	17.1
2000-01	0.0	0.0	0.0	0.0	8.3	18.0	12.2	7.3	2.2	0.2	0.0	T	48.2
2001-02	0.0	0.0	0.0	0.0	T	3.5	7.0	4.4	10.6	T	0.0	0.0	25.5
2002-03	0.0	0.0	0.0	7.6	2.3	1.2	3.1	4.9	2.8	9.5	0.0	0.0	31.4
2003-04	0.0	0.0	0.0	T	1.3	5.7	16.6	14.5	20.2	0.0	0.0	0.0	58.3
2004-05	0.0	0.0	0.0	0.0	0.5	T	9.6	3.7	0.1	0.0	0.0	0.0	13.9
2005-06	0.0	0.0	0.0	0.0	10.6	6.6	0.6	6.4	11.0	0.0	0.0	0.0	35.2
2006-07	0.0	0.0	0.0	0.3	0.5	1.8	15.6	20.0	12.3	0.1	0.0	0.0	50.6
2007-08	0.0	0.0	0.0	0.0	0.0	12.2	14.5	10.4	6.0	0.7	0.0	0.0	43.8
2008-	0.0	0.0	0.0	0.0	2.9	22.6							
POR= 60 YRS	T	0.0	T	0.7	3.6	6.4	6.8	6.4	7.6	1.5	T	T	33.0

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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. 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. NORMALS ARE 30-YEAR AVERAGES (1971 - 2000). 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 AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. 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.</p> <p>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.</p> <p>NOTE: The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
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2008 SIOUX CITY IOWA (KSUX)

Sioux City is located along the Missouri River at a point where Iowa borders both Nebraska and South Dakota. Except for the river valleys, the countryside is rolling. The Sioux City business section lies in the river valley and the residential sections, for the most part, are spread over the hills which range from 100 to 200 feet higher than the valley. The local topography causes minor variations in wind and temperature.

Located in the midland of a continent and in the northern half of the Great Plains, the climate of Sioux City is typically continental and is largely determined by the movement and interaction of the large-scale weather systems. Under normal conditions, winters are cold and summers warm, and most of the precipitation comes during the warmer months from April to September. There is

considerable fluctuation in temperature and precipitation from season to season and from year to year, as elsewhere in the northern plains. Except for an occasional dry year, the climate is quite favorable for agriculture with corn, the small grains, and grasses producing abundantly.

The grass usually starts to grow about the middle of April. The growing season averages about 160 days. Summers are sunny and most summer rains are associated with showers or thunderstorms. Winds are lightest in the summer months, except for occasional strong gusts with thunderstorms. Winds gradually increase in autumn and winter and usually reach their highest average velocities in April.

Station Location

SIoux CITY

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	Latitude		Longitude		ELEVATION ABOVE								REMARKS	
				NORTH	WEST	SEA LEVEL	GROUND							AUTOMATIC OBSERVING EQUIPMENT *			
						GROUND TEMPERATURE SITE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAUGE	WEIGHING RAIN GAUGE	8 INCH RAIN GAUGE		HYGROTHERMOMETER		
<u>AIRPORT</u>																	
Third Admn. Building Municipal Airport	1/29/54	06/01/95	3/4 mi. NW	42° 24'	96° 23'	1095	a24 e28	19	19	18	17	c8	d17	b5 f5			a. 103 ft. to 6/5/58. b. Commissioned 1650 ft. W of thermometer site 1/1/60. c. 4 ft. to 4/28/66. d. Installed on roof 5/14/80. e. Raised 8/25/83. f. Type Change 9/6/85.
Municipal Airport	06/01/95	Present	NA	42° 23'	96° 23'	g1136								s			ASOS Commissioned 06/01/95 g. Ground elevation.

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* NOTES: For earlier station history see previous editions.