

SOUTH DAKOTA WEATHER SUMMARY, 2008

GENERAL

2008 was marked by cool temperatures and widespread precipitation which caused delayed planting, slow crop development, and a delayed harvest. Some row crops were still remaining in the field at the end of December. At the beginning of 2008, the U.S. Drought Monitor rated 34.5% of the state in moderate drought or worse and 8.9% of the state in a severe drought. By the end of the year, precipitation levels caused only a small corner of the state (southwestern Fall River County) to be rated abnormally dry. The adequate moisture created good growing conditions for crops, setting all-time-record productions for corn and winter wheat.

JANUARY

January was a month of extremes in temperature across the state. Much of the state experienced temperatures above 50° F and several days dipping below -10° F, with many areas dropping below -20° F. Most locations received little precipitation, but a few locations reported more than half of an inch for the month. While above average for January, this light moisture did little to change ongoing drought conditions.

FEBRUARY

Lack of precipitation and cold temperatures were the two big stories for February. Temperatures fell well into the -20s°F in northeastern South Dakota, and average temperatures were well below average over the whole state. While all stations received precipitation during the month, nearly all the state had below-average precipitation. Most of the state had very little snow cover at the end of February, with only parts of southeastern and northeastern South Dakota and sections of the Black Hills having more than four inches.

MARCH

With the exception of two late-month winter storms in the northeast, central, and east central parts of the state, the state had well-below-average precipitation totals for the month of March. Temperatures for the month were split down the middle of the state. Eastern South Dakota was generally below average, with some places more than 4° F below average. Parts of western South Dakota were as much as 2 to 4° F above average.

APRIL

Despite two major spring snowstorms at the beginning of the month and another near the end, which dropped as much as a foot of snow in some areas, the state had below-average precipitation for the month of April. Although a few stations saw their first 70° F temperatures of the year near the beginning of April, overall temperatures were below average for most of the state for the month.

MAY

South Dakota saw several storms during the month of May that included several feet of snow in the Black Hills, straight line winds in excess of 70 miles per hour in the southeast part of the state near the Nebraska border, and multiple reports of hail and tornado touchdowns across the state. The National Weather Service in East Rapid City received 9.71 inches of precipitation in May, setting a record for the wettest May on record. Cooler-than-average temperatures for the month caused most parts of the state to be 20 to 40 growing degree days below average by the end of the month.

JUNE

Both widespread and isolated storms were seen across the state

in June and contributed to above-average precipitation accumulation for the month for most of South Dakota. Only locations in the far southeast and southwest were behind average for accumulation, with many stations in western South Dakota having near-record accumulations for June. The state saw below-average temperatures in most locations for the entire month.

JULY

Temperatures shifted from slightly below average at the beginning of the month to warmer than average during the middle and end of the month. Isolated storms tracked fairly regularly across the state in July, leaving only a few areas of the far northeast corner of the state and areas along the Missouri River border with Nebraska showing a little dryness.

AUGUST

August temperatures varied significantly, with weeks falling both above and below average. Yankton reported a high for the month of 104° F, but during the weekend of August 23 a cold spell brought Porcupine to a low of 35° F. Isolated thunderstorms brought precipitation to most areas of the state during the beginning of August, including some flooding and hail damage in southwest and northeast South Dakota. However, very little precipitation fell anywhere in the state over the last two weeks of the month. Total accumulation of growing degree days was still running a few days to at least a week behind average.

SEPTEMBER

The entire state received at least some precipitation during the month, though the amounts were quite variable. September started off with very cool temperatures, reports of localized frost occurrence, and some minor crop damage, particularly in the western half of the state. Temperatures warmed to well above average at the end of the month to aid in the final maturity of late planted and developmentally-delayed crops.

OCTOBER

October was marked by two separate weeks of heavy precipitation, including the first snow of the fall. Virtually the entire state had at or above average precipitation for the month, with the eastern third of the state as much as two to five inches above average. Temperatures varied throughout the month, but temperatures below 28° F on October 16 brought an end to the growing season in eastern South Dakota. A week of very warm temperatures, making the low 80s in the southwest, marked the end of the month.

NOVEMBER

The state saw varying amounts of precipitation in the month, the most notable being an early winter storm which dropped over a foot of snow on some parts of western South Dakota during early November. Combined with winds of over 60 miles per hour, some areas saw power outages and severe traffic problems. The temperatures remained variable, with most parts of the state reporting single-digit low temperatures by the latter part of the month.

DECEMBER

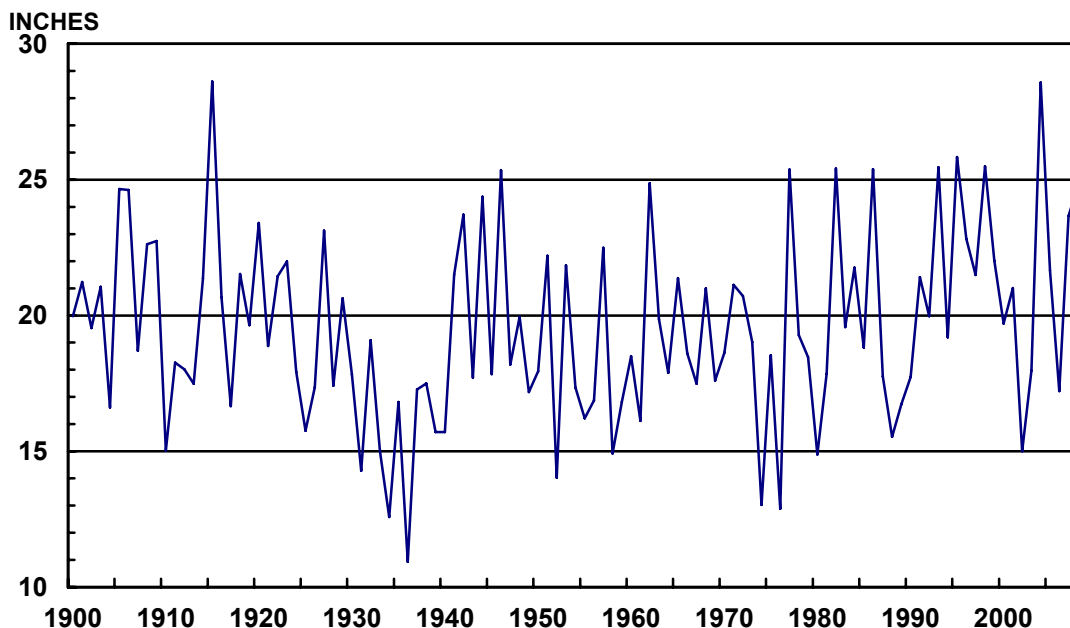
While December started with moderate temperatures, several arctic outbreaks caused the month to be one of the top 15 coldest on record. Britton reported the lowest temperature of the month at -26° F. Most of the state reported at least some snow cover due to several storms that dropped frequent snowfalls across the state. Total snowfall amounts were at near-record amounts at many locations.

PRECIPITATION, SOUTH DAKOTA, 2007-2008

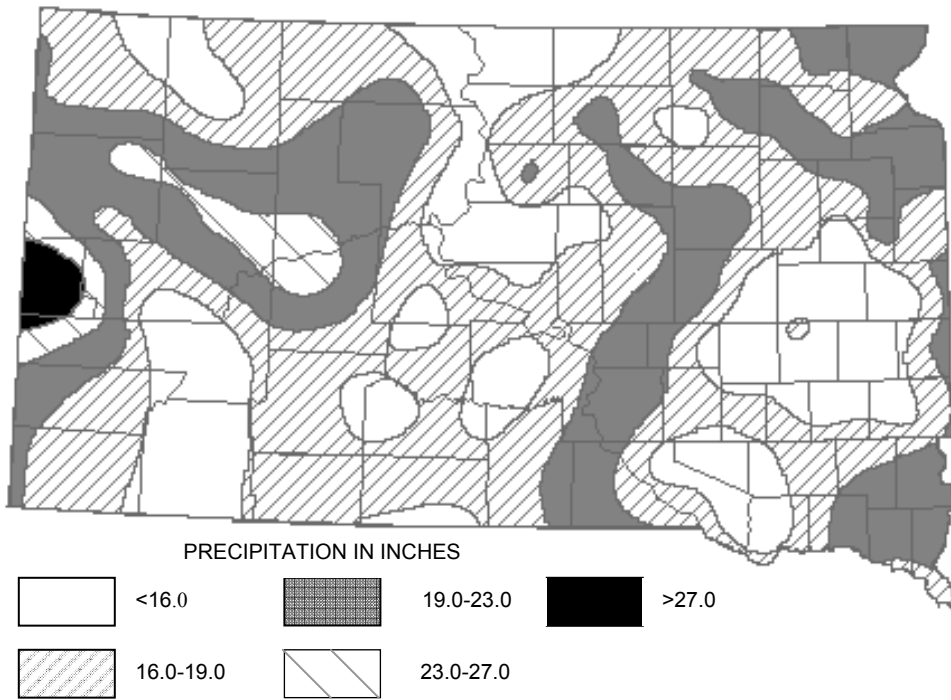
DIST.	STATION	GROWING SEASON				ANNUAL			
		APR 1-SEP 30, 2007		APR 1-SEP 30, 2008		2007		2008	
		TOTAL	DEPARTURE FROM NORMAL	TOTAL	DEPARTURE FROM NORMAL	TOTAL	DEPARTURE FROM NORMAL	TOTAL	DEPARTURE FROM NORMAL
----- INCHES -----									
NW	CAMP CROOK	12.06	+0.95	19.84	+8.73	16.70	+2.33	23.52	+9.15
	NEWELL	11.25	-0.14	18.41	+7.02	15.03	-0.45	23.92	+8.44
	LEMMON	14.35	+0.79	15.55	+1.99	17.41	-0.83	21.22	+2.98
	DUPREE	14.04	+1.00	21.89	+8.85	19.54	+2.09	28.23	+10.78
NC	MOBRIDGE	18.11	-5.42	14.62	+1.93	23.09	+6.15	18.90	+1.96
	FAULKTON	17.66	+2.81	19.72	+4.87	24.65	+4.34	24.86	+4.55
	ABERDEEN	22.70	+7.54	16.45	+1.29	28.23	+8.01	24.45	+4.23
NE	WAUBAY	21.13	+5.24	16.10	+0.21	26.77	+5.82	23.35	+2.40
	WATERTOWN	15.68	-0.69	18.12	+1.75	24.19	+2.25	25.29	+3.35
	MILBANK	27.05	+10.97	22.20	+6.12	35.61	+12.81	29.02	+6.97
WC	SPEARFISH	14.80	-0.40	26.23	+11.03	21.16	-0.50	34.57	+12.91
	RAPID CITY	10.06	-2.33	16.24	+3.85	12.59	-4.05	20.55	+3.91
	COTTONWOOD	9.42	-3.32	17.15	+4.41	14.03	-3.13	22.48	+5.32
	MILESVILLE	13.04	-1.64	24.95	+10.27	18.24	-1.39	31.28	+11.65
C	PIERRE	15.73	+0.92	18.19	+3.38	25.94	+6.06	23.65	+3.77
	HIGHMORE	23.15	+7.16	18.25	+2.26	30.66	+9.43	23.53	+2.30
	HURON	23.24	+7.94	16.89	+1.59	30.69	+9.79	25.44	+4.54
EC	MITCHELL	16.74	-0.05	16.40	-0.39	26.33	+3.47	25.36	+2.50
	BROOKINGS	16.26	-1.48	14.64	-3.10	22.86	+0.05	22.64	-0.17
	SIOUX FALLS	17.31	-0.74	16.18	-1.87	31.34	+6.65	25.47	+0.78
SW	ORAL	NA	NA	16.72	+3.87	NA	NA	19.83	+3.10
	PORCUPINE	13.09	-0.15	16.08	+2.84	16.22	-0.32	21.45	+3.93
SC	MURDO	14.71	+0.49	16.71	+2.49	23.00	+3.23	22.06	+2.29
	KENNEBEC	13.24	-1.05	15.10	+0.81	22.70	+3.99	20.35	+1.64
	WINNER	22.47	+5.05	15.26	-2.16	32.01	+8.29	21.55	-2.17
SE	PARKSTON	NA	NA	17.03	-0.04	NA	NA	26.19	+3.08
	YANKTON	16.42	-2.33	19.80	+1.05	29.15	+4.06	30.76	+5.67

SOURCE: SOUTH DAKOTA STATE CLIMATOLOGIST.

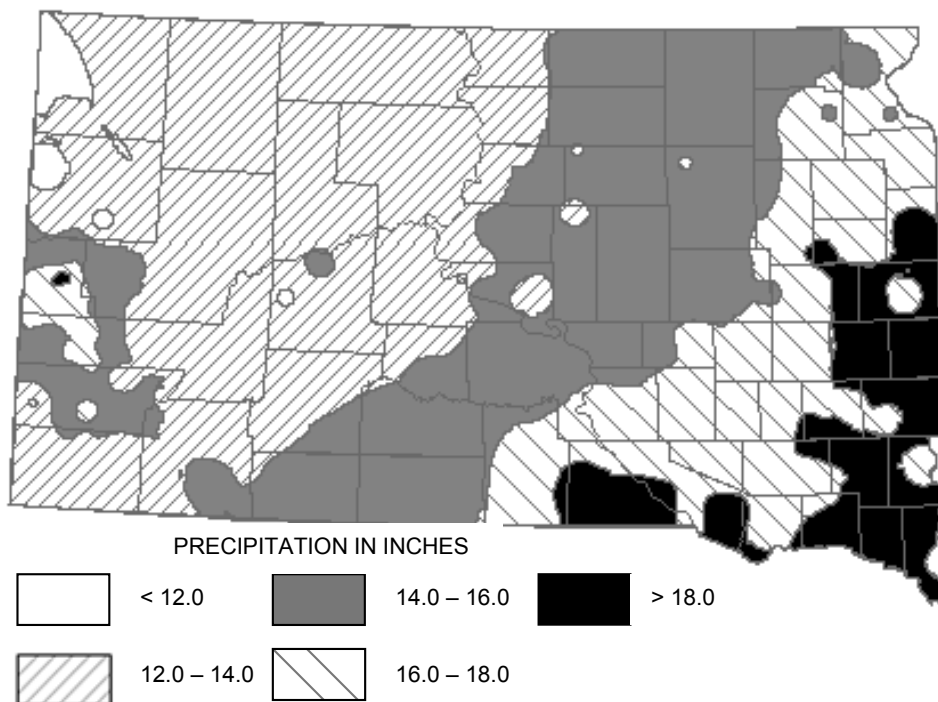
AVERAGE ANNUAL PRECIPITATION, SOUTH DAKOTA, 1900-2008



**GROWING SEASON PRECIPITATION,
SOUTH DAKOTA, APRIL THROUGH SEPTEMBER, 2008**



**GROWING SEASON PRECIPITATION,
SOUTH DAKOTA, APRIL THROUGH SEPTEMBER AVERAGE, 1971-2000**



SOURCE: STATE CLIMATE OFFICE OF SOUTH DAKOTA