

SOUTH DAKOTA WEATHER SUMMARY, 2011

GENERAL

The 2011 crop season started cold and wet, but ended hot and dry. Above average precipitation along with large snowmelt amounts in the spring caused flooding and delays in small grain planting in some areas. Warm and unusually dry summer conditions continued into the fall months delaying row crop development this season. Despite the delays, harvest was completed ahead of schedule for all row crops.

JANUARY

Average temperatures ranged from 5°F to 25°F during the month; however, all stations also reported temperatures well below 0°F. The low and high temperatures recorded in the state were -26°F and 57°F, respectively. Much of the state received some snowfall during the month. Average snow depth for the month was 14.6 inches with areas of the northeast part of the state reporting an accumulated range of over 20 inches to even above 30 inches in a couple of locations.

FEBRUARY

Another cold month was witnessed as the state ranged from 5°F to 10°F below average. Britton recorded the coldest temperature at -31°F, while Philip and Winner were the first to break 70°F for the year reaching 71°F. Despite the mid-month warming, snowpack held strong in the northeast part of the state with several stations in the top 5-10 ever for February snowfall totals. Precipitation continued much above average for nearly the whole state. Watertown recorded the highest monthly total at 2.44 inches of liquid. Oelrichs had the lowest at 0.41 inch.

MARCH

Temperatures continued their colder than average trend for much of the month. Below 0°F values still occurred on various occasions during the month with the coldest individual temperature at Onida with -21°F. Winner reported the high temperature for the month at 79°F. Precipitation amounts varied with a good deal of the northeast and parts of the southwest above average, while areas of the southeast were much below average. Clear Lake received the largest total at 1.67 inches. Winner reported the least at 0.15 inch.

APRIL

Below average temperatures and above average precipitation dominated the weather pattern for the month of April. Most of the state had above average Growing Degree Days (GDD) accumulations at the beginning of the month, but fell well below average by the end. This caused small grain planting progress to run far behind the five-year average by month's end.

MAY

Cool temperatures and wet conditions continued to cause planting delays for most of the month. Above normal precipitation along with above normal snow melt amounts also caused flooding issues in several areas. The state continued to lose ground on GDDs, but by the end of the month planting progress for small grains was close to the 5-year average. Row crop planting progress however continued to be a challenge.

JUNE

Even though warmer temperatures were recorded in most areas of the state during the second week, temperatures for the most part remained below average for the month. Pierre set a record daily low at 38°F during the second week. The western part of the state started out the month as the wettest area, but the central

areas ended the month with the highest deviation from average. Heavy rains occurred over large parts of the state at the end of the month causing or increasing flooding issues in several areas. Planting of soybean and sorghum acres were near completion by the end of June, with sunflower planting progress even with the 5-year average. Small grain development was behind seasonal averages due to the cool and wet conditions. Corn growth also lagged behind average for the month.

JULY

July weather conditions were the opposite of the previous month, with above normal temperatures and precipitation below normal. Several locations statewide saw hail and strong wind events during the first week with some crop damage reported. Most crop development continued to be behind the normal schedule, with some crops showing signs of stress from the heat. Livestock were also adversely affected by the heat, resulting in losses to some producers.

AUGUST

Except for a cool down in the middle of the month, August temperatures continued to be above normal. Precipitation was variable for the month with a few areas of heavy rainfall, while others were quite dry. Row crop development remained behind schedule with signs of stress from lack of moisture in some areas. The small grain harvest started out behind schedule, but was completed mostly on schedule by the end of the month.

SEPTEMBER

Cooler conditions in September provided much needed relief for heat stressed crops. An early frost in the middle of the month resulted in scattered crop damage, with the soybean crop being affected worse than other crops. Precipitation continued to be below normal, with no stations reporting rainfall during the week of September 5th thru the 11th. Dry soil conditions made winter wheat seeding difficult and emergence also lagged behind schedule. Cattle and sheep conditions were mostly in the good to excellent range despite dry pasture conditions.

OCTOBER

Unusually warm temperatures combined with extreme dryness in the early part of October produced serious fire conditions across the state. Crop development quickly caught up with normal progress for the month and harvest jumped ahead of schedule, being nearly complete by the end of the month. Soybean harvest was virtually done. Other completion rates by the end of October were 85% for corn, 88% for sorghum, and 87% for sunflowers; all were 21 percentage points or more ahead of the 5-year average.

NOVEMBER

With minimal rainfall and above average temperatures the first two weeks in November producers were able to complete row crop harvest well ahead of the 5-year average. However, winter wheat condition fell far behind the 5-year average. With the mostly dry mild weather until late November, producers were also able to get the majority of fall tillage done before winter set in.

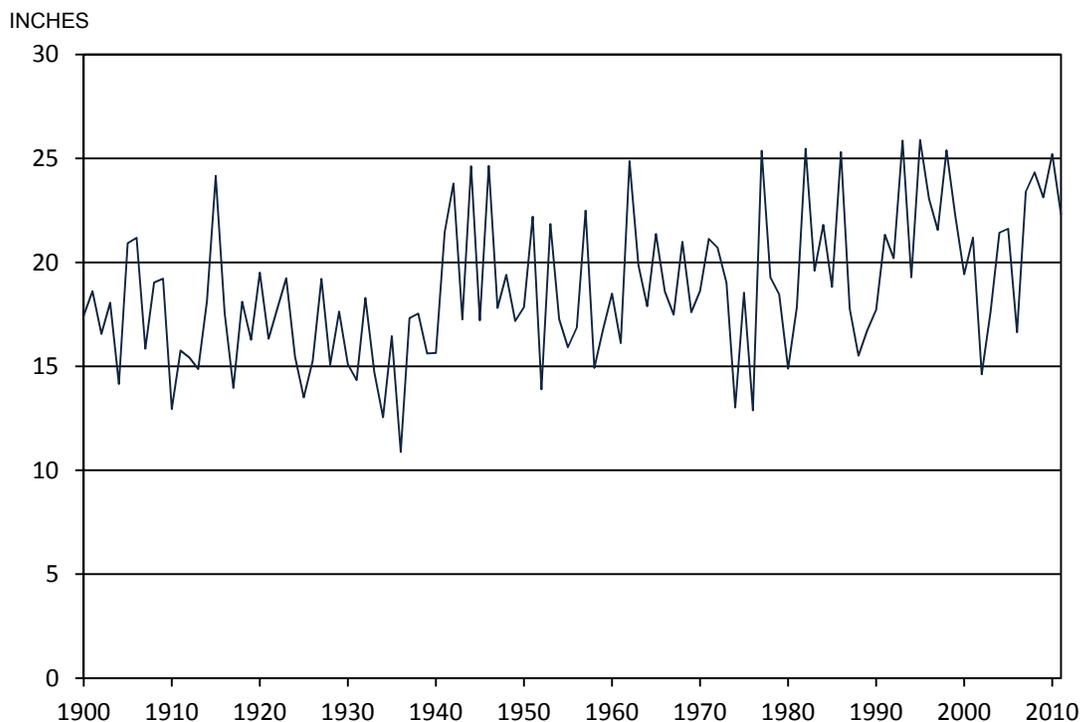
DECEMBER

The month of December was unusually mild with only minor snowfall amounts scattered across the state. Temperatures were well above average and the only snow cover at the end of the month was in the northern Black Hills. There was a slight concern as to the impact this would have on the winter wheat and alfalfa going into winter. Snow cover for winter wheat was rated at 95 percent poor, while alfalfa was rated 96 percent poor.

**PRECIPITATION,
SOUTH DAKOTA, 2011-2012**

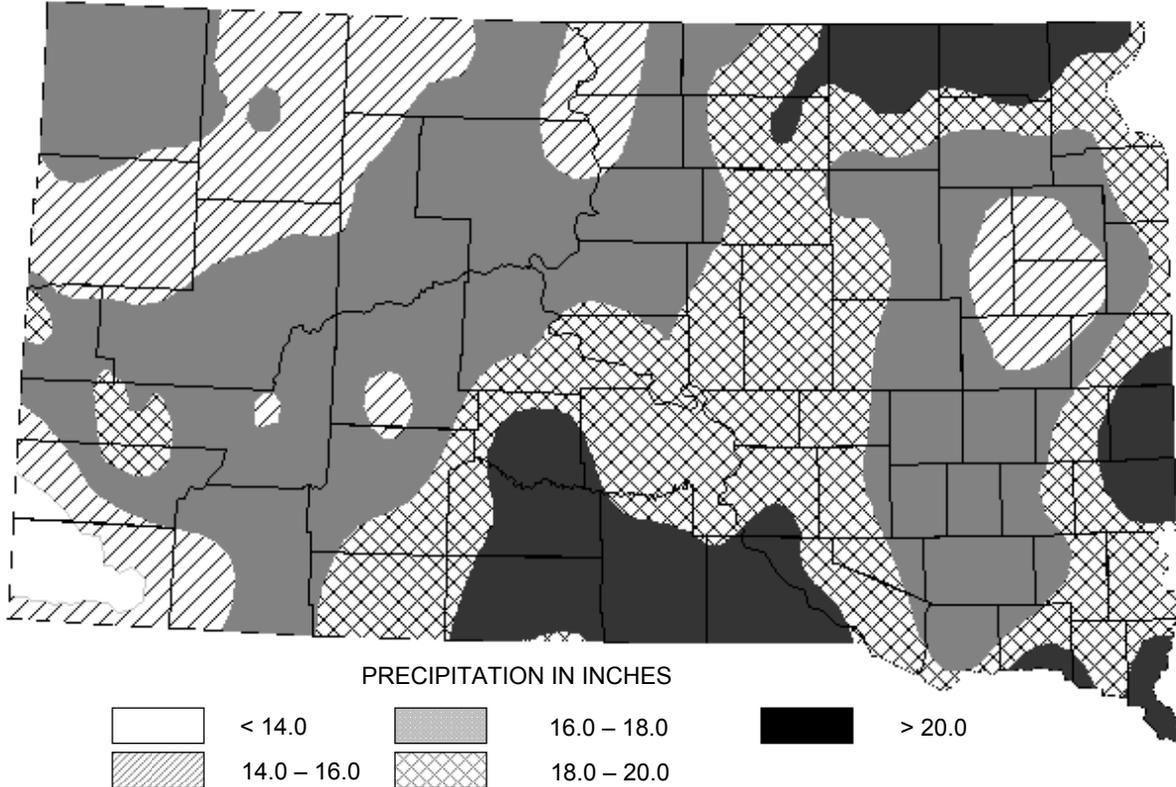
| DIST. | STATION | GROWING SEASON | | | | ANNUAL | | | |
|-------|---------------|--------------------|-----------------------|--------------------|-----------------------|--------|-----------------------|-------|-----------------------|
| | | APR 1-SEP 30, 2010 | | APR 1-SEP 30, 2011 | | 2010 | | 2011 | |
| | | TOTAL | DEPARTURE FROM NORMAL | TOTAL | DEPARTURE FROM NORMAL | TOTAL | DEPARTURE FROM NORMAL | TOTAL | DEPARTURE FROM NORMAL |
| | | -----INCHES----- | | | | | | | |
| NW | CAMP CROOK | 18.24 | 7.13 | 15.55 | 4.44 | 20.50 | 6.13 | 18.95 | 4.58 |
| | NEWELL | 13.31 | 1.92 | 13.19 | 1.80 | 16.69 | 1.21 | 17.36 | 1.88 |
| | LEMMON | 22.92 | 9.36 | 14.72 | 1.16 | 25.56 | 7.32 | 18.69 | 0.45 |
| | DUPREE | 22.62 | 9.24 | 18.43 | 5.05 | 26.20 | 8.36 | 24.08 | 6.24 |
| NC | MOBRIDGE | 11.45 | -1.24 | 12.26 | -0.43 | 15.10 | -1.84 | 16.54 | -0.40 |
| | FAULKTON | 18.04 | 3.19 | 18.39 | 3.54 | 24.44 | 4.13 | 25.37 | 5.06 |
| | ABERDEEN | 21.34 | 6.18 | 18.74 | 3.58 | 27.21 | 6.99 | 23.31 | 3.09 |
| NE | WEBSTER | 18.80 | 2.18 | 16.14 | -0.48 | 29.64 | 7.58 | 20.78 | -1.28 |
| | WATERTOWN | 21.61 | 5.24 | 14.32 | -2.05 | 28.77 | 6.83 | 20.02 | -1.92 |
| | MILBANK | 20.56 | 4.48 | 20.64 | -0.05 | 26.69 | 4.64 | 25.65 | 1.67 |
| WC | SPEARFISH | 16.97 | 1.77 | 11.94 | -3.69 | 22.75 | 1.09 | 17.20 | -4.68 |
| | RAPID CITY | 17.29 | 4.90 | 14.42 | 2.03 | 19.24 | 2.60 | 19.42 | 2.78 |
| | COTTONWOOD | 15.38 | 2.64 | 12.45 | -0.29 | 19.52 | 2.36 | 15.59 | -1.57 |
| | MILESVILLE | 19.69 | 5.01 | 16.79 | 2.11 | 24.36 | 4.73 | 21.01 | 1.38 |
| C | PIERRE | 17.25 | 2.44 | 20.19 | 5.38 | 29.54 | 9.66 | 25.89 | 6.01 |
| | WESSING. SPR. | 36.04 | 19.30 | 18.06 | 1.32 | 41.36 | 18.41 | 23.70 | 0.75 |
| | HURON | 25.12 | 9.82 | 16.17 | 0.87 | 30.89 | 9.99 | 22.71 | 1.81 |
| EC | MITCHELL | 21.49 | 4.70 | 16.07 | -3.29 | 34.41 | 11.55 | 20.75 | -5.16 |
| | BROOKINGS | 34.16 | 16.42 | 19.35 | 1.61 | 39.80 | 16.99 | 23.41 | 0.60 |
| | SIOUX FALLS | 31.78 | 13.73 | 20.13 | 2.08 | 38.26 | 13.57 | 24.28 | -0.41 |
| SW | OELRICHS | 16.15 | 3.16 | 12.98 | -0.01 | 18.35 | 1.10 | 16.00 | -1.25 |
| | PORCUPINE | 13.66 | 0.42 | 16.20 | 2.96 | 20.54 | 3.02 | 21.60 | 4.08 |
| SC | MURDO | 16.36 | 2.14 | 25.22 | 11.00 | 21.71 | 1.94 | 30.09 | 10.32 |
| | KENNEBEC | 20.17 | 5.88 | 16.86 | 2.57 | 24.41 | 5.70 | 21.35 | 2.64 |
| | WINNER | 20.34 | 2.92 | 21.99 | 4.57 | 25.22 | 1.50 | 25.22 | 1.50 |
| SE | PICKSTOWN | 26.55 | 9.03 | 15.02 | -2.84 | 30.68 | 7.31 | 19.31 | -4.85 |
| | YANKTON | 32.71 | 13.96 | 22.10 | 3.35 | 39.20 | 14.11 | 28.44 | 3.35 |

**AVERAGE ANNUAL PRECIPITATION,
SOUTH DAKOTA, 1900-2011**

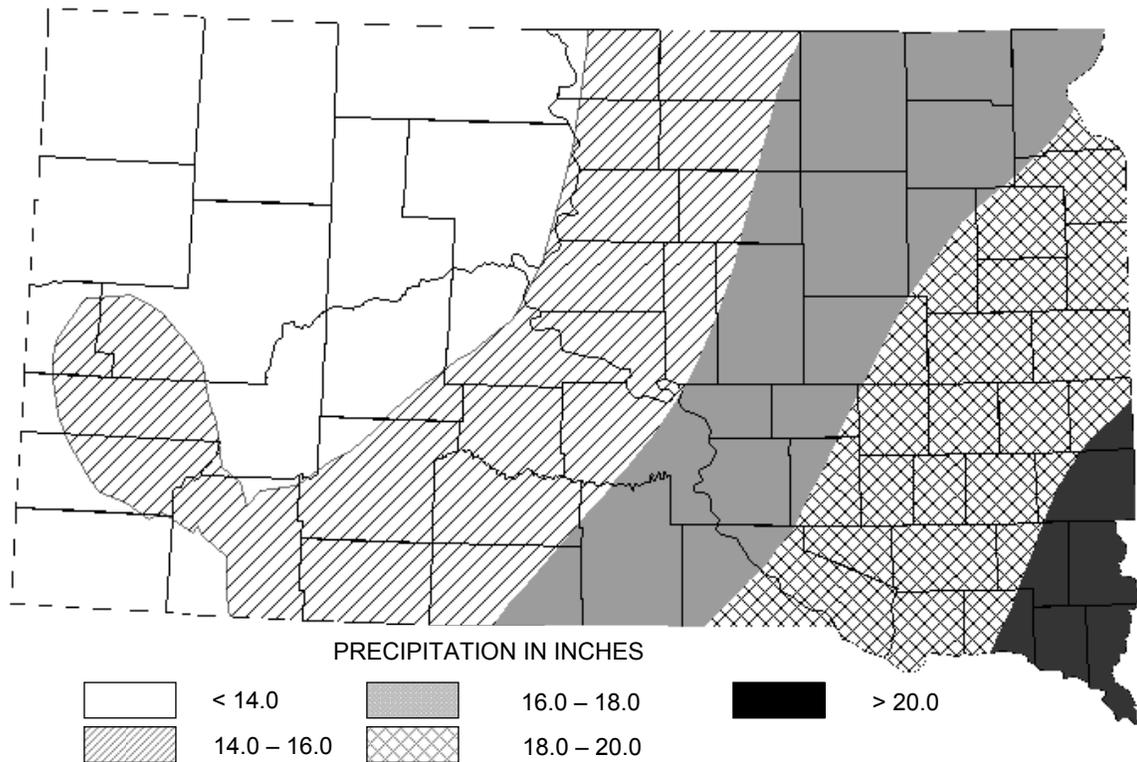


SOURCE: STATE CLIMATE OFFICE OF SOUTH DAKOTA

**GROWING SEASON PRECIPITATION,
SOUTH DAKOTA, APRIL THROUGH SEPTEMBER, 2011**



**GROWING SEASON PRECIPITATION,
SOUTH DAKOTA, APRIL THROUGH SEPTEMBER AVERAGE, 1981-2010**



SOURCE: STATE CLIMATE OFFICE OF SOUTH DAKOTA