

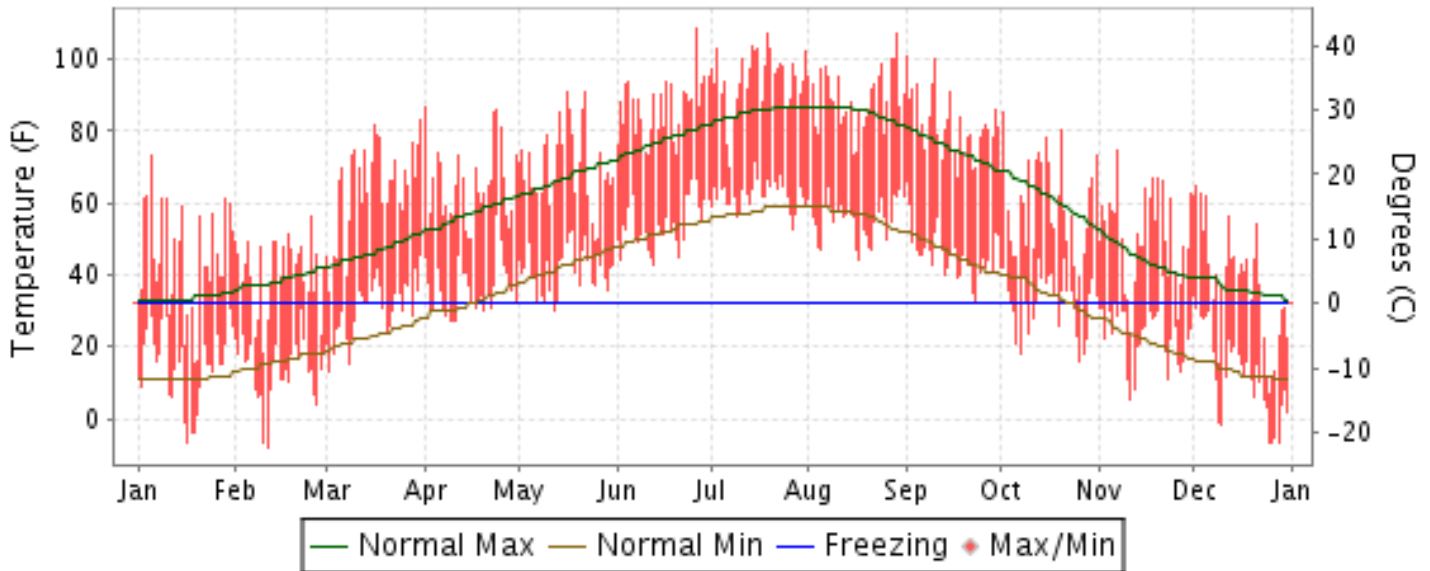


2012 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

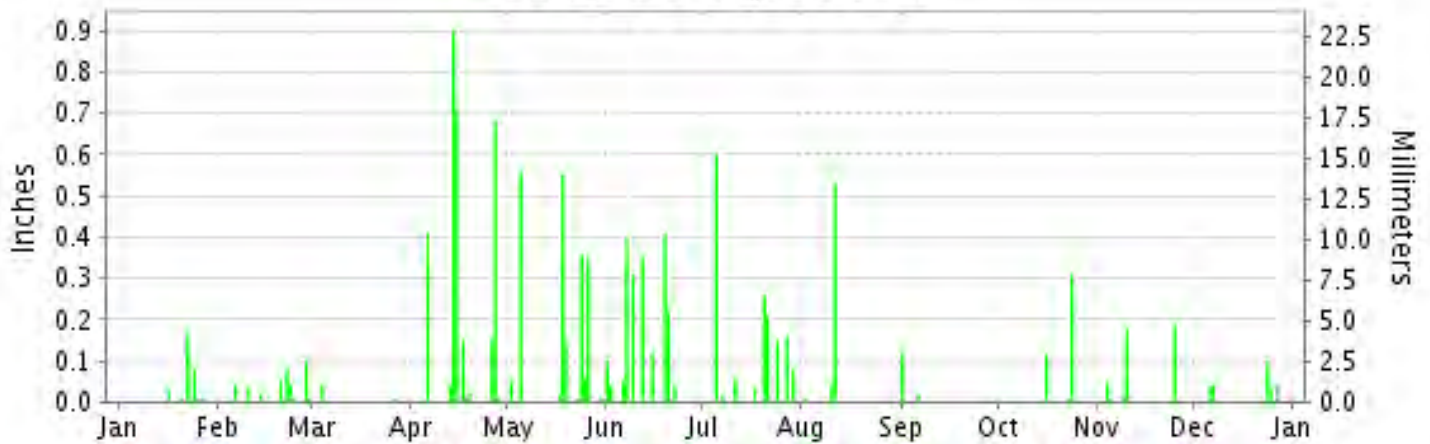
ISSN 0198-4721

RAPID CITY, SOUTH DAKOTA (KRAP)

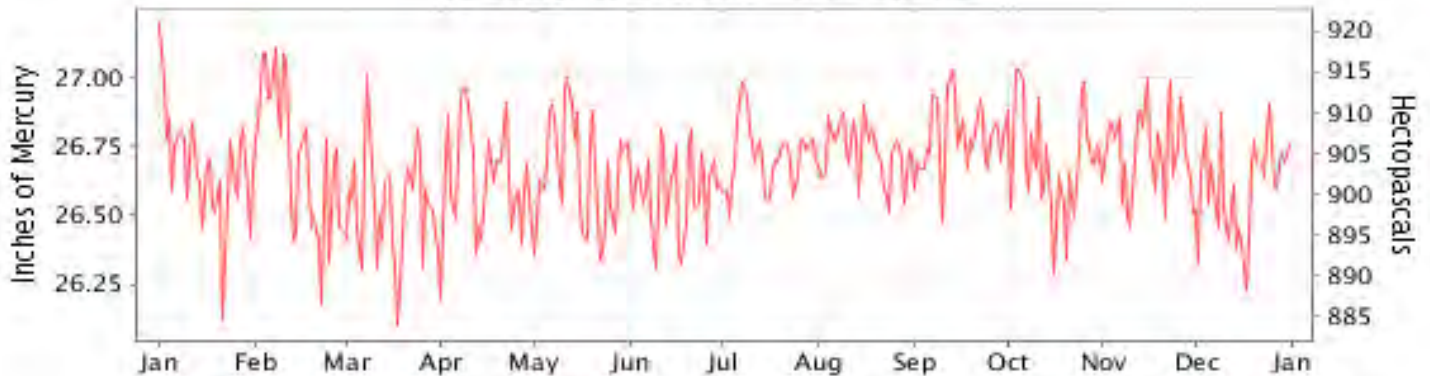
Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

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 2012

RAPID CITY (KRAP)

LATITUDE: 44° 2'N LONGITUDE: 103° 3'W ELEVATION (FT): GRND: 3160 BARO: 3153 TIME ZONE: MOUNTAIN (UTC -7) WBAN: 24090

| ELEMENT | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YEAR | |
|----------------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----------|----|
| TEMPERATURE °F | MEAN DAILY MAXIMUM | 44.4 | 40.6 | 64.6 | 64.6 | 70.3 | 86.6 | 94.5 | 89.1 | 81.8 | 59.2 | 51.0 | 37.6 | 65.4 | |
| | HIGHEST DAILY MAXIMUM | 73 | 56 | 83 | 87 | 91 | 109 | 107 | 107 | 101 | 85 | 75 | 65 | 109 | |
| | DATE OF OCCURRENCE | 05 | 25 | 31 | 01 | 22+ | 26 | 19 | 29 | 01 | 02 | 07 | 02 | JUN 26 | |
| | MEAN DAILY MINIMUM | 14.9 | 13.7 | 30.5 | 36.2 | 41.5 | 54.0 | 62.4 | 55.7 | 45.9 | 32.6 | 23.4 | 12.3 | 35.3 | |
| | LOWEST DAILY MINIMUM | -7 | -8 | 13 | 27 | 30 | 43 | 53 | 44 | 32 | 16 | 5 | -7 | -8 | |
| | DATE OF OCCURRENCE | 17 | 11 | 02 | 11+ | 12 | 13 | 27 | 17 | 23 | 26 | 11 | 28+ | FEB 11 | |
| | AVERAGE DRY BULB | 29.7 | 27.2 | 47.6 | 50.4 | 55.9 | 70.3 | 78.5 | 72.4 | 63.9 | 45.9 | 37.2 | 25.0 | 50.3 | |
| | MEAN WET BULB | 24.1 | 23.3 | 38.0 | 42.3 | 47.6 | 59.0 | 63.4 | 56.9 | 48.6 | 38.3 | 32.0 | 21.2 | 41.2 | |
| | MEAN DEW POINT | 14.9 | 16.8 | 23.9 | 32.6 | 38.8 | 50.0 | 53.8 | 44.8 | 32.6 | 28.8 | 25.5 | 13.7 | 31.4 | |
| | NUMBER OF DAYS WITH: | | | | | | | | | | | | | | |
| | MAXIMUM >= 90° | 0 | 0 | 0 | 0 | 2 | 12 | 24 | 14 | 6 | 0 | 0 | 0 | 0 | 58 |
| | MAXIMUM <= 32° | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 | 23 | |
| MINIMUM <= 32° | 31 | 29 | 17 | 11 | 1 | 0 | 0 | 0 | 1 | 13 | 29 | 30 | 162 | | |
| MINIMUM <= 0° | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 12 | | |
| H/C | HEATING DEGREE DAYS | 1088 | 1091 | 532 | 439 | 294 | 15 | 0 | 5 | 94 | 584 | 828 | 1236 | 6206 | |
| | COOLING DEGREE DAYS | 0 | 0 | 0 | 9 | 18 | 179 | 421 | 243 | 67 | 0 | 0 | 0 | 937 | |
| RH | MEAN (PERCENT) | 58 | 68 | 45 | 56 | 57 | 53 | 48 | 42 | 35 | 56 | 69 | 65 | 54 | |
| | HOUR 05 LST | 69 | 77 | 63 | 70 | 71 | 69 | 66 | 59 | 52 | 70 | 80 | 71 | 68 | |
| | HOUR 11 LST | 44 | 53 | 27 | 40 | 42 | 36 | 32 | 28 | 21 | 40 | 53 | 52 | 39 | |
| | HOUR 17 LST | 55 | 63 | 36 | 46 | 47 | 34 | 34 | 28 | 27 | 53 | 68 | 70 | 47 | |
| | HOUR 23 LST | 67 | 79 | 56 | 68 | 70 | 68 | 61 | 54 | 45 | 66 | 74 | 71 | 65 | |
| W/O | NUMBER OF DAYS WITH: | | | | | | | | | | | | | | |
| | HEAVY FOG(VISBY <= 1/4 MI) | 2 | 3 | 3 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 5 | 1 | 19 | |
| | THUNDERSTORMS | 0 | 0 | 1 | 3 | 3 | 10 | 10 | 4 | 1 | 0 | 0 | 0 | 32 | |
| PR | MEAN STATION PRESS. (IN.) | 26.67 | 26.70 | 26.53 | 26.64 | 26.66 | 26.59 | 26.72 | 26.73 | 26.78 | 26.70 | 26.73 | 26.60 | 26.67 | |
| | MEAN SEA-LEVEL PRESS. (IN.) | 30.04 | 30.09 | 29.80 | 29.92 | 29.92 | 29.80 | 29.91 | 29.94 | 30.02 | 30.00 | 30.08 | 29.98 | 29.96 | |
| WINDS | RESULTANT SPEED (MPH) | 6.8 | 5.9 | 2.0 | 2.2 | 4.9 | 1.1 | 0.8 | 2.5 | 3.5 | 7.3 | 2.6 | 3.5 | 3.4 | |
| | RES. DIR. (TENS OF DEGS.) | 33 | 34 | 31 | 35 | 35 | 06 | 05 | 02 | 35 | 34 | 35 | 33 | 35 | |
| | MEAN SPEED (MPH) | 10.7 | 10.8 | 10.8 | 12.4 | 10.7 | 11.3 | 9.1 | 9.6 | 9.6 | 11.9 | 8.1 | 7.9 | 10.2 | |
| | PREVAIL.DIR.(TENS OF DEGS.) | 33 | 34 | 33 | 34 | 34 | 34 | 35 | 34 | 35 | 34 | 34 | 34 | 34 | |
| | MAXIMUM 2-MINUTE WIND | | | | | | | | | | | | | | |
| | SPEED (MPH) | 48 | 43 | 44 | 54 | 51 | 43 | 47 | 49 | 36 | 56 | 44 | 47 | 56 | |
| | DIR. (TENS OF DEGS.) | 33 | 33 | 27 | 34 | 34 | 01 | 29 | 32 | 32 | 32 | 34 | 34 | 32 | |
| | DATE OF OCCURRENCE | 11 | 23 | 26 | 02 | 10 | 09 | 27 | 02 | 21 | 18 | 10 | 03 | OCT 18 | |
| | MAXIMUM 3-SECOND WIND: | | | | | | | | | | | | | | |
| | SPEED (MPH) | 59 | 62 | 58 | 64 | 62 | 58 | 62 | 63 | 62 | 70 | 51 | 60 | 70 | |
| DIR. (TENS OF DEGS.) | 33 | 32 | 27 | 35 | 34 | 14 | 29 | 32 | 26 | 33 | 34 | 34 | 33 | | |
| DATE OF OCCURRENCE | 11 | 23 | 26 | 02 | 10 | 22 | 27 | 02 | 01 | 18 | 22 | 03 | OCT 18 | | |
| PRECIPITATION | WATER EQUIVALENT: | | | | | | | | | | | | | | |
| | TOTAL (IN.) | 0.31 | 0.38 | 0.05 | 3.08 | 2.12 | 2.04 | 1.57 | 0.58 | 0.14 | 0.44 | 0.45 | 0.25 | 11.41 | |
| | GREATEST 24-HOUR (IN.) | 0.17 | 0.11 | 0.04 | 1.49 | 0.70 | 0.63 | 0.60 | 0.54 | 0.12 | 0.32 | 0.19 | 0.13 | 1.49 | |
| | DATE OF OCCURRENCE | 22 | 28-29 | 04 | 14-15 | 18-19 | 19-20 | 05 | 10-11 | 01 | 23-24 | 25 | 24-25 | APR 14-15 | |
| | NUMBER OF DAYS WITH: | | | | | | | | | | | | | | |
| PRECIPITATION 0.01 | 6 | 9 | 2 | 10 | 10 | 10 | 9 | 3 | 2 | 3 | 5 | 5 | 74 | | |
| PRECIPITATION 0.10 | 1 | 1 | 0 | 6 | 5 | 7 | 5 | 1 | 1 | 2 | 2 | 1 | 32 | | |
| PRECIPITATION 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| SNOWFALL | SNOW,ICE PELLETS,HAIL | 2.3 | 4.7 | 0.1 | T | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 4.2 | 5.3 | 16.7 | |
| | TOTAL (IN.) | 0.8 | 1.7 | 0.1 | T | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 2.3 | 2.4 | 2.4 | |
| | GREATEST 24-HOUR (IN.) | 24 | 28 | 04 | 06 | | | | | | 24 | 10 | 24 | DEC 24 | |
| | DATE OF OCCURRENCE | T | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | |
| | MAXIMUM SNOW DEPTH (IN.) | 24+ | 29 | | | | | | | | | 26+ | 30+ | DEC 30+ | |
| | DATE OF OCCURRENCE | | | | | | | | | | | | | | |
| NUMBER OF DAYS WITH: | | | | | | | | | | | | | | | |
| SNOWFALL >= 1.0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 5 | | |

NORMALS, MEANS, AND EXTREMES

RAPID CITY (KRAP)

LATITUDE: 44° 2'N **LONGITUDE:** 103° 3'W **ELEVATION (FT):** GRND: 3160 BARO: 3153 **TIME ZONE:** MOUNTAIN (UTC -7) **WBAN: 24090**

| | ELEMENT | POR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YEAR |
|-----------------------|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| TEMPERATURE °F | NORMAL DAILY MAXIMUM | 30 | 37.1 | 39.6 | 47.9 | 58.3 | 67.8 | 77.8 | 87.1 | 86.4 | 75.6 | 61.4 | 47.0 | 36.9 | 60.2 |
| | MEAN DAILY MAXIMUM | 64 | 34.4 | 38.4 | 46.0 | 57.7 | 67.8 | 77.8 | 86.9 | 86.2 | 75.5 | 62.4 | 47.1 | 37.3 | 59.8 |
| | HIGHEST DAILY MAXIMUM | 70 | 76 | 75 | 83 | 93 | 98 | 109 | 111 | 107 | 104 | 96 | 83 | 75 | 111 |
| | YEAR OF OCCURRENCE | | 1987 | 1995 | 2012 | 1989 | 1969 | 2012 | 2006 | 2012 | 1978 | 2011 | 1999 | 1965 | JUL 2006 |
| | MEAN OF EXTREME MAXS. | 64 | 60.7 | 63.0 | 72.5 | 82.0 | 87.7 | 94.9 | 101.3 | 100.3 | 95.2 | 85.8 | 71.8 | 62.3 | 81.5 |
| | NORMAL DAILY MINIMUM | 30 | 12.9 | 15.1 | 22.9 | 31.8 | 42.1 | 51.2 | 58.1 | 56.6 | 46.0 | 34.1 | 22.1 | 13.0 | 33.8 |
| | MEAN DAILY MINIMUM | 64 | 10.9 | 14.9 | 22.1 | 32.1 | 42.7 | 51.8 | 58.6 | 57.0 | 46.3 | 35.3 | 22.8 | 14.3 | 34.1 |
| | LOWEST DAILY MINIMUM | 70 | -27 | -31 | -21 | 1 | 18 | 31 | 39 | 38 | 18 | -2 | -19 | -30 | -31 |
| | YEAR OF OCCURRENCE | | 1950 | 1996 | 1996 | 1975 | 1950 | 1951 | 1987 | 1992 | 1985 | 1991 | 1959 | 1990 | FEB 1996 |
| | MEAN OF EXTREME MINS. | 64 | -11.5 | -7.1 | 1.6 | 16.9 | 28.9 | 40.0 | 48.4 | 46.0 | 30.8 | 18.9 | 2.9 | -8.1 | 17.3 |
| | NORMAL DRY BULB | 30 | 25.0 | 27.4 | 35.4 | 45.0 | 55.0 | 64.5 | 72.6 | 71.5 | 60.8 | 47.7 | 34.5 | 24.9 | 47.0 |
| | MEAN DRY BULB | 64 | 22.7 | 26.6 | 34.1 | 44.9 | 55.3 | 65.0 | 72.8 | 71.6 | 60.9 | 48.9 | 34.9 | 25.8 | 47.0 |
| | MEAN WET BULB | 29 | 19.4 | 21.5 | 28.4 | 36.8 | 46.7 | 55.3 | 59.6 | 57.6 | 48.3 | 38.2 | 27.1 | 20.3 | 38.3 |
| | MEAN DEW POINT | 29 | 15.9 | 17.2 | 24.8 | 31.7 | 43.1 | 52.2 | 56.0 | 53.4 | 43.8 | 33.6 | 23.5 | 15.9 | 34.3 |
| | NORMAL NO. DAYS WITH: MAXIMUM >= 90 | 30 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 3.4 | 11.8 | 11.2 | 3.7 | 0.4 | 0.0 | 0.0 | 31.1 |
| | MAXIMUM <= 32 | 30 | 10.2 | 8.4 | 4.6 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 5.1 | 10.1 | 39.8 |
| MINIMUM <= 32 | 30 | 30.0 | 26.7 | 26.0 | 15.1 | 2.9 | 0.0 | 0.0 | 0.0 | 1.5 | 11.2 | 24.7 | 30.2 | 168.3 | |
| MINIMUM <= 0 | 30 | 5.6 | 3.7 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 4.5 | 16.0 | |
| H/C | NORMAL HEATING DEG. DAYS | 30 | 1240 | 1054 | 918 | 601 | 325 | 99 | 15 | 22 | 187 | 538 | 913 | 1241 | 7153 |
| | NORMAL COOLING DEG. DAYS | 30 | 0 | 0 | 0 | 2 | 13 | 84 | 250 | 223 | 61 | 3 | 0 | 0 | 636 |
| RH | NORMAL (PERCENT) | 30 | 66 | 65 | 65 | 61 | 64 | 65 | 58 | 56 | 55 | 59 | 66 | 66 | 62 |
| | HOURLY 05 LST | 30 | 69 | 72 | 75 | 75 | 78 | 80 | 76 | 75 | 70 | 70 | 72 | 71 | 74 |
| | HOURLY 11 LST | 30 | 60 | 57 | 55 | 49 | 51 | 52 | 46 | 43 | 41 | 45 | 55 | 59 | 51 |
| | HOURLY 17 LST | 30 | 65 | 59 | 53 | 47 | 49 | 50 | 42 | 39 | 39 | 48 | 62 | 65 | 52 |
| | HOURLY 23 LST | 30 | 70 | 71 | 72 | 70 | 73 | 75 | 69 | 66 | 63 | 66 | 71 | 69 | 70 |
| S | PERCENT POSSIBLE SUNSHINE | 54 | 57 | 60 | 63 | 62 | 60 | 65 | 73 | 74 | 70 | 66 | 55 | 55 | 63 |
| W/O | MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI) | 49 | 1.9 | 2.7 | 3.1 | 2.0 | 1.5 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 2.2 | 1.9 | 19.3 |
| | THUNDERSTORMS | 64 | 0.0 | 0.0 | 0.1 | 1.2 | 5.1 | 9.6 | 10.6 | 7.7 | 2.9 | 0.4 | 0.0 | 0.0 | 37.6 |
| CLOUDINESS | MEAN: SUNRISE-SUNSET (OKTAS) | | | | | | | | | | | | | | |
| | MIDNIGHT-MIDNIGHT (OKTAS) | | | | | | | | | | | | | | |
| | MEAN NO. DAYS WITH: CLEAR | | | | | | | | | | | | | | |
| | PARTLY CLOUDY CLOUDY | | | | | | | | | | | | | | |
| PR | MEAN STATION PRESSURE(IN) | 29 | 26.70 | 26.81 | 26.67 | 26.65 | 26.66 | 26.67 | 26.72 | 26.73 | 26.73 | 26.72 | 26.70 | 26.69 | 26.70 |
| | MEAN SEA-LEVEL PRES. (IN) | 29 | 30.08 | 30.09 | 30.01 | 29.95 | 29.91 | 29.89 | 29.92 | 29.94 | 29.98 | 30.02 | 30.05 | 30.08 | 29.99 |
| WINDS | MEAN SPEED (MPH) | 29 | 10.3 | 10.9 | 11.7 | 12.5 | 11.8 | 10.4 | 9.7 | 9.7 | 10.2 | 10.9 | 10.3 | 10.2 | 10.7 |
| | PREVAIL.DIR(TENS OF DEGS) | 33 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 |
| | MAXIMUM 2-MINUTE: SPEED (MPH) | 17 | 59 | 59 | 64 | 61 | 57 | 54 | 69 | 54 | 48 | 58 | 62 | 58 | 69 |
| | DIR. (TENS OF DEGS) | | 35 | 33 | 33 | 32 | 32 | 32 | 21 | 32 | 33 | 33 | 31 | 33 | 21 |
| | YEAR OF OCCURRENCE | | 2008 | 1998 | 2009 | 1997 | 1999 | 2001 | 2002 | 2002 | 2011 | 2008 | 2008 | 2009 | JUL 2002 |
| | MAXIMUM 3-SECOND SPEED (MPH) | 17 | 70 | 70 | 74 | 69 | 68 | 83 | 89 | 69 | 62 | 70 | 77 | 71 | 89 |
| | DIR. (TENS OF DEGS) | | 35 | 31 | 34 | 31 | 32 | 28 | 21 | 32 | 26 | 33 | 33 | 33 | 21 |
| | YEAR OF OCCURRENCE | | 2008 | 1996 | 2009 | 1997 | 1999 | 2009 | 2002 | 2008 | 2012 | 2012 | 2008 | 2009 | JUL 2002 |
| PRECIPITATION | NORMAL (IN) | 30 | 0.30 | 0.44 | 0.93 | 1.80 | 3.22 | 2.53 | 1.85 | 1.56 | 1.29 | 1.42 | 0.53 | 0.42 | 16.29 |
| | MAXIMUM MONTHLY (IN) | 70 | 1.77 | 2.46 | 3.02 | 5.16 | 8.18 | 7.00 | 6.13 | 4.83 | 3.94 | 5.60 | 2.22 | 1.65 | 8.18 |
| | YEAR OF OCCURRENCE | | 1944 | 1953 | 1945 | 1967 | 1996 | 1968 | 1969 | 1982 | 1946 | 1998 | 1985 | 1975 | MAY 1996 |
| | MINIMUM MONTHLY (IN) | 70 | 0.01 | 0.02 | 0.05 | 0.02 | 0.33 | 0.42 | 0.38 | 0.10 | 0.03 | T | 0.01 | 0.01 | 0.01 |
| | YEAR OF OCCURRENCE | | 1952 | 1999 | 2012 | 1987 | 1966 | 2002 | 1988 | 1943 | 1975 | 1960 | 2004 | 2006 | DEC 2006 |
| | MAXIMUM IN 24 HOURS (IN) | 70 | 1.26 | 1.00 | 2.19 | 3.19 | 3.40 | 4.01 | 2.51 | 2.60 | 2.13 | 2.49 | 1.09 | 1.04 | 4.01 |
| | YEAR OF OCCURRENCE | | 1944 | 1953 | 1945 | 1997 | 1965 | 1963 | 1944 | 1982 | 1966 | 1982 | 1944 | 1975 | JUN 1963 |
| | NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01 | 30 | 5.4 | 5.7 | 7.6 | 9.5 | 11.7 | 12.3 | 9.5 | 7.7 | 7.0 | 7.2 | 5.3 | 5.4 | 94.3 |
| PRECIPITATION >= 1.00 | 30 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 1.9 | |
| SNOWFALL | NORMAL (IN) | 30 | 4.4 | 5.8 | 8.7 | 7.9 | 1.1 | 0.0 | 0.0 | 0.0 | 0.2 | 1.6 | 6.0 | 5.4 | 41.1 |
| | MAXIMUM MONTHLY (IN) | 64 | 24.0 | 23.7 | 30.7 | 30.6 | 11.6 | 3.6 | T | T | 2.0 | 10.2 | 33.6 | 17.9 | 33.6 |
| | YEAR OF OCCURRENCE | | 1949 | 1953 | 1950 | 1970 | 1950 | 1951 | 2010 | 1994 | 1970 | 1995 | 1985 | 1975 | NOV 1985 |
| | MAXIMUM IN 24 HOURS (IN) | 64 | 16.3 | 10.0 | 14.9 | 16.0 | 13.4 | 3.6 | T | T | 2.0 | 7.8 | 9.4 | 9.8 | 16.3 |
| | YEAR OF OCCURRENCE' | | 1944 | 1953 | 1973 | 1970 | 1967 | 1951 | 2010 | 1994 | 1970 | 1995 | 1977 | 1975 | JAN 1944 |
| | MAXIMUM SNOW DEPTH (IN) | 56 | 16 | 14 | 16 | 17 | 13 | 2 | 0 | 0 | 1 | 6 | 15 | 11 | 17 |
| | YEAR OF OCCURRENCE | | 1993 | 1987 | 1977 | 1970 | 1967 | 1951 | | | 1965 | 1954 | 1985 | 1985 | APR 1970 |
| | NORMAL NO. DAYS WITH: SNOWFALL >= 1.0 | 30 | 1.3 | 2.1 | 2.4 | 2.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.8 | 2.2 | 12.9 |

PRECIPITATION (inches) 2012 RAPID CITY (KRAP)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1983 | 0.34 | 0.18 | 0.84 | 1.00 | 2.18 | 3.01 | 1.94 | 2.39 | 0.33 | 1.74 | 1.07 | 0.47 | 15.49 |
| 1984 | 0.10 | 0.18 | 0.69 | 3.10 | 1.57 | 4.72 | 1.57 | 1.00 | 0.74 | 0.67 | 0.51 | 0.38 | 15.23 |
| 1985 | 0.46 | 0.06 | 1.55 | 0.32 | 1.24 | 1.58 | 1.03 | 1.86 | 1.57 | 0.98 | 2.22 | 0.77 | 13.64 |
| 1986 | 0.49 | 0.92 | 0.88 | 4.74 | 1.43 | 4.56 | 0.91 | 1.32 | 3.14 | 1.64 | 1.40 | 0.01 | 21.44 |
| 1987 | 0.04 | 1.71 | 1.14 | 0.02 | 3.39 | 1.37 | 0.83 | 2.37 | 0.68 | 0.26 | 0.30 | 0.31 | 12.42 |
| 1988 | 0.17 | 0.34 | 0.52 | 0.60 | 3.25 | 1.09 | 0.38 | 1.98 | 0.56 | 0.76 | 0.81 | 0.46 | 10.92 |
| 1989 | 0.02 | 0.34 | 0.96 | 1.46 | 1.40 | 1.04 | 0.82 | 1.70 | 3.09 | 1.49 | 0.43 | 0.82 | 13.57 |
| 1990 | 0.22 | 0.37 | 1.17 | 0.77 | 4.87 | 1.42 | 1.94 | 1.87 | 2.44 | 0.61 | 0.44 | 0.33 | 16.45 |
| 1991 | 0.32 | 0.77 | 0.63 | 2.99 | 4.40 | 3.27 | 1.97 | 0.58 | 0.59 | 1.00 | 0.73 | 0.04 | 17.29 |
| 1992 | 0.29 | 0.16 | 1.92 | 0.71 | 2.47 | 2.17 | 3.25 | 0.47 | 0.42 | 0.68 | 0.39 | 0.57 | 13.50 |
| 1993 | 0.68 | 0.61 | 0.82 | 3.05 | 2.16 | 3.39 | 4.31 | 1.18 | 1.46 | 0.90 | 0.70 | 0.53 | 19.79 |
| 1994 | 0.45 | 0.66 | 0.37 | 1.20 | 1.47 | 0.67 | 0.64 | 0.92 | 0.27 | 2.84 | 0.66 | 0.35 | 10.50 |
| 1995 | 0.09 | 0.55 | 0.79 | 2.57 | 4.03 | 4.50 | 2.87 | 0.46 | 0.82 | 2.42 | 0.42 | 0.13 | 19.65 |
| 1996 | 0.85 | 0.10 | 1.06 | 1.63 | 8.18 | 1.24 | .52 | 1.85 | 1.55 | | .07 | | |
| 1997 | 0.65 | 0.28 | 0.20 | 4.80 | 5.35 | 3.43 | 3.67 | 3.93 | 0.78 | 0.47 | 0.19 | 0.08 | 23.83 |
| 1998 | 0.15 | 1.24 | 1.32 | 0.28 | 2.34 | 5.59 | 1.26 | 1.42 | 1.50 | 5.60 | 1.13 | 0.06 | 21.89 |
| 1999 | 0.21 | 0.02 | 1.32 | 2.45 | 4.49 | 5.24 | 3.68 | 0.47 | 0.85 | 0.11 | 0.43 | 0.21 | 19.48 |
| 2000 | 0.23 | 0.15 | 1.37 | 3.95 | 2.40 | 1.60 | 2.06 | 0.70 | 0.45 | 1.54 | 0.47 | 0.11 | 15.03 |
| 2001 | 0.24 | 0.17 | 0.42 | 2.16 | 1.73 | 3.57 | 2.46 | 1.59 | 0.91 | 0.97 | 0.07 | T | 14.29 |
| 2002 | 0.05 | 0.20 | 0.69 | 2.24 | 1.61 | 0.42 | 1.13 | 0.76 | 2.45 | 0.65 | 0.04 | 0.03 | 10.27 |
| 2003 | 0.33 | 0.22 | 1.05 | 2.04 | 1.32 | 2.45 | 0.48 | 0.47 | 1.37 | 0.49 | 0.50 | 0.25 | 10.97 |
| 2004 | 0.03 | 0.93 | 0.98 | 0.50 | 2.55 | 1.02 | 2.96 | 0.80 | 2.04 | 1.28 | 0.01 | 0.06 | 13.16 |
| 2005 | 0.54 | 0.16 | 1.09 | 1.46 | 5.30 | 1.23 | 0.92 | 1.80 | 0.57 | 0.84 | 0.25 | 0.25 | 14.41 |
| 2006 | 0.14 | 0.20 | 1.20 | 2.09 | 1.82 | 0.93 | 0.76 | 1.76 | 2.00 | 0.34 | 0.47 | 0.01 | 11.72 |
| 2007 | 0.12 | 0.79 | 0.49 | 1.32 | 2.93 | 0.96 | 1.20 | 2.82 | 0.83 | 0.59 | 0.03 | 0.51 | 12.59 |
| 2008 | 0.34 | 0.51 | 0.60 | 1.38 | 7.24 | 3.12 | 2.21 | 1.42 | 0.87 | 1.47 | 1.02 | 0.37 | 20.55 |
| 2009 | 0.37 | 0.77 | 2.07 | 3.65 | 0.94 | 2.83 | 1.77 | 1.48 | 1.90 | 1.97 | 0.17 | 0.72 | 18.64 |
| 2010 | 0.20 | 0.23 | 0.17 | 3.03 | 5.19 | 4.57 | 1.66 | 1.33 | 1.51 | 0.32 | 0.42 | 0.61 | 19.24 |
| 2011 | 0.54 | 1.16 | 0.92 | 1.54 | 5.88 | 3.84 | 0.66 | 1.75 | 0.75 | 1.38 | 0.71 | 0.29 | 19.42 |
| 2012 | 0.31 | 0.38 | 0.05 | 3.08 | 2.12 | 2.04 | 1.57 | 0.58 | 0.14 | 0.44 | 0.45 | 0.25 | 11.41 |
| POR= 64 YRS | 0.38 | 0.53 | 0.97 | 1.93 | 2.93 | 2.87 | 1.93 | 1.51 | 1.16 | 1.04 | 0.51 | 0.39 | 16.15 |

WBAN : 24090

AVERAGE TEMPERATURE (°F) 2012 RAPID CITY (KRAP)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1983 | 32.1 | 37.3 | 36.4 | 40.7 | 52.0 | 63.1 | 73.6 | 78.0 | 60.8 | 49.4 | 34.9 | 8.1 | 47.2 |
| 1984 | 28.0 | 36.1 | 34.3 | 43.8 | 53.6 | 62.8 | 72.2 | 74.8 | 57.2 | 47.2 | 37.5 | 21.4 | 47.4 |
| 1985 | 21.6 | 23.8 | 35.9 | 52.0 | 61.8 | 62.1 | 74.6 | 69.0 | 55.6 | 47.3 | 16.0 | 21.0 | 45.1 |
| 1986 | 29.8 | 21.5 | 43.0 | 44.2 | 54.9 | 67.6 | 70.9 | 69.6 | 55.0 | 48.7 | 30.6 | 30.5 | 47.2 |
| 1987 | 31.1 | 32.5 | 32.6 | 51.6 | 59.5 | 67.1 | 75.4 | 68.1 | 61.4 | 47.1 | 40.3 | 28.9 | 49.6 |
| 1988 | 21.7 | 26.9 | 35.6 | 47.1 | 60.0 | 75.6 | 76.1 | 72.5 | 60.4 | 49.7 | 36.4 | 28.4 | 49.2 |
| 1989 | 28.7 | 14.4 | 31.1 | 45.8 | 55.4 | 64.0 | 77.0 | 73.1 | 61.0 | 48.8 | 36.4 | 19.4 | 46.3 |
| 1990 | 32.4 | 28.9 | 36.4 | 45.0 | 53.2 | 66.6 | 71.7 | 73.8 | 65.9 | 48.2 | 40.5 | 17.8 | 48.4 |
| 1991 | 18.4 | 36.0 | 38.5 | 46.3 | 56.6 | 67.2 | 72.9 | 74.0 | 61.1 | 46.4 | 30.0 | 32.7 | 48.3 |
| 1992 | 33.6 | 36.3 | 40.9 | 47.1 | 57.4 | 62.6 | 64.3 | 65.9 | 62.6 | 49.3 | 32.4 | 19.0 | 47.6 |
| 1993 | 16.0 | 15.2 | 37.6 | 43.5 | 56.1 | 60.3 | 65.1 | 68.6 | 56.6 | 48.2 | 32.4 | 31.5 | 44.3 |
| 1994 | 22.4 | 19.8 | 40.5 | 46.0 | 60.2 | 68.5 | 70.7 | 73.3 | 65.5 | 49.7 | 35.5 | 30.3 | 48.5 |
| 1995 | 29.2 | 31.9 | 33.2 | 40.3 | 51.8 | 62.9 | 70.6 | 73.6 | 60.1 | 46.5 | 33.7 | 25.4 | 46.6 |
| 1996 | 14.9 | 27.3 | 26.2 | 43.3 | 50.6 | 65.5 | 70.8 | 73.2 | 59.8 | | 24.3 | 17.9 | |
| 1997 | 18.1 | 28.8 | 36.7 | 38.7 | 52.8 | 66.3 | 70.9 | 68.7 | 62.5 | 48.6 | 33.2 | 30.3 | 46.3 |
| 1998 | 24.3 | 34.9 | 28.0 | 46.2 | 56.2 | 58.7 | 72.7 | 72.3 | 67.1 | 47.8 | 36.9 | 26.8 | 47.7 |
| 1999 | 25.6 | 36.6 | 36.3 | 42.6 | 53.0 | 62.6 | 71.3 | 71.4 | 55.7 | 49.9 | 44.4 | 33.3 | 48.6 |
| 2000 | 26.2 | 33.2 | 38.7 | 43.1 | 56.0 | 62.5 | 73.6 | 74.4 | 63.4 | 49.8 | 27.0 | 16.7 | 47.1 |
| 2001 | 29.7 | 16.9 | 34.4 | 46.0 | 56.2 | 64.1 | 74.8 | 74.4 | 62.5 | 47.9 | 39.9 | 28.9 | 48.0 |
| 2002 | 27.7 | 30.7 | 22.4 | 44.3 | 51.8 | 69.7 | 78.3 | 71.2 | 61.9 | 39.0 | 37.4 | 31.7 | 47.2 |
| 2003 | 26.1 | 21.5 | 35.0 | 47.9 | 55.0 | 62.2 | 77.1 | 75.9 | 59.6 | 52.5 | 28.6 | 30.5 | 47.7 |
| 2004 | 22.8 | 28.5 | 40.4 | 48.0 | 55.6 | 61.6 | 72.1 | 68.0 | 62.5 | 50.1 | 37.4 | 31.8 | 48.2 |
| 2005 | 21.9 | 32.8 | 38.0 | 48.0 | 53.6 | 66.9 | 76.0 | 70.8 | 65.3 | 50.0 | 39.5 | 25.5 | 49.0 |
| 2006 | 36.4 | 26.3 | 32.9 | 50.0 | 57.6 | 70.2 | 79.3 | 73.1 | 57.8 | 45.0 | 36.5 | 29.3 | 49.5 |
| 2007 | 26.1 | 21.1 | 44.3 | 43.9 | 59.3 | 69.4 | 79.7 | 74.2 | 63.7 | 50.3 | 37.8 | 22.3 | 49.3 |
| 2008 | 21.5 | 26.1 | 34.9 | 41.8 | 51.1 | 61.9 | 71.6 | 70.9 | 59.0 | 46.9 | 36.3 | 17.8 | 45.0 |
| 2009 | 24.9 | 28.3 | 32.7 | 40.0 | 54.1 | 59.9 | 68.2 | 67.6 | 62.6 | 38.7 | 40.4 | 16.2 | 44.5 |
| 2010 | 21.5 | 20.3 | 38.8 | 45.9 | 51.6 | 63.4 | 70.5 | 72.5 | 60.0 | 53.4 | 31.7 | 24.4 | 46.2 |
| 2011 | 19.7 | 19.3 | 31.4 | 43.3 | 50.6 | 63.0 | 74.9 | 73.1 | 61.2 | 50.7 | 33.8 | 28.0 | 45.8 |
| 2012 | 29.7 | 27.2 | 47.6 | 50.4 | 55.9 | 70.3 | 78.5 | 72.4 | 63.9 | 45.9 | 37.2 | 25.0 | 50.3 |
| POR= 64 YRS | 22.7 | 26.6 | 34.1 | 44.9 | 55.3 | 65.0 | 72.8 | 71.6 | 60.9 | 48.9 | 34.9 | 25.8 | 47.0 |

HEATING DEGREE DAYS (base 65°F) 2012 RAPID CITY (KRAP)

| YEAR | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | TOTAL |
|---------|-----|-----|-----|-----|------|------|------|------|------|-----|-----|-----|-------|
| 1983-84 | 8 | 0 | 208 | 474 | 896 | 1762 | 1139 | 832 | 948 | 626 | 366 | 101 | 7360 |
| 1984-85 | 0 | 0 | 268 | 546 | 820 | 1344 | 1341 | 1148 | 895 | 393 | 146 | 144 | 7045 |
| 1985-86 | 8 | 27 | 327 | 544 | 1466 | 1358 | 1083 | 1211 | 672 | 617 | 317 | 35 | 7665 |
| 1986-87 | 5 | 12 | 296 | 497 | 1025 | 1059 | 1045 | 907 | 997 | 408 | 199 | 46 | 6496 |
| 1987-88 | 10 | 49 | 147 | 545 | 736 | 1111 | 1340 | 1103 | 905 | 533 | 195 | 17 | 6691 |
| 1988-89 | 3 | 18 | 163 | 470 | 850 | 1127 | 1120 | 1414 | 1047 | 586 | 303 | 116 | 7217 |
| 1989-90 | 3 | 6 | 182 | 495 | 847 | 1410 | 1004 | 1004 | 880 | 597 | 363 | 68 | 6859 |
| 1990-91 | 10 | 5 | 112 | 514 | 730 | 1462 | 1440 | 807 | 815 | 556 | 269 | 16 | 6736 |
| 1991-92 | 2 | 6 | 183 | 581 | 1045 | 997 | 964 | 828 | 742 | 539 | 262 | 107 | 6256 |
| 1992-93 | 67 | 83 | 138 | 493 | 973 | 1418 | 1515 | 1390 | 841 | 636 | 269 | 158 | 7981 |
| 1993-94 | 56 | 26 | 256 | 522 | 972 | 1035 | 1312 | 1260 | 749 | 565 | 171 | 27 | 6951 |
| 1994-95 | 9 | 17 | 79 | 468 | 876 | 1068 | 1104 | 919 | 983 | 734 | 400 | 130 | 6787 |
| 1995-96 | 11 | 5 | 215 | 568 | 933 | 1221 | 1551 | 1087 | 1200 | 643 | 447 | 66 | 7947 |
| 1996-97 | 6 | 0 | 203 | | 1215 | 1453 | 1446 | 1008 | 872 | 783 | 373 | 30 | |
| 1997-98 | 23 | 26 | 127 | 510 | 947 | 1067 | 1254 | 837 | 1143 | 558 | 272 | 198 | 6962 |
| 1998-99 | 3 | 0 | 91 | 522 | 840 | 1178 | 1214 | 790 | 885 | 666 | 366 | 104 | 6659 |
| 1999-00 | 22 | 6 | 284 | 460 | 609 | 976 | 1196 | 914 | 808 | 652 | 281 | 139 | 6347 |
| 2000-01 | 10 | 1 | 152 | 462 | 1134 | 1490 | 1086 | 1339 | 944 | 565 | 278 | 127 | 7588 |
| 2001-02 | 9 | 0 | 138 | 523 | 746 | 1111 | 1149 | 954 | 1313 | 614 | 417 | 44 | 7018 |
| 2002-03 | 0 | 17 | 189 | 797 | 817 | 1027 | 1198 | 1212 | 924 | 505 | 320 | 134 | 7140 |
| 2003-04 | 0 | 17 | 220 | 385 | 1087 | 1063 | 1300 | 1053 | 758 | 506 | 298 | 136 | 6823 |
| 2004-05 | 17 | 45 | 136 | 454 | 822 | 1021 | 1331 | 896 | 833 | 510 | 354 | 69 | 6488 |
| 2005-06 | 8 | 15 | 97 | 468 | 759 | 1219 | 880 | 1079 | 990 | 444 | 260 | 8 | 6227 |
| 2006-07 | 0 | 11 | 238 | 619 | 847 | 1100 | 1198 | 1221 | 636 | 627 | 200 | 32 | 6729 |
| 2007-08 | 0 | 18 | 144 | 450 | 808 | 1318 | 1343 | 1122 | 926 | 688 | 427 | 115 | 7359 |
| 2008-09 | 9 | 15 | 199 | 554 | 853 | 1455 | 1239 | 1020 | 995 | 745 | 340 | 188 | 7612 |
| 2009-10 | 14 | 37 | 127 | 809 | 731 | 1507 | 1344 | 1244 | 804 | 570 | 423 | 95 | 7705 |
| 2010-11 | 17 | 7 | 164 | 364 | 989 | 1251 | 1392 | 1274 | 1037 | 643 | 440 | 107 | 7685 |
| 2011-12 | 0 | 2 | 151 | 458 | 931 | 1140 | 1088 | 1091 | 532 | 439 | 294 | 15 | 6141 |
| 2012- | 0 | 5 | 94 | 584 | 828 | 1236 | | | | | | | |

WBAN : 24090

COOLING DEGREE DAYS (base 65°F) 2012 RAPID CITY (KRAP)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 1983 | 0 | 0 | 0 | 0 | 9 | 62 | 282 | 407 | 88 | 0 | 0 | 0 | 848 |
| 1984 | 0 | 0 | 0 | 0 | 18 | 41 | 234 | 309 | 42 | 2 | 0 | 0 | 646 |
| 1985 | 0 | 0 | 0 | 10 | 53 | 64 | 312 | 158 | 51 | 0 | 0 | 0 | 648 |
| 1986 | 0 | 0 | 0 | 0 | 11 | 124 | 192 | 164 | 0 | 0 | 0 | 0 | 491 |
| 1987 | 0 | 0 | 0 | 13 | 33 | 118 | 341 | 152 | 45 | 0 | 0 | 0 | 702 |
| 1988 | 0 | 0 | 0 | 2 | 46 | 341 | 355 | 255 | 33 | 2 | 0 | 0 | 1034 |
| 1989 | 0 | 0 | 0 | 15 | 9 | 95 | 380 | 265 | 70 | 0 | 0 | 0 | 834 |
| 1990 | 0 | 0 | 0 | 2 | 4 | 120 | 226 | 282 | 147 | 3 | 0 | 0 | 784 |
| 1991 | 0 | 0 | 0 | 3 | 16 | 89 | 256 | 294 | 76 | 15 | 0 | 0 | 749 |
| 1992 | 0 | 0 | 0 | 9 | 36 | 41 | 51 | 118 | 72 | 11 | 0 | 0 | 338 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 25 | 66 | 146 | 9 | 7 | 0 | 0 | 253 |
| 1994 | 0 | 0 | 0 | 0 | 28 | 141 | 193 | 280 | 97 | 0 | 0 | 0 | 739 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 72 | 192 | 280 | 72 | 1 | 0 | 0 | 617 |
| 1996 | 0 | 0 | 0 | 0 | 5 | 86 | 194 | 262 | 52 | 0 | 0 | 0 | |
| 1997 | 0 | 0 | 0 | 0 | 4 | 76 | 211 | 148 | 58 | 7 | 0 | 0 | 504 |
| 1998 | 0 | 0 | 0 | 0 | 8 | 15 | 250 | 232 | 160 | 0 | 0 | 0 | 665 |
| 1999 | 0 | 0 | 0 | 0 | 2 | 40 | 225 | 212 | 9 | 0 | 0 | 0 | 488 |
| 2000 | 0 | 0 | 0 | 0 | 10 | 71 | 282 | 299 | 108 | 0 | 0 | 0 | 770 |
| 2001 | 0 | 0 | 0 | 4 | 11 | 107 | 320 | 300 | 69 | 1 | 0 | 0 | 812 |
| 2002 | 0 | 0 | 0 | 0 | 15 | 193 | 422 | 216 | 103 | 0 | 0 | 0 | 949 |
| 2003 | 0 | 0 | 0 | 0 | 20 | 54 | 381 | 364 | 65 | 7 | 0 | 0 | 891 |
| 2004 | 0 | 0 | 0 | 0 | 16 | 42 | 246 | 148 | 69 | 0 | 0 | 0 | 521 |
| 2005 | 0 | 0 | 0 | 8 | 11 | 129 | 356 | 204 | 113 | 9 | 0 | 0 | 830 |
| 2006 | 0 | 0 | 0 | 1 | 36 | 169 | 452 | 269 | 27 | 6 | 0 | 0 | 960 |
| 2007 | 0 | 0 | 0 | 0 | 30 | 170 | 464 | 310 | 109 | 0 | 0 | 0 | 1083 |
| 2008 | 0 | 0 | 0 | 0 | 0 | 29 | 221 | 206 | 26 | 0 | 0 | 0 | 482 |
| 2009 | 0 | 0 | 0 | 0 | 9 | 42 | 118 | 123 | 62 | 0 | 0 | 0 | 354 |
| 2010 | 0 | 0 | 0 | 0 | 13 | 52 | 192 | 245 | 19 | 11 | 0 | 0 | 532 |
| 2011 | 0 | 0 | 0 | 0 | 0 | 56 | 315 | 260 | 44 | 24 | 0 | 0 | 699 |
| 2012 | 0 | 0 | 0 | 9 | 18 | 179 | 421 | 243 | 67 | 0 | 0 | 0 | 937 |

SNOWFALL (inches) 2012 RAPID CITY (KRAP)

| YEAR | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | TOTAL |
|----------------|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-------|
| 1983-84 | 0.0 | 0.0 | 0.3 | 0.9 | 6.9 | 7.1 | 1.9 | 2.5 | 6.1 | 22.1 | 0.2 | 0.0 | 48.0 |
| 1984-85 | 0.0 | 0.0 | 1.3 | 0.7 | 2.0 | 4.9 | 3.8 | 0.7 | 16.2 | 0.4 | 0.0 | T | 30.0 |
| 1985-86 | 0.0 | 0.0 | 1.4 | 0.6 | 33.6 | 10.2 | 5.7 | 10.7 | 6.0 | 12.7 | 0.0 | 0.0 | 80.9 |
| 1986-87 | 0.0 | 0.0 | 0.0 | T | 12.6 | 0.1 | 0.5 | 21.5 | 10.9 | 0.3 | 0.0 | 0.0 | 45.9 |
| 1987-88 | 0.0 | 0.0 | 0.0 | 1.7 | T | 4.7 | 2.7 | 3.6 | 10.6 | 6.1 | 0.0 | 0.0 | 29.4 |
| 1988-89 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 9.0 | 0.4 | 7.3 | 10.7 | 6.4 | 0.0 | 0.0 | 36.0 |
| 1989-90 | 0.0 | T | 0.0 | 3.9 | 4.6 | 10.9 | 3.1 | 5.0 | 9.2 | 3.0 | 0.5 | T | 40.2 |
| 1990-91 | 0.0 | T | 0.0 | 1.5 | 1.0 | 6.2 | 6.3 | 8.2 | 3.6 | 11.1 | 4.9 | T | 42.8 |
| 1991-92 | T | 0.0 | T | 4.0 | 6.7 | 0.8 | 5.2 | 1.2 | 8.2 | 3.5 | 0.0 | 0.0 | 29.6 |
| 1992-93 | T | 0.0 | 0.0 | 0.9 | 5.0 | 12.4 | 13.6 | 9.0 | 1.0 | 12.2 | 0.0 | 0.0 | 54.1 |
| 1993-94 | T | 0.0 | T | 2.4 | 11.4 | 5.5 | 7.5 | 11.1 | 5.6 | 12.8 | 0.0 | T | 56.3 |
| 1994-95 | 0.0 | T | 0.0 | 0.0 | 6.8 | 4.6 | 0.9 | 6.3 | 9.2 | 10.1 | T | T | 37.9 |
| 1995-96 | 0.0 | 0.0 | T | 10.2 | 3.1 | 1.4 | 19.4 | 4.4 | 16.2 | 10.3 | 0.9 | T | 65.9 |
| 1996-97 | 0.0 | 0.0 | T | T | T | T | T | T | T | T | 0.0 | T | T |
| 1997-98 | T | T | 0.0 | 3.1 | T | T | T | T | T | T | T | T | T |
| 1998-99 | T | T | 0.0 | T | 15.9 | 0.5 | 2.0 | 0.2 | 18.5 | 6.3 | 0.0 | T | T |
| 1999-00 | 0.0 | 0.0 | 0.0 | T | 0.3 | 3.7 | 2.9 | 1.5 | 5.5 | 19.0 | 0.0 | 0.0 | 32.9 |
| 2000-01 | 0.0 | 0.0 | 1.4 | 0.0 | 2.9 | 3.0 | 2.7 | T | T | T | T | T | T |
| 2001-02 | T | T | T | T | T | T | T | T | T | T | T | T | T |
| 2002-03 | T | T | T | T | T | T | T | T | T | T | T | T | T |
| 2003-04 | T | T | T | T | T | T | T | T | T | T | T | T | T |
| 2004-05 | T | T | T | T | T | T | T | T | T | T | T | T | T |
| 2005-06 | T | T | T | T | T | T | T | T | T | T | T | T | T |
| 2006-07 | 0.0 | 0.0 | 0.0 | 3.0 | 6.8 | 2.4 | 0.4 | 8.1 | 2.3 | 1.6 | T | 0.0 | 24.6 |
| 2007-08 | 0.0 | 0.0 | 0.0 | 0.0 | T | 10.7 | 4.3 | 6.2 | 8.7 | 5.2 | 11.0 | 0.0 | 46.1 |
| 2008-09 | 0.0 | 0.0 | 0.0 | 0.0 | 11.3 | 7.9 | 7.7 | 4.7 | 26.8 | 21.9 | 0.0 | 0.0 | 80.3 |
| 2009-10 | 0.0 | 0.0 | 0.0 | 8.5 | T | 13.1 | 2.7 | 7.9 | 3.0 | 2.1 | 3.5 | 0.0 | 40.8 |
| 2010-11 | T | 0.0 | 0.0 | 0.0 | 7.6 | 4.8 | 8.7 | 22.9 | 16.9 | 10.2 | T | T | 71.1 |
| 2011-12 | 0.0 | 0.0 | 0.0 | 0.0 | 14.6 | 3.0 | 2.3 | 4.7 | 0.1 | T | 0.0 | 0.0 | 24.7 |
| 2012- | 0.0 | 0.0 | 0.0 | 0.1 | 4.2 | 5.3 | T | T | T | T | T | T | T |
| POR= 58 YRS | T | T | 0.1 | 1.7 | 5.4 | 5.2 | 4.7 | 6.7 | 9.4 | 7.1 | 1.0 | 0.1 | 41.4 |

WBAN : 24090

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 EIGHTHS(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.

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.

- 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>.

2012 RAPID CITY SOUTH DAKOTA (KRAP)

Rapid City, which is not far from the geographical center of North America, experiences the large temperature ranges, both daily and seasonal, that are typical of semi-arid continental climates.

The city is surrounded by contrasting landforms, with the forested Black Hills rising immediately west of the city, and rolling prairie extending out in the other directions. From 40 to 70 miles southeast lie the eroded Badlands. The Black Hills, many of which are more than 5,000 feet above sea level, with a number of peaks above 7,000 feet, exert a pronounced influence on the climate of this area. The rolling land to the east of the city is cut by the valleys of the Box Elder and Rapid Creeks, which flow generally east-southeastward. The station is located on the north slope of the irrigated Rapid Valley. An east-west ridge 200 to 300 feet higher than the airport separates the station from the Box Elder Creek Valley.

The principal agricultural products in the area are cattle and wheat, and ranchers and farmers are dependent on the current weather forecasts, which are at times of vital interest in the protection of livestock.

Although the annual precipitation is light at lower elevations, the distribution is beneficial to agriculture with the greatest amounts occurring during the growing season. The heaviest snows are expected in the spring, which helps to furnish moisture for the early maturing crops such as wheat, while heavy winter snows at the higher elevations provide irrigation water for the fertile valleys.

Summer days are normally warm with cool, comfortable nights. Nearly all of the summer precipitation occurs as thunderstorms. Hail is often associated with the more severe thunderstorms, with resultant damage to vegetation as well as other fragile material in the path of the storms. Autumn, which begins soon after the first of September, is characterized by mild, balmy days, and cool, invigorating mornings and evenings. Autumn weather usually extends into November and often into December.

Temperatures for the winter months of December, January, and February are among the warmest in South Dakota due to the protection of the Black Hills, the frequent occurrence of Chinook winds, and the fact that the winter tracks of arctic air masses usually pass east of Rapid City. Rapid City has become the retirement home for many farmers and ranchers from the western half of the state because of the cool summer nights and the relatively mild winters.

Snowfall is normally light with the greatest monthly average of about 8 inches occurring in March. Cold waves can be expected occasionally, and one or more blizzards may occur each winter.

Spring is characterized by unsettled conditions. Wide variations usually occur in temperatures, and snows may fall as late as May.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is September 29 and the average last occurrence in the spring is May 7.

Station History

RAPID CITY, SD

| NAME | Begin Date | End Date | Latitude | Longitude | Elevation Feet | Relocation | Platform |
|-------------------------|------------|------------|----------|-----------|----------------|------------|---------------------|
| RAPID CITY REGIONAL AP | 1995-09-01 | 1996-08-01 | 44° 2' | -103° 3' | 3165 | | ASOS, COOP, WXSVC |
| RAPID CITY REGIONAL AP | 1996-08-01 | 1996-09-26 | 44° 2' | -103° 3' | 3165 | | AIRWAYS, ASOS, COOP |
| RAPID CITY REGIONAL AP | 1970-10-01 | 1973-01-01 | 44° 3' | -103° 4' | 3162 | | AIRWAYS, COOP |
| RAPID CITY MUNICIPAL AP | 1951-01-01 | 1970-10-01 | 44° 3' | -103° 4' | 3162 | | AIRWAYS, COOP |
| RAPID CITY REGIONAL AP | 2001-04-14 | 2009-01-05 | 44° 2' | -103° 3' | 3160 | | AIRWAYS, ASOS, COOP |
| RAPID CITY REGIONAL AP | 1973-01-01 | 1992-05-14 | 44° 3' | -103° 4' | 3162 | | COOP, WXSVC |
| RAPID CITY MUNICIPAL AP | 1950-10-01 | 1951-01-01 | 44° 3' | -103° 4' | 3162 | | COOP |
| RAPID CITY REGIONAL AP | 1992-05-14 | 1995-09-01 | 44° 3' | -103° 4' | 3165 | | COOP, WXSVC |
| RAPID CITY REGIONAL AP | 2012-01-31 | Present | 44° 2' | -103° 3' | 3160 | | ASOS, COOP |
| RAPID CITY REGIONAL AP | 1996-09-26 | 2001-04-14 | 44° 2' | -103° 3' | 3160 | 685 FT NW | AIRWAYS, ASOS, COOP |

Element History

| Element | Begin Date | End Date | Frequency | Time Of Observation | Equipment * | Equipment * Modifications | Equipment Exposure |
|---------|------------|------------|-----------|---------------------|-------------|---------------------------|--------------------|
| TEMP | 1995-07-01 | 1995-09-01 | DAILY | 2400 | MXMN | | |
| PRECIP | 1982-01-01 | 1992-05-14 | DAILY | 2400 | UNIV | RCRD | |
| PRECIP | 1995-09-01 | 2009-01-05 | HOURLY | 2400 | TB | RCRD | |
| TEMP | 1950-10-01 | 1982-01-01 | DAILY | 2400 | | | |
| PRECIP | 1950-10-01 | 1982-01-01 | DAILY | 2400 | UNIV | RCRD | |
| PRECIP | 1992-05-14 | 1995-07-01 | HOURLY | 2400 | | | |
| PRECIP | 1995-07-01 | 1995-09-01 | DAILY | 2400 | UNIV | RCRD | |
| TEMP | 1982-01-01 | 1992-05-14 | DAILY | 2400 | | | |
| PRECIP | 1982-01-01 | 1992-05-14 | HOURLY | 2400 | | | |
| TEMP | 2012-01-31 | Present | DAILY | 2400 | ATEMP | | |
| PRECIP | 1992-05-14 | 1995-07-01 | DAILY | 2400 | UNIV | RCRD | |
| TEMP | 1995-09-01 | 2009-01-05 | DAILY | 2400 | HYGR | | |
| PRECIP | 2012-01-31 | Present | HOURLY | 2400 | AHTB | RCRD;HTD | |
| PRECIP | 2012-01-31 | Present | DAILY | 2400 | FPCPNX | | |
| PRECIP | 1995-07-01 | 1995-09-01 | HOURLY | 2400 | UNIV | RCRD | |
| TEMP | 1992-05-14 | 1995-07-01 | DAILY | 2400 | MXMN | | |
| PRECIP | 1995-09-01 | 2009-01-05 | DAILY | 2400 | TB | RCRD | |

* 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>

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2

Fax Number : (828) 271-4876

TDD : (828) 271-4010

Email : ncdc.orders@noaa.gov

NOAA/National Climatic Data Center

Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

Visit our Web Site for other weather data: www.ncdc.noaa.gov